Red Hat Summit

Connect

The Bu$in€$$ Imp£¢t of £utom£tion

Mark Swinson
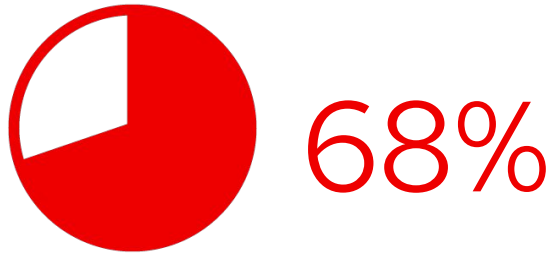Automation Specialist
Red Hat UK

✉ mark.swinson@redhat.com

in www.linkedin.com/in/mark-swinson-001/

IT Automation is a priority

68%

Of respondents agree that in the past 12 months, **IT automation at their organization has shifted** from a "nice to have" to a "**must have**"
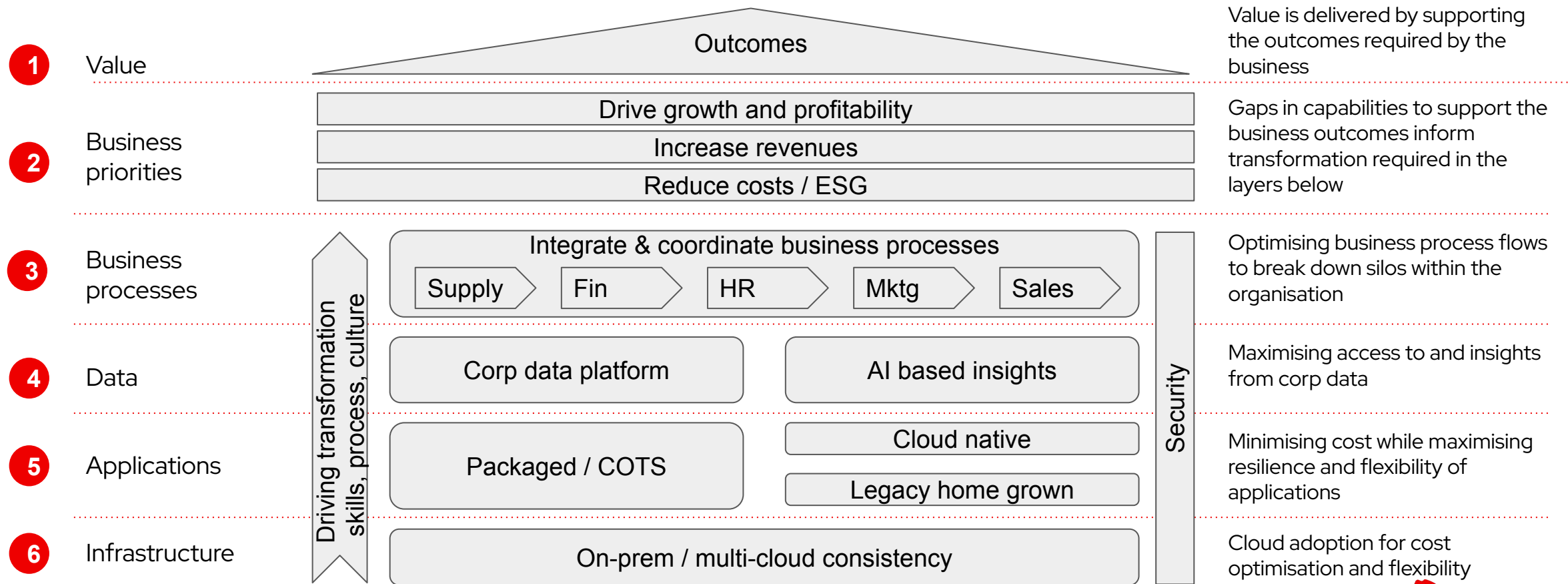
53% of respondents say IT leaders should be **serving as a proponent for culture change to ensure automation is accepted** –but only 26% say IT leaders are doing this now.

80% of respondents say IT **adopting IT automation** is "extremely important" or "very important" to the **future success** of their organization.
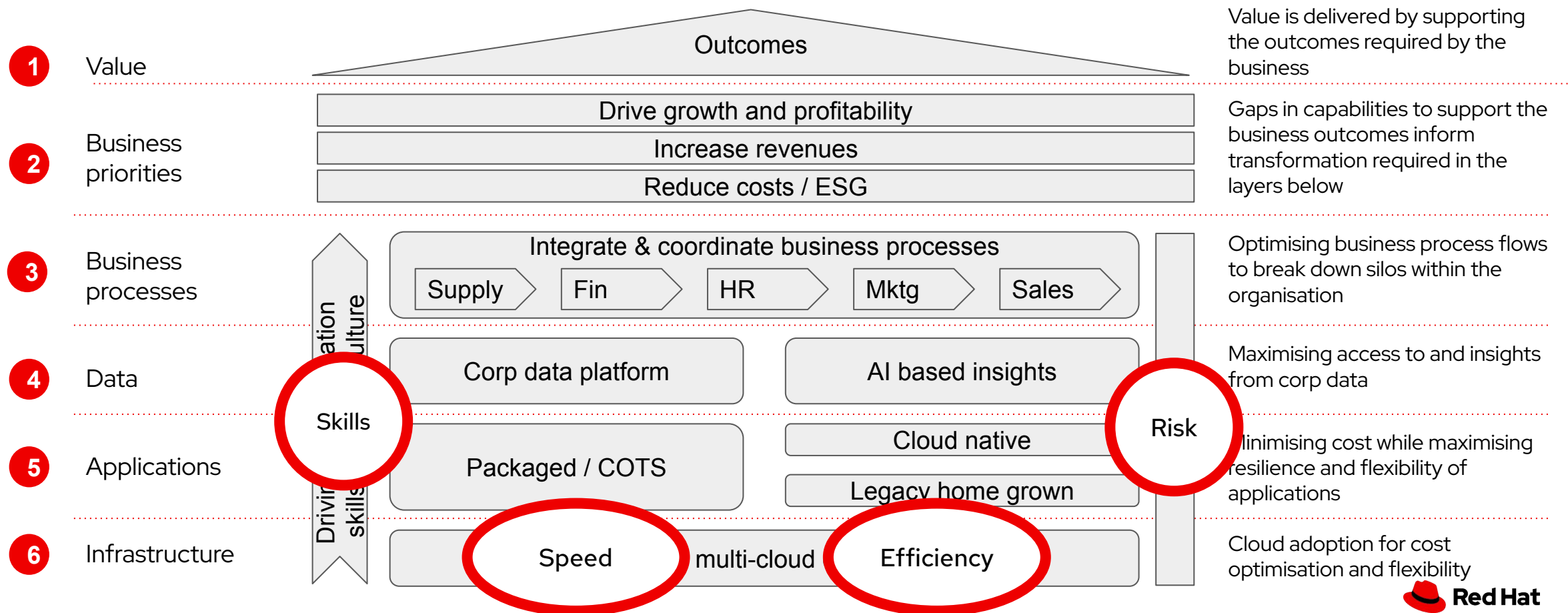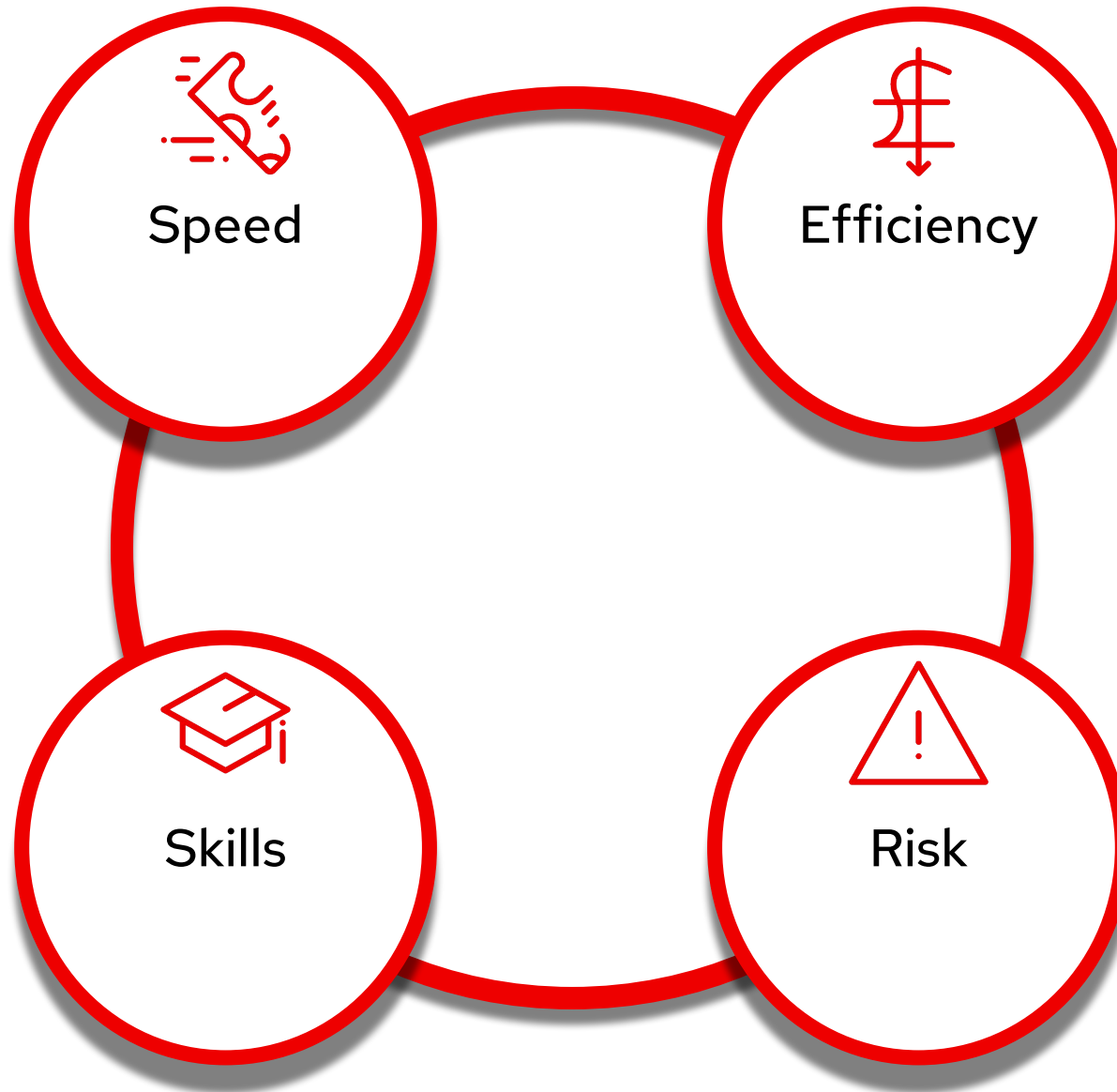
338 survey respondents across all geographic regions, different levels of seniority, job functions, industries and organization sizes.

An Architecture of Business Value

A point of view

1	Value	Outcomes	Value is delivered by supporting the outcomes required by the business
2	Business priorities	Drive growth and profitability / Increase revenues / Reduce costs / ESG	Gaps in capabilities to support the business outcomes inform transformation required in the layers below
3	Business processes	Integrate & coordinate business processes — Supply, Fin, HR, Mktg, Sales	Optimising business process flows to break down silos within the organisation
4	Data	Corp data platform / AI based insights	Maximising access to and insights from corp data
5	Applications	Packaged / COTS / Cloud native / Legacy home grown	Minimising cost while maximising resilience and flexibility of applications
6	Infrastructure	On-prem / multi-cloud consistency	Cloud adoption for cost optimisation and flexibility

Driving transformation skills, process, culture

Security

3

Red Hat

An Architecture of Business Value

A point of view

#	Layer		Description
1	Value	Outcomes	Value is delivered by supporting the outcomes required by the business
2	Business priorities	Drive growth and profitability / Increase revenues / Reduce costs / ESG	Gaps in capabilities to support the business outcomes inform transformation required in the layers below
3	Business processes	Integrate & coordinate business processes — Supply → Fin → HR → Mktg → Sales	Optimising business process flows to break down silos within the organisation
4	Data	Corp data platform / AI based insights	Maximising access to and insights from corp data
5	Applications	Packaged / COTS / Cloud native / Legacy home grown	Minimising cost while maximising resilience and flexibility of applications
6	Infrastructure	Speed — multi-cloud — Efficiency	Cloud adoption for cost optimisation and flexibility

Skills (Driving skills / ...ation ...ulture)

Risk

Red Hat

Speed

Efficiency

Skills

Risk

Speed

Efficiency

Cloud

Skills

Risk

Unified
Automated

Skills

Unifying the approach to automation reduces the variety of tools and techniques needed to automate and therefore the cognitive load

Generative AI can help lower the barrier to entry

"We realized we needed enterprise technology that could support a **cultural shift to an automation-centric approach** for our DevOps teams. In addition to **lower costs and better reusability**, we also needed a vendor-agnostic solution.

...a path to our goal of **providing a seamless experience to all** ... through **a single technical solution**."

Pierre-François Liozon
Unix Team Head,
Crédit Agricole Group Infrastructure Platform

Speed

Unified
Automated

Skills
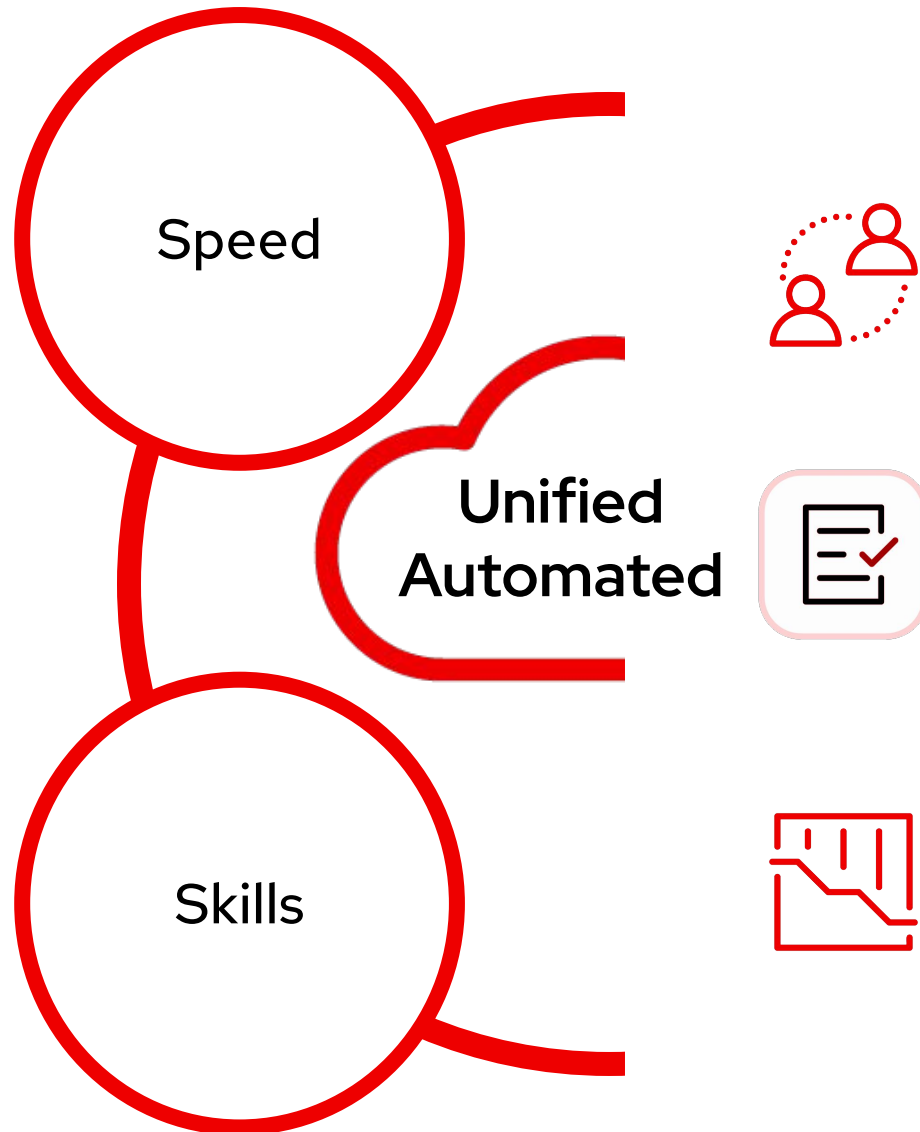
Unifying the approach to automation increases the opportunities for sharing and reuse

A tool that is modular, extensible and has lots of ready-built content helps accelerate adoption

A consistent approach means better metrics and KPIs, leading to better outcomes and ongoing improvement

ULTA BEAUTY

Ulta Beauty uses automation as a catalyst for innovation and cultural change as part of a wider three-phase transformation project.

Challenge

Deliver a company culture of continuous improvements to process efficiency, so it can meet customers' needs while enhancing the digital experience and improving online customer interactions to increase its competitive edge.

Results

- Cut deployment times from three weeks to less than a day
- Freed up key staff to focus on more priorities that move the business forward
- Saved thousands of valuable labor hours and invested back into the business

Red Hat

Speed

Efficiency

Unified
Automated
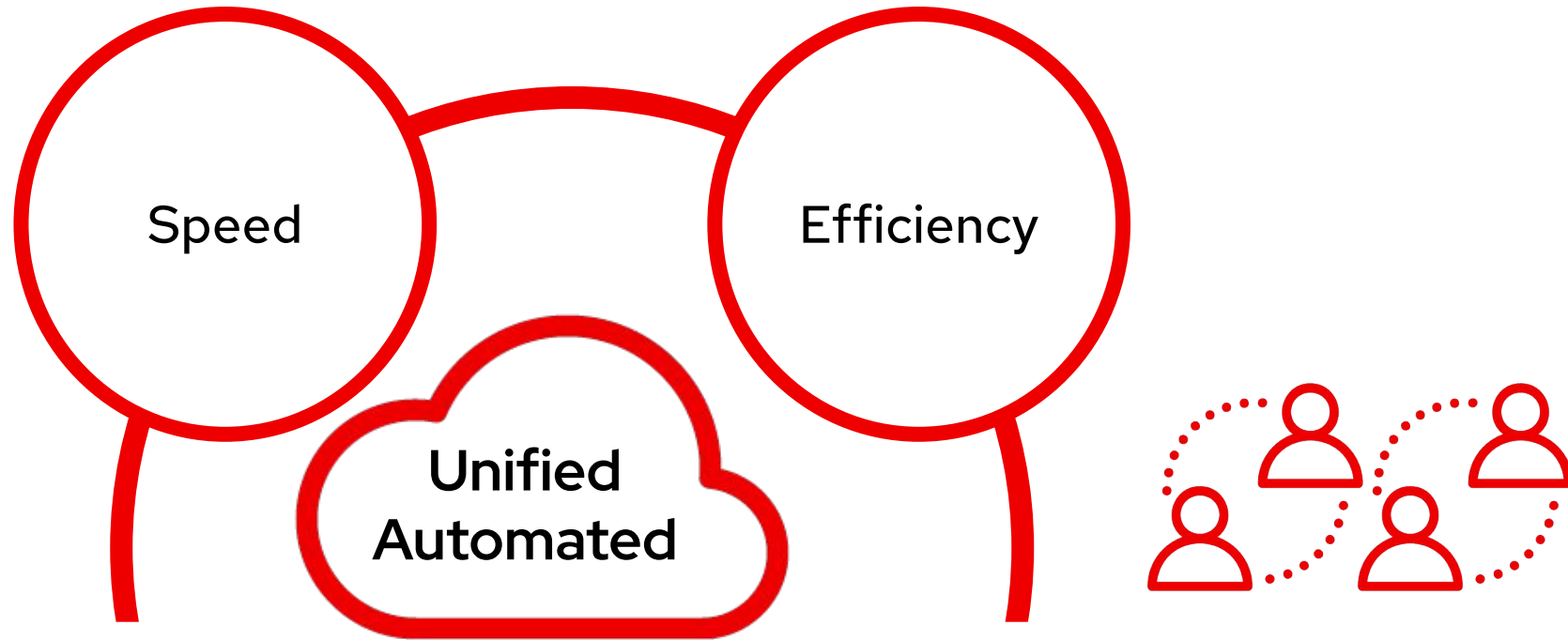
Sharing and reuse leads to the ability to coordinate and orchestrate across multiple domains

This results in greater speed and agility; requests can be serviced end-to-end, reducing deployment times

Service Levels improve, Mean Time-to-recovery (MTTR) improves

VOLKSWAGEN
AKTIENGESELLSCHAFT

"The speed of things has really stepped up. It used to be when you order a VM, even more if you order a database, you have to calculate if this will be delivered to your project in about **two months**. This has really gone down ... **to a day.**"

Eike Holtz
Virtualization Technology Specialist,
Volkswagen AG

Challenge

With 85 years of history, **Volkswagen has built up a lot of legacy platforms, and replacing old systems when you have to follow many regulations and laws creates certain challenges**. The typical lifetime of a car is more than ten years and the associated production lines persist beyond that. Therefore, **reliability and repeatability play a bigger role than usual** in Volkswagen's journey to IT modernization.

Results

- VW Group implemented a modern IT infrastructure automation, **spanning the entire stack from bare metal to workloads like databases**, with the goal of making long term cost and efficiency savings.

- The Automation Platform **provides reliability and repeatability** for Volkswagen to maintain smooth systems and processes while meeting many industry and legal regulations.

Source: Volkswagen Group presentation at 2023 Red Hat Summit, May 2023.

Speed

Efficiency

Unified Automated
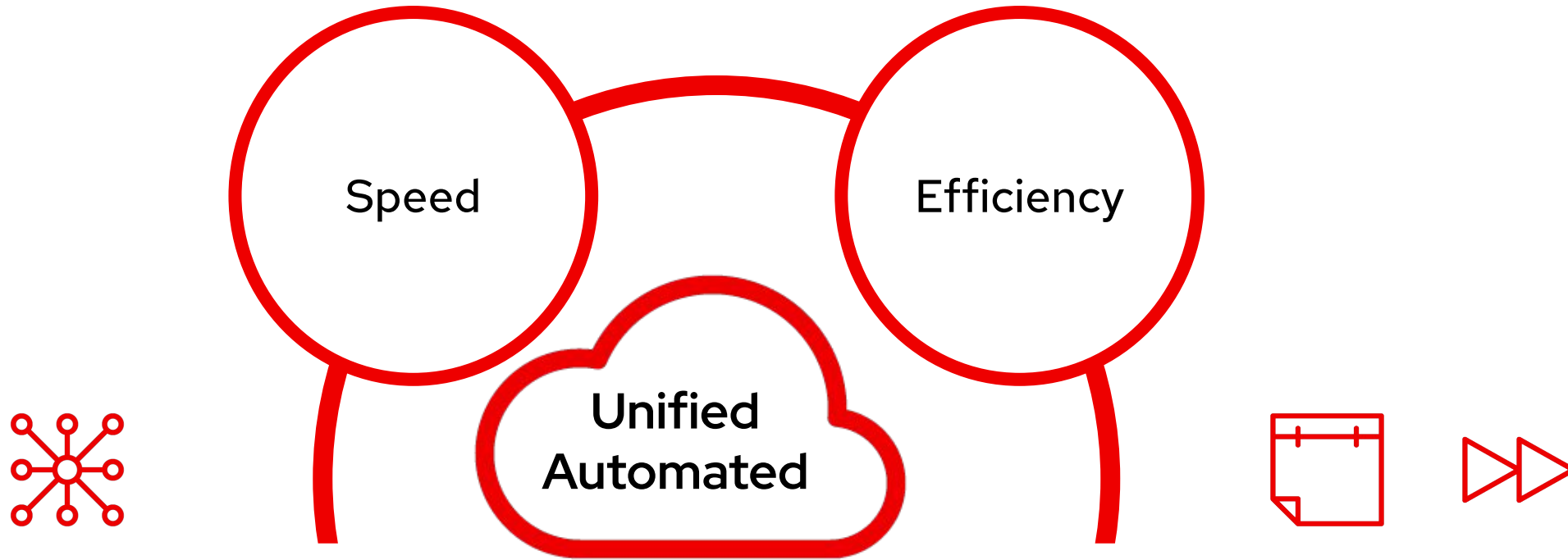
An automation platform can run tasks in parallel and based on scheduling

Time to complete multiple tasks is dramatically collapsed (compared to a manual one-by-one approach)

Automation can be scaled to reach thousands of assets - typical in cloud and edge scenarios

"Staying competitive means we need to offer new, digital features and stable, timely services to all of our stores. The only way to achieve this goal is with a centralized automation platform…"

Felix Kuehner
Compute & Runtime Services – Linux, Schwarz IT

Challenge

To balance **consistent store management with the flexibility to adapt to local demands and the agility to open new stores quickly**, particularly in new markets, the group sought to adopt an open source automation solution.

Results

- Improved delivery time for new, innovative applications and digital services

- Enhanced risk management with role–based system access

- Manage an estate across ~12,500 stores in 33 countries with a small, centralised team

Red Hat

Speed

Efficiency

ESG
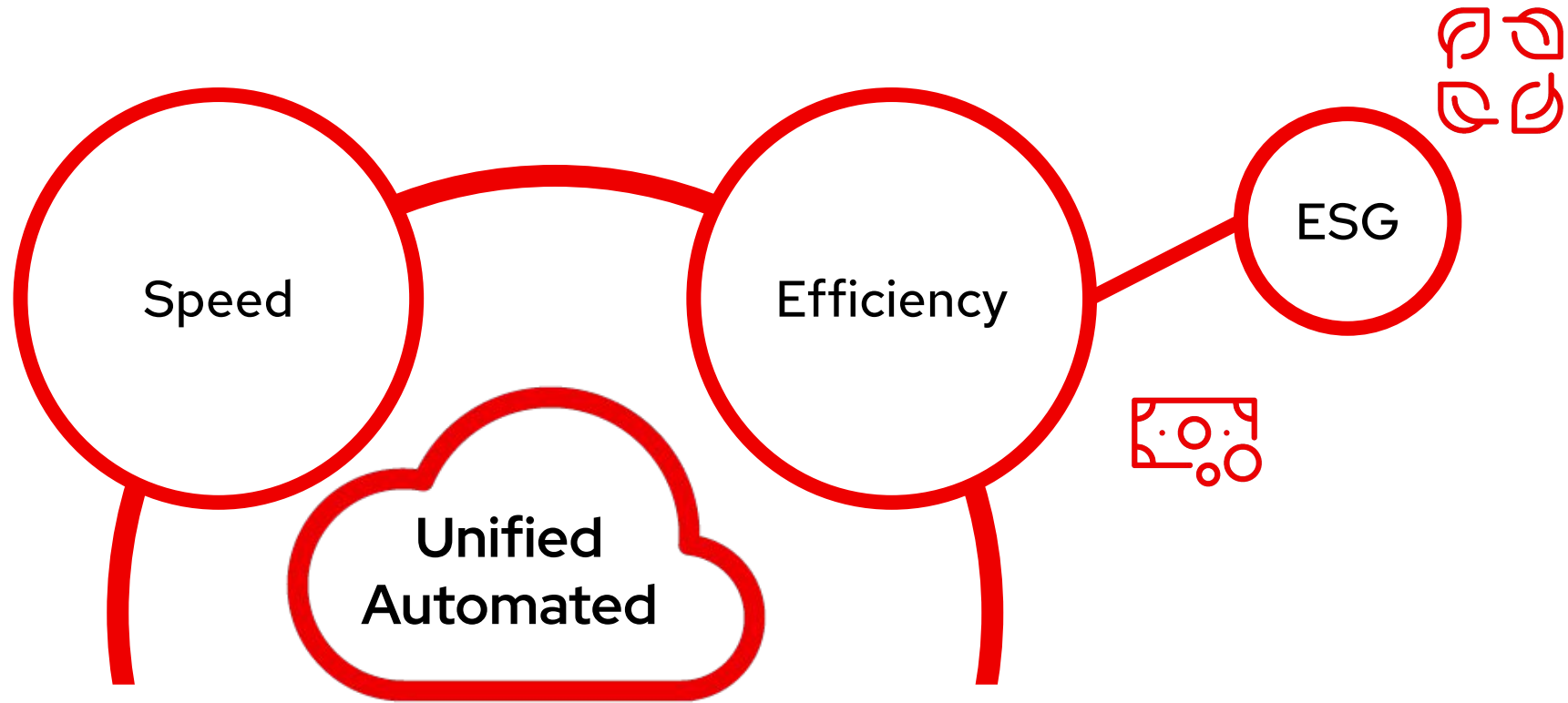
Unified
Automated

A unified approach enables a single "point of control" – one place where resource ownership can be tracked

Knowing who owns a resource and how it's being used means it can be managed more effectively and usage can be adjusted for greater efficiency

Challenge

▸ High cloud infrastructure costs on Microsoft Azure

Solution

▸ Automated process to turn off development and test environments on the weekends

▸ Automated process to stop/remove all untagged VMs or VMs without owners

▸ Automated process to reduce VM memory and CPU Cores based on peak usage data
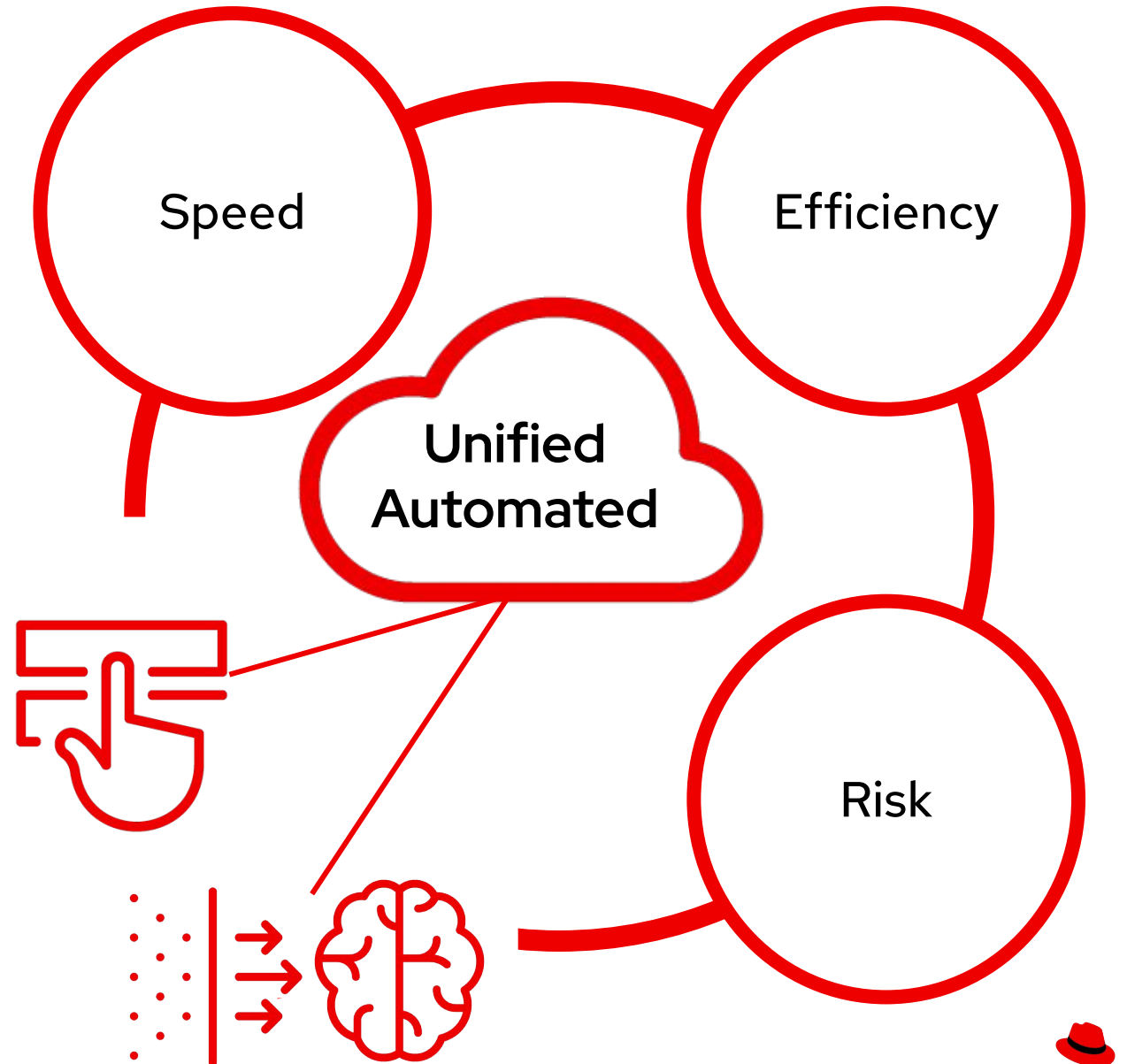
Results

▸ Reduced annual Microsoft Azure cloud infrastructure costs by 28% (US$264K)

Integration with existing IT Service Management (ie Service Desk) streamlines IT Operations

API-enabled "Automation-as-a-service" supports multiple integrations - including DevOps CD

Event-driven integration can automate remediation of common problems without requiring human intervention

Remediation can be augmented with AI to improve resolution rates

Speed

Efficiency

Unified Automated

Risk

Challenge

Blue Cross Blue Shield of North Carolina sought to leverage data in its ServiceNow configuration management database and augment it with data of its own.

Solution

Blue Cross decided to transfer its primary platform so that ServiceNow administrative tools were retained, but automation and integration tasks were handled by their Automation Platform.

Results

• Reduced dependency on niche external support

• Supported the development of a self-healing process

• Enabled IT personnel to focus on higher priority tasks

"We took our expertise and kept that in ... Automation Platform, so we only needed to call ServiceNow to meet specific requirements of our change process."

Adam Tate
Senior Infrastructure Design Engineer,
Blue Cross NC

A unified approach to infrastructure provisioning and configuration enables "Infrastructure as Code" (IaC)

Automation can be managed with a "software lifecycle"

IT systems can be reliably reinstated, based on definitions that are managed under version control (in the same way as application code)

Reliability and sharing of best practices are improved

Speed

Efficiency

Unified Automated

Risk
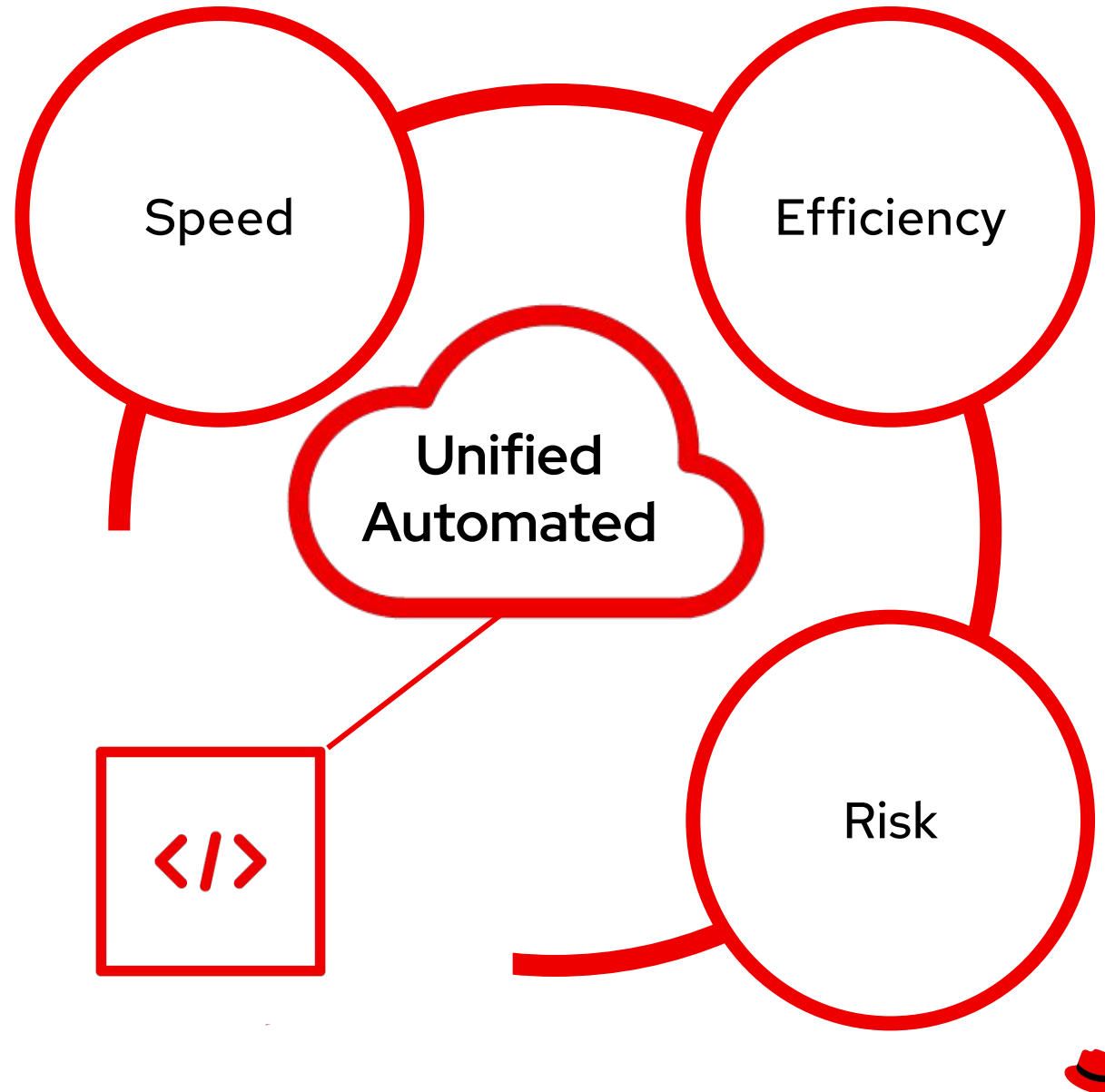
"Our Automation Platform allows us to build secure infrastructure that's supported with automation. A **common language, documentation and developer toolset to make the process more efficient.** … our common language for orchestration in CI/CD for infrastructure as code.

This ultimately **frees up bandwidth for our people to innovate**, and better focus on serving ADB's members and partners in order to promote social and economic development."

—

Krista Lozada
Senior IT Specialist (innovation & engineering),
Asian Development Bank

Using an "Infrastructure as Code" (IaC) approach means corporate standards can be enforced more easily ("Compliance as Code")

IT systems can be maintained in a compliant state - patch levels, hardening, configuration

Risks are mitigated at the same time as effort to maintain audit-readiness is reduced

"Policy-as-code" enables standards to be enforced

Unified Automated

Efficiency

Risk
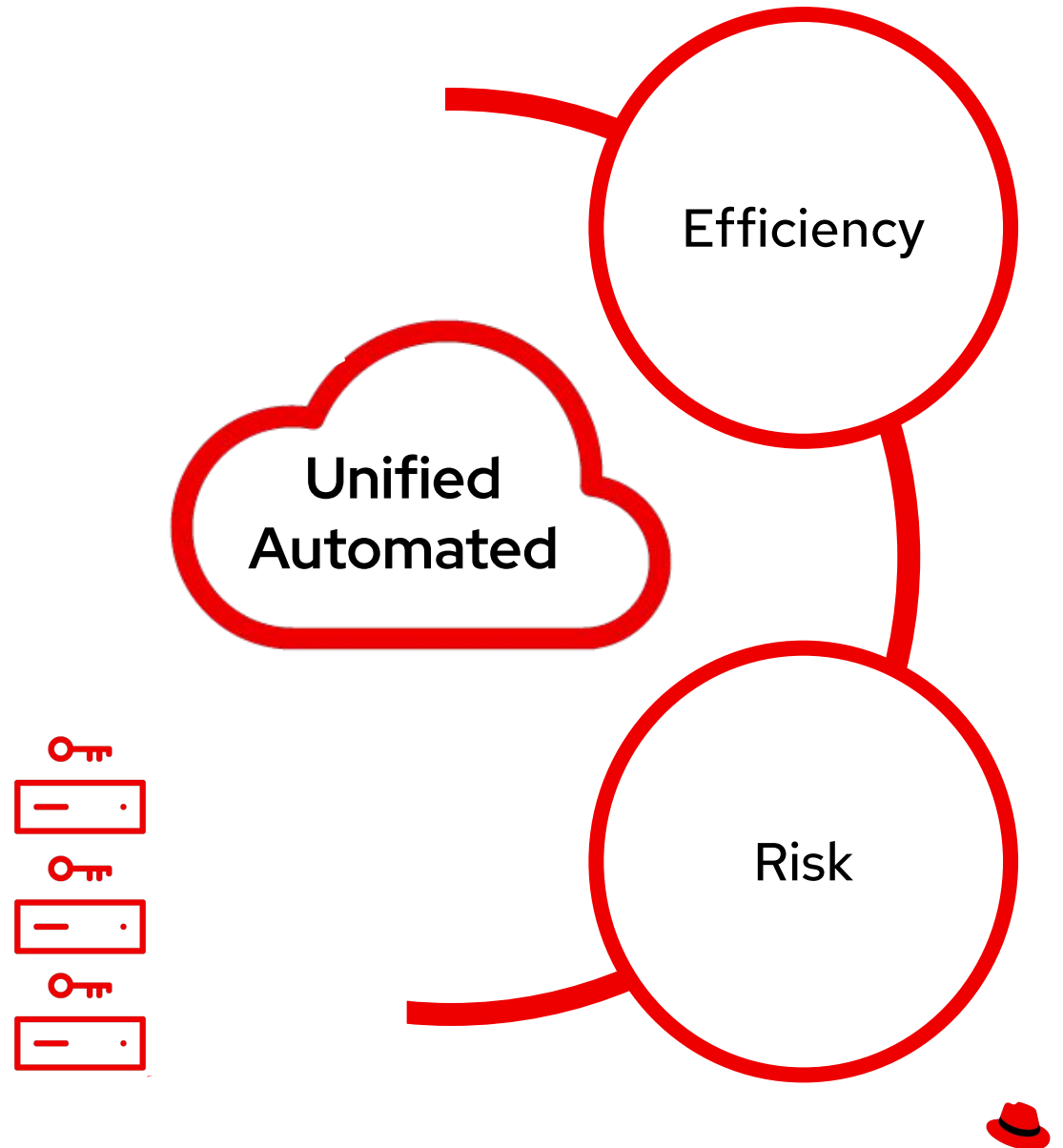
"[Our] **Automation Platform has been paramount for our cloud migration initiative, and particularly our use of AWS.** It provides a reusable and repeatable way to provision and deploy both middleware and application code on AWS, with **an automation framework that provides role-based access control and compliance guardrails.**"

Ryan Searles
Vice President, Global Technology,
TransUnion

Integration with secrets vaults and privileged credential management leads to enhanced security and enables Zero-Trust Architecture (authenticate at every step)

Removing human intervention reduces exposure and speeds actions (no more requesting privileged access)

Automation can be used to rotate certificates and credentials reducing risk

Secrets vault

Unified Automated

Efficiency

Privileged Access

Risk
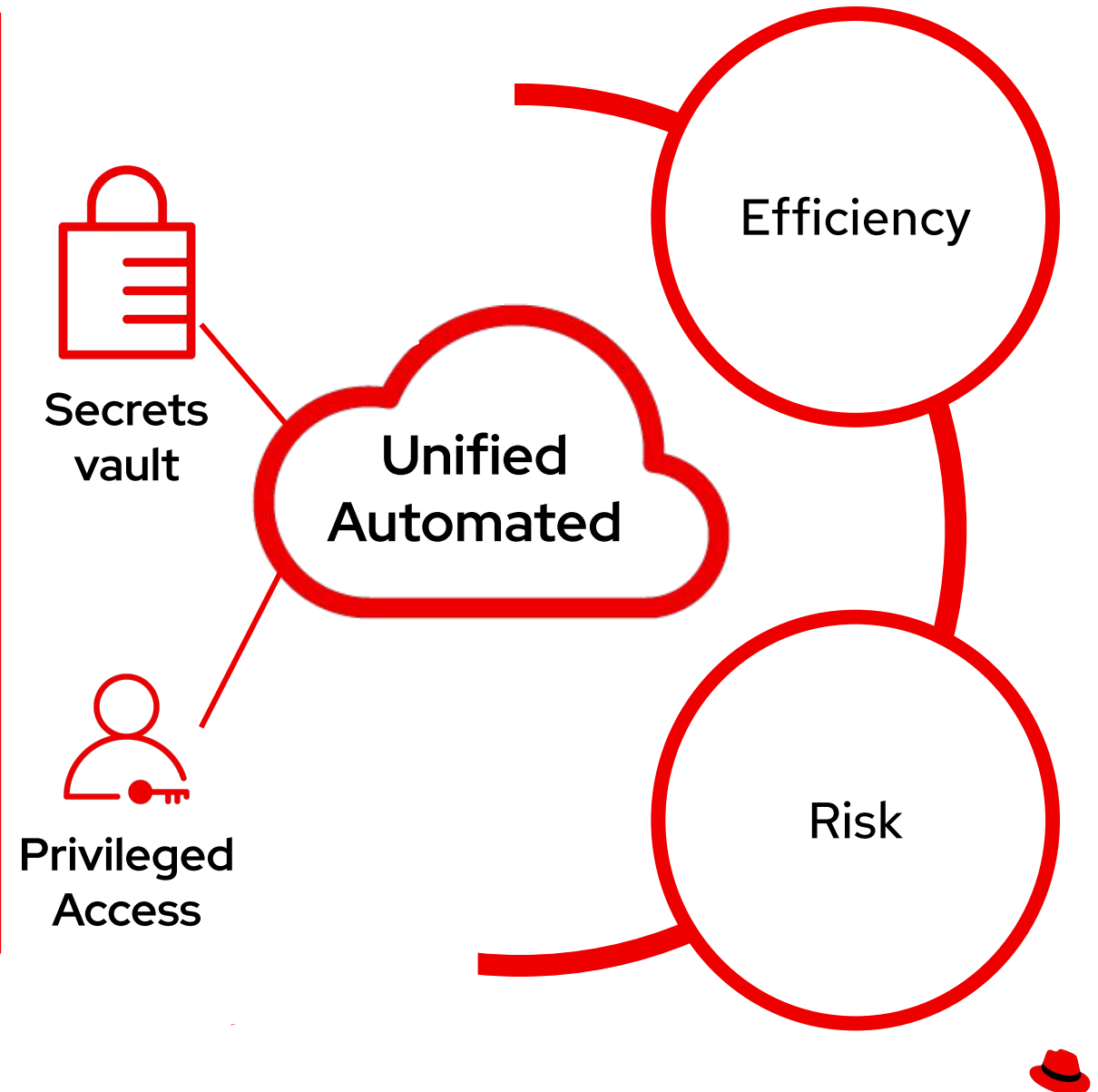
"It's really rewarding to see this win-win partnership between Red Hat and CyberArk that truly benefits both companies – and their customers."

Joanne Wu
VP of Business Development,
CyberArk

Solution
CyberArk partnered to build certified integrations which offer joint customers end-to-end security.
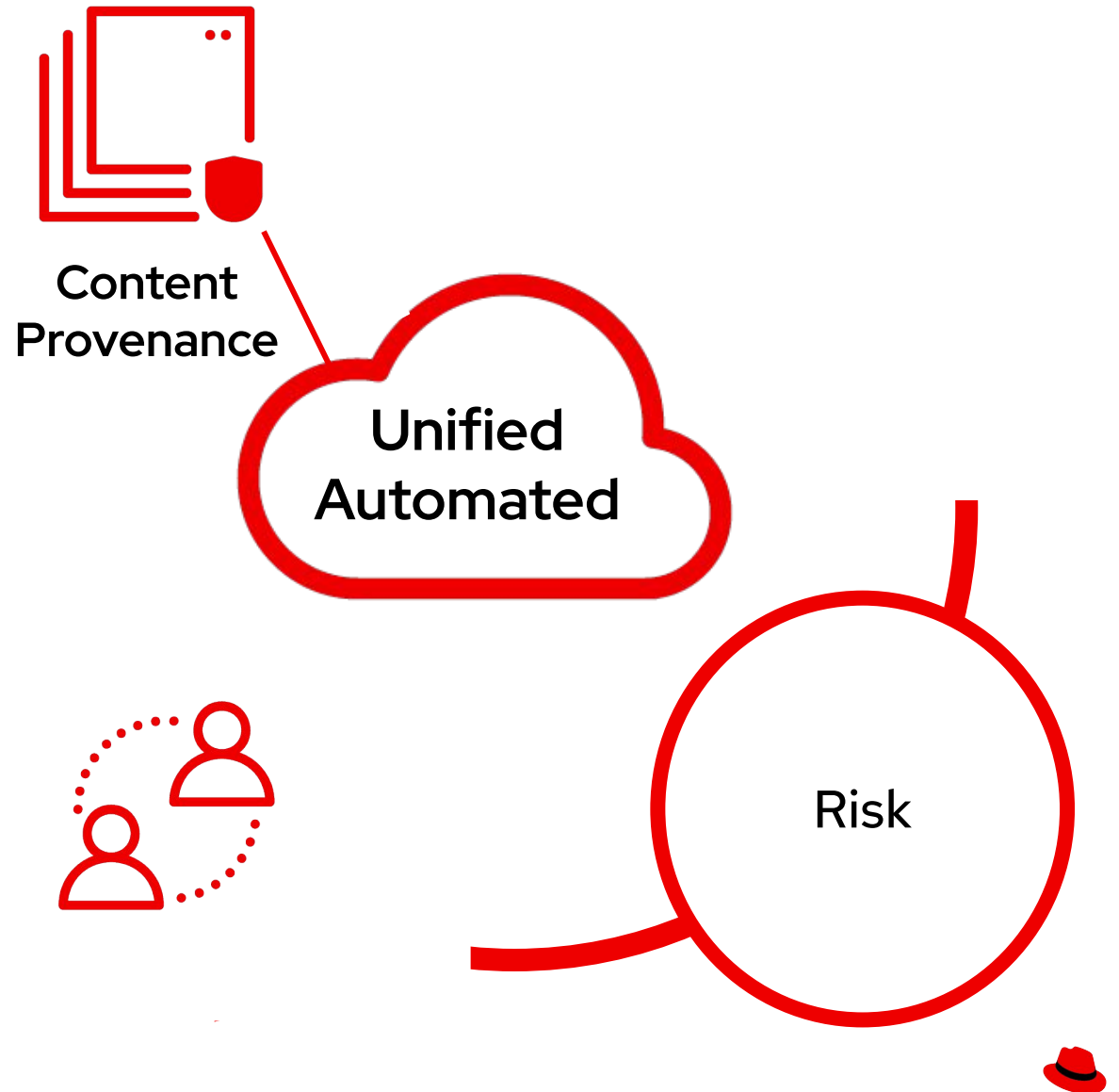
Results
- Enhanced security for users by automating credentials management

Having a "chain of custody" for automation content increases security (these are often privileged actions with serious consequences)

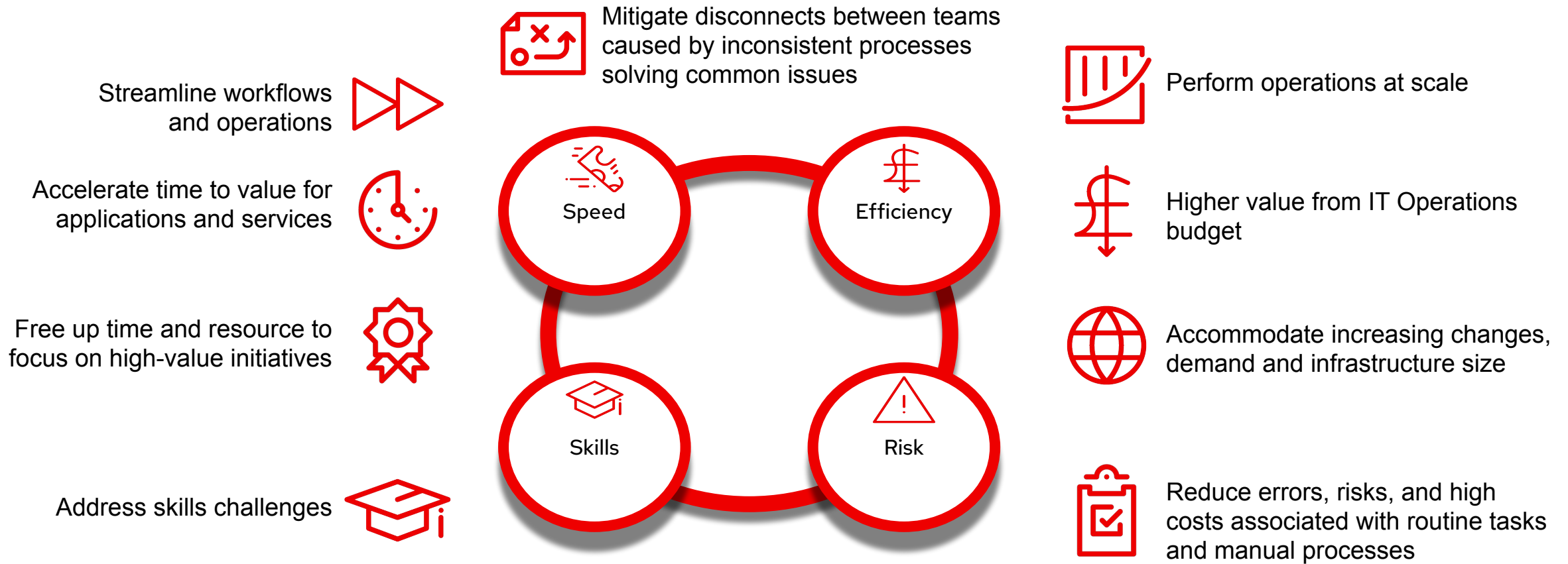Sharing trusted content, with controlled - ie role-based, access - makes reuse more likely
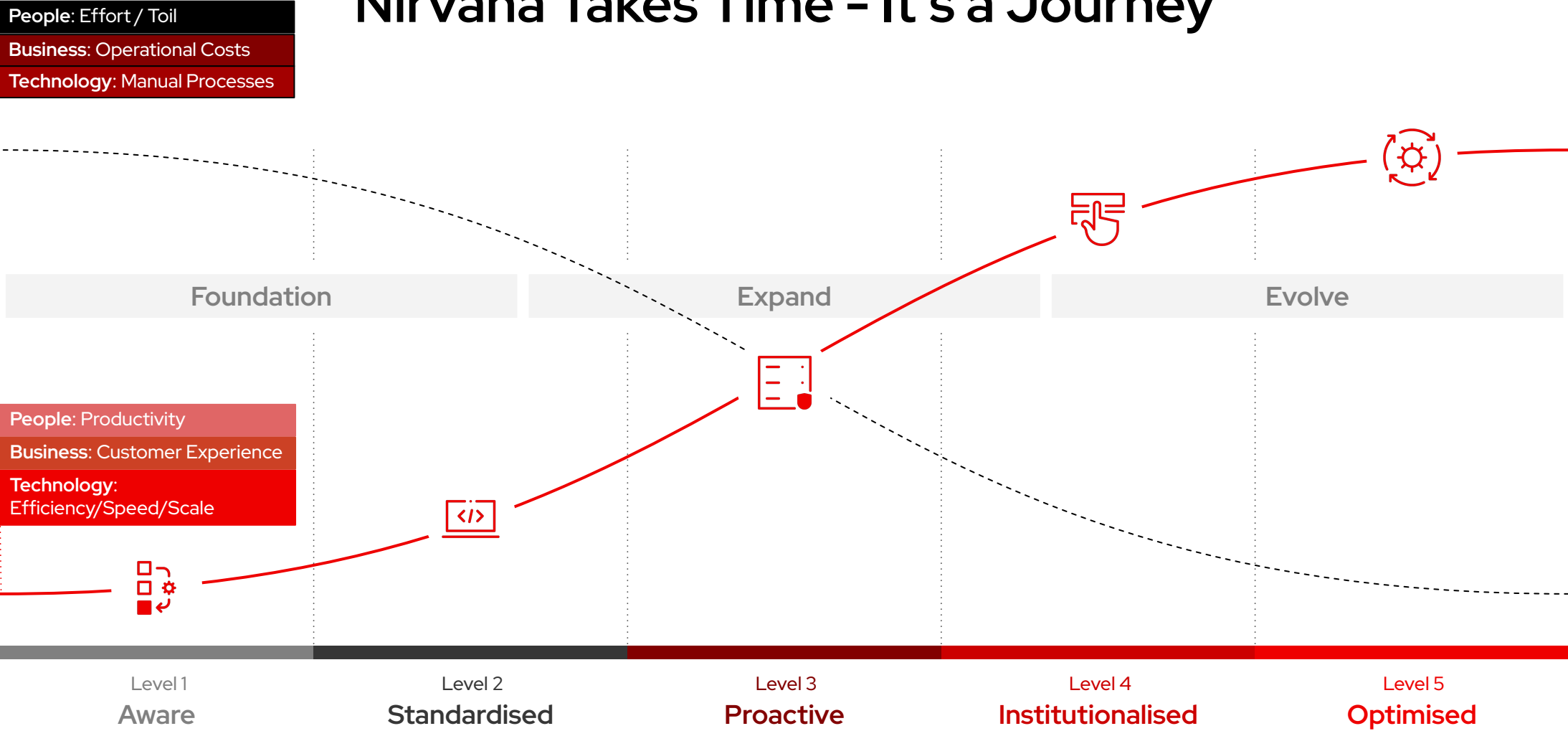
Content Provenance

Unified Automated

Risk

"When we use repeatable solutions, we can develop and deploy these in other areas of our business much faster and more frequently. It's a critical enabler for us and increases our ROI."

—

Joe Mills
Director,
Discover Financial Services

In conclusion: Why an Automation Platform?

Mitigate disconnects between teams caused by inconsistent processes solving common issues

Streamline workflows and operations

Accelerate time to value for applications and services

Free up time and resource to focus on high-value initiatives

Address skills challenges

Speed

Efficiency

Skills

Risk

Perform operations at scale

Higher value from IT Operations budget

Accommodate increasing changes, demand and infrastructure size

Reduce errors, risks, and high costs associated with routine tasks and manual processes

Red Hat

Nirvana Takes Time – It's a Journey

People: Effort / Toil
Business: Operational Costs
Technology: Manual Processes

Foundation

Expand

Evolve

People: Productivity
Business: Customer Experience
Technology: Efficiency/Speed/Scale

Level 1	Level 2	Level 3	Level 4	Level 5
Aware	**Standardised**	**Proactive**	**Institutionalised**	**Optimised**

Red Hat

Why Ansible Automation Platform?

Clue: Platform = Flexible, Powerful, Proven

Create

Manage

Scale

Red Hat Value

- **Validated & Certified Content**
- **Skills**
- **AI**

- **Focus on outcomes (not tools)**
- **Improve ways of working**

- **Knowledge Base**
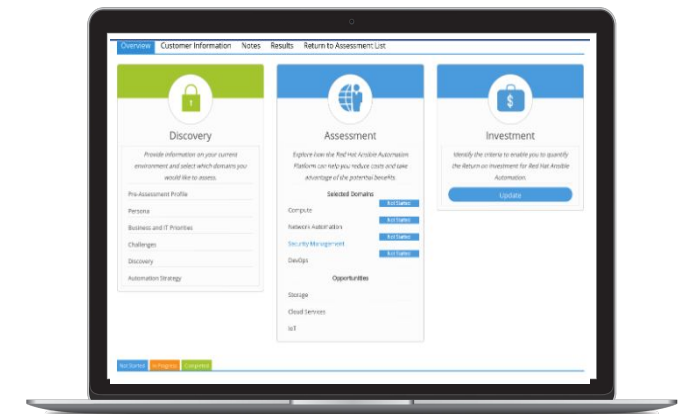- **Support**
- **Training**
- **Services**

30
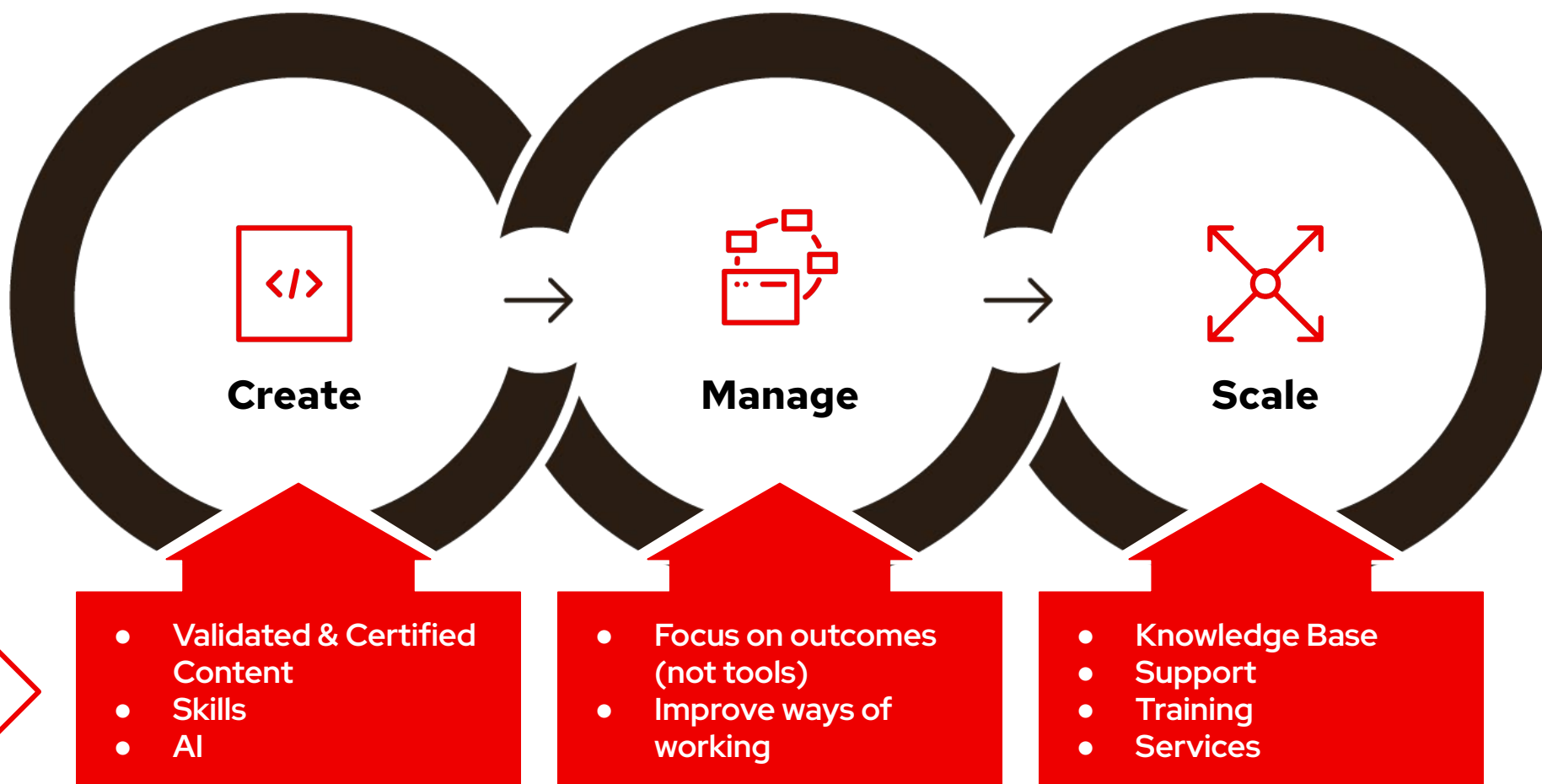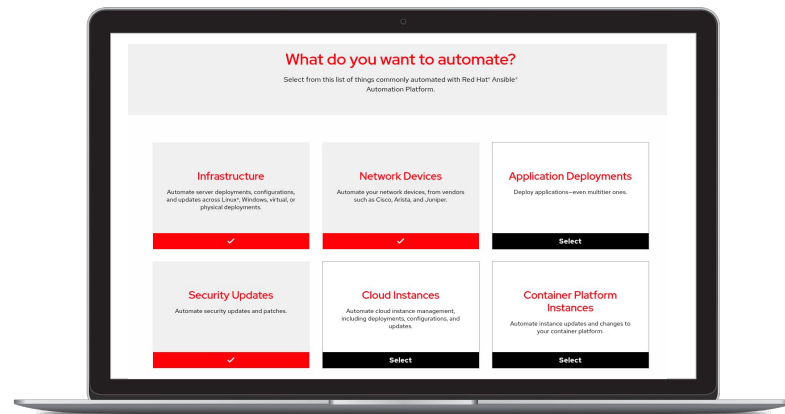
Red Hat

Red Hat Time Savings Tool
redhat.com/savetime
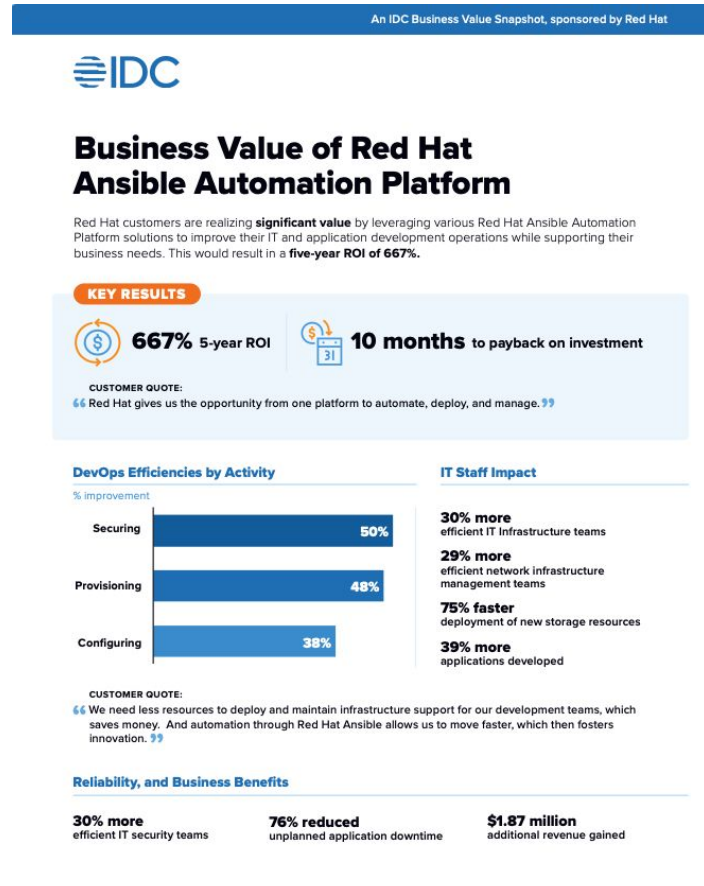
IDC RoI Analysis
red.ht/idcroi

RoI Tool
Speak to your Red Hat contact

Useful links

Ansible Basics course: Automation Technical Overview
red.ht/AAP-intro-course

Self-guided Labs
red.ht/SGL

Ansible Sandbox
red.ht/AAP-sandbox

Ansible Automation Platform Solution Guides
(Red Hat subscription required)
https://access.redhat.com/articles/7117333

Ansible Community Meetups
https://www.meetup.com/ansible-london/events/

Automation Sessions

12:00 Architecting Ansible Automation Platform for **Scale & Compliance**

13:30 **Event-Driven Automation** with AAP: From Alerts to Action

How AAP helped ABFoods transform to deliver Business Value

14:00 Enable ubiquitous and scalable automation using **config as code**

14:30 Ansible Automation Platform - **Product Roadmap**

Server in Minutes – Clinical trials where every day counts - ICON

15:30 Containing the Chaos Monkey - **Balancing Automation and Compliance**

Red Hat Summit

Connect

Thank you

in	linkedin.com/company/red-hat	**f**	facebook.com/redhatinc
▶	youtube.com/user/RedHatVideos	🐦	twitter.com/RedHat