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The Business Value of Red Hat Ansible Automation Platform

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October 2021 | IDC Doc. #US47989320

Navigating this White Paper

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BUSINESS VALUE HIGHLIGHTS

Click on highlights below to navigate to related content within this PDF.

667%
five-year return on investment (ROI)

10 months
months to payback

30%
more efficient IT infrastructure management

29%
more efficient network infrastructure management

75%
faster deployment of new storage resources

39%
more applications developed per year

30%
more efficient IT security teams

76%
reduction in unplanned downtime

$1.9 million
total new revenue gained per year

Executive Summary

IDC conducted customer research that explored the value and benefits of organizations using the Red Hat Ansible Automation Platform to standardize and automate IT operations, container, and configuration activities across cloud environments and teams in a consistent and repeatable model. This research found that these organizations were realizing significant process efficiencies, faster cycle times, and operational benefits across operations, network, storage, architecture, and security teams by using the Ansible Automation Platform's programmatic software-driven approach to IT automation. These improvements often led to optimized levels of cost reduction and containment, improved team collaboration, and more secure operations. It also enabled improved DevOps agility and execution, consistent alignment of automation across teams to enable faster decision making, improved control, and service transparency.

The Ansible Automation Platform is a foundation for building and operating enterprise-wide automation. The platform provides a flexible enterprise framework for building and operating an IT automation foundation across domains and at scale. Users can centralize and control their infrastructure with a visual dashboard, role-based access control, and automation tools including analytics and certified, reusable content. Study participants described achieving strong value with the Ansible Automation Platform by empowering DevOps and development teams to meet business demand for improved digital functionality, while streamlining and optimizing their IT environments. Study participants described their ability to achieve strong value with the Ansible Automation Platform based on interviews with these Red Hat customers.

IDC projects that study participants will achieve strong business value over time by:

- Improving the productivity and effectiveness of IT Infrastructure, network management, and security teams with increased IT and DevOps agility via improved standardization and compliance controls. With these new efficiencies in place, cross-siloes found that they

could spend less time on day-to-day administration/toil and support activities that help shift their focus to more strategic tasks.

- Increasing IT operational productivity across a variety of infrastructure teams due to the standardization and automation of many configuration tasks and IT operations processes including faster deployments of new compute, networking, and storage infrastructure, as well as hybrid cloud deployments.
- Increasing the effectiveness and speed of application development teams and boosting the number of new applications released annually (i.e., deployment frequency) to meet business demand for improved digital functionality, while streamlining and optimizing supporting IT environments.
- Enabling informed decision-making allows operations teams to analyze and aggregate data and generate reports on the status of automation deployments across multiple clusters.
- Providing the opportunity to automate security practices and bringing together the different tools used in security activities to improve the security posture and time-to-action.
- Increasing revenue by delivering higher-quality and more timely services to existing customers, and better addressing business opportunities.
- Minimizing the effects of unplanned downtime thereby lowering business risk and increasing productivity.

The pace and rate of change are accelerating, as are the business demands and global competitive pressures on IT executives, application development, architecture, and infrastructure and operations teams as they attempt to scale business models, create new customer engagement models, and enable innovation through the efficient and effective delivery of business services.

Situation Overview

The pace and rate of change are accelerating, as are the business demands and global competitive pressures on IT executives, application development, architecture, and infrastructure and operations teams as they attempt to scale business models, create new customer engagement models, and enable innovation through the efficient and effective delivery of business services. Success for IT now depends on great customer experiences, often delivered via complex digital services. The adoption of multi-cloud environments, classic and container-based application environments, Kubernetes, and organizational constructs like Agile, DevOps, and Site Reliability Engineering (SRE) continue to increase technology, and process complexity well beyond the ability for humans to manually scale and manage.

Automation software offers the ability to optimize the use of existing staff, processes, and technologies to deliver efficient operations, and sustainable competitive advantage. Modern IT service delivery models such as DevOps, SRE practices, and Cloud Centers of Excellence, are transforming the way IT utilizes automation. IT operations, architecture, development, and network teams must collaborate to create automation capabilities that enable scale, and a hyper-efficient and effective operating model that delivers great customer experiences, and measurable business outcomes.

Historically, automation software had been deployed in a vacuum and in an ad hoc, uncoordinated manner, with a singular IT silo deploying a set of small, discrete automated processes that triggered code-to-code execution of an action, based on a predefined policy. By using an automation platform across teams, IT organizations can deliver faster service delivery, more agility for the business, and end-to-end integrated process visibility that drives scale, consistency, security, and transparency.

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Red Hat Ansible Automation Platform

The Ansible Automation Platform provides an enterprise framework 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 certified, reusable content. The Ansible Automation Platform's human readable YAML automation language makes it possible for users across an organization to build, share and manage automation content. It enables collaboration across teams and helps them get up and running quickly with searchable collections of pre-composed roles and modules, so anyone can create automation.

Red Hat's open hybrid cloud strategy is built on the technological foundation of Linux, containers, and automation. An open hybrid cloud approach gives you the flexibility to run your applications anywhere you need them. The Ansible Automation Platform integrates with an ecosystem of Red Hat and partner solutions so you can build and operate automation at scale.

Developers can set up automation to provision, deploy, and manage compute infrastructure across environments. They can deploy multi-tier applications reliably and consistently, all from one common framework, configure needed services, and push application artifacts using Ansible Playbooks, as well as move software between testing and production environments more quickly with automated processes. This leads to repeatable and reliable deployments across the software delivery cycle, enabling DevOps, and the management of your continuous integration/continuous delivery (CI/CD) pipeline.

IT Operations teams can use the Ansible Automation Platform to automate infrastructure provisioning and orchestration, update and patch systems, install software, and onboard users. They can create and run reusable infrastructure as code (IaC) with Ansible Playbooks that can automate more extensive workflows, such as full application deployments to production. By getting real-time job status updates and using provided analytics, teams can understand which automation jobs are running successfully, and understand which ones need attention. They can also take automation further with security vulnerability remediation, policy and governance, and content management tools that make operations more efficient.

The Business Value of Red Hat Ansible Automation Platform

Study Demographics

IDC conducted research that explored the value and benefits for organizations in adopting Ansible Automation Platform to optimize their IT infrastructure while developing and running their business applications. The project included nine interviews with individuals at organizations who had experience and knowledge about the benefits and costs of using Ansible Automation Platform. These interviews covered quantitative and qualitative questions about the impact on their organizations' IT/application development operations, costs, and business-related results.

Table 1 presents study demographics and profiles. Based on averages, organizations interviewed had a base of 30,299 employees indicating the inclusion of several large organizations. This workforce was supported by an IT staff of 1,073 along with 662 developers. These IT teams were engaged in managing 710 business applications on behalf of 30,299 internal users, and 17.1 million customers. In terms of geographic distribution, eight companies were based in the United States with one in the United Kingdom. In addition, there was a mix of vertical industries represented, including the IT, government, financial services, healthcare, manufacturing, and travel and leisure sectors. *(Note: all numbers cited represent averages.)*

TABLE 1

Firmographics of Interviewed Organizations

Firmographics	Average	Median	Range
Number of employees	30,299	17,000	320 to 100,000
Number of IT staff	1,073	150	25 to 5,000
Number of developers	662	200	11 to 2,500
Number of IT users	30,299	17,000	320 to 100,000
Number of external customers	17.1M	9.0K	10 to 150.0M
Number of business applications	710	275	30 to 3,500
Company revenue	$6.1B	$700.0M	$18.0M to $30.0B
Countries	United States (8), United Kingdom		
Industries	Information Technology (3), Government (2), Financial Services, Healthcare, Manufacturing, Travel and Leisure		

n = 9, Source: IDC In-depth Interviews, July 2021

Choice and Use of Red Hat Ansible Automation Platform

The companies interviewed discussed both their selection criteria and use of Ansible Automation Platform for developing, running, and updating their business applications. Red Hat customers reported multiple reasons for their decision to adopt, including the overall functionality offered by Ansible Automation Platform and its ability to support application development efforts across the board. They noted that its rich, automated feature set helped companies reduce errors introduced by manual patching and other processes, and that it automated the build process while avoiding "configuration drift." Improved configuration management and continuous delivery set up capabilities were also cited.

Study participants offered detailed comments on these decision criteria:

- **Reduced human error:**
  "We did an awful lot of manual patching and manual processes. That was causing a lot of downtime. We had people and support staff running around just to deal with that, and had lots of mistakes coming out of that because it's a problem with people typing things incorrectly. Ansible [Automation Platform] actually provides really good RBAC and access control, and basically guardrails for people to keep them on the straight and narrow."

- **Desire to automate the build process:**
  "Our build process was manual, which meant that we dealt extensively with 'configuration drift' which resulted in outages. We wanted to fully automate the configuration of workloads, and we also wanted a commercially supported solution with response time SLAs."

- **Helped teams automate during growth:**
  "Our organization is growing rapidly, and we have a lot of business applications that come in and out. We wanted something to automate these things, and that was the main reason we chose Ansible Automation Platform."

- **Improved analytics:**
  "The main reason [we use Ansible Automation Platform] was that we wanted to have better automation. We wanted deep insights and Ansible [Automation] Platform has a much higher level of automation. This is because it has a dashboard that has an automation hub. Everything was all manual before."

- **Paid Ansible offered more capabilities:**
  Choosing paid Ansible [Automation Platform] was the simplest way to automate apps and IT infrastructure. Plus, they had better configuration management and continuous delivery set up capabilities. They were priced similarly to the others."

- **Good experience with Red Hat products:**
  "We are a Red Hat house as far as our support infrastructure goes for our enterprise support. We're also a Red Hat developer/partner and that's very useful for us. With Ansible [Automation Platform], it basically helped with our automation, and made our pipelines are fast and efficient. Everybody wants their stuff to work with Red Hat."

The capabilities and performance of a variety of IT teams were evaluated during the study. These teams are shown in **Table 2** along with a breakdown of Ansible Automation Platform usage by team. Those teams with the greatest amount of Ansible Automation Platform engagement were IT Infrastructure, compute-related infrastructure, DevOps, and application development, all at approximately 90% levels of usage. The study provided quantified data for all these categories except for cloud management and ticketing.

TABLE 2

Red Hat Ansible Automation Platform Usage by Teams

Usage by Team	Number of Organizations Interviewed
IT infrastructure	8
Compute-related infrastructure	8
DevOps	8
Application developers	8
Storage-related infrastructure	7
Network-related infrastructure	7
IT security	7
Cloud management	7
IT ticketing	5

n = 9, Source: IDC In-depth Interviews, July 2021

Table 3 (next page) provides granular data on how interviewed companies were using Ansible Automation Platform at the time of interviews. It should be noted that there was a substantial business application Ansible Automation Platform footprint across the survey base with, on average, 191 business applications that were supported by 4,833 devices. In addition, the solution touched 23% of all organizations' average revenues.

TABLE 3

Red Hat Ansible Automation Platform Usage by Organization

Usage Profile	Average	Median
Number of geographical locations	27	4
Number of sites/branches	41	9
Number of TBs	3.4PB	2.0PB
Number of business applications	191	200
Number of nodes/physical servers	2,552	200
Number of devices	4,833	250
Percentage of revenue	23%	5%

n = 9, Source: IDC In-depth Interviews, July 2021

Business Value Results

IDC's research demonstrates the strong value that organizations have achieved with the Ansible Automation Platform. This was enabled by improving the productivity and effectiveness of IT infrastructure, network management, and security teams, allowing them to spend less time on day-to-day administrative and support activities, and focus on more strategic projects. In addition, faster deployment of new compute, networking, and storage infrastructure served to increase the effectiveness of application development teams and boosted the number of new applications released annually. These improvements, in turn, served to increase revenue by delivering higher-quality and more timely services to existing customers, and better addressing business opportunities. The use of Ansible Automation Platform also minimized the effects of unplanned downtime which lowered business risk, and further increased staff productivity (These benefits are quantified and described in detail in the sections that follow).

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Study participants talked about the most significant benefits of the Ansible Automation Platform:

- **Ease of management and reduced downtime:**
  "Ansible [Automation Platform's] manageability, especially the capability of having auto deployment of patching and things like that, is a big benefit. Configuration management is significant, as is being certain we are staying within our certified server configuration. Reduced user outages would be another, where there is less time that users are not able to access a particular application or server due to patching or application upgrades."

- **More efficient and reliable for customers:**
  "[The most significant benefits include] staff efficiency, as well as productivity because we can get a lot more things automated to increase the productivity of the entire team. Our customers believe in the secure nature of this entire ecosystem, and because it is open source, there is more ability for collaboration and contribution."

- **More efficient IT management and quicker patching:**
  "The real savings happens on the IT side of the fence because we can deliver the deployment of a new application on a server more quickly. The benefit to the end users would be the automatic deployment of patching and deployment of updates. Now that happens with a push of a button, and we can schedule it. Before, we would be saying that today is a maintenance night between 6:00 p.m. to 10:00 p.m.. Now they can be scheduled for off-hours, and it can happen automatically, so our end users see less maintenance downtime. So, there's less planned downtime."

Improvements in Application Development

IDC projects that more than 500 million new business applications will be created by 2023. As these applications grow in scope and complexity, developers and the IT infrastructure teams that support them will need to better manage and compress application delivery cycles. Accordingly, advanced capabilities and tools that foster developer productivity are also rapidly gaining in importance.

Ansible Automation Platform is designed to address these challenges by providing an array of tools needed to implement enterprise-wide automation at scale. In addition, they can optimize and automate routine and frequently repeated tasks such as configuration and change management, patching, provisioning, and security updates. Study participants reported that Ansible Automation Platform allowed them to run robust analytics on usage while offering integration with a variety of cloud and network platforms. They noted that the platform provided better visibility thereby enabling better IT focus, and accelerated completion time for a variety of routine tasks. This enabled teams to work on other more productive or business-oriented projects.

Study participants commented on these benefits:

- **Ansible Automation Platform is a holistic offering:**
  "There's a major difference in our IT operations. Ansible [Automation Platform] has helped because it's highly automated, it's more secure and speeds up our workflows. It's automation allows us to run analytics on usage, uptime, and that type of thing, and the support and educational training tools are great. Also, it is compatible with other systems because it has a range of integrations for different cloud and network platforms."

- **Better visibility enabled better IT focus:**
  "Ansible Automation Platform is a solid automation platform that integrates with all of their products, and it works seamlessly so there's less downtime. When you deploy something, it works. If we're in Kubernetes and deploy 20 nodes to some

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job, it just works. Then we shut them down and Ansible [Automation Platform] cleans them up. There's not a lot of management. Ansible [Automation Platform] will keep track for me."

- **More efficient infrastructure agility:**
  "One of the biggest benefits is being able to do things faster. We have one Linux engineer that had to deploy 57 servers manually and it took him two to three weeks. Now we've got a single person that can deploy them in a few hours or a day."
- **Free up resources to reduce project backlog:**
  "The best thing is that we're slowly working through our backlog of other projects because of the automation Red Hat provides. We have more time to do other tasks that we were avoiding, and to work on our queue of problems."

Interviewed companies reported that Ansible Automation Platform automated multiple tasks for their infrastructure teams. System users were able to control their infrastructure with role-based access control and automation tools that include analytics and certified, reusable content. **Table 4** quantifies these benefits showing a 30% overall productivity boost for IT infrastructure teams, enabling them to work on other important projects. IDC calculated that this translated into an average annual salary savings of $1,248,000 per organization.

TABLE 4

IT Infrastructure (Servers/Compute/Storage) Management Impact

	Before Ansible Automation Platform	With Ansible Automation Platform	Difference	Benefit
Management of IT infrastructure productivity impact, equivalent FTEs	42.3	29.8	12.5	30%
Salary cost per year per organization	$4.2M	$3.0M	$1.2M	30%

n = 9, Source: IDC In-depth Interviews, July 2021

Infrastructure resource configuration and deployment management is a key activity area for IT infrastructure teams in the companies surveyed. An analysis of study participants' data indicated improvements in this area as well.

Table 5 (next page) presents IT agility metrics for two key categories within infrastructure resource configuration and deployment: server resources and storage resources. The companies interviewed noted that staff efficiencies enabled by Ansible Automation Platform improved their ability to deploy compute or storage resources in support of application development, and other efforts including DevOps. As shown in **Table 5**, after adoption, the staff time required to deploy new server and storage resources was significantly reduced (74% and 67% respectively).

TABLE 5

IT Agility Metrics

	Staff time before Ansible Automation Platform	Staff time with Ansible Automation Platform	Difference	Efficiency Benefit
Compute Resources				
Time to deploy new server resources	3.9 days	1.0 day	2.9 days	74%
Staff time to deploy new server resources	12.1 hours	4.3 hours	7.9 hours	65%
Storage Resources				
Time to deploy new storage	3.9 days	1.3 days	2.6 days	67%
Staff time to deploy new storage	22.4 hours	5.5 hours	16.8 hours	75%

n = 9, Source: IDC In-depth Interviews, July 2021

Another key IT infrastructure area that IDC evaluated was network management. Ansible Automation Platform is designed to help make the network management process more consistent by expediting security patching and remediation, and using pre-packaged roles to provision machines, apply base system configurations, and deploy applications. Study participants confirmed that these features, along with Ansible Automation Platform's built-in compatibility with widely used network vendors and suppliers, helped their network infrastructure staff to easily automate an array of routine network management tasks. As shown in **Table 6**, after adoption, network teams experienced a 29% efficiency gain, resulting in annual salary value of $333,000.

TABLE 6

Network Infrastructure Management Impact

	Staff time before Ansible Automation Platform	Staff time with Ansible Automation Platform	Difference	Efficiency Benefit
Management of network infrastructure productivity impact, equivalent FTEs	11.5	8.1	3.3	29%
Salary cost per year per organization	$1.1M	$813K	$333K	29%

n = 9, Source: IDC In-depth Interviews, July 2021

IDC drilled down further on the platform's network management impact and found that Ansible Automation Platform helped network management staff become more efficient in day-to-day operations. Key tasks impacted included network provisioning/deployment, network security management and software management and support. As shown in **Figure 1**, the greatest performance enhancements were network provisioning/deployment (49%), network security management (42%) and software management and support (37%).

FIGURE 1

Red Hat Ansible Automation Platform Impact on Network Management Staff Time Efficiencies by Activity

(% improvement)

n = 9, Source: IDC In-depth Interviews, July 2021

IDC then evaluated impacts on applications development and DevOps teams. Ansible Automation Platform gives application developers access to a wide spectrum of automation tools and resources across physical, virtual, cloud, and container environments. The companies interviewed reported that Ansible Automation Platform helped their DevOps and application development teams optimize the infrastructure management needed to support their work, daily. With improvements, these teams were able to deliver more value to their organizations' business efforts. As one study participant noted:

"We have always been a waterfall release shop. The old tools we had were good as far as that goes. As we become an agile DevOps shop and need to do more releases, we need to be capable of ensuring that those releases meet our quality standards. Having the capabilities around Ansible Automation Platform for actual deployments and easing the security scanning that goes along with it has made things better. There's probably a 10% efficiency gain."

These impacts are presented in **Table 7**. As shown, application development and DevOps teams experienced a 25% productivity boost after deployment of Ansible Automation Platform, indicating that these teams of 52 FTEs can now do the work of 65.1. Study participants reported a 39% increase in the output of new applications. As a result, development teams were able to better support their line of business partners, resulting in an annual salary savings of $1,308,000.

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TABLE 7

Application Development and DevOps Staff Impact

	Staff time output equivalence before Ansible Automation Platform	Staff time output equivalence with Ansible Automation Platform	Difference	Efficiency Benefit
DevOps and AppDev FTEs per year per organization, productivity impact	52.0	65.1	13.1	25%
Salary cost per year per organization (based on FTEs)	$5.2M	$6.5M	$1.3M	25%
New Applications, New Logic				
Number per year	6.2	8.6	2.4	39%
Development lifecycle, weeks	19.0	15.2	3.8	20%

n = 9, Source: IDC In-depth Interviews, July 2021

IDC then drilled down on DevOps impacts. Our analysis found that the Ansible Automation Platform helped study participants' ability to effectively automate an array of tasks and operations for DevOps teams. IDC identified three tasks that best measured these improvements as shown in **Figure 2** (next page). Specific DevOps improvements were identified in the following processes: securing (50%), provisioning (48%), and configuring (38%).

FIGURE 2

Red Hat Ansible Automation Platform Impact on DevOps Efficiencies by Activity

(% improvement)

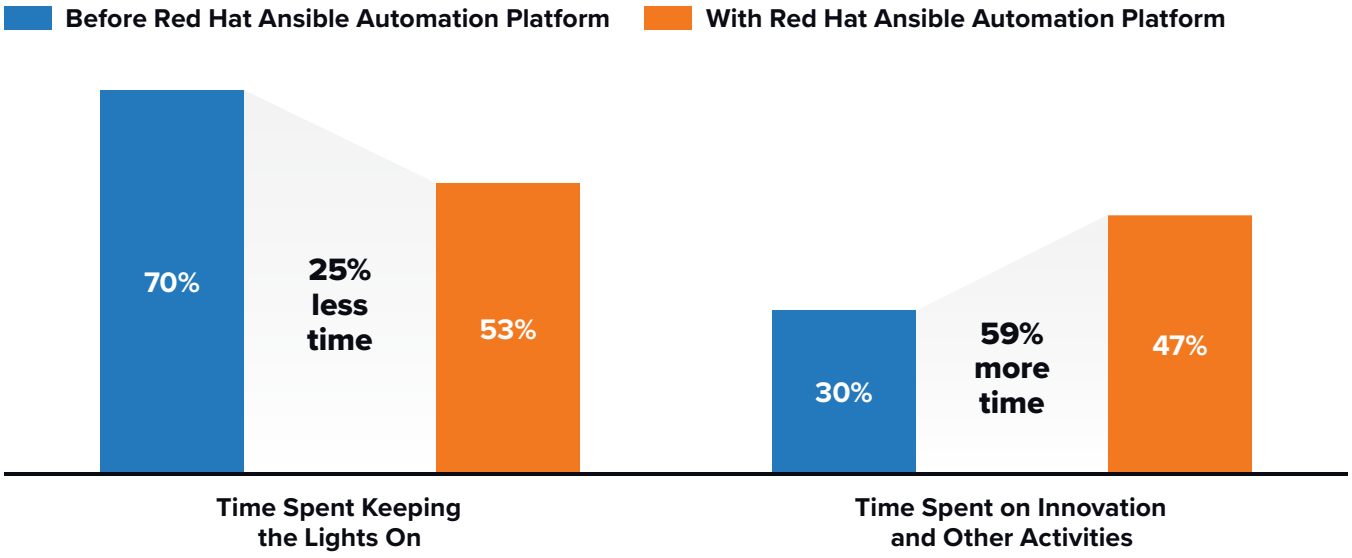
n = 9, Source: IDC In-depth Interviews, July 2021

Another core benefit for DevOps teams is the ability to use feature-rich automation to help them focus less on keeping the lights on, and more on innovation and other projects that more directly support business goals. As one study participant noted: *"Our Linux admin is now spending a lot more time working on database and other things that he hasn't been able to touch for a while."* As shown in **Figure 3**, after deployment, interviewed companies spent 25% less time keeping the lights on, while spending 59% more time on innovation and other activities.

FIGURE 3

Impact on DevOps' Teams Day-To-Day Tasks

(% of time)



n = 9, Source: IDC In-depth Interviews, July 2021

Study participants reported that improvements via Ansible Automation Platform also extended to their security operations. The platform's built-in capabilities helped to secure workloads and applications, thereby helping IT security staff to be more productive and effective in securing both network infrastructure and data. As one study participant noted: *"Ansible Automation Platform is more secure because Red Hat has a proven system. They have the talent and experts to provide best-in-class security. A company is only as secure as the IT security talent that's behind it, and they have the best."*

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Improvements for IT security staff time efficiencies are shown in **Table 8**. After adopting Ansible Automation Platform, companies experienced a 30% productivity boost resulting in average annual salary savings of $243,000.

TABLE 8

Anisble Automation Platform Impact on IT Security

	Staff time before Ansible Automation Platform	Staff time with Ansible Automation Platform	Difference	Efficiency Benefit
IT security team productivity impact, equivalent FTEs	8.0	5.6	2.4	30%
Salary cost per year per organization	$804K	$561K	$243K	30%

n = 9, Source: IDC In-depth Interviews, July 2021

Improvements in Business Operations

By improving overall IT infrastructure and application development performance with Ansible Automation Platform, study participants were better able to meet business demand, and deliver higher-quality and more timely applications and features to lines of business and customers. These improvements provided a better digital foundation for high-quality products and services, ultimately resulting in better business results and increased revenue. Interviewed companies described how the facets of advanced and newly applied automation capabilities previously described led to both cost savings and innovation. They also highlighted how better market agility helped them capture more revenue. Improvements in compliance, data security, and reduced downtime were also cited as core benefits.

By improving overall IT infrastructure and application development performance with Ansible Automation Platform, study participants were better able to meet business demand, and deliver higher-quality and more timely applications and features to lines of business and customers.

Study participants provided examples of these impacts:

- **Better automation leads to cost savings and innovation:**
  "We need less resources to deploy and maintain infrastructure support for our development teams, which saves money. And automation through Ansible [Automation Platform] allows us to move faster, which then fosters innovation."

- **Compliance is more manageable:**
  "What's nice about Ansible [Automation Platform] is that we'll be able to track things in one place, which makes it easy for us to comply. It helps with our international shipping regulations, our internal manufacturing processes, and the code specifications in how things are put together. It also helps IT data security, in terms of the specificity of how our information is stored, like sensitive information that is collected and stored across the environment."

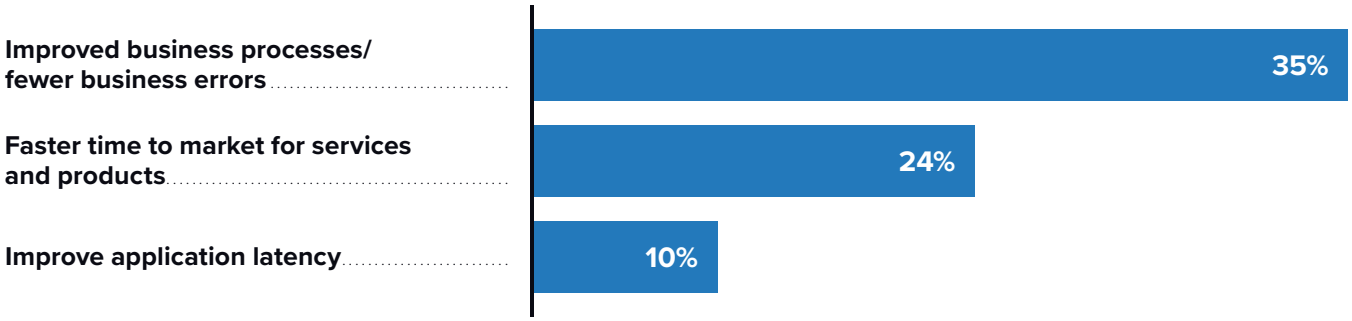
- **Use automation to better support lines of business:**
  "The human resources people can support anyone that wants cross-training. Pretty much everybody on all the teams has that ability. So, if they're a developer or an operations guy and they want to learn Cisco networking, we're all for it. We spend a lot of time cross-training because we have the capabilities."

By automating a variety of IT infrastructure and development tasks which reduced manual intervention and resulting human error, Ansible Automation Platform helped these interviewed companies move more quickly in addressing ever-changing customer needs in the highly competitive markets they serve. IDC identified several key performance indicators (KPIs) to measure process improvements directly affecting business performance. As shown in **Figure 4**, the KPI *"improved business processes with fewer business errors"* saw an increase of 35% while *"faster time to market for services and products"* showed a 24% improvement.

FIGURE 4

Key Business KPIs

(% improvement)



n = 9, Source: IDC In-depth Interviews, July 2021

The companies interviewed also reported that they were able to minimize the frequency and impact of unplanned downtime, reducing business risk and increasing the IT team's ability to manage and mitigate both planned and unplanned service disruptions. Commenting on this benefit, one study participant said: *"Ansible [Automation Platform] reduced the length of downtime for planned outages, and we're seeing an improvement as far as the amount of time that any one server is down. We can ensure that user outages are reduced further simply by making sure that server A is back up, running and functional, before we touch server B."*

As shown in **Table 9**, after deployment, the number of unplanned outages occurring annually was reduced by 58%. When outages did occur, they were able to be corrected 44% faster. This benefit yielded an annual average productivity-based business value of $2,513,000.

TABLE 9

Unplanned Downtime Impact

	Time spent before Ansible Automation Platform	Time spent with Ansible Automation Platform	Difference	Efficiency Benefit
Frequency per year	8.6	3.6	5.0	58%
Time to resolve (hours)	8.9	5.0	3.9	44%
Hours lost per user	5.7	1.4	4.3	76%
FTE impact, lost productivity due to unplanned outages	47.1	11.2	35.9	76%
Value of lost productivity	$3.3M	$783K	$2.5M	76%

n = 9, Source: IDC In-depth Interviews, July 2021

IDC data also showed that regulatory compliance was improved with Ansible Automation Platform. The platform's analytics helped organizations track and secure their relevant compliance-related information more easily. One study participant commented on having a more manageable compliance process: *"What's nice about Ansible [Automation Platform] is that we'll be able to track things in one place, which makes it easy for us to comply. It helps with our international shipping regulations, our internal manufacturing processes, and code specifications in how things are put together. It also helps with IT data security, in terms of the specificity of how our information is stored, including sensitive information that's collected."*

Table 10 shows that, after deployment, compliance team productivity increased by 18%. This benefit yielded an annual average salary savings of $57,000 per organization.

TABLE 10
Compliance Impact

	Time spent before Ansible Automation Platform	Time spent with Ansible Automation Platform	Difference	Efficiency Benefit
Compliance team productivity impact, equivalent FTEs	4.5	3.7	0.8	18%
Salary cost per year per organization	$315K	$258K	$57K	18%

n = 9, Source: IDC In-depth Interviews, July 2021

IDC then evaluated operating expense impacts. Study participants reported that Ansible Automation Platform helped their organizations work on new business initiatives more cost effectively. **Table 11** shows a reduction in new initiative-related costs of $253,000 per organization, annually.

TABLE 11
Business Impact – Reduced Cost Associated to New Initiatives

Business Impact Category	Per Organization
Reduction in new initiative-related costs	$253K

n = 9, Source: IDC In-depth Interviews, July 2021

Because DevOps and application development teams can roll out new applications and features with more agility and speed, Ansible Automation Platform helps organizations bring their products and services to market faster, and improve their competitive stance in the marketplace. This means they can capture more revenue. As one study participant explained: *"Ansible [Automation Platform]helps us ultimately intensify revenue. We can create more product, and sell more product and push it out. This is because we can get our products out to customers. Ansible [Automation Platform] helps things speed up and intensifies the process."*

As shown in **Table 12** (next page), revenue from better addressing business opportunities yielded a substantial amount of total additional revenue annually ($1,872,000).

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TABLE 12

Business Impact – Revenue from Better Addressing Business Opportunities

Business Impact Category	Per Organization
Total additional revenue per year	$1.9M
Assumed operating margin	15%
Total recognized revenue, IDC model, per year	$281K

n = 9, Source: IDC In-depth Interviews, July 2021

ROI Analysis

Table 13 presents IDC's return on investment analysis for study participants' use of Ansible Automation Platform. As shown, IDC projects that they will achieve five-year discounted benefits worth an average of $21.5 million per organization ($138,000 per 100 users) through IT cost savings, staff efficiencies, better application development, and improved business results. These benefits compare with total 5-year discounted costs of $2.8 million per organization ($18,000 per 100 users). These levels of benefits and investment costs are projected to result in an average five-year ROI of 667%, with a break-even point in their Ansible Automation Platform investment occurring in approximately 10 months.

TABLE 13

Five-Year ROI Analysis

Analysis	Per Organization	Per 100 Users
Benefit (discounted)	$21.5M	$138.0K
Investment (discounted)	$2.80M	$18.0K
Net Present Value	$18.7M	$120.0K
ROI (NPV/Investment)	667%	667%
Payback (months)	10 months	10 months
Discount factor	12%	12%

n = 9, Source: IDC In-depth Interviews, July 2021

Challenges/Opportunities

Automation is an IT executive investment choice. The complexity of the IT infrastructure, application, security, and multi-cloud environment continues to grow; it's increasingly impossible to scale any environment without automation. The level of dependencies between processes, teams, and technologies makes it difficult to consistently deliver world-class services in an optimized fashion. The need to manage the dependencies is difficult to scale with limited, or silo-based automation.

In addition to ensuring that staff (and teams) have the skills and attitude to drive value from an automation platform, enterprises also need to ensure access to the platform for data, analytics, security controls, and reporting. The difference between a silo-based automation approach and a platform approach is that collaboration, data access, and analytics accelerate transformation (i.e., DevOps, SRE, Cloud, Application modernization), and improve operational efficiencies in a more concrete, deeper, and broader approach. While IT silos will always remain, the need to collaborate and work from common platforms drives a modern operational approach to application development and service delivery. The benefits of having an automation platform across the organization enables a faster ROI, and improved coordination of use cases that can build from existing automation projects across IT teams.

The complexity of the IT infrastructure, application, security, and multi-cloud environment continues to grow; it's increasingly impossible to scale any environment without automation. The level of dependencies between processes, teams, and technologies makes it difficult to consistently deliver world-class services in an optimized fashion. The need to manage the dependencies is difficult to scale with limited, or silo-based automation.

Conclusion

The importance of automation to a business has never been greater. IT leadership teams should consider the business value of automation, and the ability to expand adoption of automation across teams and processes to maximize outcomes. IT leaders should adopt automation to reduce toil, increase team productivity, and empower teams to focus on more strategic tasks that impact customer experience. Automation is a core, foundational element to enabling scale for Agile, DevOps, and modern IT operating models. While technological complexity will continue to increase, automation is a technology capability that has proven to increase speed and agility for high performing teams, while delivering and optimizing business returns.

Appendix: Methodology

IDC's standard Business Value and ROI methodology was utilized for this white paper. This methodology is based on gathering data from organizations currently developing and running business applications on Ansible Automation Platform as the foundation for the model.

Based on interviews with these study participants, IDC has calculated the benefits and costs to these organizations of using Ansible Automation Platform. IDC used the following three-step method for conducting the ROI analysis:

1. **Gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of using Ansible Automation Platform to develop and run various business applications and workloads.** In this study, the benefits included staff time savings and productivity benefits, revenue gains, and IT infrastructure–related cost reductions.
2. **Created a complete investment (five-year total cost analysis) profile based on the interviews.** Investments go beyond the initial and annual costs of using 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 Ansible Automation Platform over a five-year period. ROI is the ratio of the net present value (NPV) and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

IDC bases the payback period and ROI calculations on several 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 $100,000 per year salary for IT staff members and an average fully loaded salary of $70,000 for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
- Downtime values are a product of the number of hours of downtime multiplied by the number of users affected.
- The impact of unplanned downtime is quantified in terms of impaired end-user productivity and lost revenue.
- Lost productivity is a product of downtime multiplied by burdened salary.
- 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 every hour of downtime does not equate to a lost hour of productivity or revenue generation, IDC attributes only a fraction of the result to savings. As part of our assessment, we asked each interviewed organization what fraction of downtime hours to use in calculating productivity savings and the reduction in lost revenue. IDC then taxes the revenue at that rate.

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

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

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