Red Hat
Ansible Automation
Platform

Enterprise wide IT Automation

The opportunities & the challenges

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Agenda

- Enterprise wide IT Automation
  - The opportunities & the challenges
- How do you get there?
- The need for a platform
- Where are the gains to be had?
- The impact of Events
- Questions & close

Achieve goals and focus teams with advanced automation techniques

Speed

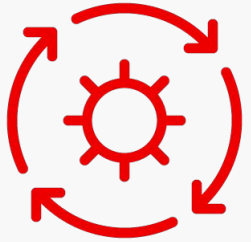
Reduce the number of manual steps, enable orchestration of multiple tools and accelerate cross-tool interaction

Become more agile

Consistency

Minimize risks with automated workflows, avoid human errors and use auditable and verifiable processes

Ensure resilience

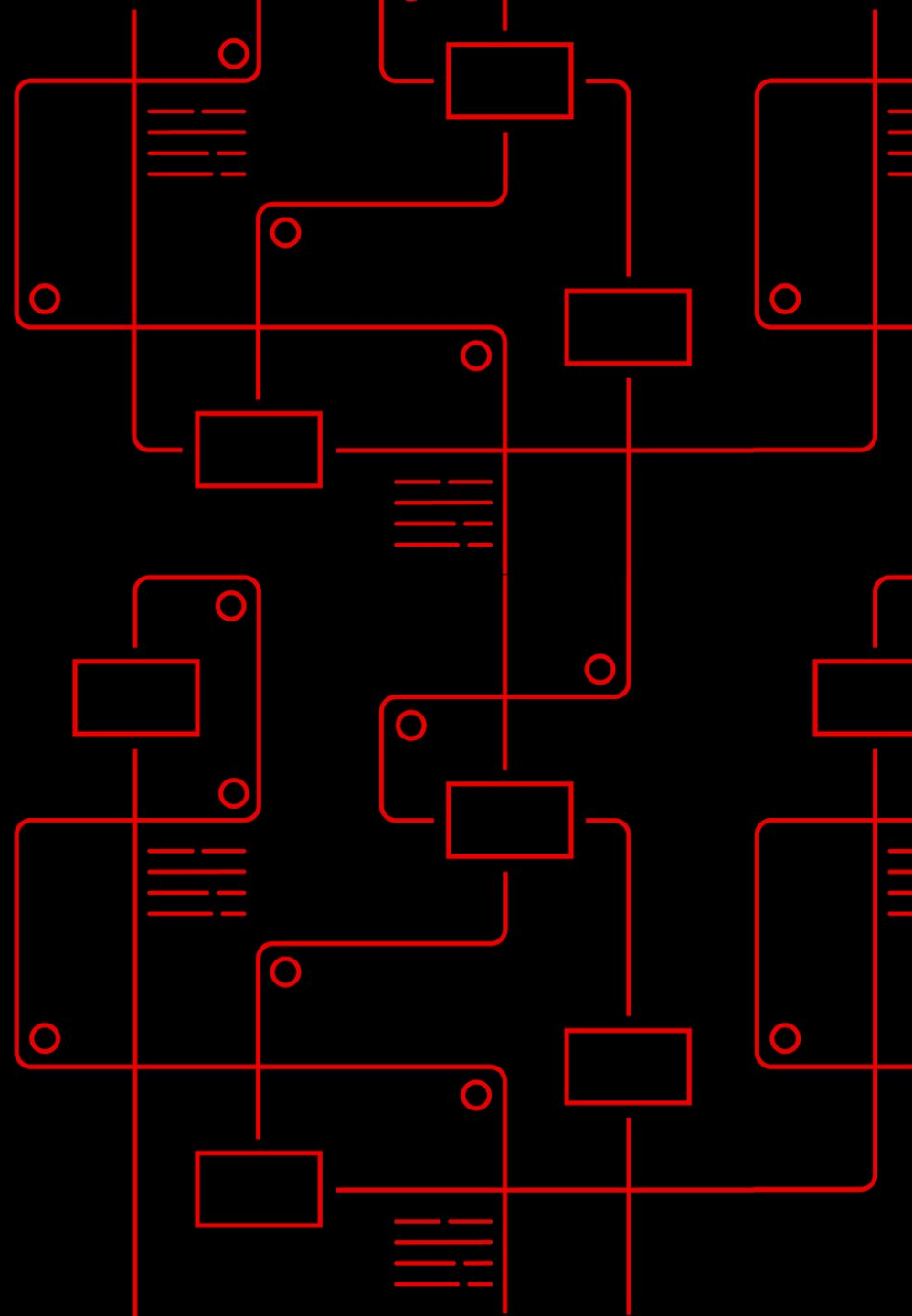


Innovation

Innovate to more advanced levels of automation and free productivity for innovation and higher level projects

Transform IT

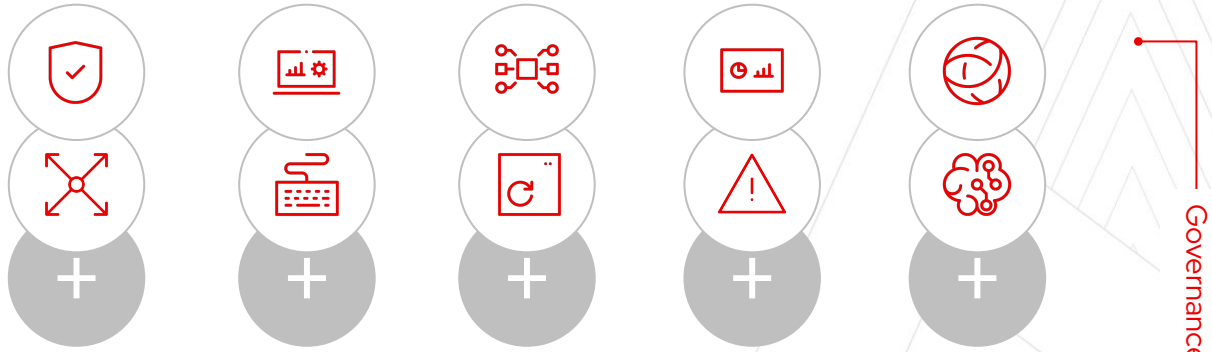
Anyone can automate...
but an enterprise needs to coordinate and scale



Many organizations share the same challenge

Differing skills, roles, and responsibilities

Growing number of use cases

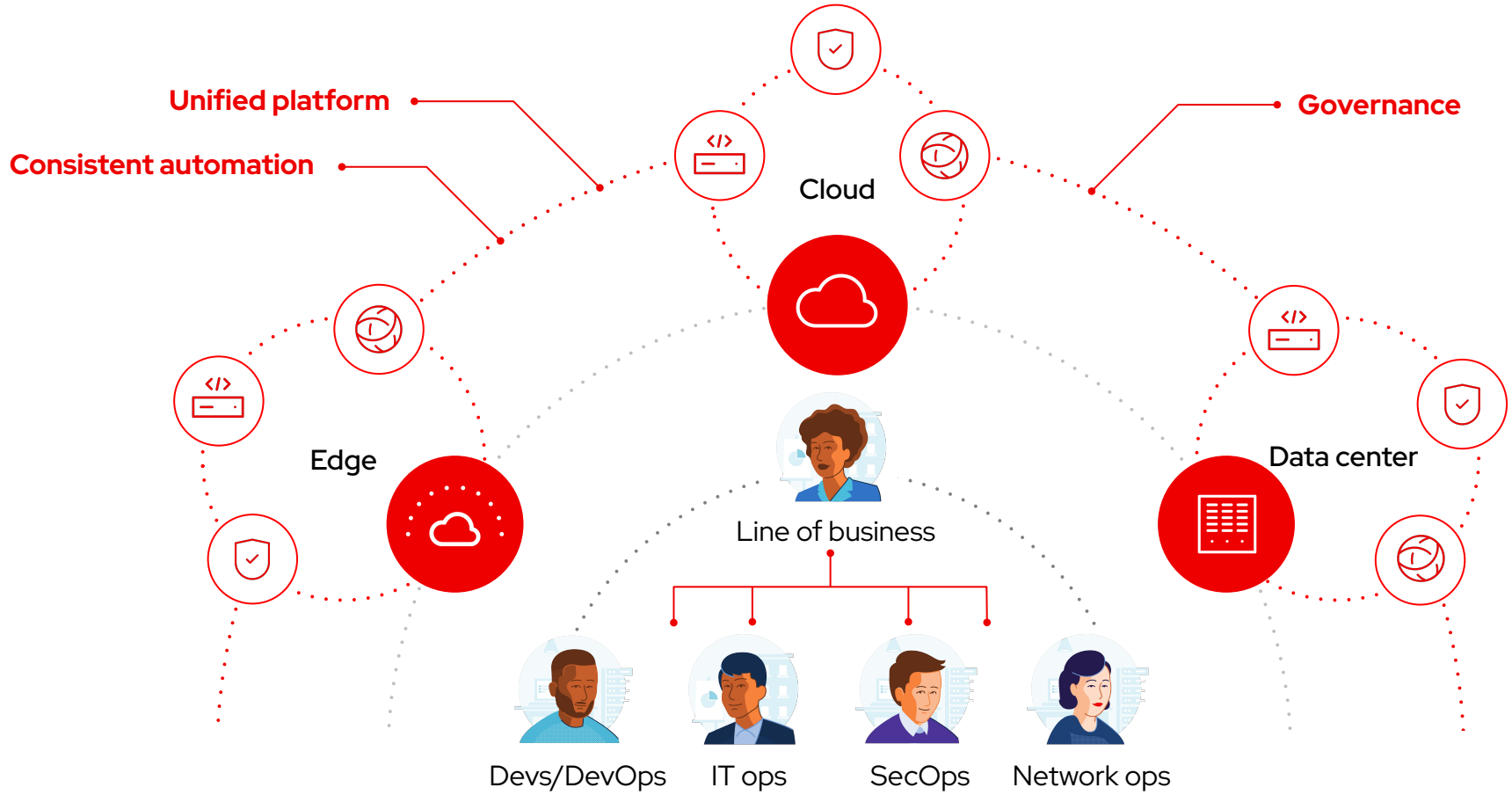


Multiple platforms and locations

Across multiple domains

Red Hat Ansible Automation Platform

The solution? Break down the silos.



Automation Maturity Curve

Federated Self-Service automation
Event driven automation
Self-healing infrastructure

Effort per change

Team autonomy
Testing framework(s)
Expanded external integrations
Governance driven RBAC

Cross team workflows
End-to-end automation provisioning
Automation first across silos

Standard onboarding
Reliable release process

Speed Scale
Reliability

Level 1 Aware

Level 2 Standardized

Level 3 Proactive

Level 4 Institutionalized

Level 5 Optimized

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An IDC Business Value White Paper, sponsored by Red Hat

IDC

The Business Value of Red Hat Ansible Automation Platform

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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

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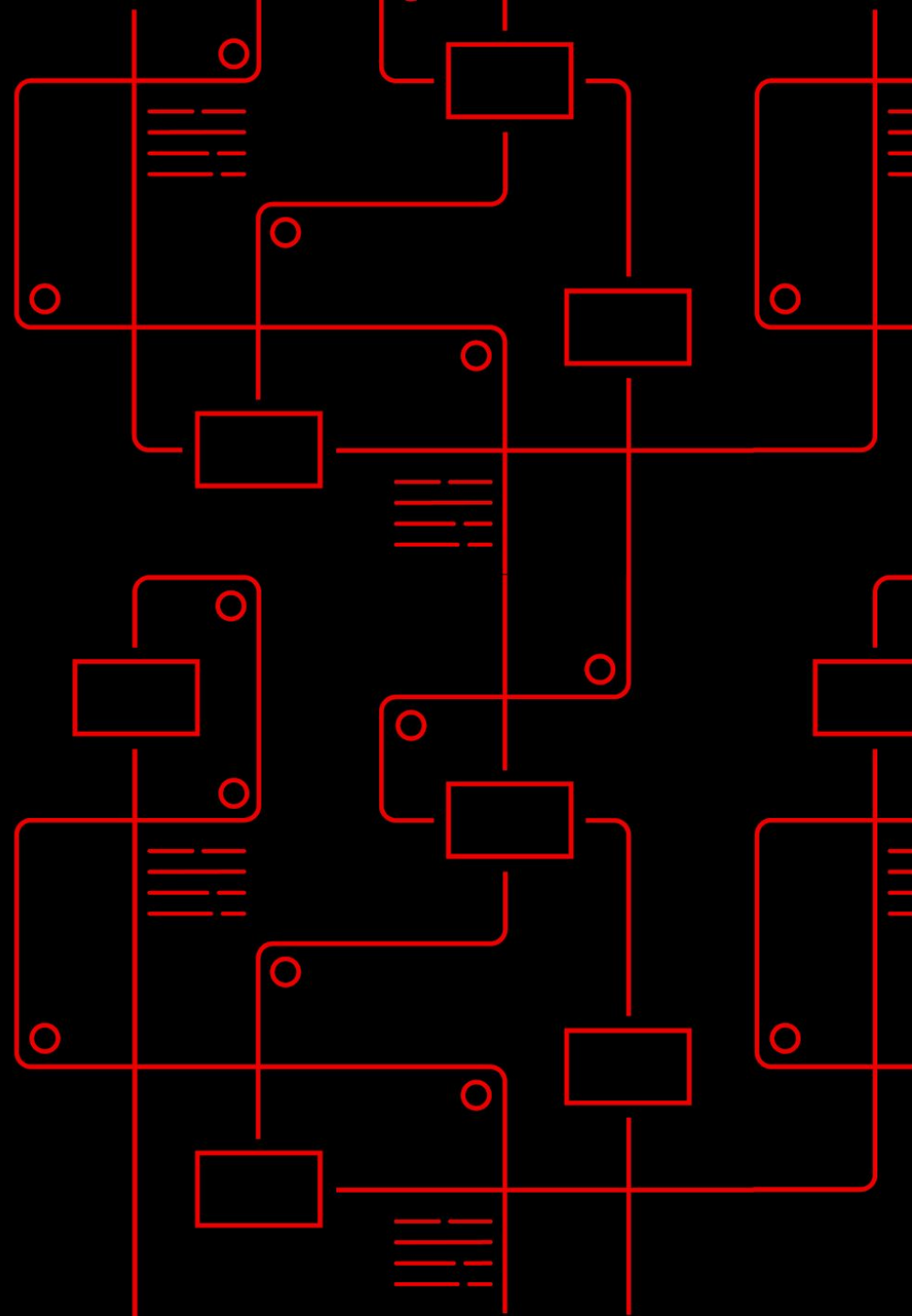
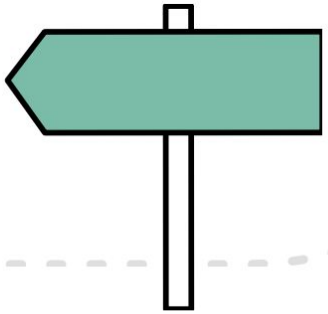
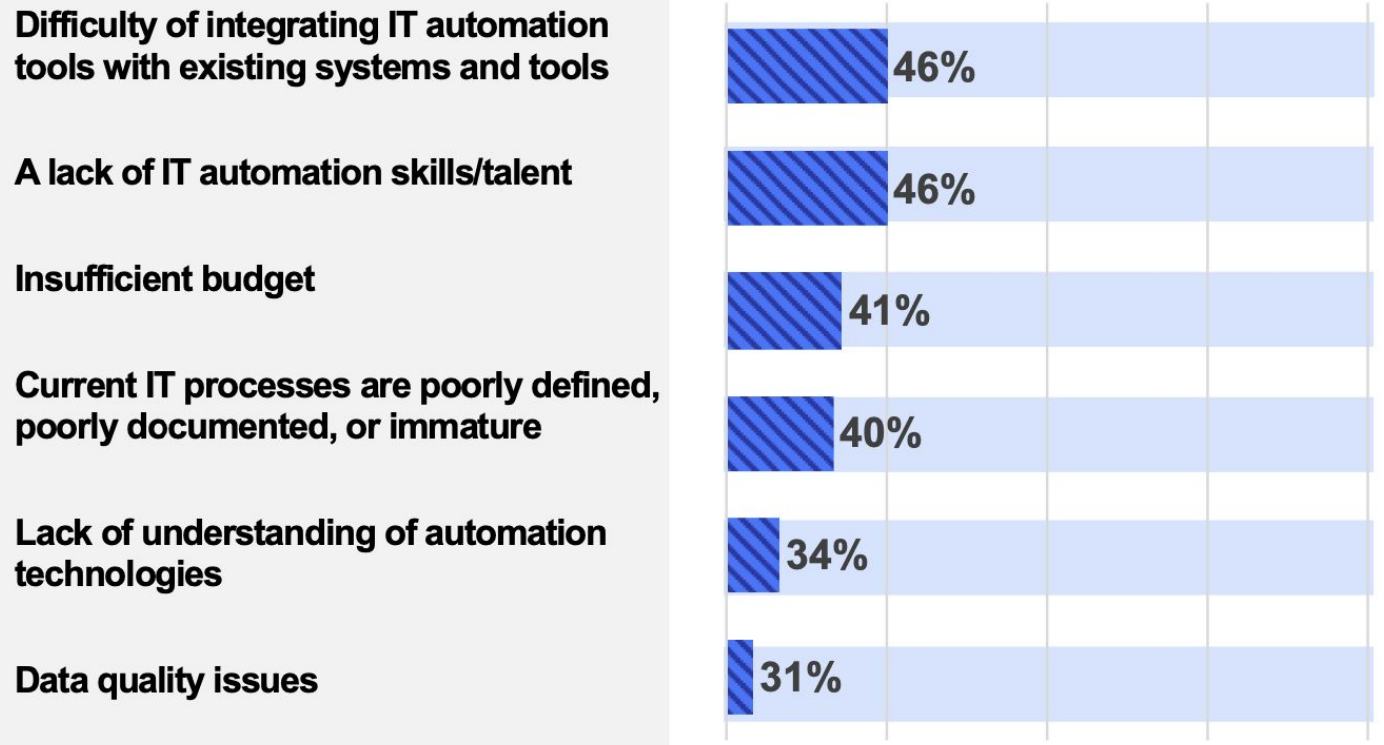
How do you get there?



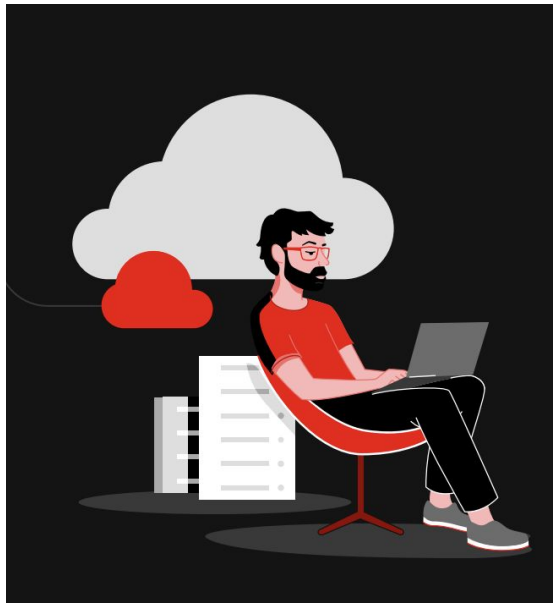
Barriers to enterprise-wide adoption of IT automation tend to vary from organization to organization.





Be a champion rather than a sponsor

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



- Share your vision for automation
- Define what success looks like
- Align with business objectives
- Tout benefits for individuals
- Early stage guidance will increase adoption during rollout
- Seed a community of practice (CoP) around automation

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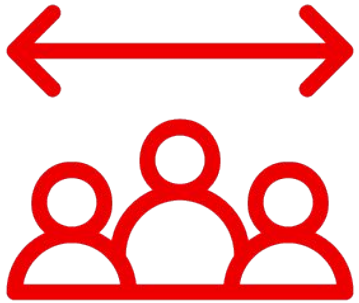
Communities of Practice

In 1991, cognitive anthropologists Jean Lave and Etienne Wenger first coined the term "community of practice" while studying group learning.

They defined it as:

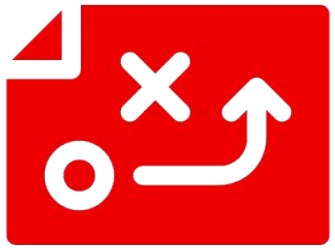
"groups of people who **share a concern** or a **passion** for something they do and learn how to do it better as they interact regularly."

Benefits to the Organization



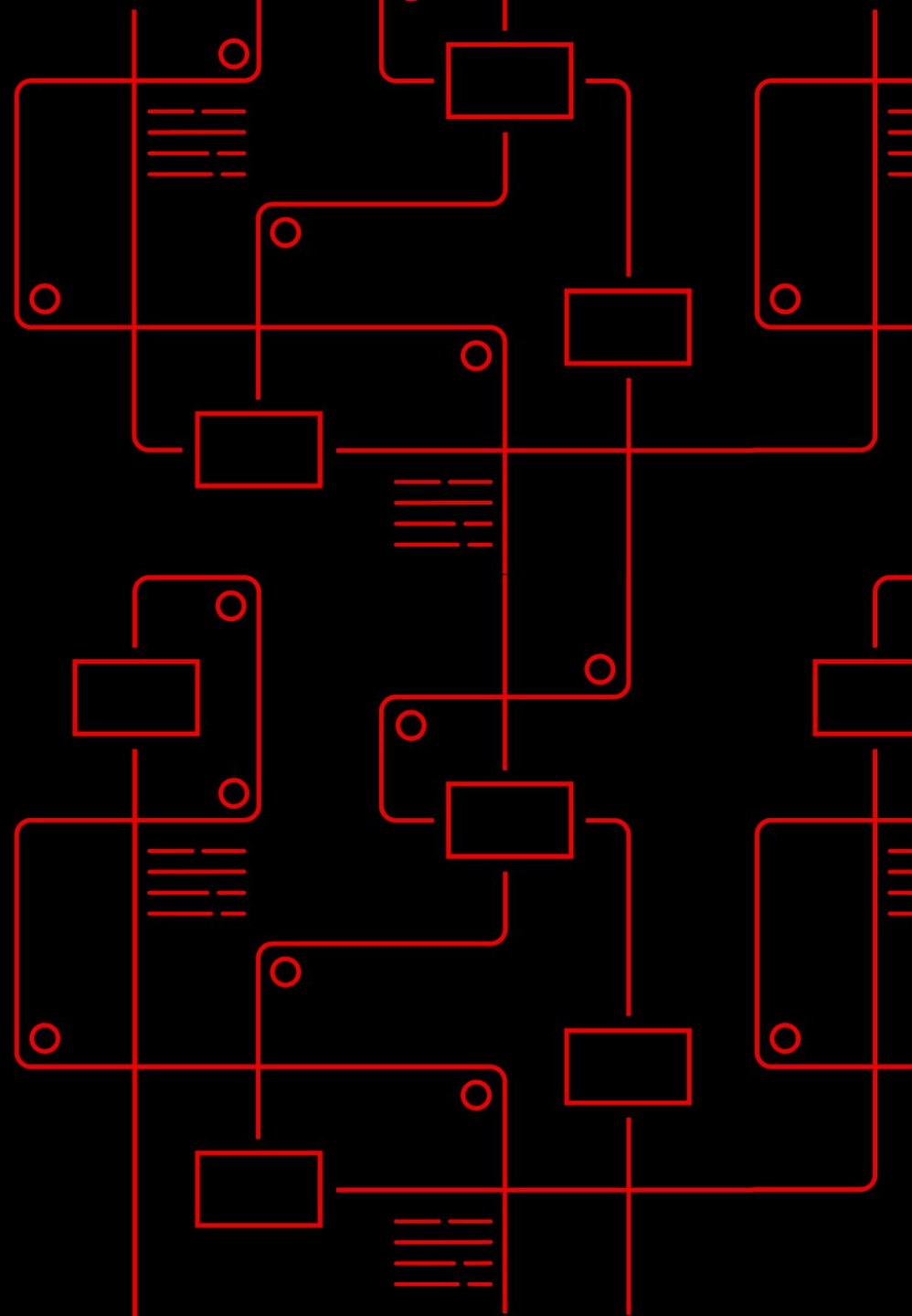
- Connect people and enable dialogue
- Stimulate learning and encourage collaboration
- Share existing knowledge
- Governance model to drive standardization and best practices
- Sharing a common language

Automation Adoption Team

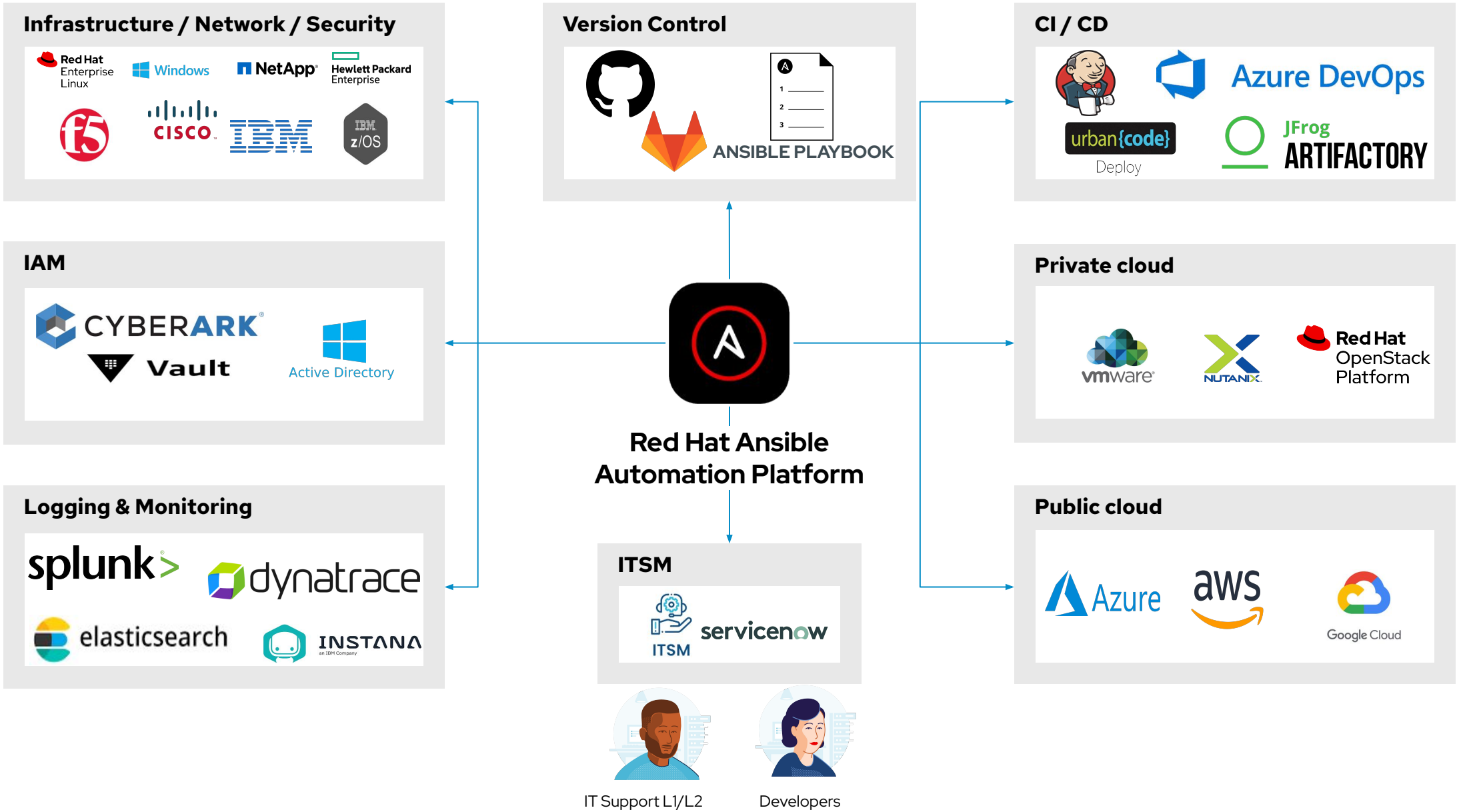


- Guides cross-functional teams
- Standardizing and applying automation approaches across projects and processes
- Comprised of automation subject-matter experts across IT, Development, BA, Security, Network, Infrastructure
- Includes architects, business and IT SMEs, and developers

The need for a platform



Ansible Automation Platform : 360° API



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Certified Content Collections

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NEW Red Hat is a *leader* in the 2023 Forrester Wave: Infrastructure Automation

Vendor Profiles

Our analysis uncovered the following strengths and weaknesses of individual vendors.

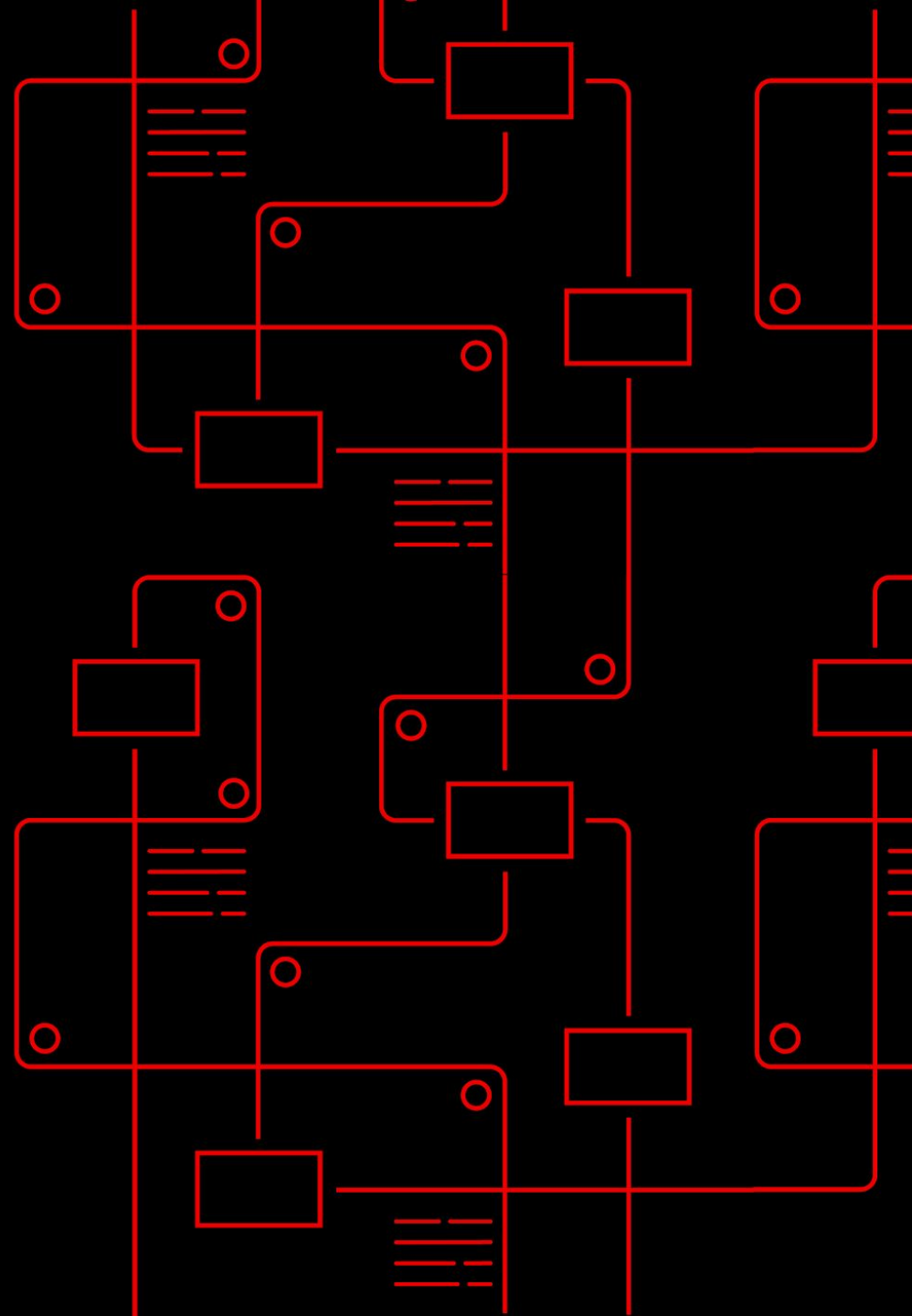
Leaders

- **Red Hat leverages its strong open source community to power innovation.** Red Hat is well-known for commercializing open source software for enterprises. It adds capabilities to upstream Ansible via its Ansible Automation Platform; this solution includes Automation Hub, Automation Services Catalog, and Insights for Ansible. Red Hat sets the pace of the market by addressing operational challenges, skill gaps, and budgetary pressures. Its strength lies in its community, which has led to solid partnerships and supporting services. Red Hat capitalizes on this ecosystem by adopting and embracing the work of contributors. Key upcoming features include trusted automation supply chain, Event-Driven Ansible, and AI-led automation through Project Wisdom.

  Ansible has strengths in configuration management, integration with configuration management database (CMDB), analytics, and community support. It can clearly handle scale: Large global systems integrators lean on it to deliver managed services. Ansible's minimal support for storage contrasts with its strong server and network capabilities; it also lacks multilayered service blueprints, infrastructure templates, and complex orchestration (handling incidents with automated resolutions or remediation). Reference customers find the upgrade path and process troublesome despite their best efforts. They also want more flexibility and better capabilities for business continuity and disaster recovery. Red Hat is a great fit for firms seeking consolidated automation across many infrastructure technologies and vendors.

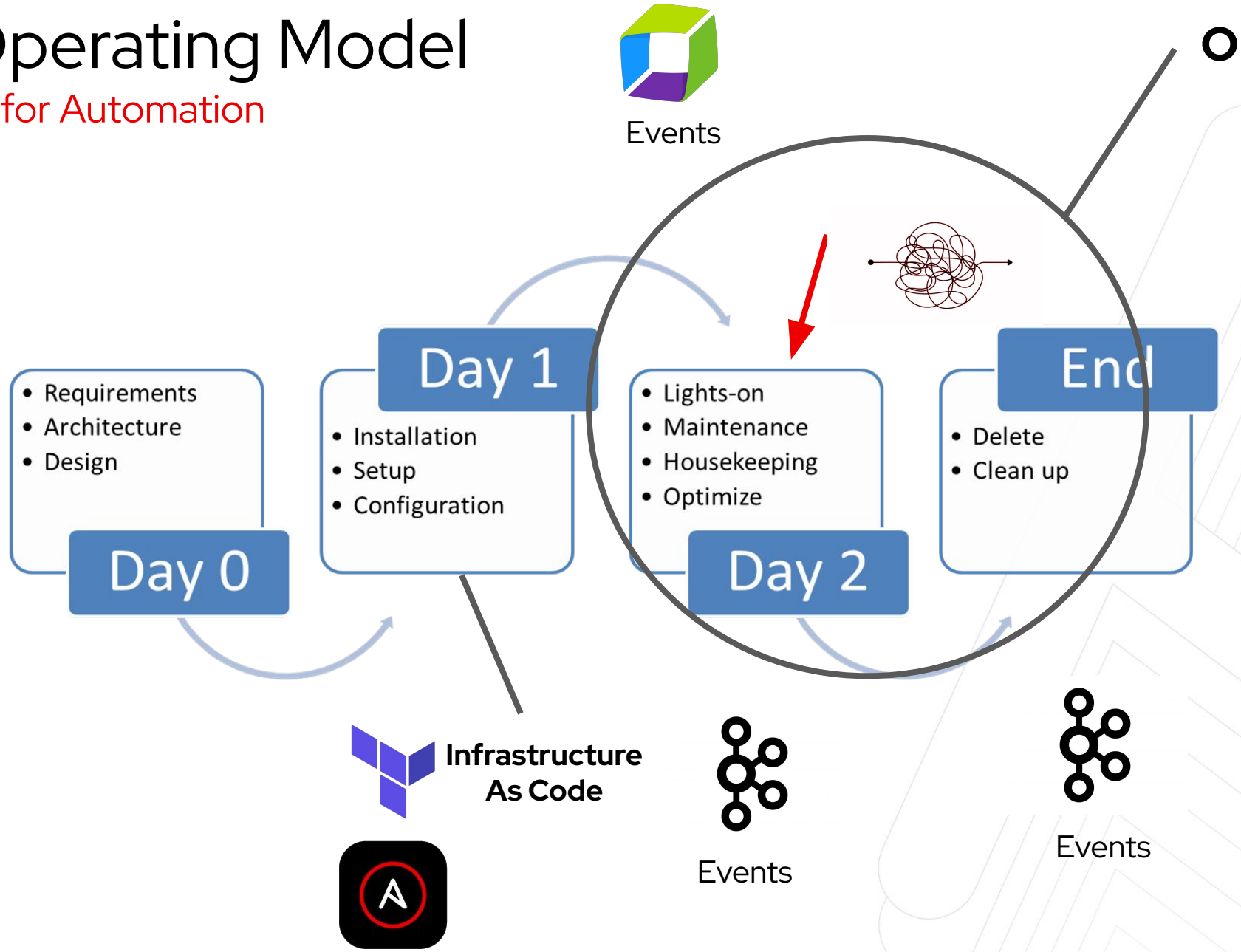
Source: *The Forrester Wave: Infrastructure Automation, Q1 2023*

Where are the gains to be had?



IT Operating Model

Scope for Automation



Looking at entire application lifecycle

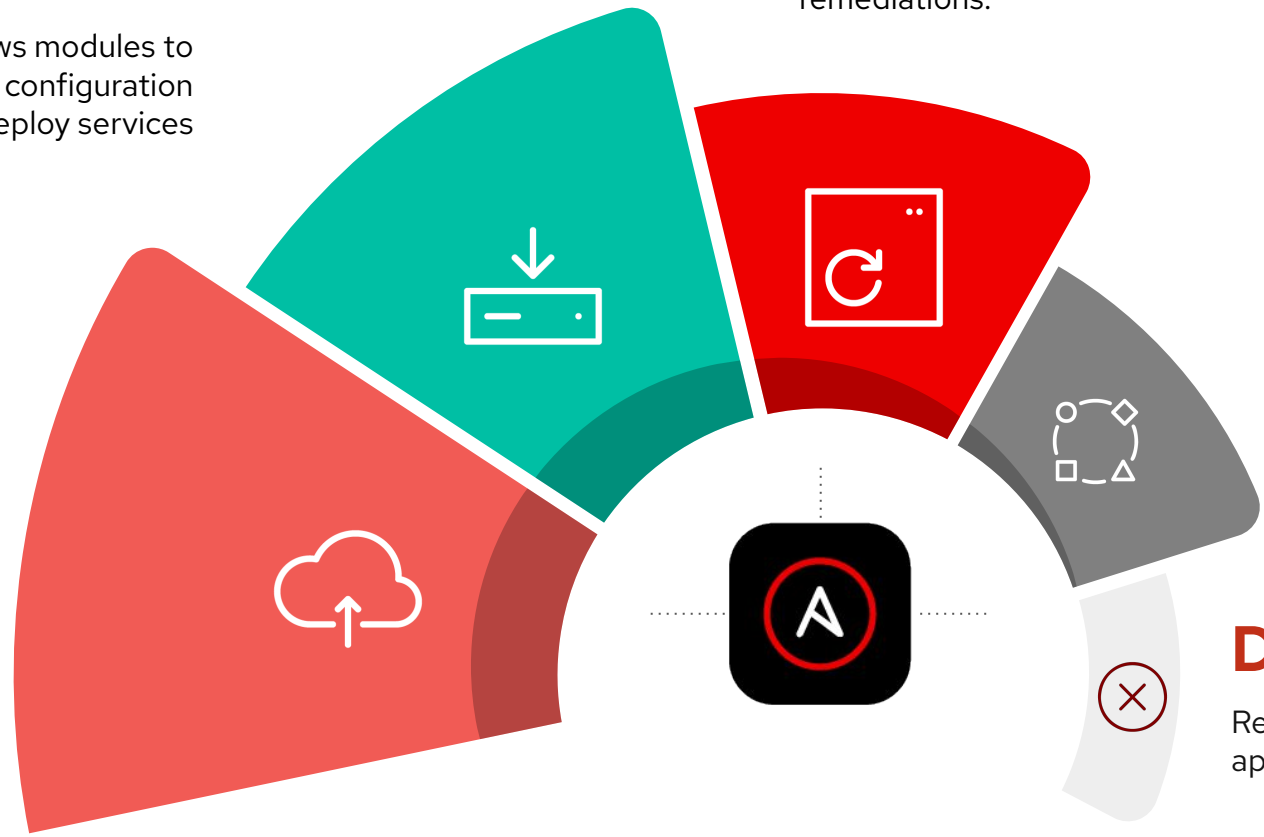
Manage entire lifecycle end-to-end

Updates, remediations

Patch management, drift and configuration control. Proactive monitoring and security vulnerability remediations.

Install application

Use native Linux or Windows modules to install applications, modify configuration settings and deploy services



Synchronize

Sync application state to database or ITSM tool to keep track of application or infrastructure status

Deploy VM

Provision virtual machine with specified resources

Deprovision

Remove or stop virtual machine when application is no longer required

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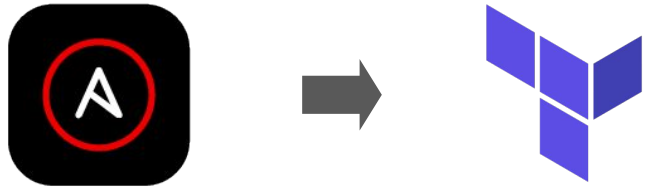
Ansible + Terraform

Working together to the end goal

Ansible calling Terraform



Terraform calling Ansible

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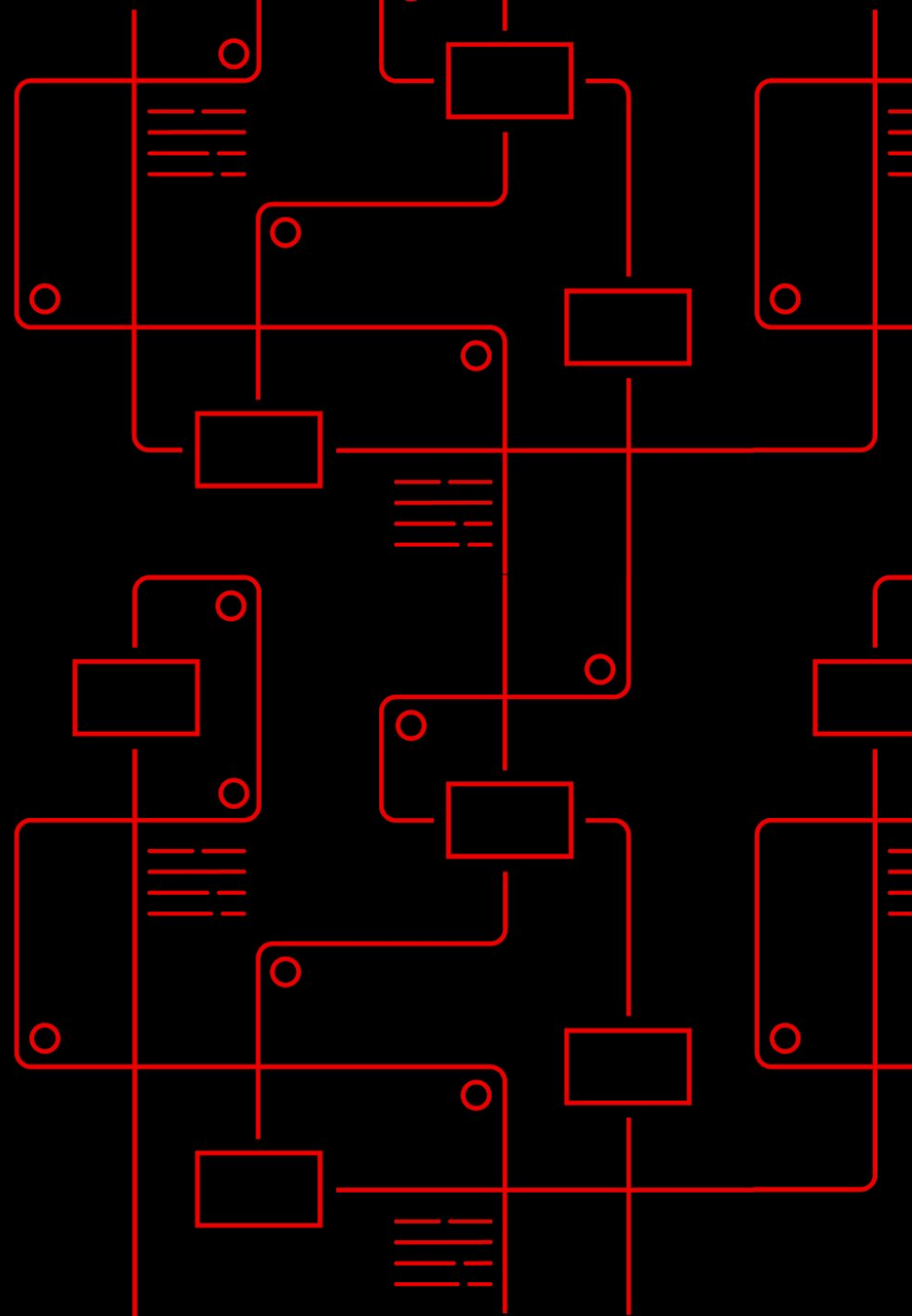
The impact of Events on an Automation Architecture



What is event-driven automation?

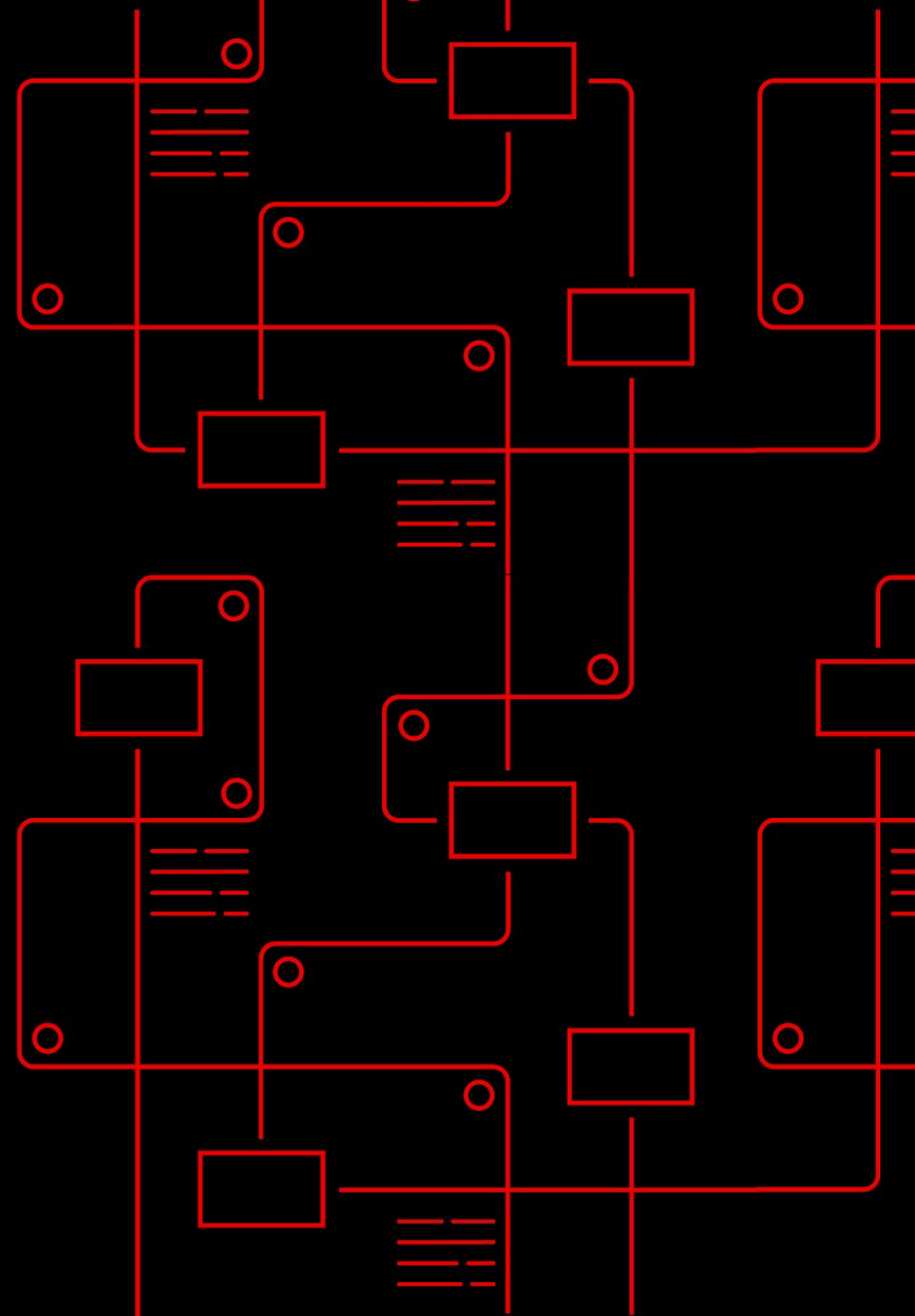
The ability to

connect intelligence, analytics and service requests

for an IT solution

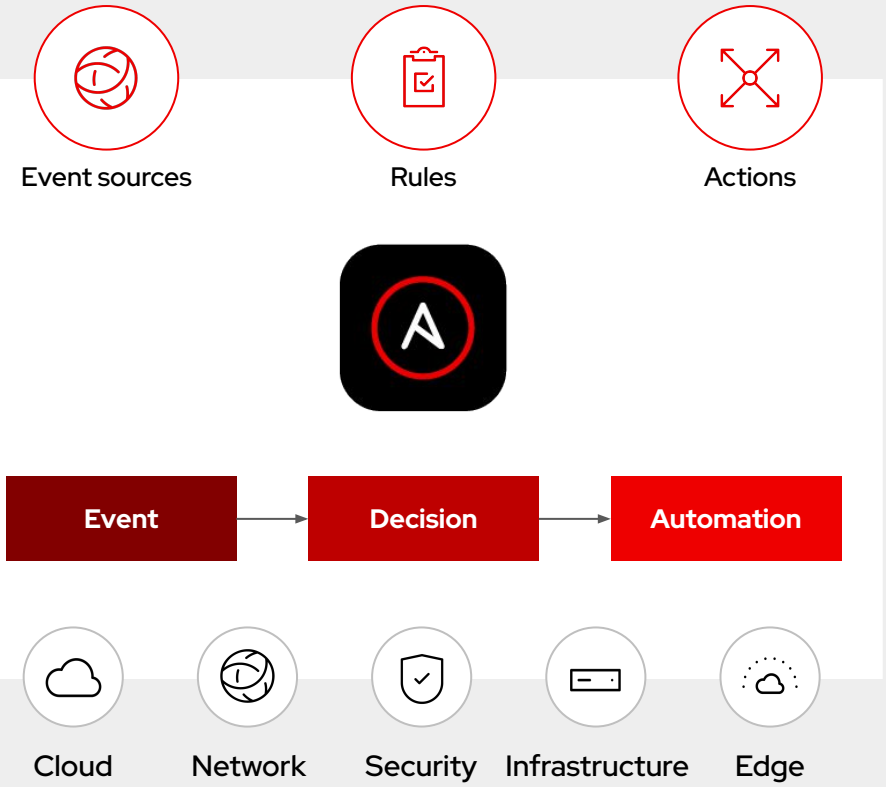
to automated actions so that activities

can take place in a single motion.



Event-Driven Ansible. Observe Evaluate Act

Developer Preview

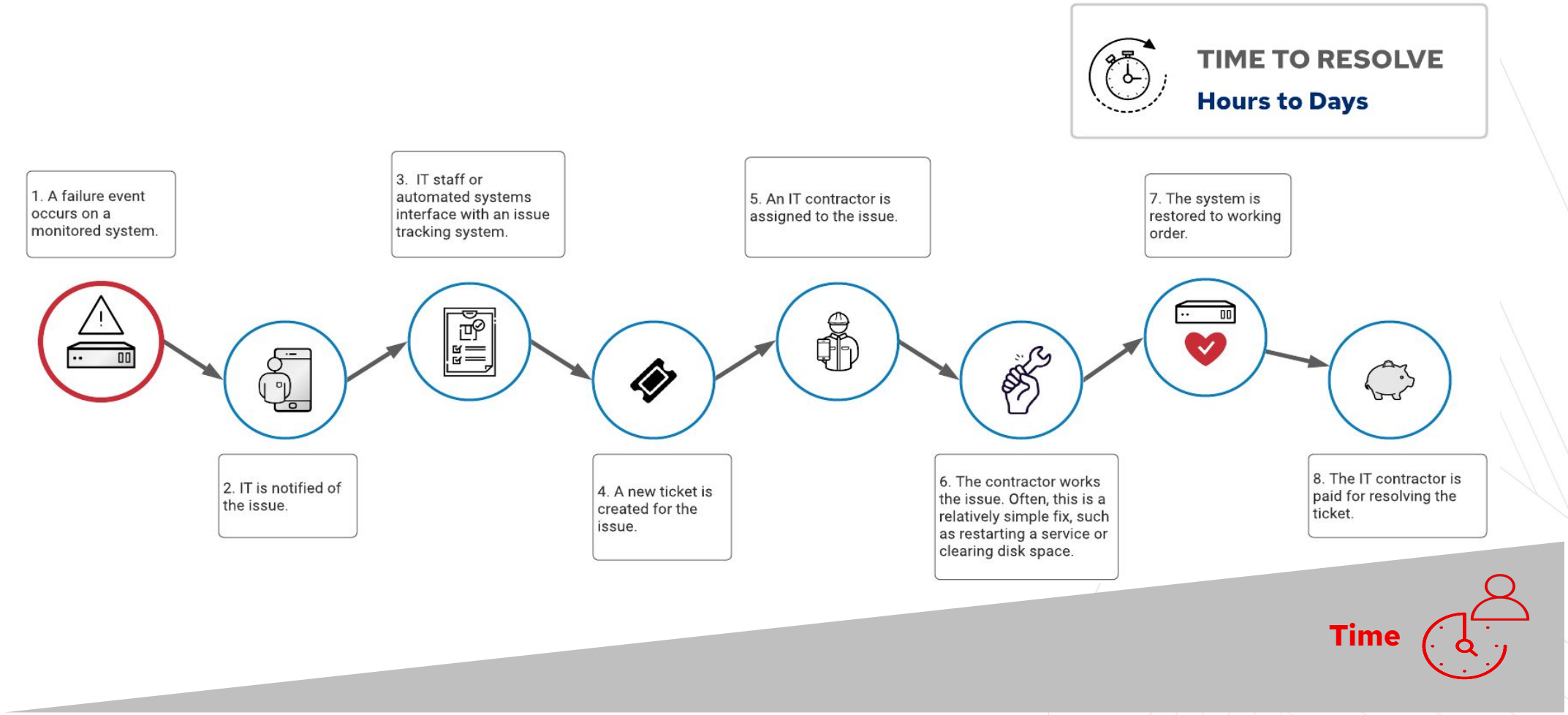


Remediation and Observation from events

- **Source** plugins provide Event-Driven Ansible the ability to listen for events which can be processed through rulebooks.
- **Rules** in the form of Rulebooks allow us to create event conditions which once met will trigger an action.
- **Actions** give us the ability to trigger playbooks, modules, notifications and further event triggers based on the conditions that have been met by a specific event.

Example manual workflow: remediating issue on managed system

Time is spent on toil and churn



Example event-driven workflow: Speed and shorter MTTR

Event driven automated remediation: same issue, fully automated workflow

OBSERVE

Third party tools:

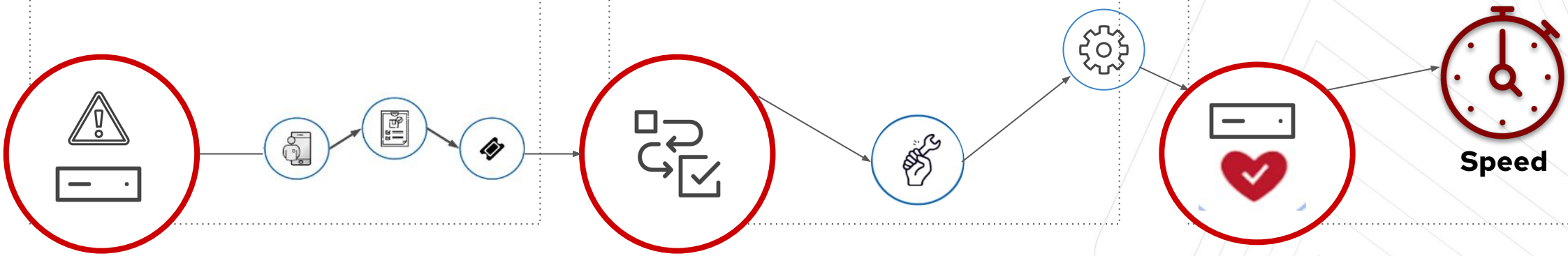
- Watch data / streaming data
- Identify event
- With or without notification and ticketing integration

EVALUATE

- Routed for remediation
- Known problem identified
- Required action identified

ACT

- Automated resolution triggered
- Remediation action completed
- Shorter MMTR



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Thank you!

Just can't get enough?

Ansible Automates,
October 19, Scandic Haymarket

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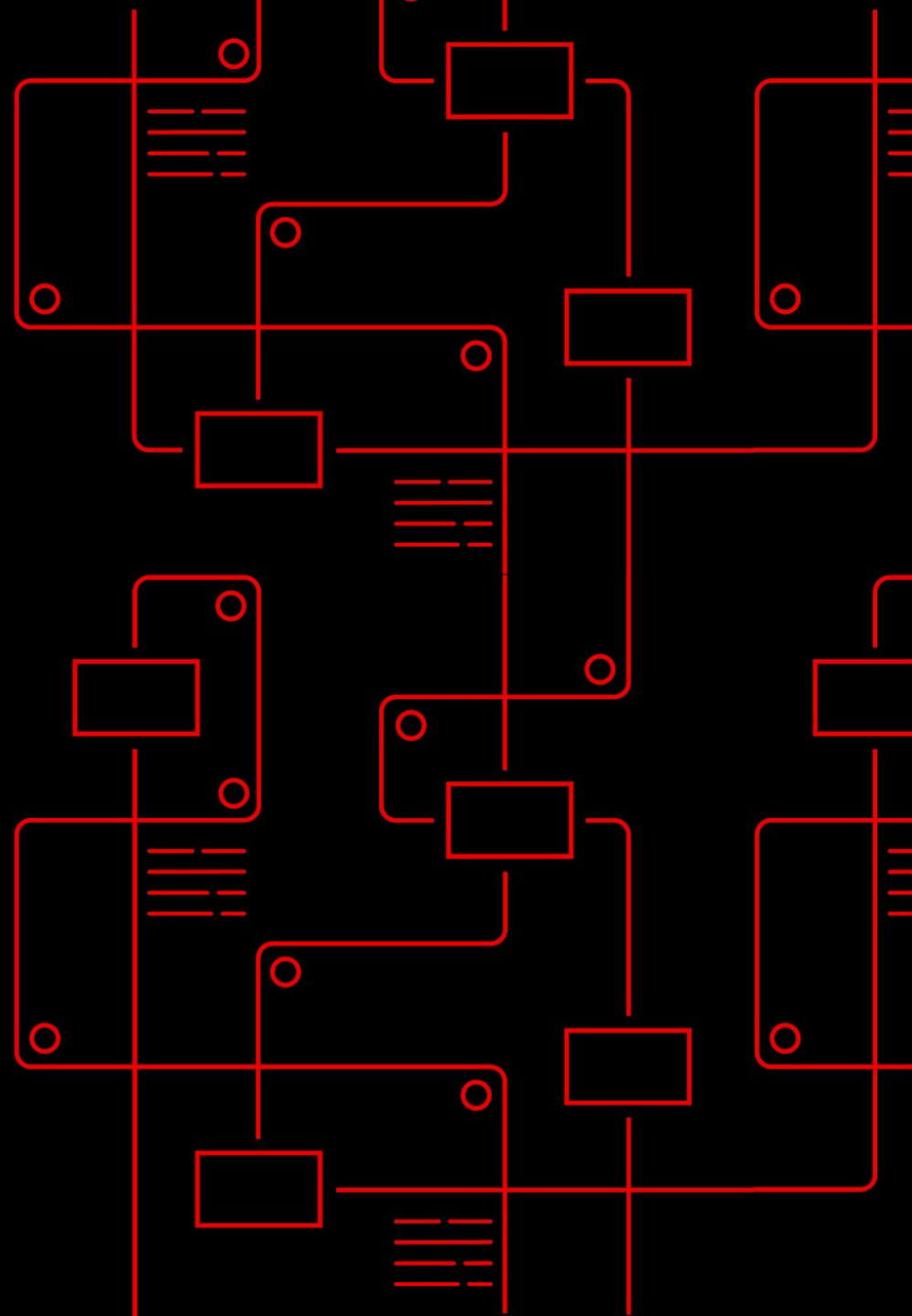
Questions?



Thank you

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