

FORRESTER®

The Total Economic Impact™ Of BMC Helix Discovery

Cost Savings And Business Benefits
Enabled By BMC Helix Discovery

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ABOUT FORRESTER CONSULTING

Forrester provides independent and objective research-based consulting to help leaders deliver key transformation outcomes. Fueled by our customer-obsessed research, Forrester’s seasoned consultants partner with leaders to execute on their priorities using a unique engagement model that tailors to diverse needs and ensures lasting impact. For more information, visit forrester.com/consulting.

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Executive Summary

IT teams cannot manage what they cannot see. Representatives of organizations that use BMC Helix Discovery said the solution provides IT teams with complete service views of their assets and infrastructure. Such visibility enhances IT team productivity, reduces downtime and resource waste, and improves security.

BMC Helix Discovery is a software-as-a-service-based, cloud-native discovery and dependency mapping system that provides instant visibility into hardware, software, and service dependencies across multi-cloud, hybrid, and on-premises environments.

BMC commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying BMC Helix Discovery.¹ The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of BMC Helix Discovery on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four representatives with experience using BMC Helix Discovery. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single composite organization that is an industry-agnostic organization with 10,000 employees and 30,000 IT assets.

Three-year savings from IT asset optimization and rightsizing

\$2.5M



KEY STATISTICS



Return on investment (ROI)

314%



Net present value (NPV)

\$5.4M

Interviewees noted that prior to using BMC Helix Discovery, their organizations used legacy systems, homegrown solutions, and manual processes to manage assets. However, prior attempts yielded limited success and left them with security breaches, a lack of visibility into their assets, and outdated information. These limitations led to high costs and inefficiencies for IT teams.

After investing in BMC Helix Discovery, the interviewees' organizations gained visibility into their IT asset ecosystems. Key results from the investment include increased productivity on IT teams, faster IT asset remediation and recovery, improved IT asset optimization, and improved IT asset security.

KEY FINDINGS

Quantified benefits. Three-year, risk-adjusted present value (PV) quantified benefits for the composite organization include:

- **IT productivity improvement of 15% for managing assets and infrastructures.** IT employees at the composite organization spend more than half their time managing assets and infrastructures. With BMC Helix Discovery, the employees gain better visibility into the IT asset ecosystem, and they are equipped with accurate, real-time data. Over three years, the increased IT productivity is worth \$684,000 to the composite organization.
- **IT asset incident resolution and recovery efficiencies improvement of 20%.** The composite's end users avoid downtime because the solution equips IT employees with better data to identify the root cause of incidents and the time spent resolving them. Over three years, faster IT asset incident resolution and recovery is worth \$2.8 million to the composite organization.
- **IT asset optimization improvement of 90%.** Wasted IT assets were reduced through better visibility of the IT asset ecosystem. This resulted in avoided licensing fees/costs associated with managing unused assets. Over three years, IT asset optimization is worth \$2.5 million to the composite organization.
- **IT asset security improvement of 95%.** One-third of the composite organization's total IT assets are vulnerable to security incidents. With BMC Helix Discovery, the composite mitigates risk and improves overall security posture with visibility of these IT assets. Over three years, IT asset security is worth \$1.2 million to the composite organization.

Unquantified benefits. Benefits that provide value for the composite organization but are not quantified in this study include:

- **Improved visibility.** Interviewees said the solution improved their organizations' visibility into the IT asset ecosystem and that this was an underlying driver to many quantified benefits. Automating asset management and discovering risks sooner prepared the organizations to make immediate and impactful business decisions.
- **Customer support.** Interviewees expressed that BMC's customer support team is fast and effective and that the help it provided their organizations enabled them to deploy the solution to maximize its capabilities and reap the full benefits.
- **Supporting business growth.** Interviewees said BMC Helix Discovery assisted in business growth because data accuracy and visibility into their firms' IT asset ecosystems were underlying drivers to supporting complex changes.

Costs. Three-year, risk-adjusted PV costs for the composite organization include:

- **Licensing fees.** BMC Helix Discovery licensing is dependent on the scope of deployment. Over three years, the composite organization pays \$1.1 million in licensing fees.
- **Implementation and ongoing administration effort.** The composite organization requires the efforts of several IT employees to maintain the solution after implementation and deployment. Over three years, this costs the composite organization \$656,100.

The representative interviews and financial analysis found that a composite organization experiences benefits of \$7.1 million over three years versus costs of \$1.7 million, adding up to a net present value (NPV) of \$5.4 million and an ROI of 314%.



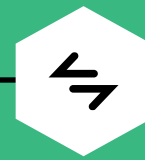
ROI
314%



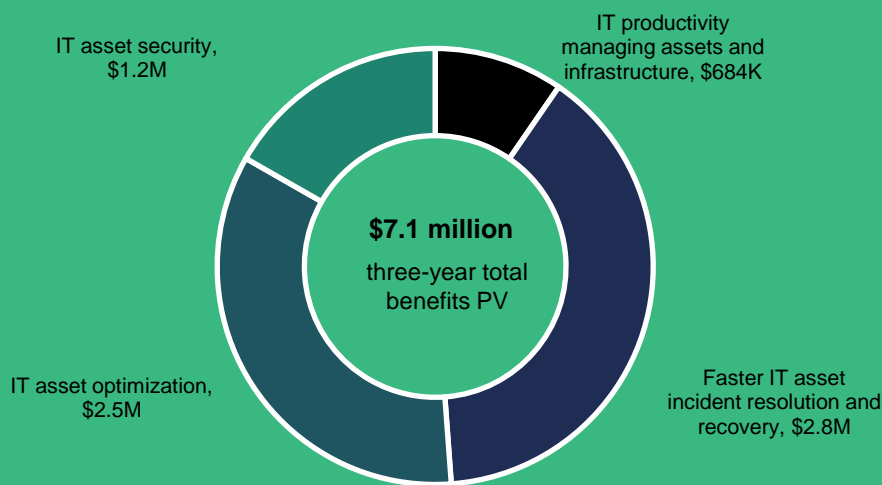
BENEFITS PV
\$7.1M



NPV
\$5.4M



PAYBACK
<6 months



“Helix has helped us into some of those large path-breaking changes in life. ... It has helped us significantly in our cloud-migration system, entire system updates, upgrades, [and] transition. These are the enablers where we have leveraged **Discovery [most].**”

— General manager of strategy and transformation, IT

TEI FRAMEWORK AND METHODOLOGY

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ framework for those organizations considering an investment in BMC Helix Discovery.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that BMC Helix Discovery can have on an organization.

Forrester Consulting conducted an online survey of 351 cybersecurity leaders at global enterprises in the US, the UK, Canada, Germany, and Australia. Survey participants included managers, directors, VPs, and C-level executives who are responsible for cybersecurity decision-making, operations, and reporting. Questions provided to the participants sought to evaluate leaders' cybersecurity strategies and any breaches that have occurred within their organizations. Respondents opted into the survey via a third-party research panel, which fielded the survey on behalf of Forrester in November 2020.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by BMC and delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.

Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the study to determine the appropriateness of an investment in Helix Discovery.

BMC reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.

BMC provided the customer names for the interviews but did not participate in the interviews.



DUE DILIGENCE

Interviewed BMC stakeholders and Forrester analysts to gather data relative to BMC Helix Discovery.



INTERVIEWS

Interviewed four representatives at organizations using BMC Helix Discovery to obtain data with respect to costs, benefits, and risks.



COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the interviewees' organizations.



FINANCIAL MODEL FRAMEWORK

Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewees.



CASE STUDY

Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. Given the increasing sophistication of ROI analyses related to IT investments, Forrester's TEI methodology provides a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

The BMC Helix Discovery Customer Journey

Drivers leading to the BMC Helix Discovery investment

Interviews					
Role	Industry	Region	Revenue	Employees	Number of IT assets
ITSM expert and product owner	Automotive	Multinational	\$36 billion	300,000	500,000
Manager of infrastructure and design	Energy	APAC	\$722 million	2,000	35,000
IT director, enterprise	Energy	North America	\$96 million	1,000	2,000
General manager of strategy and transformation	IT	Multinational	\$12 billion	200,000	250,000

KEY CHALLENGES

Prior to investing in BMC Helix Discovery, interviewees' organizations utilized legacy solutions, homegrown solutions, and manual processes to monitor assets. These solutions were costly and ineffective at providing clear and up-to-date management of IT assets in the organizations' ecosystems, and this led to security breaches, a lack of visibility and clarity on which assets were being managed and having outdated or incorrect information in systems.

The interviewees noted how their organizations struggled with common challenges, including:

- Significant IT labor expenditure on asset management.** Interviewees described the impact of their organizations' IT teams managing and tracking large volumes of assets with inflexible solutions and manual efforts. The lack of automation in asset-management processes contributed to low morale in the organizations' IT teams and ultimately led to resignations.

The ITSM expert and product owner at an automotive company stated, "There was a lot of manual effort [around] entering information in the database, in [a spreadsheet], [and] in a separate

database and then uploading [information], keeping [information] up to date, and so on."

“There were centralized solutions provided, but it’s always up to [admins] if they use this, and so on. You never had the complete information. This is what we are working on now with BMC Discovery, to have this [data] centralized and up to date.”

ITSM expert and product owner, automotive

- Wasted resources due to lack of asset visibility.** Interviewees attributed high costs in their organizations' prior environments to lack of visibility into their asset ecosystems. The general manager of strategy and transformation at an IT company described the different cost layers associated with applications in an asset

ecosystem. They said: “Applications are directly proportional to your business disruption ... and are more than 15% of the operations cost because the applications are heavy consumers of data. They also have data-ingestion costs, and there are many platforms interrelated and connected with them to support them and keep them up and running.”

- **Increasingly complex IT infrastructure due to business growth.** Interviewees described how their organizations’ prior environments did not meet the needs of their business growth plans. The general manager of strategy and transformation at an IT company said their organization was able to respond to the COVID-19 pandemic by developing more complex infrastructure from a business-continuity standpoint including a hybrid environment of data centers and cloud platforms.
- **No single source of truth/configuration management database (CMDB) and conflicting asset inventory data.** Interviewees highlighted that data in their organizations’ prior environments was not always up to date as a result of manual and point-in-time processes. The ITSM expert and product owner at an automotive company described: “So much outdated information was in our systems. [There were] a lot of hosts or they were no longer available, they were retired, and so on. But they were still in the system because nobody updated the information.”
- **Security threats to critical IT infrastructure.** Interviewees said the impact of major security breaches in their organizations’ prior environments could be substantial because of limited visibility into the organizations’ internal networks. The manager of infrastructure and design at an energy company stated: “Cybersecurity vulnerability management [and] ransomware protection ... are very, very front of

mind for us. Again, [regarding] national critical infrastructure, we get millions of attacks a day or attempt.”

INVESTMENT OBJECTIVES

The interviewees’ organizations searched for a solution that could:

- Automate asset management.
- Reduce security-risk exposure.
- Reduce IT burden.
- Resource optimization and rightsizing.

“We needed something that was well-rounded where our service department could use this software for dispatching [and] doing all the things [our previous solution did.] But what we wanted as well was protection. [We wanted] that instant view available into our hardware, our service dependencies, [and] our industrial data centers for security purposes.”

IT director, enterprise, energy

COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an ROI analysis that illustrates the areas financially affected. The composite organization is representative of the four interviewees, and it is used to present the aggregate financial analysis in the next section. The composite organization has the following characteristics:

Description of composite. The composite organization has 10,000 employees. It manages 36,300 IT assets, and this number grows by 10% annually. There are 36 employees in the organization's IT ops team, which results in approximately 1,000 IT assets per employee.

Prior to using Helix Discovery, the organization used a combination of homegrown and competitive solutions supplemented with manual processes. But this environment did not provide complete visibility into the organization's IT asset ecosystem, which left it vulnerable to major security breaches and inefficiencies in managing IT assets.

Key Assumptions

- **10,000 total employees**
- **30,000 IT assets in Year 1**
- **30 IT employees manage assets and infrastructure in Year 1**
- **The number of IT assets and IT employees grows by 10% each year**

Analysis Of Benefits

■ Quantified benefit data as applied to the composite

Total Benefits						
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	IT productivity managing assets and infrastructure	\$119,700	\$282,150	\$455,202	\$857,052	\$684,000
Btr	Faster IT asset incident resolution and recovery	\$680,513	\$1,103,762	\$1,684,165	\$3,468,440	\$2,796,186
Ctr	IT asset optimization	\$720,000	\$990,000	\$1,306,800	\$3,016,800	\$2,454,545
Dtr	IT asset security	\$480,000	\$480,000	\$480,000	\$1,440,000	\$1,193,689
	Total benefits (risk-adjusted)	\$2,000,213	\$2,855,912	\$3,926,167	\$8,782,292	\$7,128,420

IT PRODUCTIVITY MANAGING ASSETS AND INFRASTRUCTURE

Evidence and data. Interviewees said that prior to implementing BMC Helix Discovery, their organizations IT teams had inefficiencies in their productivity levels due to limited visibility into IT asset ecosystems with legacy solutions and manual processes. Furthermore, the data these solutions provided was not always accurate or up to date.

With BMC Helix Discovery, employee experiences improved at the organizations because IT team members were equipped with a more efficient solution. IT employees were able to exponentially increase time savings as employees spent more than half of their time dedicated to managing assets and infrastructure.

- Interviewees explained that BMC Helix Discovery provides benefits with managing assets because it performs the efforts that would require one or more skilled FTEs. The manager of infrastructure and design at an energy company said: “The main benefit is the reliability that [BMC Helix Discovery] has demonstrated over the years. It’s there working ... in the background doing millions

of scans a day ... and it requires very low maintenance.”

- The ITSM expert and product owner at an automotive company described the impact of digitally transforming their organization’s asset management with BMC Helix Discovery. With some locations monitoring several thousand hosts, this freed the time and effort of multiple FTEs who previously needed to manually enter data into separate platforms. The interviewee said: “The problem [we had] in the past was [exerting] a lot of manual effort. ... [We were] entering information in the database, in a spreadsheet, [and] in a separated database [and] then [uploading] them, [keeping] them up to date, and so on. There was no automation behind [it], and that was for sure a problem.” But the interviewee said the reduction in manual efforts reduced the risk of human error in data input and overall productivity.
- The manager of infrastructure and design at an energy company also described the benefit of the solution in scoping projects related to cloud initiatives. They said: “I know what [the assets] names are, what their status is offline, when they were last online, and all these bits of pieces. So,

we use the Discovery information a lot of times to make sure that the scope is right.”

- The general manager of strategy and transformation at an IT company said productivity at their organization has increased by 12% to 15% with BMC Helix Discovery. The interviewee attributed a 20% headcount reduction and 40% to 45% reduction in governance costs by replacing a homegrown solution with BMC Helix Discovery.

“We do track productivity, and we have clearly seen almost 12% to 15% of the productivity recovery or productivity enhancement has happened so far [with BMC Helix Discovery].”

General manager of strategy and transformation, IT

Modeling and assumptions. For the composite organization, Forrester assumes:

- The number of IT assets grows 10% annually as the organization continues to grow. The organization has 30,000 total IT assets in Year 1, 33,000 total IT assets in Year 2, and 36,300 total IT assets in Year 3.
- The number of IT employees who manage assets and infrastructure also grows by 10% annually. There are 30 employees in Year 1, 33 in Year 2, and 36 in Year 3.
- Before using BMC Helix Discovery, these IT employees spent approximately 70% of their time managing assets and infrastructure instead of handling other tasks. This equates to an average

of 1.5 hours spent per asset before using BMC Helix Discovery.

- The composite’s employees save time with BMC Helix Discovery, and the time savings scale over the course of three years as efficiencies continue to improve and IT assets increase. Employees who manage assets and infrastructure save 5% of time in Year 1, 10% of time in Year 2, and 15% of time in Year 3. This equates to an average management time per asset with BMC Helix Discovery of 1.43 hours in Year 1, 1.35 hours in Year 2, and 1.28 hours in Year 3.
- The composite saves 2,100 hours in Year 1, 4,950 hours in Year 2, and 7,986 hours in Year 3 with BMC Helix Discovery.
- The average burdened hourly rate of an IT employee is \$60.

Risks. The benefit an organization may realize due to IT productivity management assets and infrastructure will vary due to a variety of factors, including:

- The number of total IT assets that the organization manages.
- The number of IT employees who manage assets and infrastructure and the time they dedicate to this instead of other tasks.
- The average fully burdened hourly rate of an IT employee.

Results. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$684,000.

IT Productivity Managing Assets And Infrastructure					
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Total IT assets	Composite	30,000	33,000	36,300
A2	IT employees who manage assets and infrastructure	Composite	30	33	36
A3	Percent of time spent managing assets and infrastructure vs. other tasks	Composite	70%	70%	70%
A4	Average management time per asset before using BMC Helix Discovery (hours)	A2*2,080 hours*A3/A1	1.50	1.50	1.50
A5	Percent of time saved with BMC Helix Discovery	Interviews	5%	10%	15%
A6	Average management time spent per asset with BMC Helix Discovery (hours)	A4*(100%-A5)	1.43	1.35	1.28
A7	Total time saved with BMC Helix Discovery (hours)	A1*(A4-A6)	2,100	4,950	7,986
A8	Average fully burdened hourly rate of an IT employee	TEI standard	\$60	\$60	\$60
At	IT productivity managing assets and infrastructure	A7*A8	\$126,000	\$297,000	\$479,160
	Risk adjustment	↓5%			
Atr	IT productivity managing assets and infrastructure (risk-adjusted)		\$119,700	\$282,150	\$455,202
Three-year total: \$857,052			Three-year present value: \$684,000		

FASTER IT ASSET INCIDENT RESOLUTION AND RECOVERY

Evidence and data. Prior to using BMC Helix Discovery, interviewees’ organizations struggled to quickly identify root cause of incidents to ultimately resolve them. Tracing the root cause could take several hours in some instances, and this left the organizations at great risk. Furthermore, resolution and recovery processes were complicated by needing to determine which team was best equipped to manage the incident.

With BMC Helix Discovery, the interviewees’ organizations were able to quickly identify root causes and reduce the number of hours they spent resolving incidents.

- The IT director, enterprise, at an energy company noted that with BMC Helix Discovery, their organization’s IT team reduced resolution hours by 50%, if not more. The interviewee highlighted: “[Prior to using BMC Helix Discovery,] our IT specialists [would spend] 3 to 4 hours [tracing an issue.] Whereas now [with BMC Helix Discovery], we get that instant information. When there are issues that we can’t resolve, we call in [to BMC Helix Discovery] tech support and they’re on it. They help us right away.”
- The general manager of strategy and transformation at an IT company also described the value that the data in BMC Helix Discovery had on creating faster incident-resolution and recovery times. The interviewee noted: “If you look at the Helix fundamental base, it will give

you the reason data, and it will give you the discovery data. So the reason data ... can give you a clear [idea] or it can [show] you at where to look ... for the ... solution of this problem.”

- The general manager of strategy and transformation at an IT company said that with BMC Helix Discovery, their team’s time to response improved by 20% to 25%, the time to resolve (TTR) improved by 12% to 13%, and the mean time to recovery (MTTR) improved by more than 20%. The interviewee stated: “From the productivity at a high level to at the TTR level, we have seen greater advantage. I think somehow, it’s very much in line with our expected improvements over the due course of the time.”

“We track MTTRs for every month. ... [Since January of] last year, prior to adoption of the BMC [solution], we have [seen] almost a 20% ... improvement ... in MTTR. ... If you look at our benefits and advantages [of using BMC Helix Discovery], it has really sized up very well so far.”

General manager of strategy and transformation, IT

Modeling and assumptions. For the composite organization, Forrester assumes:

- The composite has 300 incidents of IT asset downtime in Year 1, 330 in Year 2, and 363 in Year 3. The average number of end users impacted per downtime incident is 353 in Year 1, 347 in Year 2, and 361 in Year 3. There are four

levels of severity in incidents related to asset downtime and the percentage of end users impacted. The downtime incidents at the composite organization are modeled in detail in [Appendix B](#) and summarized as follows:

- Severity 1: 1% of incidents impacts 50% of end users.
 - Severity 2: 4% of incidents impacts 25% of end users.
 - Severity 3: 27% of incidents impact 5% of end users.
 - Severity 4: 68% of incidents impact 1% of end users.
- Prior to using BMC Helix Discovery, the average time of downtime per incident was 3.6 hours. With BMC Helix Discovery, downtime is reduced by 10% in Year 1, 15% in Year 2, and 20% in Year 3.
 - The average fully burdened hourly rate of an end user is \$42.
 - The composite recaptures 50% of productivity because some regained hours may not be used productively but still enhance the employee experience. Employees reallocate the remaining recouped time toward longer work breaks, avoided late nights, and overtime.

Risks. The benefit an organization may realize due to faster IT asset incident resolution and recovery will vary due to a variety of factors, including:

- The number of incidents of IT asset downtime the organization experiences and the percentage of end users affected by them.
- The average downtime per incident.
- The average fully burdened hourly rate of an end user.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of \$2.8 million.

Faster IT Asset Incident Resolution And Recovery					
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Incidents of IT asset downtime	R4	300	330	363
B2	Average number of end users impacted per downtime incident	R25	353	347	361
B3	Average downtime per incident before using BMC Helix Discovery (hours)	R26	3.6	3.6	3.6
B4	Percent reduction in downtime (improvement in resolution and recovery time) with BMC Helix Discovery	Interviews	10%	15%	20%
B5	Total end-user time saved with BMC Helix Discovery (hours)	B1*B2*B3*B4	38,124	61,835	94,351
B6	Average fully burdened hourly rate of an end user	TEI standard	\$42	\$42	\$42
B7	Productivity recapture	TEI Standard	50%	50%	50%
Bt	Faster IT asset incident resolution and recovery	B5*B6*B7	\$800,604	\$1,298,543	\$1,981,370
	Risk adjustment	↓15%			
Btr	Faster IT asset incident resolution and recovery (risk-adjusted)		\$680,513	\$1,103,762	\$1,684,165
Three-year total: \$3,468,440			Three-year present value: \$2,796,186		

IT ASSET OPTIMIZATION

Evidence and data. Interviewees said that prior to using BMC Helix Discovery, their organizations saw cost implications of wasted asset resources. Some struggled to stay within the license limits of other solutions, which resulted in large fines if breached.

With BMC Helix Discovery, the organizations reduced costs and optimized their IT asset ecosystems to improve financial planning and decision-making.

- The ITSM expert and product owner at an automotive company said, “[License managers] ordered more as they needed just to avoid restrictions [or] breach the limit for the license to avoid any kind of fee to pay.” The interviewee estimated that their organization avoided paying

millions of dollars in fees related to license management with BMC Helix Discovery.

- The manager of infrastructure and design at an energy company described the impact of their organization’s IT asset optimization on the operational issues associated with unused virtual machines. They said the costs associated with proliferating virtual machines was around \$70,000 and that the company identified several unused machines each quarter. The interviewee said: “[Without BMC Helix Discovery, poor] resource allocation creates not [only] a budgetary issue, [but it also] creates an operational issue. ... And that’s where BMC can come into the play and say, ‘Those machines weren’t doing anything

anyway. Let's get a better decommissioning process.”

- The general manager of strategy and transformation at an IT company described how BMC Helix Discovery enabled their team to discover significantly more assets and that this resulted in 7% to 9% cost savings for cloud hosting and more than 10% operations cost savings in the application environment. The interviewee stated: “We had a huge [optimization] cost and, prior to that, we ourselves had done a lot of the AI power determination engine and so on. But, still, we have not been able to discover this amount of 5% to 7%. I'm calling it significant

because these 5% savings come on top of our existing savings, which we had already implemented.”

Modeling and assumptions. For the composite organization, Forrester assumes:

- The composite's number of IT assets grows 10% annually. The organization has 30,000 total IT assets in Year 1, 33,000 total IT assets in Year 2, and 36,300 total IT assets in Year 3.
- The composite wastes 5% of IT assets. With BMC Helix Discovery, the percentage of wasted IT assets remediated is 60% in Year 1, 75% in Year 2, and 90% in Year 3.
- The average cost per wasted asset is \$1,000.

Risks. The benefit an organization may realize due to IT asset optimization will vary due to a variety of factors, including:

- The percentage of IT assets wasted (e.g., unused, underutilized, etc.)
- The average cost per wasted asset.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of \$2.5 million.

“The fundamental advantage [of using BMC Helix Discovery] is that [we] are [able] to reduce costs. ... We [can] optimize our entire cost environment.”

General manager of strategy and transformation, IT

IT Asset Optimization					
Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Total IT assets	A1	30,000	33,000	36,300
C2	Percentage of IT assets wasted (e.g., unused, underutilized, etc.)	Composite	5%	5%	5%
C3	IT assets wasted	C1*C2	1,500	1,650	1,815
C4	Percentage of wasted IT assets remediated with BMC Helix Discovery	Interviews	60%	75%	90%
C5	Wasted IT assets remediated with BMC Helix Discovery	C3*C4	900	1,238	1,634
C6	Average cost per wasted asset	Composite	\$1,000	\$1,000	\$1,000
Ct	IT asset optimization	C5*C6	\$900,000	\$1,237,500	\$1,633,500
	Risk adjustment	↓20%			
Ctr	IT asset optimization (risk-adjusted)		\$720,000	\$990,000	\$1,306,800
Three-year total: \$3,016,800			Three-year present value: \$2,454,545		

IT ASSET SECURITY

Evidence and data. Prior to using BMC Helix Discovery, interviewees’ organizations were left vulnerable to security breaches due to a lack of visibility into their IT asset ecosystems and imprecise root-cause analysis. A breached asset could potentially affect thousands of hosts.

With BMC Helix Discovery, the organizations were able to improve their overall security risk exposure and productivity and mitigate potential security issues.

- The ITSM expert and product owner at an automotive organization highlighted how BMC Helix Discovery equipped their company with the information and insights to mitigate three potential security risks including Log4j, which would have affected 8,000 hosts. The interviewee stated: “The most important thing is [that we] are more secure against cyberattacks ... and [we] have updated information about [our] system. ... If you know something will happen or ... there are

issues at other companies, you can easily check this internally with Discovery.”

- The general manager of strategy and transformation at an IT company described the impact of reducing their organization’s risk index in its overall environment through faster vulnerability identification and quicker remediation. The interviewee said, “[Before BMC Helix Discovery,] we were in amber zone [of risk] ... [After BMC Helix Discovery, we went] from 8.8 to 7.5 [risk points] ... [which is significant, given] the complexity of our size, environment, and ecosystem.”

The same interviewee said: “[The] precision [of BMC Helix Discovery] ... really helps ... lower risk. ... It’s very important for the people managing and monitoring [our systems to have BMC Helix Discovery for] risk mitigation.”

Modeling and assumptions. For the composite organization, Forrester estimates:

- The composite has 17,500 security incidents per year and 30% of these are related to IT assets.
- The composite's probability of a security breach without a discovery tool is 0.02%.²
- Before using BMC Helix Discovery, 4% of the composite's 30,000 total IT assets were vulnerable to security breaches.
- With BMC Helix Discovery, the percent reduction in vulnerable IT assets is 80% in Year 1, 90% in Year 2, and 95% in Year 3.
- The composite organization's cost of a security breach related to IT assets for is \$600,000.³

- The percentage of IT assets that are vulnerable to a security breach before and after using BMC Helix Discovery.
- The organization's total cost of a security breach.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of \$1.2 million.

“Everyone remembers the Log4j patching craziness [that happened] all around the world. Without [BMC Helix] Discovery, we would have been in a much worse situation to understand [our vulnerability]. With [BMC Helix] Discovery, we had a nice and definite list of what we need to patch.”

Manager of infrastructure and design, energy

Risks. The benefit an organization may realize due to IT asset security will vary due to a variety of factors, including:

- The number of security incidents related to IT assets the organization experiences.

IT Asset Security					
Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Security incidents	Composite	17,500	17,500	17,500
D2	Percentage of security incidents related to IT assets	Composite	30%	30%	30%
D3	Security incidents related to IT assets	D1*D2	5,250	5,250	5,250
D4	Probability of a security breach before using BMC Helix Discovery	Forrester research	0.02%	0.02%	0.02%
D5	Subtotal: Security breaches related to IT assets before using BMC Helix Discovery	D3*D4	1	1	1
D6	Total IT assets	A1	30,000	33,000	36,300
D7	Percentage of IT assets vulnerable to security breaches before using BMC Helix Discovery	Composite	4%	4%	4%
D8	Vulnerable IT assets before using BMC Helix Discovery	D6*D7	1,200	1,320	1,452
D9	Percent reduction in vulnerable IT assets with BMC Helix Discovery	Interviews	80%	90%	95%
D10	Vulnerable IT assets with BMC Helix Discovery	D8*(100%-D9)	240	132	73
D11	Probability of a security breach with BMC Helix Discovery	D4/D7*(D10/D6)	0.004%	0.002%	0.001%
D12	Subtotal: Security breaches related to IT assets after Discovery	D3*D11	0	0	0
D13	Cost of a security breach related to IT assets	Forrester research	\$600,000	\$600,000	\$600,000
Dt	IT asset security	(D5-D12)*D13	\$600,000	\$600,000	\$600,000
	Risk adjustment	↓20%			
Dtr	IT asset security (risk-adjusted)		\$480,000	\$480,000	\$480,000
Three-year total: \$1,440,000			Three-year present value: \$1,193,689		

UNQUANTIFIED BENEFITS

Interviewees mentioned the following additional benefits that their organizations experienced but were not able to quantify:

- **Improved visibility.** Interviewees said their organizations benefited from using BMC Helix Discovery with their organizations' entire IT asset ecosystems. Automating asset management and discovering risks sooner prepared them to make immediate and impactful business decisions.

- The manager of infrastructure and design at an energy company said: “[BMC Helix] Discovery is so good at discovering not just what we know, but [also] what we don’t know. And then that can be fed [into the system], and you get some really good exception reporting.”
- The general manager of strategy and transformation at an IT organization stated: “[With BMC Helix Discovery, we

are able to] visualize the entire topology of [our] infrastructure. ... Once you have kind of a complex environment, you need ... very visualization-driven dashboards [to help you make the] right decisions.”

- **Customer support.** Interviewees said the BMC Helix Discovery customer support team is fast and effective and that the help it provides enables their organizations to deploy the solution to its greatest capabilities and reap the full benefits.

- The IT director, enterprise, at an energy company highlighted, “When there are issues that we can’t resolve ... we call [BMC] tech support, and they’re on it. They help us right away.”
- The general manager of strategy and transformation at an IT company stated: “We go over ... [our] long-range aims and long-range challenges [biannually], and then we go back and talk to people from BMC to share our [plans] with them. ... [We] have a great understanding with them from that perspective.”

- **Supporting business growth.** Interviewees said BMC Helix Discovery assists in business growth because data accuracy and visibility into IT asset ecosystems are underlying drivers to supporting complex changes.

The general manager of strategy and transformation at an IT company stated: “[BMC Helix Discovery] helps [us with] envisioning, anticipating, and forecasting [our] future complexity, future consumption, [and] future users, and [it also] helps [us with] sizing up [our business]. ... That’s ... the unique differentiator of BMC Helix [Discovery].”

FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer

might implement BMC Helix Discovery and later realize additional uses and business opportunities, including:

- **Reducing operational costs in other ecosystems/tiers of the business.** Interviewees said BMC Helix Discovery will help their organizations minimize hosting apps across different tiers and ultimately reduce operational costs. The general manager of strategy and transformation at an IT company stated: “Maybe it will take another year or so [when] we decide [that] with this many applications, we don’t need to make it up. ... Or maybe we don’t need to connect them with so many other networks or in FinOps ecosystem because that’s really going to save a lot of money from the ITSM operations cost.”
- **Continuing business transformation/future planning.** Interviewees highlighted how BMC Helix Discovery fits into their organizations’ business transformations and future planning. The general manager of strategy and transformation at an IT company described how the solution helps their team develop its asset-refresh policy. The interviewee stated: “We [are] in the middle of transformation, and our transformation journey is going to be concluded in [the 2025 financial year] ... so, we do need the asset-refresh policy so that we can take the immediate and timely action whenever the needs [emerge].”

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in [Appendix A](#)).

Analysis Of Costs

■ Quantified cost data as applied to the composite

Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Licensing fees	\$0	\$428,450	\$428,450	\$428,450	\$1,285,350	\$1,065,492
Ftr	Implementation and ongoing administration effort	\$109,824	\$219,648	\$219,648	\$219,648	\$768,768	\$656,056
	Total costs (risk-adjusted)	\$109,824	\$648,098	\$648,098	\$648,098	\$2,054,118	\$1,721,548

LICENSING FEES

Evidence and data. BMC Helix Discovery licensing is dependent on the scope of the deployment.

Modeling and assumptions. For the composite organization, Forrester assumes:

- The composite organization pays \$389,500 in licensing fees annually.
- Pricing may vary. Contact BMC for additional details.

Risks. The cost of licensing may vary due to a variety of factors including the number of IT assets and infrastructures the organization manages.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$1.1 million.

Licensing Fees							
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3	
E1	BMC Helix Discovery licensing fees	Composite	\$0	\$389,500	\$389,500	\$389,500	
Et	Licensing fees	E1	\$0	\$389,500	\$389,500	\$389,500	
	Risk adjustment	↑10%					
Etr	Licensing fees (risk-adjusted)		\$0	\$428,450	\$428,450	\$428,450	
Three-year total: \$1,285,350				Three-year present value: \$1,065,492			

IMPLEMENTATION AND ONGOING ADMINISTRATION EFFORT

Evidence and data. Interviewees said implementing BMC Helix Discovery and providing ongoing management is straightforward and that with the support of the BMC team, their organizations' IT employees were trained on the solution within two to three days.

The interviewees also described ongoing management activities that include collaborating with BMC colleagues to improve service, increasing automation, working on patterns, and speeding up environments. In addition to monitoring the BMC Helix Discovery dashboard, interviewees' organizations spent time documenting patterns and implementing them to make them available on all queries. Overall, interviewees estimated that daily management of the solution requires 4 to 6 hours of effort by one employee.

“I was new to [BMC Helix Discovery], and [I] picked it up in just a few days. It’s not a big learning curve. It’s just that once you get into it, you understand how much data this thing has. And ... [knowing how to get] to that data is actually harder to [learn] ... than the actual language itself.”

Manager of infrastructure and design, energy

Modeling and assumptions. For the composite organization, Forrester assumes:

- The composite organization has two IT employees on the BMC Helix Discovery implementation team.
- The average fully burdened hourly rate of an IT employee on the implementation team is \$60.
- Initially, the percentage of time IT employees use BMC Helix Discovery in managing their IT assets and infrastructure is 40%. By the end of Year 1, IT employees use the solution to manage IT assets and infrastructure 80% of the time. They consistently use it at 80% over the course of three years.

Risks. The cost of implementation and ongoing administration efforts may vary due to a variety of factors, including:

- The number of IT employees on the implementation team.
- The fully burdened hourly rate of an IT employee on the implementation team.

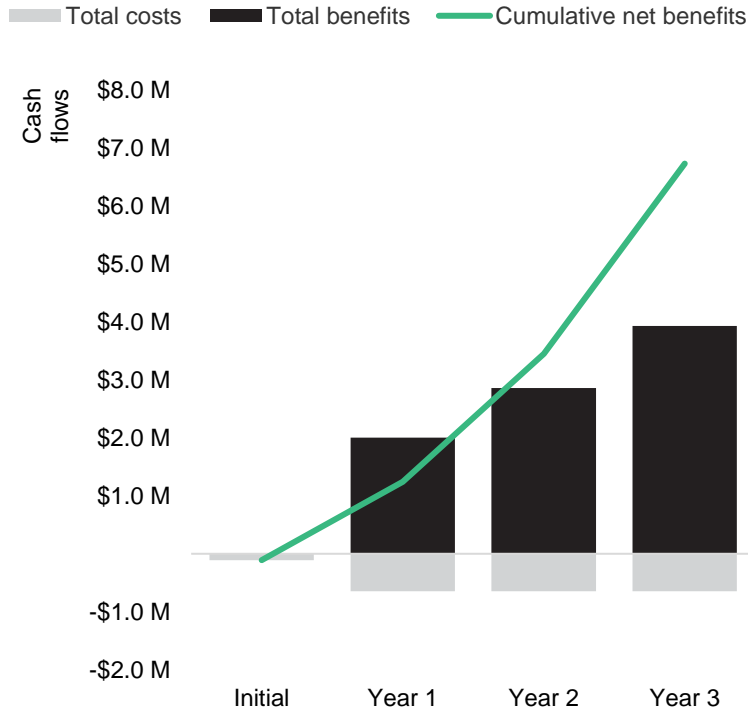
Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of \$656,100.

Implementation And Ongoing Administration Effort						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	IT employees on the BMC Helix Discovery implementation team	Composite	2	2	2	2
F2	Average fully burdened hourly rate of an IT employee	A8	\$60	\$60	\$60	\$60
F3	Percent of time spent using the BMC Helix Discovery to model and improve services, increase automation, optimize and secure IT assets and infrastructure, etc. vs. performing other tasks	Interviews	40%	80%	80%	80%
Ft	Implementation and ongoing administration effort	F1*2,080 hours*F2*F3	\$99,840	\$199,680	\$199,680	\$199,680
	Risk adjustment	↑10%				
Ftr	Implementation and ongoing administration effort (risk-adjusted)		\$109,824	\$219,648	\$219,648	\$219,648
Three-year total: \$768,768			Three-year present value: \$656,056			

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (Risk-Adjusted)



The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

Cash Flow Analysis (Risk-Adjusted Estimates)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$109,824)	(\$648,098)	(\$648,098)	(\$648,098)	(\$2,054,118)	(\$1,721,548)
Total benefits	\$0	\$2,000,213	\$2,855,912	\$3,926,167	\$8,782,292	\$7,128,420
Net benefits	(\$109,824)	\$1,352,115	\$2,207,814	\$3,278,069	\$6,728,174	\$5,406,872
ROI						314%
Payback						<6 months

Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

TOTAL ECONOMIC IMPACT APPROACH

Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.

Costs consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.

Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.

Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.



PRESENT VALUE (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.



NET PRESENT VALUE (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made unless other projects have higher NPVs.



RETURN ON INVESTMENT (ROI)

A project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits less costs) by costs.



DISCOUNT RATE

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.



PAYBACK PERIOD

The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

Appendix B: Additional Information

Distribution Of IT Asset Downtime Incidents					
Ref.	Metric	Source	Year 1	Year 2	Year 3
R1	Total end users	Composite	10,000	10,000	10,000
R2	Total IT assets	A1	30,000	33,000	36,300
R3	Probability of IT asset downtime	Composite	1%	1%	1%
R4	Incidents of IT asset downtime	R2*R3	300	330	363
R5	Probability of an incident with Severity 1	Composite	1%	1%	1%
R6	Incidents with Severity 1	R4*R5	3	3	4
R7	Percentage of end users impacted per Severity 1 incident	Composite	50%	50%	50%
R8	End users impacted per Severity 1 incident	R1*R7	5,000	5,000	5,000
R9	Average downtime per Severity 1 incident (hours)	Composite	1	1	1
R10	Probability of an incident with Severity 2	Composite	4%	4%	4%
R11	Incidents with Severity 2	R4*R10	12	13	15
R12	Percentage of end users impacted per Severity 2 incident	Composite	25%	25%	25%
R13	End users impacted per Severity 2 incident	R1*R12	2,500	2,500	2,500
R14	Average downtime per Severity 2 incident (hours)	Composite	2	2	2
R15	Probability of an incident with Severity 3	Composite	27%	27%	27%
R16	Incidents with Severity 3	R4*R15	81	89	98
R17	Percentage of end users impacted per Severity 3 incident	Composite	5%	5%	5%
R18	End users impacted per Severity 3 incident	R1*R17	500	500	500
R19	Average downtime per Severity 3 incident (hours)	Composite	3	3	3
R20	Probability of an incident with Severity 4	Composite	68%	68%	68%
R21	Incidents with Severity 4	R4*R20	204	224	247
R22	Percentage of end users impacted per incident with Severity 4	Composite	1%	1%	1%
R23	End users impacted per incident with Severity 4	R1*R22	100	100	100
R24	Average downtime per Severity 4 incident (hours)	Composite	4	4	4
R25	Subtotal: Average end users impacted per downtime incident	$(R6*R8+R11*R13+R16*R18+R21*R23)/R4$	353	347	361
R26	Subtotal: Average hours of downtime per incident	$(R6*R9+R11*R14+R16*R19+R21*R24)/R4$	3.62	3.61	3.63

Appendix C: Endnotes

¹ Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

² Source: Forrester Consulting Cost Of A Cybersecurity Breach Survey, Q1 2021.

³ Ibid.

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