

The Business Value of Red Hat Ansible Automation Platform



Jevin Jensen
Research Vice President,
Infrastructure and Operations, IDC



Matthew Marden
Research Vice President,
Business Value Strategy Practice, IDC



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Executive Summary

IDC conducted customer research to explore organizations' business benefits and value using Red Hat Ansible Automation Platform. Customers used Ansible Automation Platform to automate IT operations across multiple hybrid cloud environments. These environments included public, private, hybrid clouds, on-premises datacenters, and company-owned edge locations. Many customers had standardized their operations around Ansible Automation Platform so that IT teams could operate in a consistent and repeatable model. The research found that these organizations significantly improved IT operational efficiency, enhanced business speed, and gained more scalability. IT operational benefits were found across several areas, including network, cloud, storage, and security teams. Many companies used Ansible Automation Platform across multiple use cases and personas. By collaborating across teams such as IT Operations, DevOps, and site reliability engineering (SRE), companies found additional business value through the elimination of silos. Expanding use cases beyond just day 1 infrastructure provisioning into day 2 support was reported by many companies. These use cases included cybersecurity remediation, software deployment, and other value-added use cases.

Additionally, with Ansible Automation Platform, software developers delivered more business benefits and did so faster. These improvements often led to cost reductions, improved team collaboration, and more secure operations. For example, companies saved money by finding and resolving configuration drift, over-provisioning of cloud resources, quickly identifying and removing unused IT assets, and improving license management. Additionally, DevOps teams increased speed and execution with consistent automation alignment across all teams and fewer manual processes, thereby reducing the time to value for new application development. Resiliency is a significant benefit reported to IDC, with savings from reduced unplanned downtime.

Ansible Automation Platform aims to simplify and streamline enterprisewide automation and provisioning. An IT Operations team can, for example, provision new hybrid or public cloud resources in minutes instead of hours when done manually. The platform enables large enterprises to scale application and configuration deployment through an agentless architecture. IT and cybersecurity teams can quickly monitor and push configuration and patches when vulnerabilities are identified. This approach to configuration ensures consistent enterprisewide security and performance.

Business Value Highlights

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

- ↑ **668%**
three-year ROI
- ➡ **8 months**
to payback
- ↓ **61%**
less unplanned downtime,
better resiliency
- ↑ **38%**
increase in network management team efficiencies
- ↑ **28%**
increase in public cloud management efficiencies
- ↑ **36%**
development team productivity gains
- ↑ **68%**
faster to deploy new compute resources
- ↑ **23%**
faster to market for new products and services
- ↑ **\$8.54 million**
higher revenue per organization per year

Enterprises created reusable playbooks to centralize and control their infrastructure. Ansible playbooks offer reusable, simple configuration management for multiple deployment technologies (cloud, on premises, etc.), which can be especially useful when deploying complex applications. Companies benefit from playbooks in many ways. One method is enabling staff from all support teams to reuse approved and tested playbooks to resolve common incidents, quickly reducing downtime. Another example is consistently deploying new resources or automation without starting from scratch each time.

Additional capabilities include dashboards, role-based access control, and analytics about the IT landscape. Red Hat customers gain access to certified and supported content from leading infrastructure vendors. Red Hat has continued adding new capabilities that were unavailable at the time of IDC's interview. New innovations include advanced event-driven automation and generative AI for content creation. Customers in this study reported substantial operational value with Ansible Automation Platform across both IT Operational and DevOps/development teams. These software teams were able to deliver higher business value faster, all while optimizing their IT environments. The Red Hat customers interviewed in this study detailed their ability to achieve substantial returns with Ansible Automation Platform.

Based on interviews with current Red Hat customers, IDC calculates that they will realize benefits worth an annual average of \$14.81 million per organization (\$24,300 per 100 employees) through robust automation with Ansible Automation Platform by:

- **Instilling more agility and flexibility in IT operations** by reducing the time required for provisioning, configuration, and security and supporting more effective development activities
- **Ensuring improved IT and systems reliability, quality, and scalability** so that it is a better user and customer experience with more limited business risk
- **Providing significant day 2 efficiencies for IT teams**, thereby freeing up staff time to support other innovative and business-impacting activities
- **Improving business outcomes**, including capturing more revenue, moving faster to address and win more business opportunities, and better serving existing customers

Situation Overview

In the competitive global environment, the themes of speed, scale, efficiency, and ensuring business outcomes are now commonplace, with the pace of change accelerating.

Businesses benefit from the rapid, incremental application changes of DevOps and the rise of the digital-first organization. However, this has resulted in a dramatic increase in complexity. This business model depends on providing well-performing and highly available applications and infrastructure to deliver an excellent customer experience. The complex architecture of modern digital businesses often involves engaging with multiple cloud providers, hybrid on-premises resources, and edge-based applications and integrating with web services. In addition, the provisioning and ongoing cost management of container-based application platforms can be challenging even for the most mature IT teams. Furthermore, the increased use of containers and Kubernetes orchestration for new cloud-native applications at the edge and in the public cloud has also dramatically increased. All of this contributes to the dramatic increase in complexity.

Addressing these complex issues in the past meant hiring highly skilled workers, but that didn't solve the underlying problem. Today, IT is challenged to make their existing staff more effective and improve employees' work-life balance. The concern about being replaced by automation has long since given way to the need to enable the existing staff to have tools to manage this growing complexity effectively. Therefore, modern enterprises address these challenges head-on through new organizational models.

New, modern organizational models, including SRE, FinOps, cloud center of excellence, and platform engineering, have adapted to address the sheer complexity and focus on business outcomes. These changes mean that collaboration between these newer groups with established teams such as networks, operations, security, and DevOps is vital to efficiently managing the environment. Therefore, a standard automation tool across teams is needed to break down the silos and ensure the teams' productivity. Standardizing on a central automation solution can assist in breaking down these silos and improving collaborations. Business success requires teams to work together to provision new resources quickly while solving production incidents efficiently and with less downtime, as well as limiting the impact of vulnerabilities.

Red Hat Ansible Automation Platform Overview

Ansible Automation Platform provides an enterprise platform for building and operating IT automation at scale. Users can centralize and control their infrastructure with a visual dashboard, role-based access control, and automation tools, including analytics and a complete ecosystem of certified, reusable content. Ansible Automation Platform's popular and human-readable YAML automation language is utilized for creating infrastructure as code (IaC) automation.

laC allows users across an organization to build, share, and manage automation content and may use a “single source of truth” for automated actions. It enables collaboration across teams and helps them get up and running quickly with searchable collections of precomposed automation content that jumpstarts new automation projects. The reusable content comes from customer-created custom playbooks (which may be partly created from content collections), which can be stored privately or in a designated repository for use across their entire landscape as needed. Playbooks act as blueprints for enterprise infrastructure management as well as how to automate it as standalone tasks or in concert with multiple playbooks. Some examples are provisioning and orchestrating infrastructure, updating and patching systems, installing software, and onboarding users.

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. Ansible Automation Platform can automate both across Red Hat technologies and across a broad ecosystem of partner solutions so that you can build and operate automation at scale. In addition, customers can access certified and curated content from Red Hat and a wide range of leading cloud, datacenter, network, and application vendors to enable automation within their enterprise.

Additionally, these pre-certified or validated content collections in Ansible Automation Platform may help jumpstart new IT automation projects. This content allows developers to create new automation to deploy and provision across complex environments.

A consistent framework built on Ansible playbooks helps developers automate testing and software deployment and day 2 operational management. Repeatable processes improve the effectiveness of teams by storing laC created with Ansible in GiT-style or other source-of-truth repositories. This process allows automation developers to fully participate in DevOps processes, such as a continuous integration/continuous delivery pipeline. This repeatable and reusable laC with version control is essential to the consistency of IT operations because it offers a “single source of truth.”

Red Hat is a supporter of and contributor to open source communities. Ansible Automation Platform extends the Red Hat solution, which includes the open source foundation of Red Hat Enterprise Linux and the Red Hat OpenShift container platform to automate workloads anywhere. Enterprises with a Red Hat subscription gain access to an integrated environment, 24 x 7 support, and the curated content mentioned above.

Red Hat partnered with most hyperscalers to provide Ansible Automation Platform in the hyperscalers marketplace. Instances can be spun up in minutes within a customer’s public cloud environment with full Red Hat support and capabilities. Providing Ansible Automation Platform for quick deployment significantly reduces implementation time, giving enterprise customers new deployment options and faster time to value for their automation investments.

An analytics component increases the value of Ansible Automation Platform through analytics that span all automation running across a customer’s entire organization.

By providing actionable recommendations, IT can reduce efforts around audits and compliance, which drives business value. By getting real-time status updates for automation jobs and using analytics, teams can understand which automation jobs are running successfully and which ones need attention. IT operations can also leverage automation to drive better policy and governance of the environment.

The Business Value of Red Hat Ansible Automation Platform

Study Demographics

IDC conducted in-depth interviews with IT managers and executives at organizations using Red Hat Ansible Automation Platform to understand the impact on their IT and business operations. Interviews were designed to capture quantitative and qualitative feedback about the use of Ansible Automation Platform.

As shown in **Table 1**, study participants had an overall enterprise profile, with 60,903 employees and annual revenue of \$23.08 billion on average (medians of 20,000 employees and \$4.5 billion). Most organizations are headquartered in the United States, but the sample also included organizations from India and the United Kingdom, and a broad range of industries were covered, namely Financial Services (4), Retail (3), Telecommunications (2), Biotechnology, Healthcare, Higher Education, IT Consulting, Manufacturing, and SaaS (see **Table 1** for additional details).

TABLE 1
Demographics of Interviewed Organizations

	Average	Median
Number of employees	60,903	20,000
Number of IT staff	3,547	800

[Continued next page >](#)

	Average	Median
Number of business applications	653	200
Revenue per year	\$23.08B	\$4.50B
Countries	United States (13), India, United Kingdom	
Industries	Financial Services (4), Retail (3), Telecommunications (2), Biotechnology, Healthcare, Higher Education, IT Consulting, Manufacturing, SaaS	

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

Choice and Use of Red Hat Ansible Automation Platform

Study participants described choosing Red Hat Ansible Automation Platform to address common challenges, including the need to instill more flexibility, quality, and automation across their IT environments. They explained that they needed to leverage automation to operate more efficiently from both IT and business perspectives, including at edge business locations.

Interviewed Red Hat customers spoke in specifics about their decision criteria:

Driver of efficiencies and higher productivity (Telecommunications):

“We chose Red Hat Ansible Automation Platform because we can achieve efficiency and productivity through better controls, fewer mistakes, and the scaling and automation of operations, ultimately leading to increased productivity.”

Open source, flexible automation tool (Medical Devices Company):

“We explored various automation tools and were particularly interested in open source solutions with the flexibility to make changes easily ... It became evident that Red Hat Ansible Automation Platform aligns well with open source best practices and offers many of the checkpoints we were seeking.”

Centralized management and scalability (Higher Education):

“The reason we went with paid Red Hat Ansible Automation Platform is that we wanted to utilize the management capabilities, and the ability to scale was a differentiating factor. Centralization and scalability are both crucial aspects for us.”

Repeatable network security rules (Retailer):

“Primarily, Red Hat Ansible Automation Platform serves as a point for repeatable firewall rules, such as granting end users virtual desktop access. It acts as a template, which is something we emphasize.”

Table 2 provides an overview of Red Hat Ansible Automation Platform use by interviewed organizations. As shown, they are leveraging automation provided by Ansible Automation Platform across significant IT and business environments, including 11 geographic locations/ countries and over 3,000 business locations. They described near-unanimous use of Red Hat Ansible Automation Platform for their Red Hat Enterprise Linux environments but also considerable use with Red Hat OpenShift and other Red Hat technologies, as well as multivendor “ecosystem” technologies. Study participants reported significant use across a number of teams and use cases, most frequently network, storage, and compute infrastructure; development and DevOps; and cloud management teams.

On average, interviewed Red Hat customers use Ansible Automation Platform with 4,791 nodes that run 309 applications used by 47,753 employees. They also reported that nearly two-thirds of their revenue (64%) is supported by technologies that are managed using Ansible Automation Platform. This further confirms the platform’s importance to their businesses. For additional information about study participants’ use of Ansible Automation Platform, please see **Table 2**.

TABLE 2
Red Hat Ansible Automation Platform Use by Interviewed Organizations

	Average	Median
Number of geographical locations, countries	11	4
Number of sites/branches	3,285	13
Number of TBs, storage	5,487	150
Number of business applications	309	70
Number of nodes	4,791	300
Number of internal users	47,753	2,500
Percent of revenue	64%	80%
Number of automation jobs per month	4,017	1,083

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

Business Value and Quantified Benefits of Red Hat Ansible Automation Platform

Red Hat Ansible Automation Platform customers described achieving important gains and value through automation of IT processes and configuration across their business environments. They reported not only seeing IT team efficiencies but also benefiting from enhanced agility and systems performance, which has enabled them to improve development efforts and generate better business results.

Interviewed Red Hat customers detailed the most salient gains in value through the use of Ansible Automation Platform:

Significant cost savings and efficiencies deliver ROI (Telecommunications):

“We can put a ROI number to our use of Red Hat Ansible Automation Platform because of cost savings and efficiencies, which are significant based on the size of our operations. We’ve seen that we pretty much pay off our investment in Ansible the next month because of these efficiencies.”

Efficiencies from automation across activities (Retailer):

“For us, using Red Hat Ansible Automation Platform is all about efficiency gained through automation, adherence to standards, security protocols, and repeatability.”

Improved ability to use data speeds up all business processes

(Medical Device Manufacturer):

“From a business perspective, we have achieved faster data access and validation with Red Hat Ansible Automation Platform, cutting down delays by up to two weeks. This allows us to ensure accurate content and implement event-driven automation.”

Enhanced visibility and improved business agility (Retailer):

“Red Hat Ansible Automation Platform offers better insight into each server’s activities, enabling us to monitor for configuration drift and missing elements. This broader environmental awareness holds great value for us. Moreover, Red Hat Ansible Automation Platform enhances business agility and significantly reduces time to value.”

Based on interviews with organizations using Red Hat Ansible Automation Platform for significant components of their IT infrastructures, IDC calculates that they will realize benefits worth an average of \$14.81 million per organization per year (\$24,300 per 100 users) in the following areas:

- **IT staff productivity benefits:**

Teams responsible for managing IT and network environments spend significantly less time on monitoring, management, and support activities on a day-to-day basis,

while development teams see demonstrable improvements in their throughput due to automation and streamlined processes. IDC puts the value of these IT team–related efficiencies and productivity gains at an annual average of \$9.17 million per organization (\$15,100 per 100 employees).

- **Risk mitigation — user productivity benefits:**

Applications users benefit from increased systems reliability and performance, while business activities experience fewer disruptions that can negatively affect the customer experience. IDC estimates that interviewed Red Hat customers will achieve net productivity and revenue gains worth an annual average of \$4.37 million per organization (\$7,200 per 100 employees).

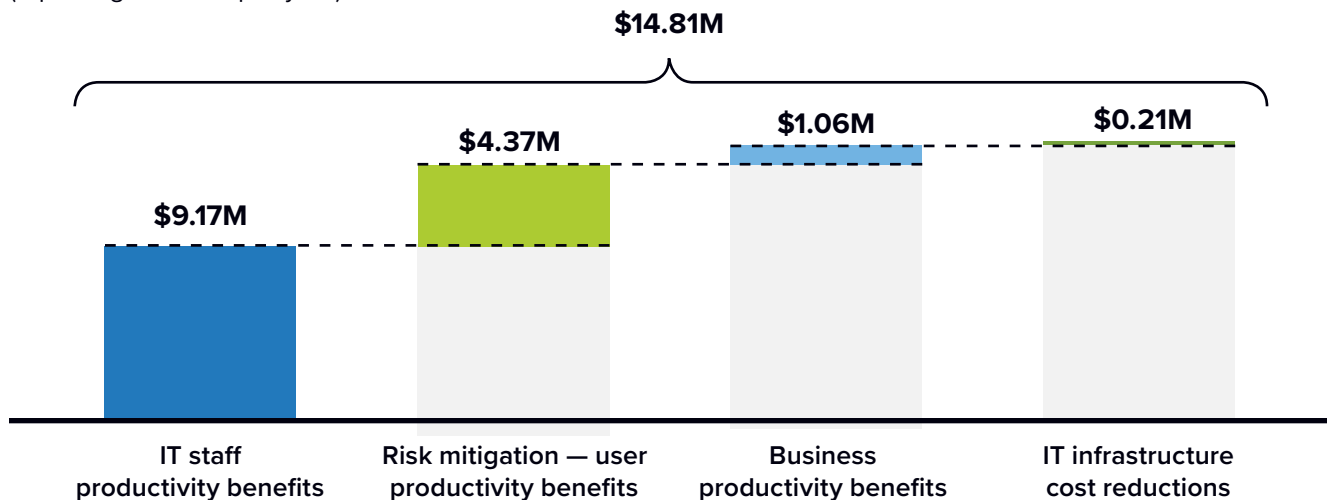
- **Business productivity benefits:**

Business results improve as study participants can move more readily to address business opportunities and provide a better experience to existing customers. IDC calculates that interviewed customers will realize net revenue gains of \$1.06 million per organization (\$1,700 per 100 employees) per year.

- **IT infrastructure cost reductions:**

Improved understanding of infrastructure use and configuration helps study participants optimize their IT infrastructure requirements and architectures. As a result, IDC expects that they will save an annual average of \$209,600 per organization (\$300 per 100 employees).

FIGURE 1
Average Annual Benefits per Organization
 (\$ per organization per year)



n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

For an accessible version of the data in this figure, see [Figure 1 Supplemental Data](#) in Appendix 2.

Table 3 provides specific details about the areas of value study participants reported achieving through use of Red Hat Ansible Automation Platform, which IDC calculates will equal \$14.81 million per organization per year over three years.

TABLE 3
Average Annual Benefits

Category of Value	Average Quantitative Benefit	Calculated Average Annual Value*
IT infrastructure cost savings	Compute savings of \$182,200 per year, storage savings of \$70,000 per year	\$209,600
IT configuration and change management teams	28% efficiencies, worth 9.7 FTEs, \$100,000 salary assumption	\$804,500
IT public cloud management teams	28% efficiencies, worth 20.2 FTEs, \$100,000 salary assumption	\$1.68M
IT network management teams	38% efficiencies, worth 32.4 FTEs, \$100,000 salary assumption	\$2.69M
Development team productivity gains	36% productivity gain, worth 48 FTEs, \$100,000 salary assumption	\$3.99M
Unplanned downtime – productivity gains	61% productivity loss saved, worth 73.3 FTEs, \$70,000 salary assumption	\$4.27M
Compliance team efficiencies	27% efficiencies, worth 1.8 FTEs, \$70,000 salary assumption	\$102,800
Higher net revenue, business enablement	\$8.54M higher revenue per year, 15% margin assumption applied	\$1.06M
Total annual benefits per organization	\$14.81M per organization	

*Includes 6.1 average months deployment time in year 1.

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

Application Development Benefits

Organizations rely on their IT systems and operations to provide an adaptable foundation for business activities. In large part, this relates to IT's ability to provide capacity for workloads and timely delivery of new software functionality. Manual and siloed processes tend to hamper an IT organization's ability to achieve these objectives, but study participants consistently reported that Red Hat Ansible Automation Platform has instilled significantly more agility and flexibility in their IT operations.

Specifically, study participants credited the ability to script and automate the provisioning and deployment of IT resources with Ansible Automation Platform, greatly reducing the friction normally associated with these activities. As a result, interviewed Red Hat customers reported requiring far less time to deliver new compute, storage, or network resources required by business or development teams.

Study participants provided specific examples of the impact of using Ansible Automation Platform:

Enhanced IT agility and performance (Higher Education):

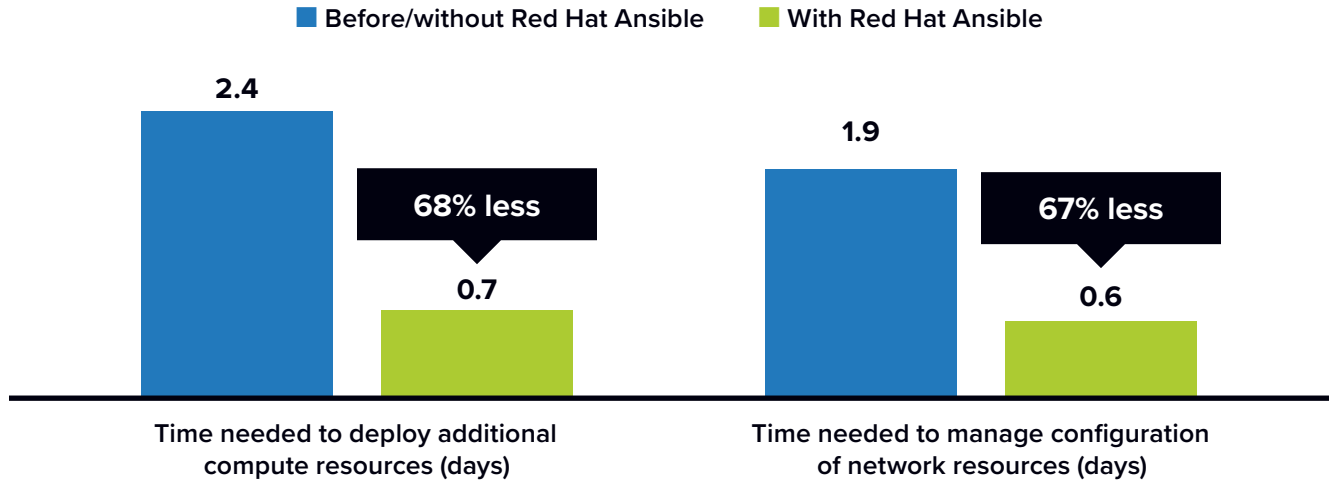
"We improved our compute deployment time, reducing it from two business days to just 90 minutes with Red Hat Ansible Automation Platform ... Our stability has also significantly increased, ensuring better network performance and system uptime."

Faster deployment by reducing errors (Banking):

"Automation with Red Hat Ansible Automation Platform speeds development because the automation reduces mistakes and errors ... Also, Ansible gives us more time to work on new features."

Figure 2 (next page) shows the extent to which Red Hat Ansible Automation Platform has provided study participants with needed flexibility in deploying compute and network resources, with average improvements of 68% and 67%, respectively, in terms of management of the extension of these IT resources.

FIGURE 2
Impact on IT Agility
 (Number of days)



n = 15; Source: IDC Business Value In-Depth Interviews, January 2024
 For an accessible version of the data in this figure, see [Figure 2 Supplemental Data](#) in Appendix 2.

Study participants linked automation with Red Hat Ansible Automation Platform to substantial efficiencies across development processes. They reported that Ansible-driven automation has reduced the time required for activities including provisioning (38%), configuration (34%), and security (27%), reducing the number of potential choke points across development life cycles (Figure 3).

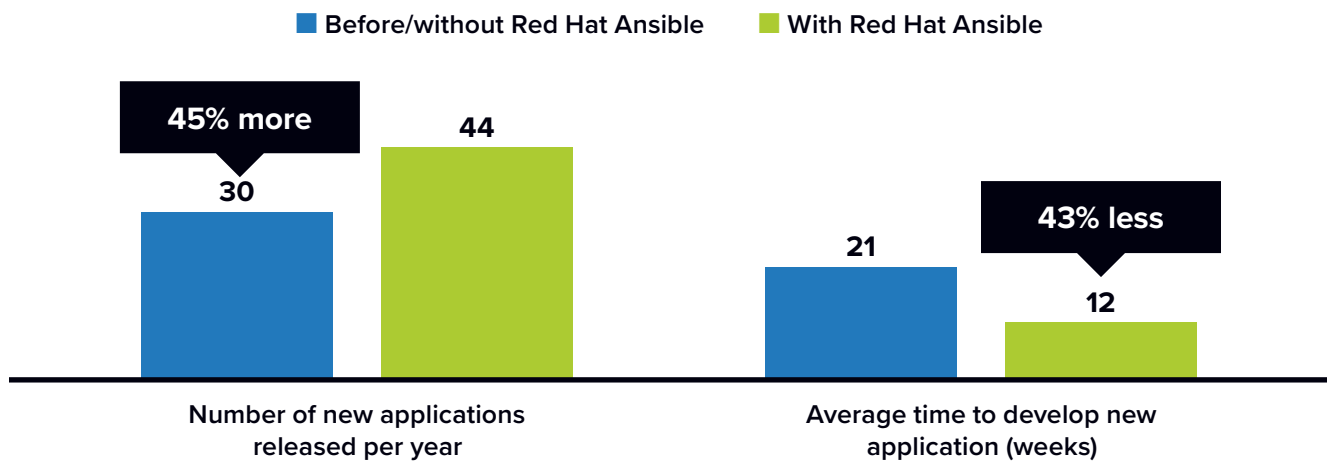
FIGURE 3
Impact on Development KPIs
 (% efficiency)



n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

As a result, development activities that rely on access to IT resources or processes occur significantly faster with Red Hat Ansible Automation Platform, and study participants reported increasing both the volume and cadence with which they provide the business with new software and functionality. IDC’s analysis shows that study participants release 43% more new applications while requiring 45% less time per release with Ansible Automation Platform (Figure 4).

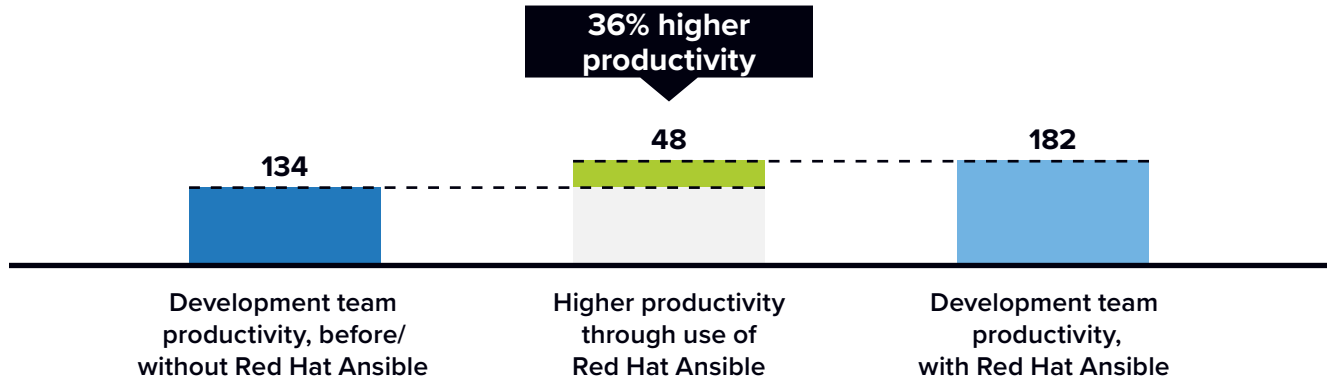
FIGURE 4
Impact on Development Volume and Life Cycle
 (Number of new applications/weeks)



n = 15; Source: IDC Business Value In-Depth Interviews, January 2024
 For an accessible version of the data in this figure, see [Figure 4 Supplemental Data](#) in Appendix 2.

These metrics around development volume and cadence reflect development teams’ ability to better support business operations with Ansible Automation Platform. One interviewed organization commented: “From a development perspective, end-to-end automation is what we’re using Red Hat Ansible Automation Platform for ... This reduces risk, reduces errors, and increases compliance. So that’s how it impacts the application developers, and that’s how it saves them time.” On average, study participants reported that their development teams are 36% more productive with Ansible Automation Platform, which reflects significant enablement and increased organizational value for these development teams (Figure 5, next page).

FIGURE 5
Impact on Development Team Productivity
 (Equivalent productivity, FTEs per organization)



n = 15; Source: IDC Business Value In-Depth Interviews, January 2024
 For an accessible version of the data in this figure, see [Figure 5 Supplemental Data](#) in Appendix 2.

IT Operational and Staff Benefits

Interviewed Red Hat customers also connected use of Ansible Automation Platform to significant day 2 efficiencies for IT teams responsible for managing and supporting their infrastructure environments.

Specifically, Red Hat customers described benefits from automation with Ansible Automation Platform that included:

- The ability to scale activities without increased hiring due to automation
- Significant efficiencies for network teams
- Improved ability to implement changes
- Better visibility and understanding of how IT time is spent

This section of the study details benefits of using Red Hat Ansible Automation Platform for teams responsible for IT infrastructure and cloud management, network management, and infrastructure configuration and change management. The broad impact of Ansible Automation Platform across these teams demonstrates the increasing value that organizations can achieve as they use it across more of their IT and business teams and use cases.

Infrastructure and Cloud Management Efficiencies

Study participants reported that the automation and higher-quality infrastructure management gained through use of Red Hat Ansible Automation Platform enable their teams responsible for managing core on-premises and cloud infrastructure to work more efficiently. They noted that automation of infrastructure configuration and updates saves substantial time and that Ansible Automation Platform helps them better organize these teams and ensures cross-team visibility into workflows and higher-priority responsibilities, thereby enabling improved focus. An interviewed financial services organization commented: *“Red Hat Ansible Automation Platform saves us time because all we have to do is write an automation script [playbook], and then, instead of having to log in to every server, that script [playbook] works for the 1,000 servers we have.”* A customer in the medical device manufacturing sector described the general positive impact of using Ansible Automation Platform for its infrastructure teams: *“With Red Hat Ansible Automation Platform, we’ve been able to automate workflows, ensure greater security, reduce friction, and basically implement more best practices.”*

Table 4 provides IDC’s analysis of the impact of using Ansible Automation Platform on these teams responsible for infrastructure management. As shown, IDC calculates that Ansible Automation Platform enables average efficiencies of 28%, freeing up the time of 20.2 FTEs on average.

TABLE 4
Impact on IT Infrastructure and Public Cloud Management Teams

Average per Organization	Before/ Without Red Hat Ansible Automation Platform	With Red Hat Ansible Automation Platform	Difference	Benefit
FTEs required for equivalent environments	73.0	52.8	20.2	28%
Staff hours per Ansible node per year	28.6	20.7	7.9	28%
Value of staff time required for equivalent environments	\$7.3M	\$5.3M	\$2.0M	28%

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

Network and Edge Management Efficiencies

Interviewed Red Hat customers also noted important efficiencies across various responsibilities related to managing their network environments all the way to the edge. For these organizations, automation of scripts and other tasks is especially important for managing complexities inherent to networking environments that connect distributed workforces and business operations.

Study participants provided examples of time savings and efficiencies related to network management that they attributed to use of Red Hat Ansible Automation Platform:

Significant efficiencies for network teams (Telecommunications):

“We see significant time savings for our network infrastructure team with Red Hat Ansible Automation Platform because we’re a communications company, so that’s a big part of our day — maybe 70%–80% time savings for this team ... Because of this, we can advance our projects, improve our time to market for new innovative projects, and better keep the lights on.”

Refocus valuable staff time (SaaS):

“Our lowest network infrastructure level now uses automation scripts with Red Hat Ansible Automation Platform for certain use cases, which allows us to use our most skilled people to build these scripts and to determine what the changes are going to be, and Ansible allowed us to push the actual work to our lowest level of operations team.”

Figure 6 (next page) details efficiencies that Ansible Automation Platform provides study participants in certain responsibilities related to network management. As shown, efficiencies are most significant in areas where automation can most significantly affect day-to-day operations, including planning and management (43%) and provisioning and deployment (42%). However, interviewed Red Hat customers also linked their use of Ansible Automation Platform to efficiencies in other areas, including software updates (28%), security (27%), and performance optimization (19%).

FIGURE 6
Network Management Team Efficiencies by Responsibility
 (% benefit)



n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

Table 5 shows how automation of network and edge management activities has driven efficiencies for network management teams on the whole. IDC puts average efficiencies for these teams at a strong 38% with Red Hat Ansible Automation Platform, which equates to an efficiency worth 32.4 FTEs per interviewed organization.

TABLE 5
Impact on Network Management Teams

Average per Organization	Before/ Without Red Hat Ansible Automation Platform	With Red Hat Ansible Automation Platform	Difference	Benefit
FTEs required for equivalent environments	85.9	53.5	32.4	38%
Staff hours per Ansible node per year	33.7	21.0	12.7	38%
Value of staff time required for equivalent environments	\$8.6M	\$5.4M	\$3.2M	38%

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

Infrastructure Configuration and Change Management Efficiencies

Interviewed organizations also spoke to the positive effect of automation with Red Hat Ansible Automation Platform on teams and staff responsible for configuration and change management. These tasks often require time to manage unexpected downstream consequences from errors or incomplete actions, making the benefit of robust and high-quality automation clear for these teams. A higher education organization spoke to the benefit of scaling their activities without having to make more hires with Ansible Automation Platform: *“Using configuration management and Red Hat Ansible Automation Platform, we have made teams at least 50% more productive, measured by comparing the number of required Sysadmins or network engineers for automated tasks versus manual ones.”*

As shown in **Table 6**, IDC puts the average efficiency for staff and teams responsible for configuration and change management at 28%, freeing up the time of almost 10 FTEs per organization.

TABLE 6

Impact on Infrastructure Configuration and Change Management Teams

Average per Organization	Before/ Without Red Hat Ansible Automation Platform	With Red Hat Ansible Automation Platform	Difference	Benefit
FTEs required for equivalent environments	34.3	24.6	9.7	28%
Staff hours per Ansible node per year	13.5	9.7	3.8	28%
Value of staff time required for equivalent environments	\$3.4M	\$2.5M	\$967,700	28%

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

Performance and Business Benefits

Interviewed Red Hat customers also reported that use of Ansible Automation Platform puts them in a better position to address business opportunities and ensure customer satisfaction. They linked these business gains to experiencing fewer user-impacting outages, better leveraging data in support of their businesses, and delivering new services and products more quickly.

Importantly, more robust configuration from automation means that infrastructure and applications suffer fewer outages and benefit from faster resolution of problems with use of Red Hat Ansible Automation Platform. A telecommunications company explained: *“Automation with Red Hat Ansible Automation Platform helps to reduce the downtime probably by 50%, which is a significant benefit for us.”* A SaaS provider further noted: *“We deployed Red Hat Ansible Automation Platform to an acquisition that was folded in, and we reduced our incidents by at least 30% by pushing our changes with Ansible versus letting people make configuration changes on the fly ... Not only were our customers happy, but we also saved money because when we would have an incident, there would be root cause analyses that took staff weeks to work through.”* On average, study participants experience 46% fewer unplanned outages and have reduced overall unplanned downtime by 61%.



Automation with Red Hat Ansible Automation Platform helps to reduce the downtime probably by 50%, which is a significant benefit for us.”

Telecommunications company

TABLE 7
Impact on Unplanned Downtime KPIs

Average per Organization	Before/ Without Red Hat Ansible Automation Platform	With Red Hat Ansible Automation Platform	Difference	Benefit
Unplanned outages per year	19.7	10.7	9.0	46%
Mean time to repair (MTTR), hours	5.3	3.2	2.1	39%
Productive hours lost per user per year	4.7	1.8	2.9	61%
Productivity impact, FTEs per organization per year	119.6	46.3	73.3	61%
Value of lost productivity per organization per year	\$8.37M	\$3.24M	\$5.13M	61%

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

Study participants connected improved configuration and agility to other systems performance and business benefits. For example, a healthcare organization explained how Ansible Automation Platform enables faster delivery of new services and features: *“With Red Hat Ansible Automation Platform, we have more of an understanding and more set requirements that allow us to turn over new services and features faster. So, what used to take maybe six months is now taking two and a half months from beginning to end, from inception to launch.”* Gains reported by interviewed Red Hat customers included being faster to market with new services and products (23% faster on average), experiencing fewer business-impacting errors (20% fewer), and improving systems performance (13% lower latency) (Figure 7).



On average, study participants experience 46% fewer unplanned outages and have reduced overall unplanned downtime by 61%.

FIGURE 7
Impact on Performance and Business KPIs
 (% efficiency)



n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

Overall, Red Hat customers described being in a better position to address and capture business opportunities and provide superior customer experience.

Red Hat customers provided examples of how Red Hat Ansible Automation Platform has served to enable their business activities:

Improved ability to leverage data in support of business (Medical Device Manufacturer):

“By eliminating all the grunt work with Red Hat Ansible Automation Platform, we can now analyze data through root cause analysis, develop corrective action plans, and respond much faster ... Improved data accuracy and reduced data latency enable quicker problem resolution, which can have a significant financial impact of millions of dollars of additional revenue per year.”

Freed up time translates to improved business results (eCommerce):

“We can leverage the extra time that we have from using Red Hat Ansible Automation Platform to focus on doing more and implementing new features as well as developing new products and implementing new releases ... As a result, we see operational efficiencies and 1–2% higher revenue.”

As shown in **Table 8**, interviewed Red Hat customers connect their use of Ansible Automation Platform to average annual revenue gains of \$8.54 million per organization, representing a significant boost to their business outcomes.

TABLE 8
Business Productivity Benefits — Higher Revenue

	Per Organization	Per 100 Employees
Total additional gross revenue per year	\$8.54M	\$14,100
Assumed operating margin	15%	15%
Total additional net revenue per year	\$1.28M	\$2,100

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

ROI Summary

Table 9 (next page) provides IDC’s analysis of the benefits and investment costs associated with study participants’ use of Red Hat Ansible Automation Platform. IDC calculates that they will achieve discounted three-year benefits worth an average of \$34.75 million per organization (\$57,100 per 100 employees) in staff efficiencies, employee productivity gains, higher revenue, and lower IT infrastructure costs. To achieve these benefits, interviewed Red Hat customers will invest a discounted average of \$4.53 million per organization over three years (\$7,400 per 100 employees). These levels of benefits and investment costs would yield an average three-year ROI of 668%, with breakeven on investment in Ansible Automation Platform occurring in an average of eight months from the beginning of implementation.

TABLE 9
ROI Analysis

	Three-Year Average per Organization	Three-Year Average per 100 Employees
Benefit (discounted)	\$34.75M	\$57,100
Investment (discounted)	\$4.53M	\$7,400
Net present value (NPV)	\$30.22M	\$49,600
ROI (NPV/investment)	668%	668%
Payback period	8 months	8 months
Discount rate (%)	12%	12%

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

Challenges/Opportunities

IT automation aims to solve the complexity of modern applications and improve day 1 and day 2 support for the digital enterprise. This dual focus is both an opportunity and a challenge for today’s IT automation solutions. As a common platform, Ansible Automation Platform has been designed to be a single and flexible automation platform for use across the enterprise. It enables companies to provision new infrastructure quickly to get faster time to value of new projects. The challenge of day 1 is consistently provisioning these new workloads and resources, in which automation and IaC can play a significant role. This ability to scale for new projects and workloads is nearly impossible without automation.

Day 2 has become more critical as digital enterprises focus on the customer experience and have higher expectations for resiliency. Day 2 operations include maintaining application performance, finding and patching security vulnerabilities, and proactively managing multiple cloud environments. IT is challenged to find and resolve issues faster, even with higher levels of complexity. Due to this added complexity, the multitude of dependencies between processes, teams, and technologies make it challenging to consistently deliver a positive customer experience. The enterprise must overcome these challenges and complexities to succeed in today’s competitive environment. Using an IT automation solution with tested and predefined automation content as well as custom, yet curated, playbooks enables support teams to resolve incidents in complex application landscapes quickly and safely.

In addition to technological challenges, enterprises must overcome shortages of skilled employees. IT automation can help ensure consistency despite skill gaps and improve the current staff's work-life balance. Standardizing IT automation platforms will help remove silos between IT teams such as DevOps, SRE, Cloud COE, network, infrastructure, and platform engineering teams. Removing the silo-based automation approach increases collaboration, reduces training time and costs, and improves data access across teams. The right automation solution can help automate these complex cross-domain processes, enabling all teams to benefit.

This approach will accelerate transformation and modernization, which results in improved operational efficiencies. While some silos may remain, a common platform drives a modern application development and service delivery approach. The benefits of having a unified automation platform across the organization enable faster ROI and improved collaboration and the coordination of use cases across teams.

Conclusion

Organizations must reconcile the demand placed on their IT organizations regarding speed, scale, and quality with the challenges of increased complexity associated with hybrid IT environments and applications. The failure to establish and maintain efficient IT operations can prove costly in terms of staff time requirements and business agility, quality, resiliency, and performance. Having high-performing IT teams can help address these challenges, but organizations often find that day-to-day management responsibilities can overwhelm these teams. Many organizations look to automating IT provisioning, processes, and configuration of their public and hybrid clouds to address these challenges. This study evaluates the impact for organizations of using Red Hat Ansible Automation Platform across their IT, network, and business environments and use cases.

Interviewed Red Hat customers reported achieving significant IT operational efficiencies and improvements in business agility and capabilities with Ansible Automation Platform. For IT teams responsible for managing and administering environments, automation generates substantial day-to-day efficiencies, while development teams benefit from greatly reducing the friction associated with provisioning and deploying the IT resources they require. On the business side, employees benefit from higher-quality applications that experience fewer outages. Businesses can act more readily to address new and latent customer demand to capture higher revenue. Overall, IDC calculates that interviewed Red Hat customers will realize an average three-year ROI of 668% through using Ansible Automation Platform and break even on their investment in eight months, reflecting the significant value they achieve through efficiencies and business enablement.

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 Ansible Automation Platform.

Based on interviews with organizations using Ansible Automation Platform, IDC performed a three-step process to calculate the ROI and payback period:

- 1. Gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of using Red Hat Ansible Automation Platform.** In this study, the benefits included IT infrastructure cost savings, IT staff efficiencies, user productivity gains, and security/risk benefits.
- 2. 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 Ansible Automation Platform 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 Ansible Automation Platform 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 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. The average deployment time for study participants of Red Hat Ansible Automation Platform was 6.1 months, with all organizations completing their deployment in approximately one year or less.

*All dollar figures in this White Paper are in \$ USD.
All numbers in this document may not be exact due to rounding.*

Appendix 2: 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

	Amount
IT staff productivity benefits	\$9.17M
Risk mitigation — user productivity benefits	\$4.37M
Business productivity benefits	\$1.06M
IT infrastructure cost reductions	\$0.21M
Total	\$14.81M

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

[Return to original figure](#)

FIGURE 2 SUPPLEMENTAL DATA

Impact on IT Agility

	Before/Without Red Hat Ansible	With Red Hat Ansible
Time needed to deploy additional compute resources (days)	2.4	0.7
Time needed to manage configuration of network resources (days)	1.9	0.6
Difference	68% less	67% less

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

[Return to original figure](#)

FIGURE 4 SUPPLEMENTAL DATA

Impact on Development Volume and Life Cycle

	Before/Without Red Hat Ansible	With Red Hat Ansible
Number of new applications released per year	30	44
Average time to develop new application (weeks)	21	12
Difference	45% more	43% less

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

[Return to original figure](#)

FIGURE 5 SUPPLEMENTAL DATA

Impact on Development Team Productivity

	FTEs per Organization
Development team productivity, before/without Red Hat Ansible	134
Higher productivity through use of Red Hat Ansible	182
Development team productivity, with Red Hat Ansible	48 (36% higher productivity)

n = 15; Source: IDC Business Value In-Depth Interviews, January 2024

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About the IDC Analysts



Jevin Jensen

Research Vice President, Infrastructure and Operations, IDC

Jevin is Research Vice President, Intelligent CloudOps Market service at IDC where he covers infrastructure as code/GitOps infrastructure Automation, cloud cost transparency, DevOps, hybrid/public/multi cloud management platforms, and edge management.

[More about Jevin Jensen](#)



Matthew Marden

Research Vice President, Business Value Strategy Practice, IDC

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.

[More about Matthew Marden](#)

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IDC Research, Inc.
140 Kendrick Street, Building B, Needham, MA 02494, USA
T +1 508 872 8200

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