The Economic Benefits of Red Hat Ansible Automation Platform Versus DIY Automation

Standardize automation to get to market faster and reduce operational complexity and risk, while increasing cross-functional collaboration

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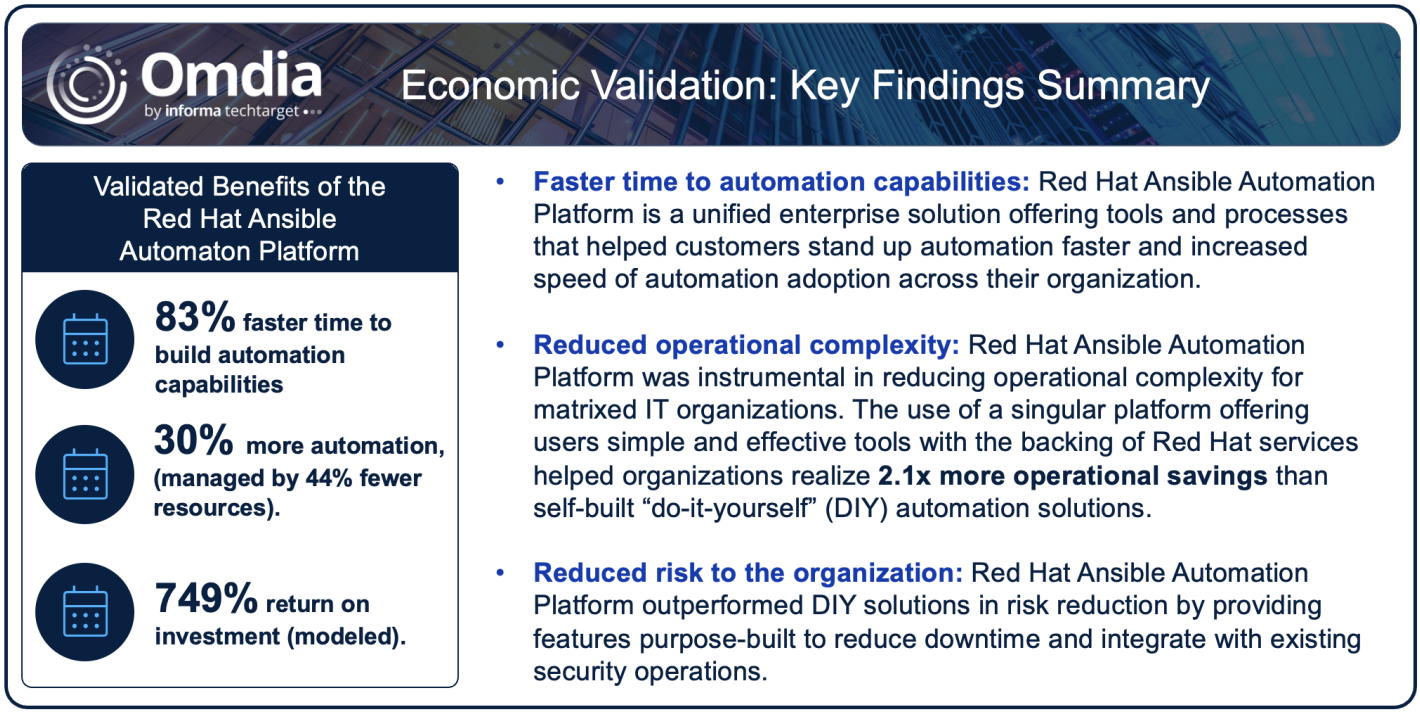


Introduction

This Economic Validation from Omdia focused on the quantitative and qualitative benefits that organizations can expect from using Red Hat Ansible Automation Platform to create, share, manage, and execute automation of mission-critical IT functions instead of using "do-it-yourself" (DIY) solutions comprised of disparate tooling like self-created scripts, open source and point in time automation utilities that are often disconnected or slioed.

Challenges

Automation is essential for modern businesses, enabling IT organizations to operate more efficiently, innovate rapidly, and meet evolving demands. However, implementation of strategic automation initiatives across an organization can present challenges.

Consider how the growth of artificial intelligence and machine learning have necessitated AIOps initiatives around operational efficiency, governance, and predictive maintenance.

Further still, organizations are also required to offer self-service access to data, infrastructure, and services to meet the needs of their customers and the market. This flexibility often increases complexity, requiring IT teams to manage virtualized and containerized environments across on-premises, cloud, and edge platforms while ensuring availability, security, and compliance.

Automation designed to unify teams can accelerate workflows, reduce errors, and minimize reliance on experts for repetitive tasks. Research from Enterprise Strategy Group (now Omdia) found that some of the top challenges organizations faced when using infrastructure management and automation tools include the high costs of tools, different preferences of tools between teams, a lack of a clear automation strategy, finding the right tool for the job, scaling across locations, and incompatibility with legacy infrastructure.[1]

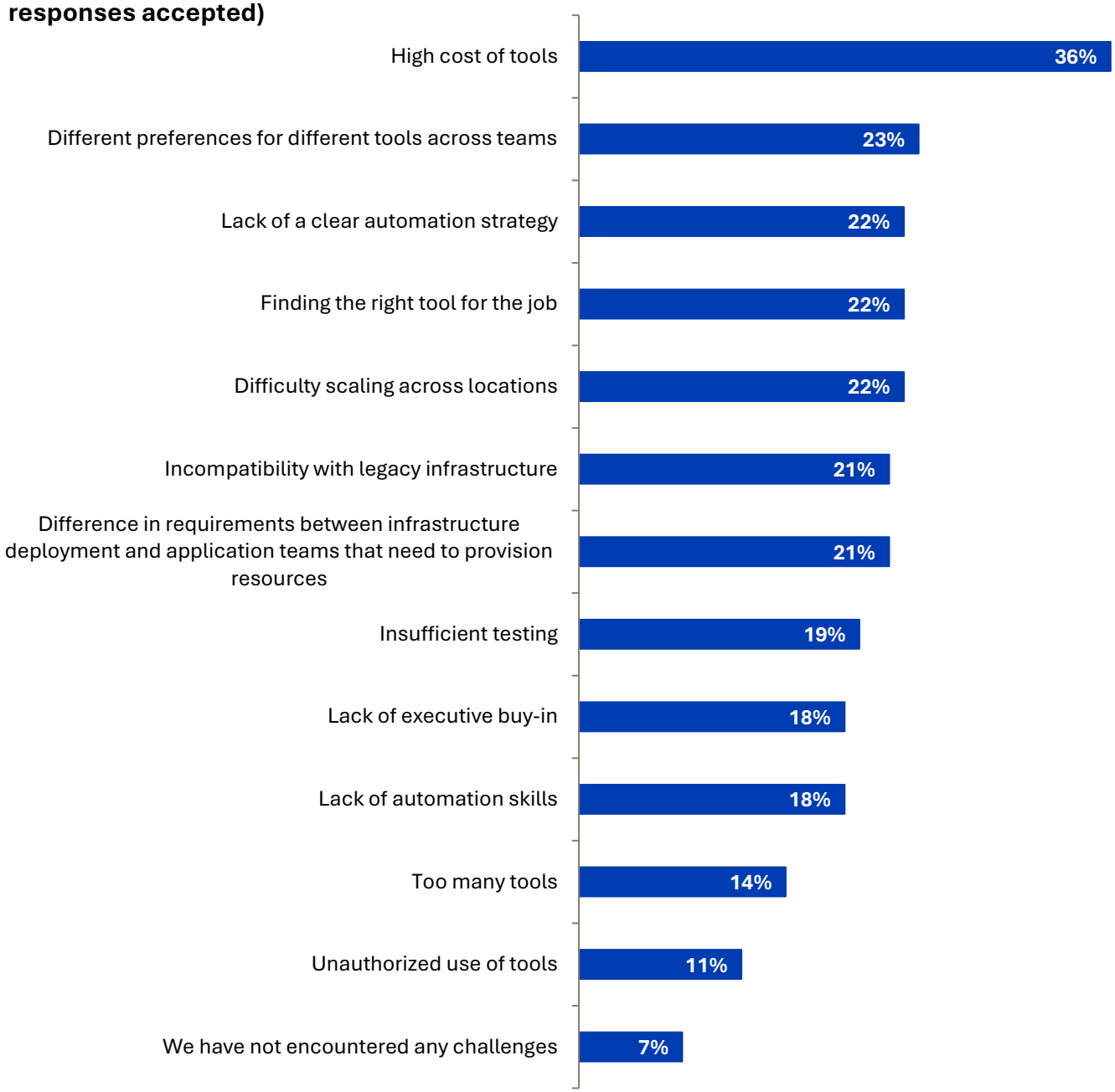
Summary of Enterprise IT Automation Challenges:

- Budget constraints.
- Tool sprawl (number and complexity of tools).
- Lack of automation tool standardization and strategy.
- Skills gaps, lack of automation expertise,and limited resources.
- Internal roadblocks and resistance to change.
- Scaling across locations.
- Legacy system integration.
- Data silos, governance, and accessibility.
- Process variance and lack of documentation.
- Security and compliance challenges.

[1] Source: Enterprise Strategy Group (now Omdia) Complete Survey Results, *Private AI, Virtualization, and Cloud: Transforming the Future of Infrastructure Modernization*, August 2025.

Figure 1. Top Challenges Faced When Using Infrastructure Management and Automation Tools

What are the most significant challenges, if any, your organization encounters when using infrastructure management and automation tools? (Percent of respondents, N=380, three responses accepted)



Source: Omdia

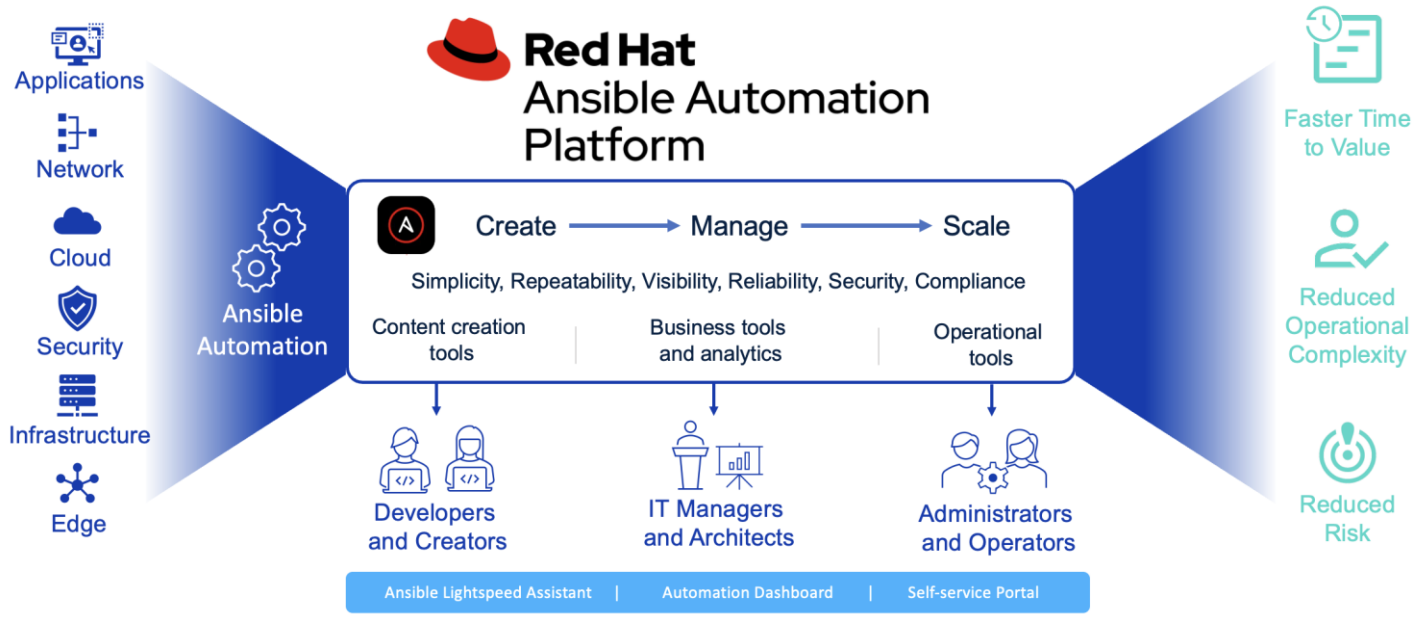
To overcome these challenges, organizations must adopt a strategic approach to automation that breaks down inefficiencies and aligns workflows with business objectives. Random acts of automation, such as DIY scripting or isolated tool usage, can increase complexity and hinder scalability. A unified automation platform that is standardized, reusable, and supported by validated content that reduces maintenance complexity across teams is critical to driving effective automation strategies and achieving long-term success.

The Solution: Red Hat Ansible Automation Platform

Red Hat Ansible Automation Platform is a strategic automation platform that integrates comprehensive capabilities, a robust technology ecosystem, and flexible deployment options into a single solution. It enables users to automate and orchestrate a series of workflows across domains for more efficient, resilient, and consistent IT operations at scale. Red Hat Ansible Automation Platform is made up of:

- **Automation Controller:** The control plane for automation, which includes a centralized user interface (UI) and RestFulAPI, role-based access control, workflows, and integrated continuous integration/continuous delivery (CI/CD). Automation Controller helps standardize how automation is deployed, initiated, delegated, and audited.
- **Automation Dashboard:** Provides visibility into automation performance and return on investment (ROI) with comprehensive tracking of job success rates, cost savings, and automation value across the organization. This new feature enables teams to monitor, track, and report on automation outcomes with clear metrics.
- **Automation execution environments:** Consistent and portable environments packaged as containers to easily execute and scale the use of Ansible playbooks and roles.
- **Automation mesh:** Provides a simple and reliable way to scale and expand the use of automation across the organization and across locations without requiring knowledge of the underlying complexity of the architecture.
- **Self Service Automation Portal:** Enables platform administrators to quickly and easily scale automation service delivery to new users and teams.
- **Ansible Lightspeed Intelligent Assistant:** A chat assistant and coding assistant that leverages generative AI to provide on-demand support and guidance for administrators, developers, and users of automation.
- **Event-driven Ansible:** Offers enhanced flexibility and control over event-driven automation with new support for external secret management, enabling more sophisticated automation workflows that respond to real-time events.
- **Ansible content tools:** Provided for developers and operators to easily use CLIs to build and deploy containerized automation execution environments (**Execution environment builder**) and automation (**Automation content navigator**), along with **Ansible-lint**, which ensures best practices to help make code more consistent and maintainable.
- **Certified and validated content collections:** Helps creators easily start automating with building blocks that integrate automation with Red Hat and industry partner platforms and simplify the execution of key operational tasks. Collections can include modules, plug-ins, roles, playbooks, and documentation.
- **Private Automation hub:** Provides easily accessible repositories to discover, use, and extend content that is created by Red Hat and its technology partners, helping to reduce risk and minimize time to automation.

Figure 2. Red Hat Ansible Automation Platform



Source: Omdia

Omdia Economic Validation

Omdia completed a quantitative economic analysis of Ansible Automation Platform. Omdia's Economic Validation process is a proven method for understanding, validating, quantifying, and modeling the economic value propositions of a product or solution. The process leverages Omdia's core competencies in market and industry analysis, forward-looking research, and technical/economic validation. Omdia conducted in-depth interviews with end users to better understand and quantify how Ansible Automation Platform has impacted their organizations, particularly in comparison with previously deployed and/or experienced automation solutions. This included vendor-provided automation tools, open source automation tools and platforms, and developer-created scripts. The customers that Omdia spoke with were organizations using Ansible Automation Platform to build automation capabilities across their IT environments and build automation into their service offerings. The qualitative and quantitative findings were used as the basis for a simple economic model comparing the costs and benefits of growing, managing, and maintaining automation capabilities with Ansible Automation Platform.

Ansible Automation Platform Economic Overview

Omdia's economic analysis revealed that Ansible Automation Platform has provided its customers with significant savings and benefits in the following categories:

- Faster time to automation capabilities.
- Reduced operational complexity.
- Reduced risk to the organization.

Faster Time to Automation Capabilities

Simple 1:1 automation of manual tasks can be achieved rather easily by any administrator with some scripting experience, but building coordinated cross-functional automation capabilities across the organization takes time, planning, and the backing of senior leadership. When coming up with a plan, organizations should empower automation teams by looking to eliminate the personal and divisional roadblocks that often stymie automation initiatives and consider the platforms, tools, and processes that will prove successful. Ansible Automation Platform provided organizations with a unified solution, tools, and processes that helped teams adopt automation faster and scale consistently across the enterprise. These benefits included:

> **"Ansible Automation Platform helped us to bring people on board that were afraid of using automation because they did not have the experience. It was so simple and effective that we soon had developers, system administrators, managers, and others joining our discussions."**

- **Faster time to automation.** Customers reported that it was quick and easy to get started with Ansible Automation Platform. Developers were able to learn Ansible in only a few short weeks, taking advantage of Red Hat's training, workshops, and documentation. The small automation teams were able to deploy the control and execution plane components quickly from RPMs obtained on the Red Hat Customer Portal and through simplified OpenShift installations. While the majority of deployment times consisted of working on internal buy-in and cross-functional cooperation, teams were able to have cross-functional automation capabilities up and running across the organization in only a few months, compared to the year or two that it would have taken to build automation capabilities without a unified platform, tools, content, support, and vision that could be conveyed to the organization. "We were lucky because we automation admins had the internal backing and a mandate that empowered us to access the things that we needed from other groups without hitting roadblocks that could take months to sort out." The GenAI guidance capabilities built into the Ansible Lightspeed Intelligent Assistant helped to accelerate onboarding for both experienced developers and novice end users.

> **"The self-service portal is a far easier way for us to make automation available for use across the organization. It is a separate portal so users do not have to know how to use the full automation platform but can still become more productive with the automations."**

- **Expanded use of automation across the organization.** Customers reported that it was very fast for developers to create the initial automation capabilities and integrate with existing systems, and this positive experience helped to positively affect the spread of automation. The simplicity of the platform and tools, availability of the self-service portal, AI-powered intelligent assistant, and reusable playbooks and modules made it easier for other groups across the organization to use and even create new automation capabilities and become invested in contributing to company-wide automation efforts.

- **Faster time to cross-functional collaboration.** Ansible Automation Platform provided a single unified technology, tool, language, and process that helped to bring cross-functional teams together, including managers, developers, operators, architects, and security teams. These cross-functional teams were able to openly collaborate on automation initiatives, better understand requirements, and build trust. This helped to remove barriers and silos, and ultimately resulted in more effective, widespread, and standardized use of automation. In some cases, this collaboration extended beyond the enterprise, with organizations engaging the open source community to further strengthen and accelerate their automation efforts. "The more we automate, the more capabilities we build and the easier it is to automate more."

> **"In the beginning, we automated simple things, but now we have started automating more complex things across teams—so building workflows that span the network, storage, servers, and the application. The more we can automate, the more time we save."**

- **Faster time to automate at scale.** Ansible Automation Platform was made for scale. Organizations reported that it was much faster to scale capabilities while ensuring governance, availability, and security across different groups, locations, and technologies. Automation could be worked into CI/CD frameworks, and containerized automation execution environments running on the automation mesh framework made it easy for organizations to extend automation capabilities across the data center, cloud, and edge locations. Organizations could quickly scale automation without duplicating the efforts to better execute on hybrid and multi-cloud strategies, quickly expand to new geographic and edge locations, and normalize IT operations for new mergers and acquisitions.

Reduced Operational Complexity

Ansible Automation Platform helped to reduce operational complexity across organizations by providing a single highly capable solution that can be efficiently integrated into their systems. This enabled developers and automation teams to spend less time creating and maintaining automation and similarly helped administrators and architects spend less time managing, operating, and scaling automation across locations and infrastructure. It also provided IT managers and architects with the insight to make better decisions and operate the business with greater agility and flexibility. Customers shared that Ansible Automation Platform had helped to reduce operational complexity through the following benefits:

- **Less time spent creating automation.** Customers reported that Ansible Automation Platform and developer tools made it far easier for them to create and test automation compared to writing scripts and using open source automation. Ansible Core is based on simple YAML syntax that is easy to learn with CLI tools to develop, test, and run playbooks. Playbooks contained the plays, modules, and plugins required to piece together automation to run on any infrastructure, while the Ansible-specific linter, Ansible-lint, helps reduce syntax errors. Roles and collections could be defined to make automation reusable, and public and private Automation hubs provided trusted content collections, documentation, and examples to help organizations avoid starting from zero and further

> **"I can create automation in Ansible that would have taken me three times as long with our old automation tool. And now as I am building the automation; I am thinking ahead and figuring out where tasks and roles can be reused by others going forward to save them time and effort."**

accelerate time to automation creation. Ansible Builder simplified the creation of containerized execution environments that could be paired with playbooks and shared with other teams. Customers reported that automation that used to take weeks or months (including discussions, meetings, and requests for information) now could be completed in days or sometimes just a few hours.

- **Less time spent maintaining automation content.** Maintaining automation content on Ansible Automation Platform was far easier for organizations as well. Teams could quickly update playbooks, roles, and execution environments and publish those changes through collections without rework. Customers reported that an expert was required to maintain the scripts that they used to create when things changed, and the open source automation that they used to rely on had to be wiped out and recreated each time a new version was released, and neither option offered any support outside the open source community. Customers estimated that they would need a team that was at least twice the size to create and maintain automation without Ansible Automation Platform.

> **"Before, all our departments were free to choose the best-of-breed automation tool that worked best for their role. This sounded good at the time and sped up manual tasks, but it did not result in a major win for the organization because everything was still serialized and required experts to handle the request."**

- **Less time spent managing and supporting automation across the organization.** Execution and management of automation by architecture and operations teams was made far more efficient with Ansible Automation Platform. The automation controller made it easier to manage automation jobs and execution environments (through the UI, CLI, or API) and reduced the effort required to define, document, delegate, and operate automation efforts across the company. Operations teams were able to deploy reusable job templates and execute automation jobs securely, with role-based access and without exposing credentials. Business teams were able to use the Automation dashboard to track, analyze, and improve how the platform is used and to automatically calculate and justify ROI. The dashboard enabled business teams to make data-driven decisions around how to optimize the value of AI and better report and share data across the organization. The previous automation tools leveraged by those we interviewed provided no cross-functional capabilities or visibility and had to be executed and managed independently by experts.

> **"With the automation dashboard, we can connect to all of our platforms regardless of version and can see a management summary, jobs, statistics, and some financial metrics without having to send any data outside of our organization."**

- **Less time spent scaling automation efforts.** Ansible Automation Platform makes scaling automation far easier on teams locally and across hybrid and edge locations. Automation mesh can expand the use of automation without having to understand the underlying complexity. Containerized execution nodes provide the localized capacity to offload and run automation playbooks at remote and segmented environments that cannot access the automation

> **"Ansible Lightspeed helps us develop and scale our playbooks faster by helping to guide our junior engineers on what they can use and our senior engineers to fill in some of the details of the parameters to save time manually entering things. And the (AI-powered) intelligent assistant will only help to speed things up even more."**

controller. This removes the burden on the operations and automation teams to continuously troubleshoot and support automation capabilities across complex environments and reduces the likelihood for automation siloes built on diverse tooling to continue. New features like the self-service portal and Ansible lightspeed intelligent assistant make scaling automation faster and easier across the organization by bringing automation to more users that do not have to be experts in the platform to use it.

- **Improved flexibility and agility.** By bringing automation capabilities to more locations and functions across the organization, Ansible Automation Platform enabled IT teams to do more with less and provided the flexibility and agility required to better support the business. Companies that we spoke with that used to rely on serialized ticketing systems said that new IT services for the business could take weeks to complete the authorizations and siloed and serialized operations required. With Ansible Automation Platform, requests for these services were made through a self-service portal, and resources were provided in under an hour (including authorizations). Driving efficiencies like these across various aspects of the organization can result in a significantly positive impact on the bottom line both in terms of freeing up resources and impacting revenue.

Reduced Risk to the Organization

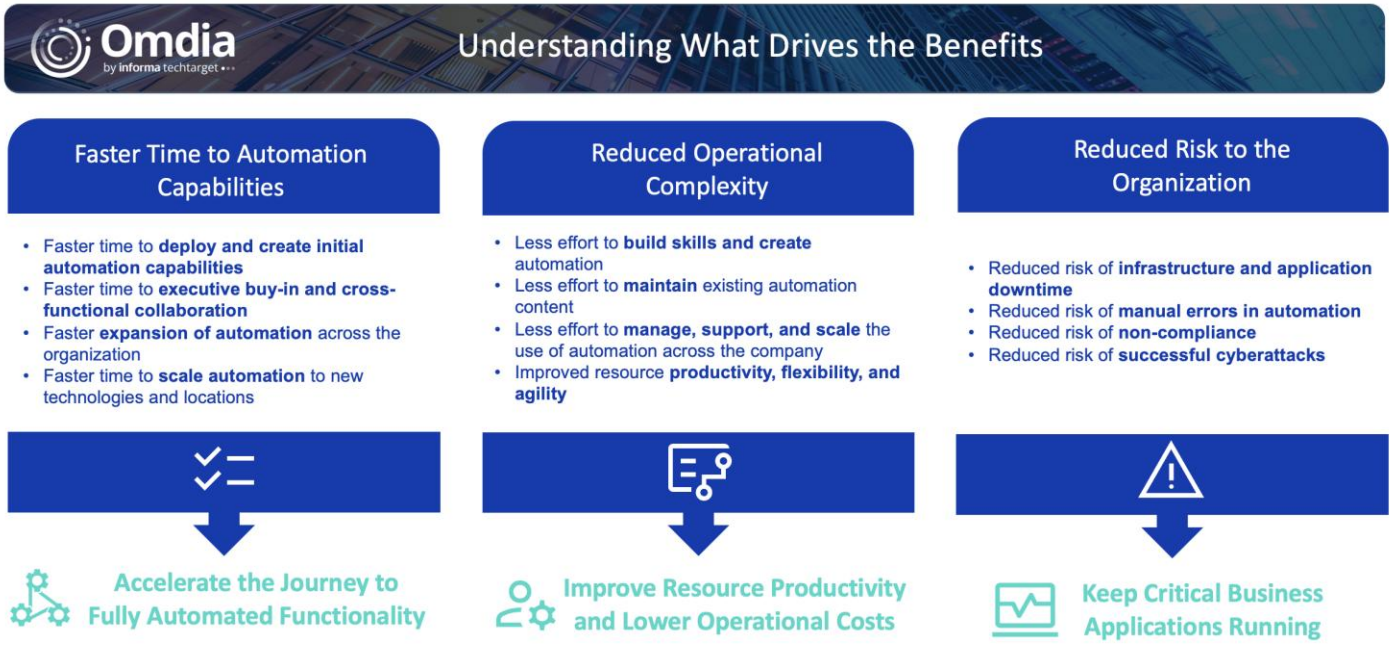
Ansible Automation Platform helped to reduce risk for organizations compared to using open source automation by providing features that help to minimize the risk of downtime and functions that comply with and integrate well into existing security operations. These benefits included:

- **Reduced risk of downtime.** Ansible Automation Platform provided organizations with content collections that provided trusted and certified integration with technology partners and reusable components created by experienced developers and architects. This helped to reduce the risk of manual errors that could cause downtime by nearly 70% for one organization. The intelligence built into the automation controller and automation mesh performs system health checks and can provide redundancy and visibility into mesh topologies that can reduce issues with infrastructure that might cause downtime. Event-driven Ansible can be combined with existing playbooks to automate remediation and stop issues before they arise or to automatically fix issues that do—without human intervention. Ansible was also able to integrate with IT service management systems to help alert, share logs, and speed resolution of issues that may lead to downtime down the road.

> **"We were able to use Ansible automation to automate security and availability checks and push security and configuration settings back to where they should be every 24 hours. So even if someone got in and changed something, our automation would set it right back to where it needs to be."**

- **Reduced risk of cyberattack.** Alternative automation tools and scripting can expose sensitive system information, accounts, and credentials. Ansible Automation Platform mitigates these risks through secured bi-directional communication between Ansible nodes and helps to reduce the risk of accounts or passwords being stolen, with a built-in credential management system that never exposes the credentials. Ansible logs can be integrated with SOAR to help speed investigations, and approvals can be employed to help stop the possibility of outsiders gaining access and making unauthorized changes to systems.

Figure 3. Benefits of Ansible Automation Platform



Source: Omdia

Omdia Analysis

Omdia's Economic Validation Team leveraged the information collected through vendor-provided material, public and industry knowledge of economics and technologies, and the results of customer interviews to create a five-year TCO/ROI model. The model compares the costs and benefits of building and scaling automation capabilities across a large, distributed organization with Ansible Automation Platform versus a DIY approach using open source automation tools and point automation solutions. Omdia's interviews with customers who have recently built automation capabilities with Ansible Automation Platform, combined with experience and expertise in economic modeling and technical validation of automation solutions, helped to form the basis for our modeled scenario.

The model assumed a large organization with 28K employees spanning five worldwide geographical locations. We assumed that the organization consisted of 104 full-time equivalents (FTEs) to handle compute, network, and security operations; an eight-person storage team; and 706 IT generalists tasked with providing on-site and remote IT services for employees and business units.

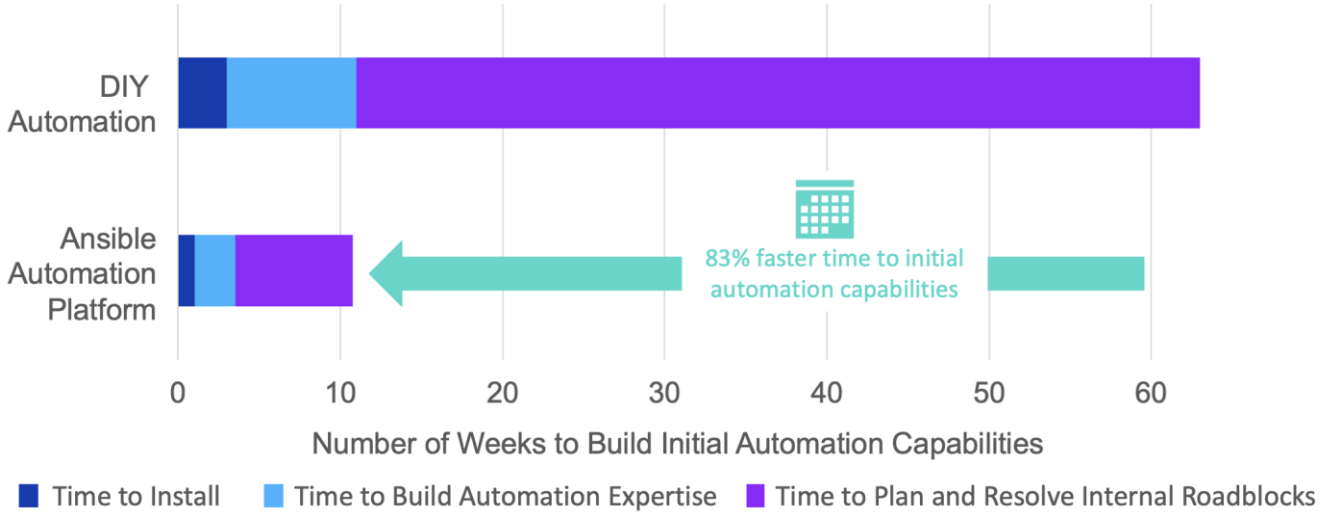
We first modeled the time to build the initial automation capabilities, including the time to install and deploy automation servers, software, and platforms (one week for Ansible Automation Platform versus three weeks for the DIY case based on easy RPM installations versus manually setting up several tools); build automation expertise (2.6 weeks for Ansible Automation Platform versus eight weeks for the DIY case based on improved documentation, AI-assistance, training and a simple YAML language); and the time to plan for cross-functional automation capabilities by resolving internal roadblocks (7.2 weeks for Ansible Automation Platform versus 52 weeks for DIY-based automation). As Figure 4 shows, the clear and unified vision of Ansible Automation Platform, along with simplified installations and a learning curve, resulted in **an 83% faster time to initial automation capabilities.**

Why This Matters

IT automation tools are freely available through open source initiatives and are often provided by vendors to automate the functions of their solution. But these tools must be operated by experts, lack support, and are complex and difficult to scale and maintain.

Omdia's validation and models show that Red Hat provides a unified platform that drives automation success and efficiency across the organization, resulting in an **ROI of 749%.**

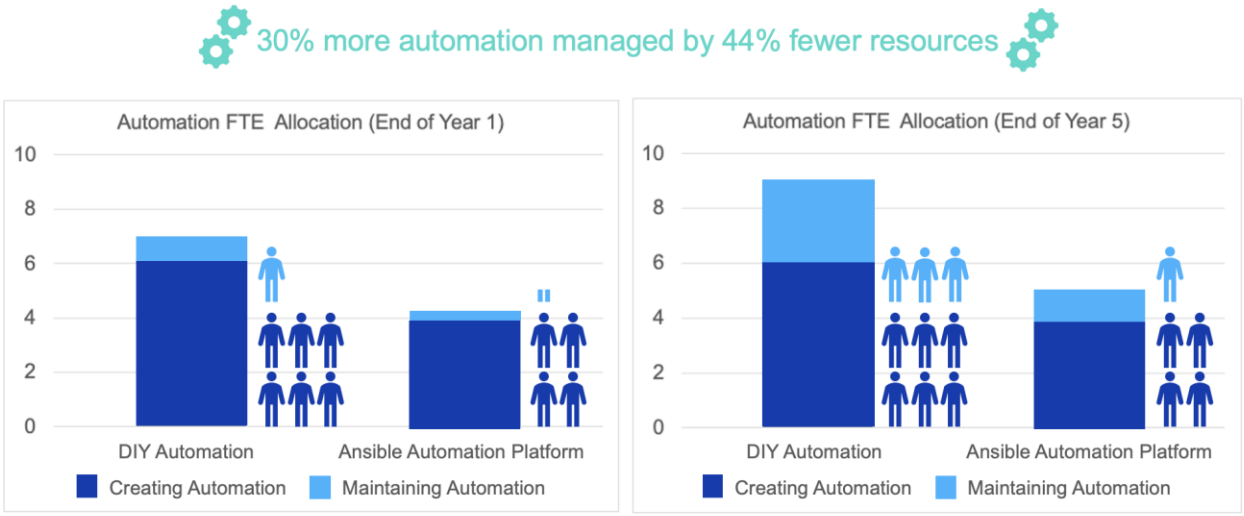
Figure 4. Time to Build Initial Automation Capabilities



Source: Omdia

Omdia assumed an initial automation team size of four people for Ansible Automation Platform case, with a 1.5x larger team of six people required to build the initial automation capabilities. Once automation content was created, only a small portion of the existing team's time would be required to maintain existing automation for Ansible Automation Platform, but a full-time dedicated resource would be required for the DIY case due to the added complexity, frequent changes, and lack of support and documentation. We assumed that by year 5, Ansible Automation Platform team had grown to include an FTE to manage, maintain, and support existing automations, and two more FTEs would need to be added to manage the DIY case. As shown in Figure 5, our automation capabilities calculations (described later) were used to show that Ansible Automation Platform **could provide 30% more automation managed by 44% fewer resources.**

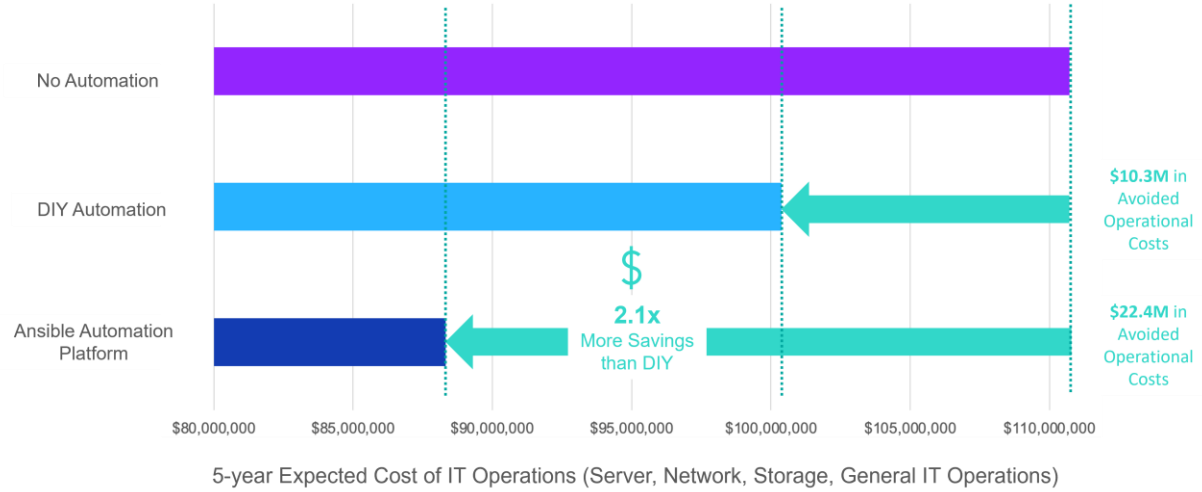
Figure 5. Comparison of FTEs Required to Create, Manage, and Maintain Automation



Source: Omdia

Next, Omdia modeled the expected growth in automation capabilities across the organization and across locations over the five-year period. We assumed that, with Ansible Automation Platform, the organization could automate across all locations at the same rate of 10% new automation capabilities per year, while, for the DIY case, new automation capabilities per year would grow roughly half as fast at 5%, and all efforts would have to be repeated at each new location, providing a delay of up to one year before secondary locations had built their initial capabilities. This model was used to predict the overall operational savings by considering the percentage of automatable functions against the growth in automation capabilities by the end of each year and the expected benefit of these automations. Our models predicted that over five years, Ansible Automation Platform **could provide $22.4M in avoided IT operations work through automation**, which is over twice as much savings as would be realized with DIY automation (see Figure 6).

Figure 6. Avoided Cost of IT Operations

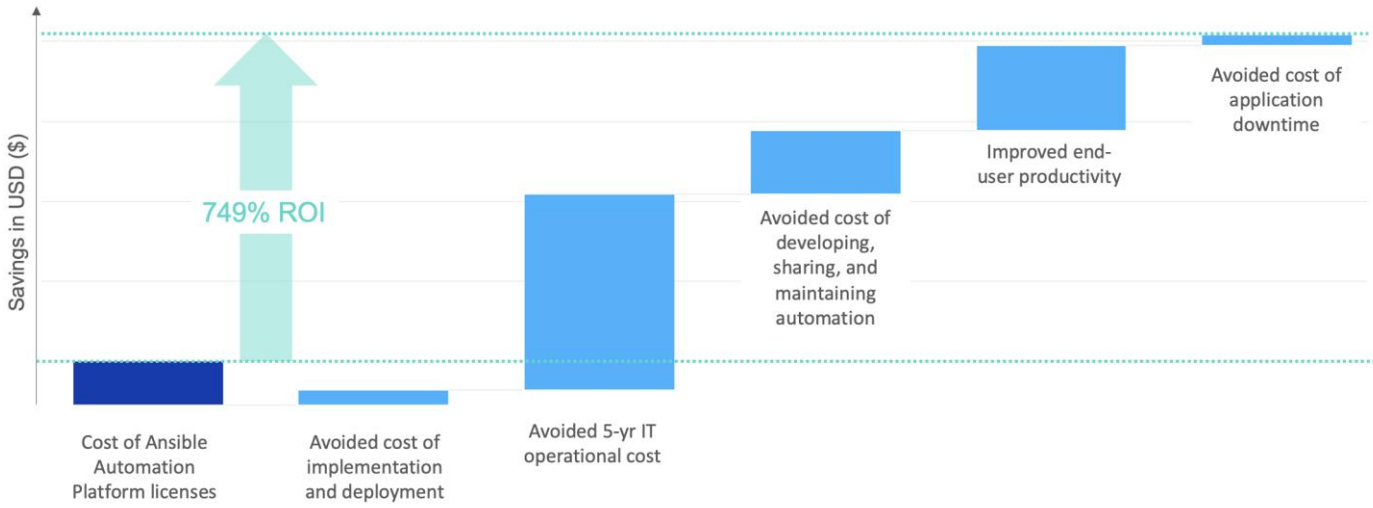


Source: Omdia

Omdia's models also predicted that automation could improve end-user productivity by reducing the time spent impacted by device issues and service interruption. Omdia assumed that automation could reduce both the number of issues seen (through fewer issues, better interoperability, and periodic health checks) and minimize the time to resolve and remediate these issues through automated actions and improved workflows. Our models predicted that, while both DIY and Ansible Automation Platform could reduce the expected impact on end-user productivity, Ansible Automation Platform provided 87% less impact on end-user productivity, saving the organization an additional $5.3M over DIY over the five-year period. A similar model predicted that automation could help reduce the number of application downtime events, as well as minimize the time to restore operations. Our models predicted that Ansible Automation Platform could provide an additional $696K in avoided impact to revenue over the expected savings provided by DIY automation.

Taking all the modeled predictions into consideration, Omdia calculated the expected ROI of automating with Ansible Automation Platform rather than relying on DIY automation capabilities built around open source tools and point automation solutions. While both options provide significant savings over no automation, our models predict that Ansible Automation Platform **can provide over $23M in additional savings and benefits that would not be realized with DIY automation.** Considering the investment in the Red Hat licenses required to run the platform over the five-year period, Omdia calculated that Ansible Automation Platform **could provide an ROI of 749% over the five-year period** (see Figure 7).

Figure 7. Expected Five-year ROI of Ansible Automation Platform



Source: Omdia

Considerations

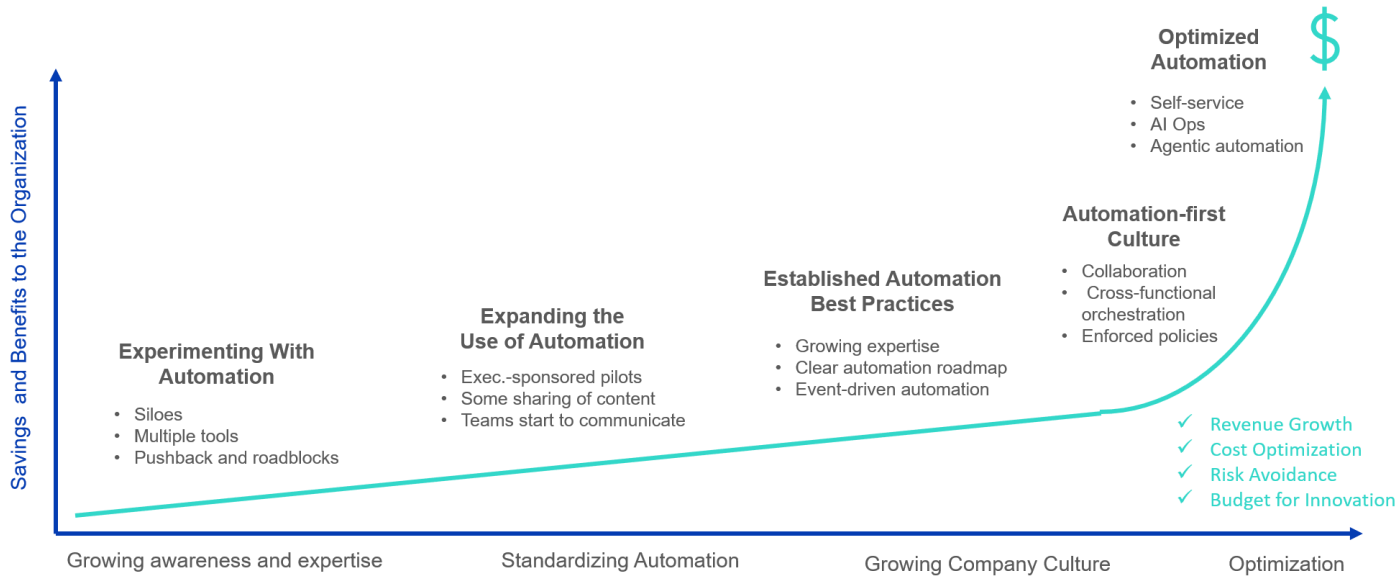
Omdia's models are built in good faith upon conservative, credible, and validated assumptions; however, no single modeled scenario will ever represent every potential environment. Each organization has a unique set of challenges it must overcome and opportunities that can be achieved through automation. The benefits received by an organization depend on the size of the organization, the nature of the business, and the current capabilities, characteristics, and composition of its IT organization, along with many more variables. Omdia recommends that you perform your own analysis of available products and consult with your Red Hat representative to understand and discuss the differences between the solutions through your own proof-of-concept testing.

Conclusion

IT automation is becoming more of an important mandate across modern IT organizations. Automation helps reduce IT complexity and speed operations and enables an organization to provide IT services that better meet the demands of today's modern businesses. Although the initial Opex costs for DIY automation are compelling when organizations first get started, there is an eventual tipping point where the total cost to operationalize automation across many teams with diverse sets of domains and endpoints favors commercial automation platforms such as Ansible Automation Platform. An enterprise automation platform must be able to orchestrate complex workflows at the top level, while automating specific tasks for specific endpoints at the lowest device level.

But successful automation is not just about the automation platform, but it is also about the end-to-end process of growing into a mature and automated organization. It is an incremental journey that involves gaining executive support, unifying technology, coming together as an organization, and coordinating new processes—all of which can take significant time to achieve. As shown in Figure 8, as organizations work through this journey, exponentially increasing levels of savings and benefits can be realized.

Figure 8. Exponential Growth in Benefits as Organizations Grow Automation Capabilities



Source: Omdia

Omdia validated that Red Hat has provided the platform, tools, and services to help organizations quickly get started with automation, spread the use of automation across the organization, standardize automation across technologies and teams, reduce operational complexity and risk, and scale the use of automation across more technologies and locations.

Our modeled scenario predicted that Ansible Automation Platform can provide over $23M in additional savings and benefits over five years when compared to building DIY automation capabilities. This analysis also predicted that an investment in Ansible Automation Platform provides a 749% ROI. If your organization is serious about driving the benefits of automation across its IT environment quickly and effectively while reducing operational complexity and risk to the organization, Omdia suggests that you consider Ansible Automation Platform.

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