

# The Business Value of Red Hat Insights







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### **Executive Summary**

Insights is a Red Hat service that continuously monitors platforms and applications in a hybrid cloud environment. Customers can utilize Insights via most Red Hat subscriptions at no additional charge, such as Red Hat's Enterprise Linux, Ansible Automation Platform, and OpenShift. Insights is designed to help IT administrators with complex tasks related to compliance, security vulnerabilities, and performance degradation and other operational tasks. By using Red Hat's best practices and analytics, IT operations can reduce toil and focus on more value-added innovation projects.

Insights users can access a centralized dashboard to view the health and status of their full environment, making it easier to manage and maintain their systems. By being more proactive, enterprises can reduce downtime, avoid outages, and improve the customer experience of their applications. In addition, as enterprises modernize applications with containers that run on premises, in the cloud, and in hybrid modes, Insights is designed to identify and recommend solutions to common issues in minutes.

Insights can also improve costs by helping give customers better visibility of their cloud spending, especially container clusters such as Red Hat OpenShift. Infrastructure and application costs can be collected and modeled by a project or team to identify excess capacity. Using 90 days, historical data, enterprises can detect cost anomalies and control spending proactively — before the invoice arrives weeks later. Insights can enable FinOps teams by helping align chargebacks for unallocated costs. With actionable data provided to the right stakeholder, enterprises can better control their cloud costs.

The primary goals of solutions like Insights are to enable IT teams to drive better business outcomes by removing blind spots and delivering a better digital customer experience through improved performance, security, and resiliency. This study evaluated the returns of Red Hat Insights and how this platform delivers on the promise of enhanced visibility. During this study, enterprises of all sizes consistently told IDC were more efficient in finding performance issues, identifying security vulnerabilities, and reducing downtime. This improvement translates to bottom-line savings and short payback periods. IT operations teams can utilize Insights to troubleshoot their production infrastructure and application landscape proactively. Enterprises that have implemented site reliability engineering (SRE) teams may find that Insights can improve their effectiveness too.

# Business Value Highlights

Click the highlights below to navigate to content within this document.

- **501%** three-year return on investment
- **7 months** payback
- 1 20%
  IT systems
  management team
  efficiencies
- 48% faster deployment of virtual machines
- faster application development life cycle, new applications, and new features
- 24% more efficient security teams
- 76% less unplanned downtime



IDC spoke with organizations about how they are using Red Hat Insights with other Red Hat solutions, such as Red Hat Enterprise Linux, Red Hat OpenShift, and Red Hat Ansible, to support and optimize their hybrid IT environments. Study participants described applying improved visibility and predictive analytics to deliver more efficient, agile, and robust IT services.

Based on interviews with Red Hat customers, IDC calculates that they will realize benefits through their use of Insights worth an average of \$2.01 million per year (\$103,500 per 100 cloud servers/virtual machines [VMs]) by:

- Providing businesses with increased visibility into their hybrid IT environments, leading to improved efficiency, security, and performance
- Ensuring significant time savings in management and security activities, thereby enabling IT teams to focus more on innovation and business success
- Benefiting development teams through automation and self-service features, allowing businesses to react more readily to business needs and deliver more new applications faster
- Understanding configuration of their hybrid IT infrastructures, enabling proactive steps to address potential security vulnerabilities and improving security posture
- Improving business results, including better availability of important business applications, enhanced IT systems agility, and reduced operational and business losses associated with performance issues

### Situation Overview

Companies continue to migrate to the public cloud, but the hybrid model is here for the foreseeable future. Enterprises tell IDC that in two years, they will still have roughly 47% of their workloads on premises (source: IDC's *Intelligent CloudOps Survey*, October 2023). In the same survey, IDC found that the median number of cloud providers in use was 3. The combination of maintaining hybrid and monitoring multiple public cloud providers means additional stress on the IT operations teams. In addition, the rate of change is accelerating as the demands of digital transformation and global economic pressures increase. IT executives, line-of-business owners, and application development, cloud architecture, and infrastructure and operations teams must collaborate closely to address the challenge of increasing complexity of these new environments. Success for business and IT is now interdependent. Their mutual goal is to provide an efficient and resilient application environment where incidents are solved quickly.



Businesses are asking for new applications at a faster rate. Newer applications are often cloud native and container based, utilizing web services with digital infrastructure and networking across multiple cloud environments. Therefore, IT must simultaneously adapt to support legacy applications running in hybrid cloud and container-based public cloud application environments. In addition, organizations are looking to adopt modern organizational constructs such us DevOps, cloud COE, FinOps, and SRE to meet these complex architectures while managing costs. Leaders can leverage each of these groups to meet the support needs of the business, but only if effective tools enable them.

An essential tool for modern IT teams enables IT operations teams to be more proactive. Today's digital businesses rely on their hybrid cloud infrastructure to be resilient and performant. IT must find and address incidents in real time before customers report them. Therefore, a tool that continuously analyzes the company's application landscape is essential. Simple monitoring tools are no longer enough. IT needs easy-to-use tools that look across the entire environment to identify risk and predict issues proactively so that teams can take guick actions before incidents are reported. When problems arise, the tool must provide expert advice on where to look and best practices to remediate the incident. In addition, alerting when servers and applications are out of compliance with company-standard configurations or security policies improves the resiliency of the applications. Many vendors combine this data into a single analytics dashboard so that teams can proactively see performance issues and troubleshoot bottlenecks. When multiple IT teams see the same comprehensive data in real time, it improves collaboration and accountability. This cross-team collaboration and a single source of truth enhance the efficiency of operations teams that often lack full staffing today due to workforce skills and hiring challenges. Improving IT tools can translate into better work-life balance for support staff while delivering better results to the business.

# Red Hat Insights Overview

Red Hat Insights provides enterprise visibility of a company's on-premises or cloud application environment. Users can centralize and control their application infrastructure with a visual dashboard. Insights enables monitoring and management of critical cloud infrastructure components, including Red Hat Enterprise Linux, Red Hat OpenShift, and Red Hat Ansible Automation platforms, and other third-party infrastructure applications. It enables collaboration across teams and helps them quickly find and resolve incidents with best practices and predictive monitoring of the hybrid landscape. Red Hat's open hybrid cloud strategy builds on the technological foundation of Linux, containers, and automation. An open hybrid cloud approach allows you to run your applications anywhere you need them. Red Hat Insights integrates with the ecosystem of Red Hat and partner solutions so that you can build and operate automation at scale.



Insights is an enterprise-grade solution from Red Hat. It provides complete capabilities to analyze a company's environment at scale continuously. This proactive approach to managing complex environments means improved customer experience and resiliency, which has become critical for today's modern digital enterprise. Full visibility of the IT landscape means that IT operations and site reliability engineering teams can quickly solve incidents before they become customer impacting. Red Hat's goal is to improve resiliency by enhancing the efficiency of operations and security processes, which is essential for the modern digital enterprise.

IT teams struggle to fill open head counts in today's tight labor market, putting additional stress on current staff and hurting work—life balance. Insights aims to streamline everyday tasks and find issues with less manual effort, helping existing teams focus on projects that improve business outcomes. Insights helps IT find performance issues faster and resolve stability problems through detailed, step-by-step recommendations. This saves IT hours of research and reduces their time on technical support calls because Insights contains decades of Red Hat's expert advice. In addition, Insights is designed to find issues before they occur.

Another critical area of focus for Insights is security. Insights empowers operation and security teams by prioritizing what to focus on by identifying security risks and vulnerabilities in their cloud environments. It is more than just a scanner. Insights looks in depth to find threat intelligence based on each customer's unique configuration and common vulnerability and exposure (CVE) identified items. By working with the Ansible Automation Platform, patches and security configuration changes can be implemented across the entire environment.

Red Hat is a supporter of and contributor to the open source community. As application supply chain concerns grow, open source applications can provide the increased security and better provenance that enterprises need. In addition, a hybrid cloud approach offers the flexibility to run applications anywhere. IDC shows that enterprises will continue to run production workloads in a hybrid mode for years. Red Hat Insights builds on the open source foundation of Red Hat Enterprise Linux and Red Hat OpenShift containers to manage a customer's complete environment.

Finally, Red Hat continues to improve Insights' capabilities. In 2023, Red Hat added a Cost Management module to Insights, allowing customers to manage their Red Hat operational costs and usage in addition to previously provided subscription visibility. Customers can better control their spending by identifying unused subscriptions in the environment. Insights Cost Management also enables customers to allocate expenses to appropriate business units or departments.

# The Business Value of Red Hat Insights

### **Study Demographics**

IDC conducted interviews with IT managers about their organizations' use of Red Hat Insights. Interviews were in depth in nature and designed to understand the impact in both quantitative and qualitative terms of using Red Hat Insights in areas such as IT costs, staff time requirements, agility, performance, and ability to support business operations.

Table 1 presents demographics of the Red Hat customers interviewed for this study. As shown, they were generally enterprise-level organizations, with an average employee base of 32,471 and annual revenue of \$5.97 billion (medians of 20,000 employees and \$4.0 billion in annual revenue). They provided experiences of using Red Hat Insights from a number of different industry verticals, namely the healthcare (2), ecommerce, food and beverage, manufacturing, retail, and transportation sectors.

TABLE 1 **Demographics of Interviewed Organizations** 

	Average	Median
Number of employees	32,471	20,000
Number of IT staff	474	312
Number of business applications	335	50
Revenue per year	\$5.97B	\$4.00B
Countries	United States	
Industries	Healthcare (2), ecommerce, food and beverage, manufacturing, retail, and transportation	

n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

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### Choice and Use of Red Hat Insights

Study participants discussed the reasons that they chose to use Red Hat Insights for their unique hybrid IT environments that rely on other Red Hat solutions, such as Red Hat Enterprise Linux, Red Hat OpenShift, and Red Hat Ansible, focusing most commonly on the need to increase visibility into and understanding of these environments. They realized that the inherent complexity of modern and often hybrid IT systems requires more robust solutions to ensure needed visibility and insights and that failure to deliver these capabilities results in inefficiencies and also potentially creates risk in terms of security exposure and operational outcomes. They ended up choosing Red Hat Insights after concluding that it would provide the incremental gains in visibility and understanding that they required.

# Interviewed Red Hat customers described their reasons for choosing to use Insights in their own words:

#### Need for consistent deployment experience across IT environments:

"We have a multi-public cloud plus on-premises environment, and we needed to standardize our deployments, from a Linux side, across all those landscapes, which we can do with Red Hat Insights."

#### Improved security capabilities:

"We were having problems trying to keep track of all the bugs and possible vulnerabilities in our IT environment, and Red Hat Insights helps with this."

#### Scalability and analytical capabilities:

"We looked at other monitoring solutions but ended up going with Red Hat Insights because it is very scalable and allows us to identify and analyze things in real time."

Table 2 (next page) provides information about interviewed organizations' use of Red Hat Insights. Their ability to use Red Hat Insights across their hybrid and even multicloud environments is reflected in support for an average of 1,163 cloud servers and 783 on-premises VMs. For study participants, this reflects a significant share of their overall IT estate, as shown by use of Red Hat Insights for an average of 223 applications used by over 12,000 employees, and is directly connected to more than three-quarters (78%) of revenue on average. In terms of supporting Red Hat solutions, all interviewed organizations reported using Red Hat Insights with Red Hat Enterprise Linux, and most also reported using it with Red Hat OpenShift and Red Hat Ansible.

**TABLE 2** Red Hat Insights Use by Interviewed Organizations

	Average	Median
Number of cloud servers	1,163	84
Number of on-premises physical servers	117	13
Number of VMs, on premises	783	100
Total cloud servers/VMs	1,946	184
Number of applications	223	52
Percentage of revenue connected to applications/IT environments supported by Red Hat Insights	78	100
Number of internal users of applications	12,160	3,200

n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

### **Business Value and Quantified Benefits** of Red Hat Insights

Red Hat Insights customers described establishing more efficient, resilient, and high-performing hybrid IT environments in support of their business operations through access to timely and relevant information driven by predictive analytics. They have translated these benefits to significant time savings in management and security activities in addition to improving their IT agility, security, and performance in support of business activities.

### Interviewed organizations detailed the most important benefits they are realizing with Red Hat Insights:

#### Significant efficiencies linked to consistent visibility into systems:

"The visibility in one 'pane of glass' with Red Hat Insights is a huge win for us, as is the alignment into a single system. It provides huge gains in terms of efficiency, so it's been a win-win for us."



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#### Improved security, more efficient operations, and better business results:

"Red Hat Insights has reduced security risk and improved our efficiency, which helps us deliver our products faster. That has helped our dealers and customers, increased revenue, and improved our agility."

#### Strong monitoring capabilities, improved performance, and better resource utilization:

"Red Hat Insights has given us the ability to continuously monitor our infrastructure for security vulnerabilities so that we adhere to industry regulations. We've optimized performance because we can analyze application and server performance to better identify optimizations."

#### Improved availability, resulting in higher revenue:

"We get revenue benefits with Red Hat Insights because of proactive monitoring and predictive analytics that lead to increased system availability. Because of that, we also get higher customer satisfaction, which leads to increased sales."

Based on interviewed Red Hat customers' experiences, IDC calculates that they will realize benefits worth an annual average of \$2.01 million per organization (\$103,500 per 100 cloud servers/VMs) in the following areas (see Figure 1, next page):

#### • IT staff productivity benefits:

Red Hat Insights reduces the amount of time IT systems management and security teams must spend on monitoring and support activities on a day-to-day basis. Development teams benefit from not only enhanced access to IT resources but improved understanding of application and IT configurations. IDC estimates that study participants will realize IT staff efficiencies and productivity gains worth an annual average of \$1.46 million per organization (\$75,200 per 100 cloud servers/VMs).

#### • Risk mitigation and business productivity benefits:

Red Hat Insights allows for more targeted support and remediation efforts, helping organizations minimize the frequency and impact of outages and security threats. Combined with efficiencies for compliance teams, IDC calculates that study participants will benefit from user productivity gains and higher revenue worth \$0.36 million per organization (\$18,400 per 100 cloud servers/VMs).

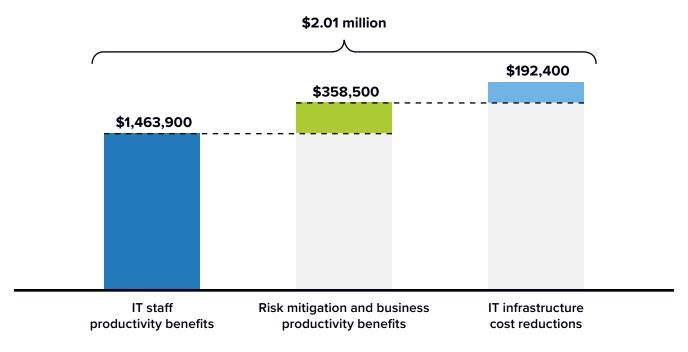
#### • IT infrastructure cost reductions:

Red Hat Insights enables organizations to architect their IT systems to make more efficient use of existing resources and choose the most cost-effective IT environment for workloads. IDC estimates that study participants will capture cost savings of \$0.19 million per organization (\$9,900 per 100 cloud servers/VMs) per year.



FIGURE 1

Average Annual Benefits per Organization
(\$ per year per organization)



n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

For an accessible version of the data in this figure, see  $\underline{\text{Figure 1Supplemental Data}}$  in Appendix 3.

### Infrastructure Use and Operational Efficiencies

Interviewed organizations described how Red Hat Insights allows them to handle day-to-day monitoring and support activities more effectively and efficiently. They previously found it challenging to allocate staff time and resources to these activities, which are generally time consuming but also necessary and challenging, especially in the context of IT environments seeing growing data and workload volumes. Of greater concern, configuration inefficiencies have cascading effects, with poorly configured IT systems leading to business problems and preventing IT organizations from taking a more proactive role in driving business activities.

Study participants noted that Red Hat Insights provides actionable data and insights that their IT organizations need to achieve better outcomes, both from an IT operational perspective and in supporting businesses.

In addition to valuable staff time savings, interviewees linked use of Red Hat Insights with shifting IT team focus to innovation and business initiatives (see **Table 3**):

#### Time savings from consistency and visibility:

"With Red Hat Insights, we now have consistency for our servers in terms of configuration, patching, and security. So if there's something that we need to update, we can move quickly and complete the updates."

#### Reallocating staff time savings to planning and proactive work:

"We are using time saved with Red Hat Insights for planning activities ... Those were not being considered previously — now the team has time to plan and also to do preventive maintenance on our IT systems."

#### Focusing on cost optimization and customer-focused activities:

"We are driving new initiatives for cost optimization in the cloud with Red Hat Insights, developing new services for our customers, and letting our resources work on remediation of sensitive data ... Red Hat Insights has helped with bringing up time and resources to do these."

TABLE 3
Impact on IT System Management Team Efficiencies

	Before/ Without Red Hat Insights	With Red Hat Insights	Difference	Benefit
FTEs required per organization for equivalent workloads	22.3	17.8	4.4	20%
Staff hours per cloud server/VM per year	21.5	17.2	4.3	20%
Equivalent value of staff time per organization per year	\$2.23M	\$1.78M	\$0.44M	20%

n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

Study participants also reported that they can achieve higher virtualization density levels and distribute workloads more cost effectively with Red Hat Insights. Further, enhanced visibility and understanding of infrastructure dependencies and capacity allow for more informed decisions about infrastructure choices.



### Interviewed customers provided examples of these IT infrastructure-related cost benefits:

#### Establish a more cost-effective infrastructure:

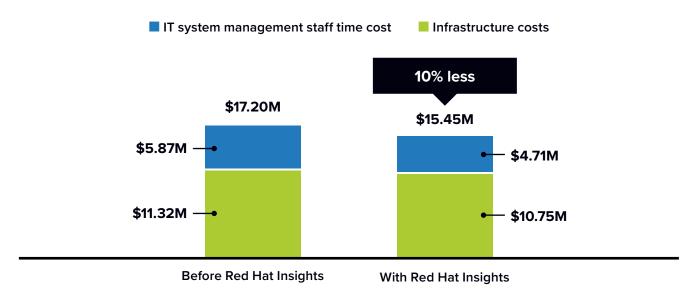
"The improved visibility that we have with Red Hat Insights means that we can better position VMs on physical machines, which helps us balance resources. Being able to do that means greater speed of services and applications that are running with Red Hat supporting them."

#### Better distribute infrastructure use and lower total infrastructure costs:

"Without Red Hat Insights, our infrastructure usage rate would be probably 70% or higher. With Red Hat Insights, we're able to reduce the load on our CPUs ... Red Hat Insights has helped us optimize infrastructure requirements, saving up to \$500,000-\$700,000 per year."

As shown in **Figure 2**, study participants have optimized the use of both cloud and on-premises infrastructure with Red Hat Insights. IDC calculates that they will realize average infrastructure cost savings of 5%, equating to \$218,700 per year per organization. Combined with IT system management efficiencies, IDC projects that these cost and staff efficiencies will allow interviewed customers to run equivalent workloads at a 10% lower cost on average over three years, thereby saving an average of \$1.75 million per organization.

FIGURE 2
Impact on Three-Year Cost of Operations
(\$ per organization—three years



n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

For an accessible version of the data in this figure, see  $\underline{\text{Figure 2 Supplemental Data}}$  in Appendix 3.



### **Agility and Scalability Benefits**

Standardization provided by Red Hat Insights enables faster infrastructure configuration and deployment of compute and storage resources compared with manual-driven processes. In addition, automated and more robust deployment reduces the likelihood of errors or misconfigurations occurring. One interviewed Red Hat customer commented: "Red Hat Insights allows us to establish standards for new applications and features. As a result, we can baseline new configurations much faster than when we had a more manual process." As shown in Figure 3, interviewed organizations can provide compute and storage resources more efficiently with Red Hat Insights, with deployment of new VMs occurring 48% faster and cloud resources 33% faster.

FIGURE 3
Impact on IT Agility
(Hours)



n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

For an accessible version of the data in this figure, see  $\underline{\text{Figure 3 Supplemental Data}}$  in Appendix 3.

Efficient deployment facilitated by Red Hat Insights drives overall development improvements. The platform's automation and self-service features benefit DevOps activities, allowing businesses to react more readily to business needs. For example, with Red Hat Insights, businesses can respond faster to requests for support for intended growth or new applications.

# Study participants provided examples of how they can better support development efforts with Red Hat Insights:

#### Efficient deployment drives overall development improvements:

"We can deploy more easily and more efficiently with Red Hat Insights. Deployment methods are better and provide better rails for us to establish the connection. All of those translate into an increased ability for our development team to work efficiently and to test more efficiently as well."

#### Automation and self-service benefit DevOps activities:

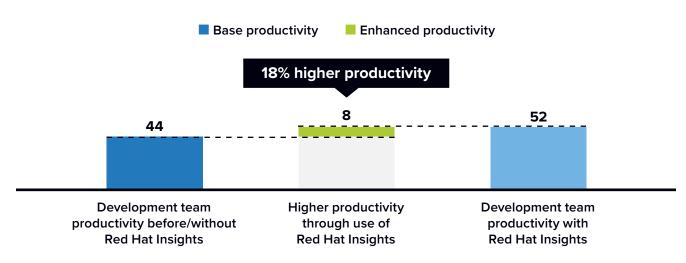
"Red Hat Insights allows us to build in automation for the DevOps team, with self-service being a factor as well as automation playbooks."

#### Developers have visibility into application configuration and vulnerabilities:

"Red Hat Insights helps our developers by allowing them to see if there are bugs or misconfigurations with applications ... Also, it provides them with self-service access."

Improved agility and understanding of development contingencies with Red Hat Insights enable development teams to increase throughput and deliver 55% more new applications. Meanwhile, interviewed Red Hat customers have streamlined the application development life cycle for new applications and features by 33% on average. As shown in **Figure 4**, use of Red Hat Insights enhances application development team productivity by an average of 18%, thanks to improved understanding of development contingencies and higher throughput.

FIGURE 4
Impact on Development Team Productivity
(Equivalent productivity, FTEs per organization)



n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

For an accessible version of the data in this figure, see Figure 4 Supplemental Data in Appendix 3.



#### **Security and Risk Benefits**

Study participants also emphasized that using Red Hat Insights has helped them better understand infrastructure configuration and thus be more proactive in addressing and responding to potential security vulnerabilities. They noted that Red Hat Insights provides timely, relevant, and curated insights to application vulnerabilities and performance, improving security postures and efficiency of security teams.

# Interviewed Red Hat customers provided examples of security-related improvements:

#### Robust monitoring leading to improved security posture:

"It's all about visibility into our environment to ensure that all security standards are in place and are being monitored to confirm that. 'You can't track what you don't monitor,' as they say, and Red Hat Insights has given us the ability to ensure that the monitoring is in place, which in turn has a direct impact on any sort of risk we might have with open holes."

#### Automated resolution of some security issues and improved data correlation:

"Red Hat Insights has automated our logging capabilities and provides proactive resolution for some bugs within our environment as well ... It also gives us the ability to correlate certain kinds of data a lot faster automatically versus a manual process."

Use of Red Hat Insights also fosters trust in operational data and improved visibility into application performance and contingencies, which supports informed decisions on where to best run workloads:

#### **Enabling better security and transition to cloud:**

"Red Hat Insights has helped us to reduce risk related to security. Our environment is more secure — we don't have any issues with storing documents and confidential information, as well as product design and IT-related information, which is being secured in a better way. That is also helping us to better migrate from on premises to public cloud. We're saving time and cost."

#### Improved systems performance and trust in data:

"Improved performance of our IT system and data accuracy with Red Hat Insights is helping our suppliers and dealers, as well as customers, to trust IT and product data in the areas of autonomous vehicles. That is creating more confidence in the supplier–customer relationship."

IDC's study shows that interviewed organizations' security teams gain from timely, relevant, and curated insights into application vulnerabilities and performance with Red Hat Insights. This has resulted in improved security postures, with teams being 24% more efficient on average, identifying 20% more potential threats, and reducing response time to threats by 26% (see **Table 4**, next page).



TABLE 4
Impact on Security Team Efficiencies and Metrics

	Before/ Without Red Hat Insights	With Red Hat Insights	Difference	Benefit
FTEs required per organization for equivalent workloads	18.1	13.7	4.3	24%
Staff hours per cloud server/VM per year	17.5	13.3	4.2	24%
Equivalent value of staff time per organization per year	\$1.81M	\$1.37M	\$0.43M	24%
Number of security-related incidents detected per year	59	73	14	20%
Time to resolve per detected security-related incident (hours)	2.2	1.6	0.6	26%

n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

Study participants also emphasized the benefits of using Red Hat Insights for their compliance teams. The built-in regulatory compliance functionality of Red Hat Insights allows these teams to maintain and demonstrate adherence to regulations more readily. One interviewed organization commented: "PCI DSS is the primary compliance bar by which we are measured. Knowing the stability and security of the systems that back that up with Red Hat Insights certainly has made it easier for us to maintain our PCI DSS compliance." Interviewed Red Hat Insights customers reported an average 10% efficiency for their compliance teams.

#### **Performance and Business Benefits**

IDC research also shows that study participants drive better business results with Red Hat Insights. They have improved the availability of important business applications with better visibility into performance, which allows them to take proactive steps to avoid outages and remediate outages faster. In addition, enhanced IT systems agility allows them to respond more readily to customer demand, which can allow them to win business that they might have otherwise foregone.



# Interviewed Red Hat customers provided examples of these types of business and performance impact:

#### Ability to react more readily to business needs:

"With Red Hat Insights, we can react faster to requests from the business to support intended growth or a request for a new application. It doesn't change the time to market. but it allows us to provide foundational infrastructure faster."

#### Means of providing better user experience:

"Red Hat Insights gives us a better picture of what's going on with the system overall ...

We can better make recommendations and adjustments to our infrastructure and systems to give needed performance for users."

Interviewed organizations specified how Red Hat Insights has allowed them to reduce operational and business losses associated with performance issues. They have reduced the loss of productive time due to unplanned outages by an average of 76% with Red Hat Insights. Further, they have brought down the impact of unexpected outages on their business operations, reducing total lost revenue per year from unplanned downtime by an average of 49%, which is worth \$1.14 million per year per organization in higher revenue (see **Table 5**).

TABLE 5
Impact on Unplanned Downtime KPIs

	Before/ Without Red Hat Insights	With Red Hat Insights	Difference	Benefit
Mean time to repair (hours)	2.6	1.6	1.0	39%
Hours of productive time lost per user per year	0.5	0.1	0.4	76%
Productivity loss per year in FTEs per organization	3.0	0.7	2.3	76%
Value of lost productivity time per organization per year	\$211,200	\$50,100	\$161,100	76%
Total lost revenue per year	\$2.34M	\$1.20M	\$1.14M	49%
Total net revenue lost per year	\$351,200	\$180,200	\$171,000	49%

n = 7; Source: IDC Business Value In-Depth Interviews, December 2023



### **ROI Summary**

Table 6 presents IDC's analysis of the net benefits and investment costs for study participants in using Red Hat Insights. As shown, IDC calculates that interviewed Red Hat customers will realize total three-year discounted benefits worth an average of \$4.76 million per organization (\$244,700 per 100 cloud servers/VMs) in infrastructure cost savings, IT team efficiencies, reduced risk, and productivity and revenue gains. These benefits compare with an average three-year discounted investment cost of \$0.79 million per organization (\$40,700 per 100 cloud servers/VMs). These levels of benefits and costs would result in an average three-year ROI of 501% for study participants, with breakeven on their investment in Red Hat Insights occurring in an average of seven months from the beginning of implementation and/or deployment.

TABLE 6
ROI Analysis

	Three-Year Average per Organization	Three-Year Average per 100 Cloud Servers/VMs
Benefit (discounted)	\$4.76M	\$244,700
Investment (discounted)	\$0.79M	\$40,700
Net present value (NPV)	\$3.97M	\$204,000
ROI (NPV/investment)	501%	501%
Payback period	7 months	7 months
Discount rate	12%	12%

n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

# Challenges/Opportunities

Effectively managing your application infrastructure landscape is a critical goal for IT executives. The complexity of the IT infrastructure, cloud-native applications, cybersecurity, and multiple cloud environments continues to grow. Today's digital business has increased expectations on IT to expand its proactive capabilities and reduce resolution time when incidents occur. The interdependencies between processes, teams, and cloud technologies make delivering a superior customer experience with optimized and cost-effective resources challenging. In addition, identifying and remediating cybersecurity vulnerabilities and patches means risks can be better controlled. Managing these dependencies is easier to troubleshoot with an effective management and automation solution.

In addition to ensuring that all IT operations, developers, and line-of-business teams have a central solution to act on performance or availability incidents, enterprises must provide access to a central platform for analytics, security controls, and reporting. The difference between a silo-based organizational approach and a central solution is collaboration, where in-depth visibility and analytics will accelerate the digital business. DevOps, SRE, FinOps, and operations teams must improve efficiency to manage the demand of the business with existing staff. While collaboration can continuously improve, the need to communicate and work from a single source of truth will drive teamwork. The benefits of having better awareness with proactive actions across the application landscape enable the digital customer experience and efficiency that organizations need.

### Conclusion

Business executives have raised the bar by asking IT operations teams to be more proactive and improve the resiliency of their digital infrastructure. This stretch goal means IT must do more with less in a difficult labor market. Operations teams need to solve downtime or slow performance incidents before customers are impacted to support the digital enterprise's applications. An infrastructure solution that can analyze the landscape and recommend solutions while helping identify opportunities to reduce costs is a win-win for the enterprise. IDC's business value research found that this comprehensive approach has a tremendous return on investment after companies implement this solution. IDC also found payback times of just seven months. Downtime is also reduced by 76%, increasing business value and aligning with the business executives' goals. Enterprises looking to solve these challenges should look for a single, comprehensive management solution to identify and remediate incidents while controlling costs proactively.

# Appendix 1: Methodology

IDC's standard Business Value/ROI methodology was utilized for this project. This methodology is based on gathering data from organizations currently using Red Hat Insights.

Based on interviews with organizations using Red Hat Insights, IDC performed a three-step process to calculate the ROI and payback period:

- Gathered quantitative benefit information during the interviews using a before-andafter assessment of the impact of using Red Hat Insights. In this study, the benefits included IT infrastructure cost savings, IT staff efficiencies, user productivity gains, and security/risk benefits.
- Created a complete investment (three-year total cost analysis) profile based on the interviews. Investments go beyond the initial and annual costs of using Red Hat Insights and can include additional costs related to migrations, planning, consulting, and staff or user training.
- 3. Calculated the ROI and payback period. IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations' use of Red Hat Insights over a three-year period. ROI is the ratio of the net present value and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

# 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. For the purposes of this analysis, based on the geographic locations of the interviewed organizations, IDC has used assumptions of an average fully loaded salary of \$100,000 per year for IT staff members and an average fully loaded salary of \$70,000 per year for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
- The net present value of the three-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 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.



# Appendix 2: Business Value Calculations

**Table 7** provides details about the areas of value that study participants reported achieving through the use of Red Hat Insights, which IDC calculates will equal \$2.01 million per organization per year over three years.

TABLE 7
Average Annual Benefits

Category of Value	Average Quantitative Benefit	Calculated Average Annual Value
IT infrastructure cost savings	5% average savings on cloud and on-premises infrastructure, saving \$218,700 per year	\$192,400
IT system management team efficiencies	20% efficiency, worth 4.4 FTEs, \$100,000 salary assumption	\$388,800
IT security team efficiencies	24% efficiency, worth 4.3 FTEs, \$100,000 salary assumption	\$380,200
Application development team productivity gains	18% productivity gain, worth 8 FTEs, \$100,000 salary assumption	\$694,900
Unplanned downtime, productivity gains	76% less productive time lost, worth 0.4 hours per year per employee, 2.3 FTEs saved, \$70,000 salary assumption	\$141,700
Unplanned downtime, net revenue gains	49% less revenue lost, \$1.14 million in lost revenue avoided, 15% margin assumption applied	\$171,000
Compliance team efficiencies	10% efficiency, worth 1.1 FTEs, \$70,000 salary assumption	\$66,500
Total average annual benefits	\$2.01M	

Note: calculated average annual value includes 4.3 months deployment time in year 1 n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

All dollar numbers in this White Paper are in U.S. dollars.

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



# **Appendix 3: Supplemental Data**

This appendix provides an accessible version of the data for the complex figures in this document. Click "Return to original figure" below each table to get back to the original data figure.

#### FIGURE 1 SUPPLEMENTAL DATA

**Average Annual Benefits per Organization** 

	IT staff productivity benefits	Risk mitigation and business productivity benefits	IT infrastructure cost reductions
Per organization	\$1,463,900	\$358,500	\$192,400
Average annual benefits per organization	\$2.01M		

n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

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#### FIGURE 2 SUPPLEMENTAL DATA

#### Impact on Three-Year Cost of Operations

	Before Red Hat Insights	With Red Hat Insights
Infrastructure costs	\$11.32M	\$10.75M
IT system management staff time cost	\$5.87M	\$4.71M
Total	\$17.20M	\$15.45M
Difference	n/a	10% less

n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

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### Appendix 3: Supplemental Data (continued)

#### FIGURE 3 SUPPLEMENTAL DATA

### Impact on IT Agility

	Before/without Red Hat Insights	With Red Hat Insights	Difference
New VM	1.9 hours	1.0 hour	48% less
New cloud compute	0.8 hours	0.6 hours	33% less
New storage	0.4 hours	0.3 hours	18% less

n = 7; Source: *IDC Business Value In-Depth Interviews*, December 2023

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#### FIGURE 4 SUPPLEMENTAL DATA

### Impact on Development Team Productivity

	Development team productivity before/with Red Hat Insights	Higher productivity through use of Red Hat Insights	Development team productivity with Red Hat Insights
(Equivalent productivity, FTEs per organization)	44	8	52
Difference		18% higher productivity	

n = 7; Source: IDC Business Value In-Depth Interviews, December 2023

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# About the IDC Analysts



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Matthew is responsible for carrying out custom business value research engagements and consulting projects for clients in a number of technology areas with a focus on determining the return on investment of their use of enterprise technologies. Matthew's research often analyzes how organizations are leveraging investment in digital technology solutions and initiatives to create value through efficiencies and business enablement.

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