
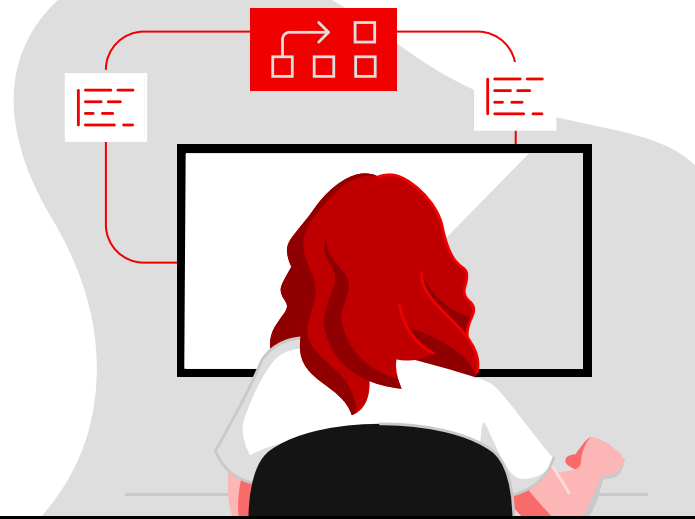


AUTO- MAT- ION



An IT executive's guide to automation

The need for transformative automation



CONTENTS

3

Introduction

Why you need to consider transformative automation

6

Chapter 1

Adopt automation as a long-term strategy, not just a tool

12

Chapter 2

An IT executive's role in finding and adopting a successful automation solution

16

Chapter 3

How to choose an IT automation solution

19

Chapter 4

Red Hat's role in transformative IT automation

23

Appendix

An IT executive's glance at the value of automation

24

Appendix

Ready to get started with automation?

Why you need to consider transformative automation

Organizations across industries face unprecedented pressure to deliver services with increased speed and hardened security practices.

IT teams play a crucial role in meeting these demands, but they need to be efficient and scalable to keep up with growing demands.



The solution is often found on one of two paths:
hire more help or automate.

Due to talent shortages or budget restrictions, many organizations can't expand their teams. IT automation can help your current workforce accomplish more to support business requirements.



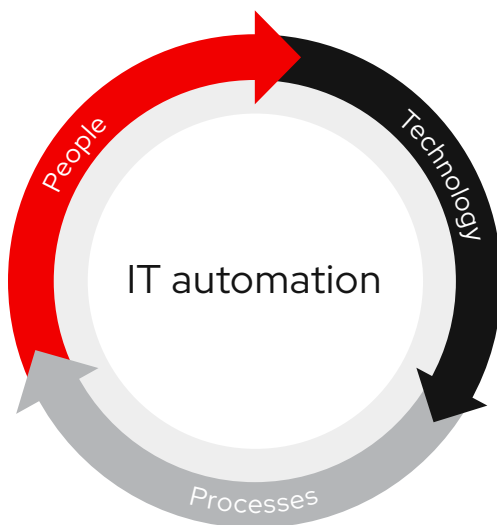
Automation can help organizations achieve success.

It allows them to take advantage of new opportunities by:

- ▶ Moving faster with improved resilience.
- ▶ Operating with more predictability and efficiency.
- ▶ Encouraging new ways of working.
- ▶ Responding immediately to changing conditions without staff intervention.



Automation is the key to supporting modernization and digital transformation.



Digital transformation initiatives involve **people**, **processes**, and **technology**, so it's important to understand how automation impacts each of these elements.

- ▶ **People:** Improve morale by automating high-volume routine tasks and freeing time for more interesting and high-priority projects.
- ▶ **Technology:** Configure, manage, and operate components through automation.
- ▶ **Processes:** Streamline complex processes and build complete automated workflows.



So, what's preventing organizations from taking advantage of transformative automation?

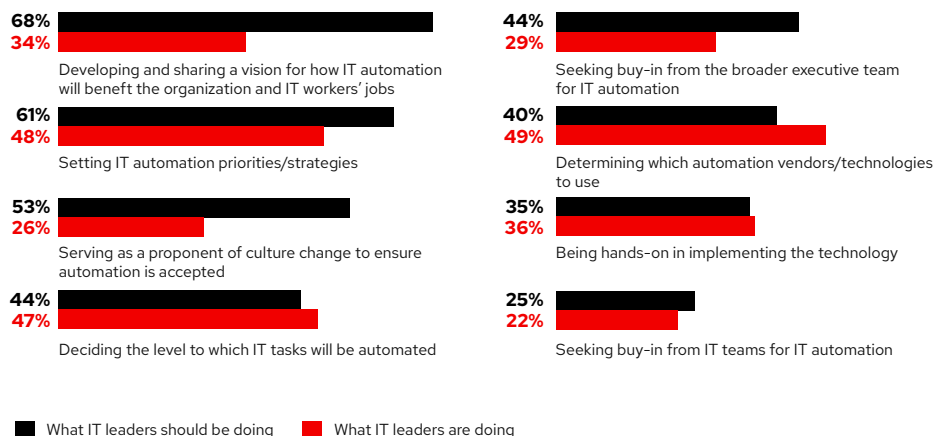
According to a recent Harvard Business Review Pulse Survey, organizations expect IT leaders to set IT automation priorities and promote cultural change.¹ However, IT leaders tend to focus on technical rather than strategic issues.



Because automation can bring critical benefits to an organization, there is an urgent need to close this gap between C-level expectations and actual practices.

68%

of respondents say IT leaders should be developing and sharing a vision for how IT automation will benefit the organization and IT workers' jobs, but only 34% say IT leaders are doing this now.¹



¹ Harvard Business Review Pulse Survey sponsored by Red Hat. "Taking the Lead on IT Automation: IT Leaders as Evangelists for Their Automation Strategies", January 2022.

Adopt transformative automation as a long-term strategy, not just a tool

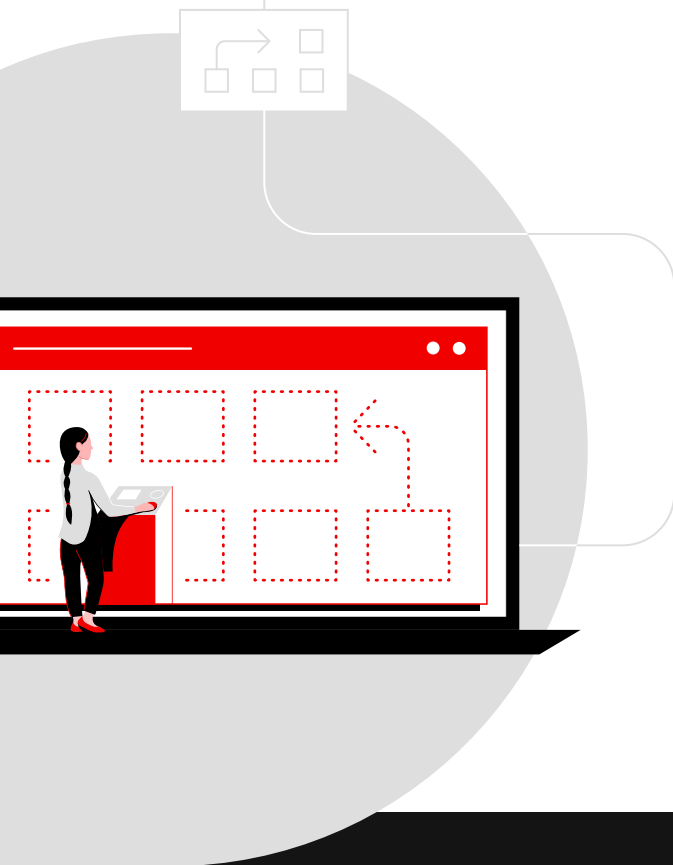
As an IT executive, the decision to make a change most often requires a catalyst or compelling event.

Sometimes that impetus is an industry-specific requirement, or increased use of multiple cloud services within your organization. Sometimes it's a catastrophic outage that leads to a loss in revenue. Other times, it's a global shift in how companies manage their business, including rapid shifts in market or work conditions or even changes in internal priorities.

Increasing competition and change are exposing business problems and gaps that may not have been obvious before.

As a result, business leaders are eager to find new ways to:

- ▶ Gain a competitive advantage.
- ▶ Ensure resilience and consistency.
- ▶ Boost efficiency and productivity.
- ▶ Focus on innovation and get to market faster.
- ▶ Improve customer experiences.
- ▶ React rapidly to new challenges.



IT executives need more than a tool to get their company to where it needs to be.

They need a long-term strategy, an experienced partner, and a true automation platform that supports their organization's overall digital transformation efforts.

IT automation can help by giving organizations the ability to do more with their existing staff while scaling their infrastructure. By using a single automation platform across their IT organization, they can reduce complexity and unify isolated teams and processes.

// 80% of surveyed business executives say that adopting IT automation is “extremely important” to the future success of their business.²

5 benefits of an IT automation platform

1. Improve efficiency, reduce costs, and accelerate time to market.

Within an enterprise, IT can be difficult to manage at scale when teams become burdened with technical debt, manual workflows, skills gaps, talent shortages, and increasing complexity.

With automation, your processes become well-defined and repeatable. And by using event-driven automation capabilities, complete workflows—from simple to complex, according to your organization's comfort level—can be initiated without staff involvement. This improves efficiency, consistency, and resilience, with the business value appearing on the bottom line.

² Harvard Business Review Analytic Services, sponsored by Red Hat. “Taking the lead on IT automation: IT leaders as evangelists for their automation strategies,” January 2022.

An IDC whitepaper sponsored by Red Hat found that organizations using Red Hat® Ansible® Automation Platform to standardize and automate IT operations and configuration activities across their environments recognized a

Five-year return on investment (ROI) of 667% with 10 months to payback.³

The report also found that users experienced:³

- ▶ 76% reduction in unplanned downtime.
- ▶ 75% faster deployment of new resources.

Plus, automation allows you to refocus your IT teams on projects that deliver greater value to your organization.



Orange Sonatel, the principal telecommunications provider of Senegal, reduced application deployment time from weeks to minutes, using Red Hat OpenShift® and Red Hat Ansible Automation Platform to automate time-consuming manual deployment processes.

The service provider's teams can now deliver new services and features to customers **faster** and with **66% fewer staff**.⁴

³ IDC White Paper, sponsored by Red Hat. "The business value of Red Hat Ansible Automation Platform," March 2022. Document #US48678022.

⁴ Red Hat case study, "Senegal's top telco adopts Red Hat Ansible Automation Platform and Red Hat OpenShift," September 2020.

2. Connect isolated areas of automation

When individual tasks are automated in isolation, disconnected areas of automation are created. In this scenario, different teams automate different tasks using different tools. Automation is most effective when a single solution works across teams

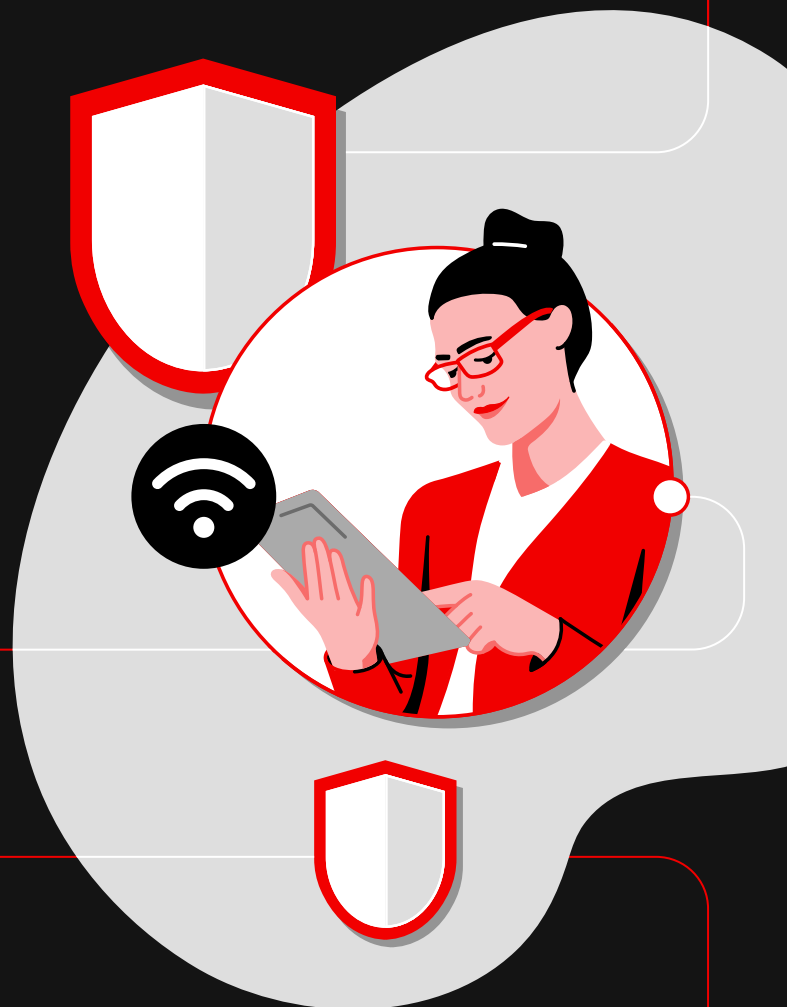
and departments. A common enterprise automation platform can provide control over and visibility into your organization's automation efforts. **End-to-end automation allows you to connect disparate processes and deliver more value.**

3. Support security

The average cost of a data breach in 2022 was US\$4.35 million,⁵ and security remains a top concern for organizations. Automation helps avoid potential vulnerabilities by removing the risk of human error and making actions repeatable and consistent. And should a security incident occur, event-driven automation can start isolation and remediation processes immediately.

These efforts can include:

- ▶ Automating system and security updates.
- ▶ Coordinating enterprise security systems.
- ▶ Addressing security incidents.
- ▶ Responding to threats and vulnerabilities.
- ▶ Maintaining compliance with policies.



⁵ IBM Security. "Cost of a Data Breach Report 2022," 2022.

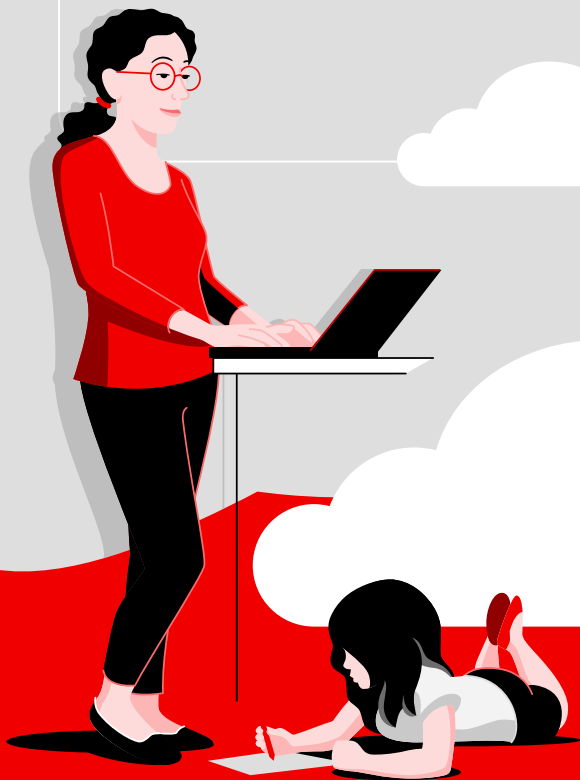


4. Minimize custom tooling

The right automation solution should act as a unified foundation, allowing you to automate and orchestrate across your entire IT ecosystem and integrate with your existing tooling.

With a unified platform, you can define automation strategies and governance that meet requirements for:

- ▶ Reliability.
- ▶ Business continuity.
- ▶ Reportability.



5. Attract and retain talent

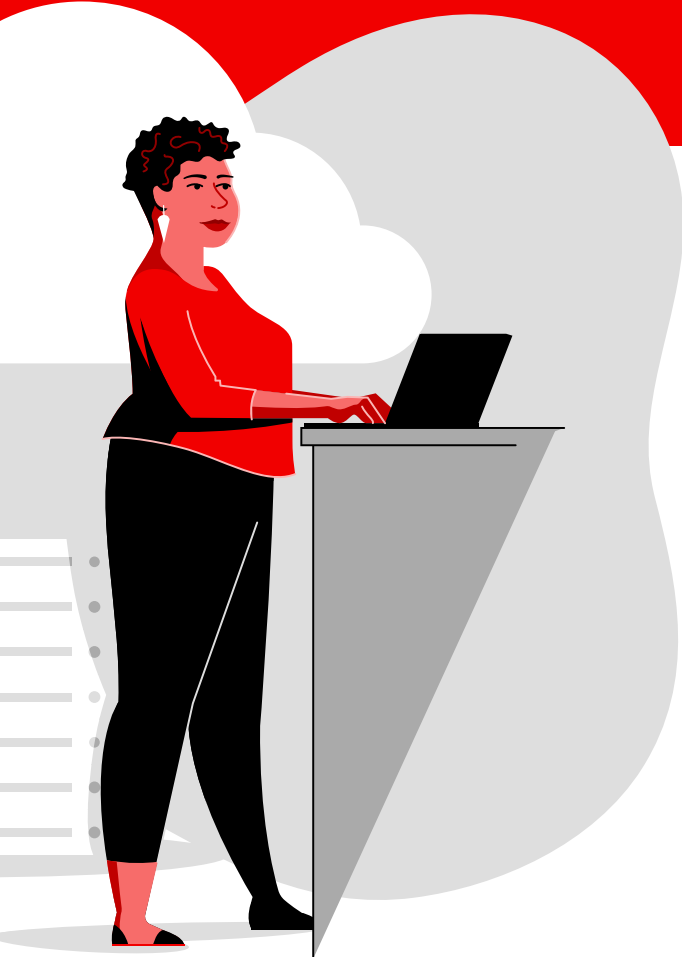
Automation can help you prevent employee burnout. In most cases, the tasks that are automated are those that people don't want to do or don't have the time to perform.

Rather than taking away jobs, automating these tasks is like adding members to your teams, allowing your existing employees to focus on more fulfilling responsibilities and innovative IT work.

- ▶ By freeing your staff from tedious, unrewarding tasks, they can focus on more interesting projects that positively impact your customers and business.
- ▶ Top talent is rarely interested in performing repetitive and boring tasks.
- ▶ Event-driven automation capabilities can prevent many of the IT incidents and outages that result in after-hours and weekend calls.
- ▶ Knowledge that is documented and shared in a common format that everyone can understand and use helps close skills gaps and manage staff changes.



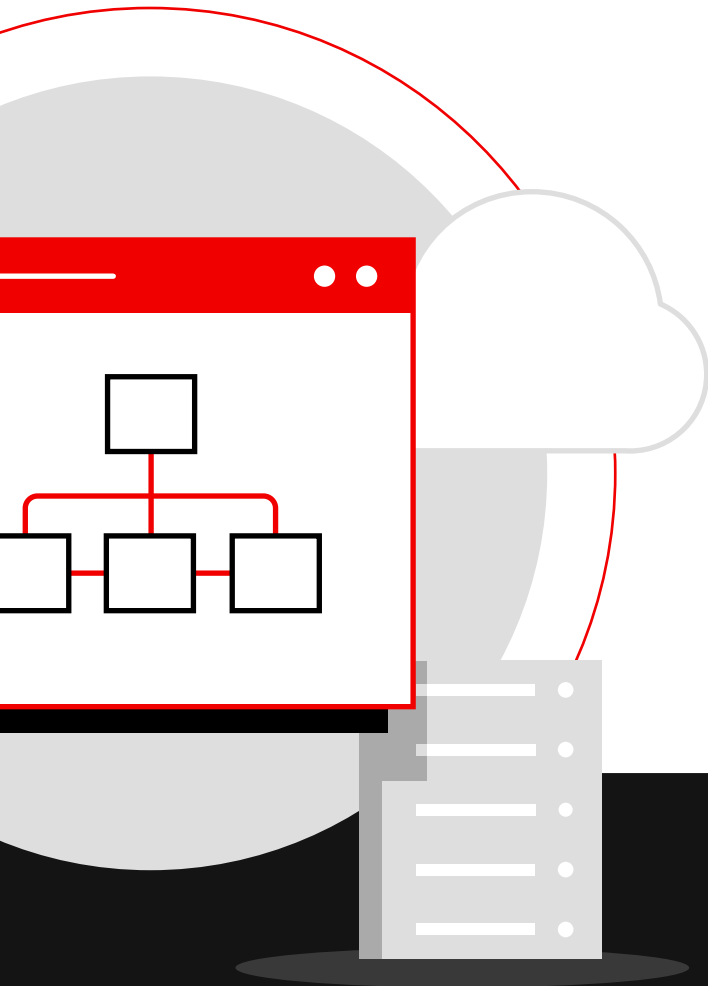
Automation can attract the type of employees you're looking for in a high-demand talent pool.



An IT executive's role in finding and adopting a successful automation solution

As organizations navigate ever-changing enterprise ecosystems, **IT automation has become an imperative boardroom conversation.**

Once the benefits have been weighed and the decision made to move forward with an IT automation solution, executives need to consider their role in ensuring a successful rollout and organization-wide adoption.



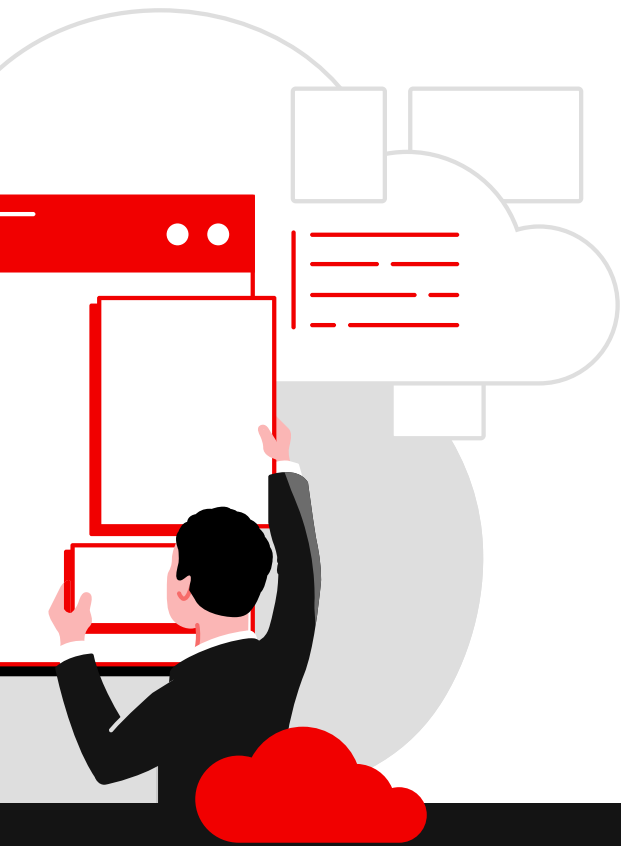
Best practices for a successful automation rollout

Be a champion
rather than just a sponsor

For enterprise-wide automation
to succeed, active support needs
to come from the top.

- ▶ The role of the IT executive must go beyond simply approving the solution to serve as an executive champion and promoter.
- ▶ As an IT executive, you need to be a champion of the technology and share your vision for how automation will benefit not only your organization, but your staffs' jobs at an individual level.
- ▶ Promote automation as an enterprise-wide strategy for success and continuously show your confidence in this strategy at all levels of your organization.
- ▶ Get involved at an early stage to help teams start small, show value, expand conservatively, and repeat. Over time, you'll establish a base for others to build upon your experiences and deliver even more value.

Read [The automated enterprise e-book](#) to learn more about creating an organization-wide automation strategy.



Align to a business objective

To successfully adopt automation within your organization, you need to:

1. Use it to achieve a business objective. Whatever that key business challenge might be, identify how automation can help your teams move forward—and **define what success looks like.**
2. **Focus on outcomes, not outputs,** and then advertise and champion those outcomes.
3. Attach key performance indicators (KPIs) to your automation project to show that **this isn't just a new technology, but one that is prioritized.** Plus, if the metrics you are outlining are meaningful and realistic, this exercise helps you prove your project's success after implementation.

Support change and collaboration

A common concern from executives about bringing automation into their organization is dealing with employee fears about being automated out of a paycheck.

- ▶ **The truth is that automation doesn't replace IT professionals—it replaces repetitive, menial work and restores order to chaotic systems.**
- ▶ Recognize and address employee anxiety and concerns, and focus on the benefits they'll experience, including a focus on more rewarding work and improved cross-enterprise collaboration that moves projects forward faster.
- ▶ If you don't acknowledge the effects of automation on your employees' workdays, you will likely struggle with adoption.

“Vodafone Idea has automated IT infrastructure and operations end to end by adopting Red Hat Ansible Automation Platform. Adopting Ansible Automation Platform has helped in reducing cost and improving operational efficiency with increased user productivity and faster go to market.”⁶

Jagbir Singh
Chief Technology Officer,
Vodafone Idea Limited

⁶ Red Hat case study. “Vodafone Idea Limited automates to improve IT infrastructure,” April 2021.

Encourage adoption by investing in people

As with the implementation of any technology, **automation only works if people know how to use it.** And if staff don't adopt the tools, the investment is useless. Training your workforce on how to use the technology in the right way is critical to successful adoption.

By offering teams opportunities to build their automation skills, you'll not only encourage adoption, but make the most of your investment. Work with a vendor that provides consulting and training solutions to help you educate your workforce on how to effectively use your automation platform.

// Red Hat's experts clarified the process of developing services and apps on Red Hat technologies from design to production implementation. With the knowledge they shared, we now can develop, run, and deploy everything ourselves and take advantage of automation.⁷

Sefa Can Acar

Linux® Administrator,
Bilyoner Interactive Services

// 68% of business executives say IT leaders should be developing and sharing a vision for how IT automation will benefit the organization and IT workers' jobs – but only 34% say IT leaders are doing this now.⁸

Find a common ground

To see true business benefits from automation, there must be alignment between leadership and implementers.

While multiple levels within your organization might agree that automation is important, they might not agree on automation priorities.

By choosing an automation platform rather than a tool, you can automate across all levels of your IT infrastructure and demonstrate the value of automation at the practitioner level. By connecting domains across the organization, you can support your digital transformation initiatives and meet C-level goals.

⁷ Red Hat case study. "Turkish betting platform runs on Red Hat OpenShift and Ansible," May 2020.

⁸ Harvard Business Review Analytic Services, sponsored by Red Hat. "Taking the lead on IT automation: IT leaders as evangelists for their automation strategies," January 2022.

How to choose an IT automation solution

☐ Choose an automation platform, not a tool

Automation is an integral part of your organization's digital transformation efforts and should be approached holistically. When you use both manually initiated and event-driven automation across workloads and tasks, you can transform entire workflows and re-envision the IT workday.



☒ Once you understand why you want to automate and how to successfully incorporate automation into your organization, you need to choose an IT automation solution.

☐ Find an automation platform that supports workload portability

Flexibility and agility are essential for automation. As an enterprise, you potentially have thousands of containers, so your automation solution must be able to automate and orchestrate container deployment, networking, scalability, and availability.

Select an automation platform that is easy to adopt

The easier a platform is to adopt, the more likely it will be embraced across your organization. Look for a technology with a simple-to-learn programming language and shareable, certified content that helps teams get started quickly.

Embrace an automation solution that doesn't lock you in

When you choose an automation platform that's built on open source technology, you benefit from the freedom of interoperability and the absence of vendor lock-in.

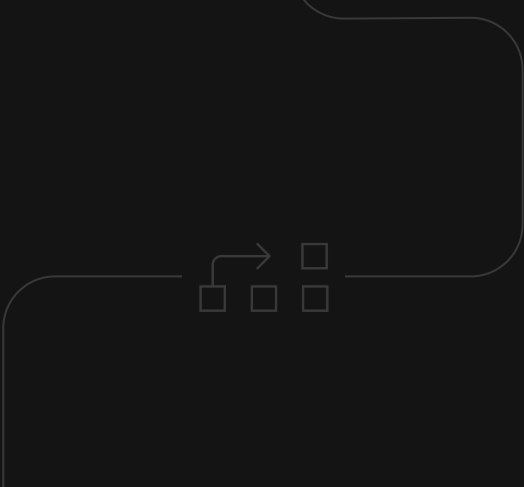
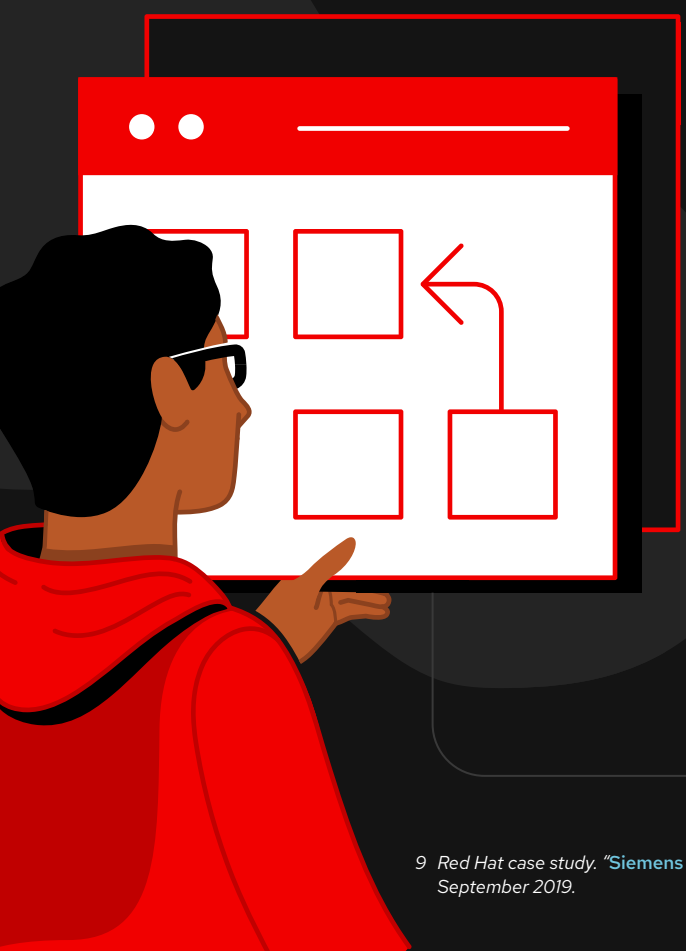
Ensure your automation platform includes management tools

Find a platform that includes analytics, role-based access control (RBAC), content signing, and trusted automation content, and has the ability to readily share your own content.



Opt for a vendor that provides consulting and training solutions

Your organization doesn't need to manage implementation and training on your own. Find a vendor that can help you build your automation platform and educate your workforce on how to effectively use it.



// The in-person workshops [with Red Hat Consulting] were very important to our technicians gaining a thorough understanding of Ansible to deploy faster and better.⁹

Rufus Buschart

Head of Public Key Infrastructure, Siemens

⁹ Red Hat case study. "Siemens automates communication security with Red Hat Ansible," September 2019.

Red Hat's role in transformative IT automation

Your organization relies on your IT infrastructure and applications.

Use IT automation with event-driven capabilities to:

- ▶ Save time.
- ▶ Ensure application resiliency and availability.
- ▶ Improve employee satisfaction.
- ▶ Reduce costs.
- ▶ Connect your technology, processes, and teams.
- ▶ Deliver more business value.
- ▶ Gain a competitive advantage.
- ▶ Respond faster to user requests and system issues.



// Red Hat is a great fit for firms seeking consolidated automation across many infrastructure technologies and vendors.¹⁰

¹⁰ Forrester Research. "The Forrester Wave™: Infrastructure Automation, Q1 2023," March 2023

Automate your infrastructure with

Red Hat Ansible Automation Platform

Red Hat Ansible Automation Platform is the foundation for automated enterprises.

With all the tools and features you need to implement enterprise-wide automation, Ansible Automation Platform covers a wide variety of use cases:

- ▶ **Connect hybrid cloud environments.**
Read the [Connect your hybrid cloud environment with IT automation e-book](#).
- ▶ **Networking.** Read the [Network automation for everyone e-book](#).
- ▶ **Security automation and configuration compliance.** Read the [Simplify your security operations center e-book](#).
- ▶ **Application development and deployment.**
Read the [Streamline CI/CD pipelines with Red Hat Ansible Automation Platform whitepaper](#).
- ▶ **Self-service enablement.** Learn more about [Red Hat Ansible Automation Platform](#).
- ▶ **Cross-function orchestration.**
Read the [use case for orchestration](#).
- ▶ **Event-driven automation.** Read the [5 reasons to include event-driven automation in your IT strategy checklist](#).



Balance simplicity with power.

Red Hat Ansible Automation Platform can be used across IT departments with consistency.

Rely on Red Hat Ansible Automation Platform for:

Complete support

Ensure IT availability and reliability with a platform that provides enterprise-grade support, quality and security testing, integration, and clear roadmaps.

Vendor interoperability

Use and automate your preferred infrastructure technologies via standard, open interfaces that let vendors create modules and plugins for your automation platform.

Simple adoption

Staff across your organization can build and deploy automation quickly and effectively with simple, human-readable automation and intuitive tools.

Massive scalability

Deploy automation consistently across your entire IT organization with a platform that scales across infrastructure, operating systems, management tools, and user roles.



Event-driven automation

Create advanced end-to-end automation scenarios that respond in a predetermined, user-defined way to observed events in your IT environment, without manual intervention.

Agentless deployment

Quickly connect and automate your infrastructure components with security—without needing to install and maintain an agent on each device.

Supported partner content

Ansible Automation Hub is an ever-expanding resource for supported partner content, providing ways to use automation and how-to guides for implementing them within your infrastructure.

“At one time, we had a ridiculous, laborious process for producing customer reports. By integrating ticket requests, we could automate report generation and make it available via a dashboard at the touch of a button.

Many bespoke use cases, such as onboarding new users, can also now be done by the customer themselves because we have used the Ansible automation controller API to integrate the processes and workflows.¹¹

Talor Hollaway
CTO, Advent One

¹¹ Red Hat case study. “Advent One improves capabilities with Ansible Automation Platform,” November 2020

An IT executive's glance at the value of automation

The Swiss Federal Railway, ranked amongst the world's best railways¹²

- ▶ Reduced device configuration times by more than 90%, from five days to three hours.
- ▶ Enhanced security for critical national transportation infrastructure with RBACs.
- ▶ Established comprehensive device access for easier service updates and innovation.

Vodafone, India's leading telecom operator¹⁴

- ▶ Cut costs by 30% year-over-year.
- ▶ Improved automated provisioning speed for Infrastructure-as-a-Service (IaaS) and Platform-as-a-Service (PaaS) by 99%.
- ▶ Saved more than 1,000 working hours.

Schwarz Group, the fourth-largest retailer in the world¹³

- ▶ Improved delivery time for new, innovative applications and digital services.
- ▶ Gained expertise to operate Ansible in-house, backed by enterprise support.
- ▶ Enhanced risk management with role-based system access.

¹² Red Hat case study. "Swiss railway accelerates innovation with Red Hat Ansible Automation," October 2019.

¹³ Red Hat case study. "Retailer Schwarz Group automates IT with Red Hat Ansible Automation Platform," March 2021.

¹⁴ Red Hat success story. "Vodafone Idea Limited automates to improve IT infrastructure," April 2021.

AUTO MAT- ION



Ready to get started with automation?

Choose the automation platform selected as a leader by The Forrester Wave™: Infrastructure Automation, Q1 2023.¹⁰ Red Hat Ansible Automation Platform was identified as a leader because of its strong open source community, integration with partners and supporting services, and strong management and analytics capabilities.

Automate your infrastructure with Red Hat

Learn more about Red Hat Ansible Automation Platform.

Get the resources and support you need to start your automation journey with Red Hat Consulting.

Find out what analysts are saying about event-driven automation.