Digital transformation, the open source way

Using open source principles to unite teams, technology, and processes

#OPENTRANSFORMS

Transform your organization

Build a better business
with open source technology,
culture, and practices

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Chapter 1

The challenge:
Digital transformation

The world has changed. Digital devices and services connect the planet and offer customers more choices than ever before. Every industry faces disruption, and businesses must transform to meet consumer demands and stay ahead of the competition. IDC's *FutureScape: Worldwide IT Industry 2018 Predictions* stated that "85% believe having the right combination of culture, process, and technology are most critical to an organization's digital transformation success."[1]

Business leaders understand that digital transformation is critical to ongoing success. However, legacy technology, outdated processes, and separate IT initiatives can stall or even halt transformation before tangible business benefits are realized. There is a very real potential of better living through software—if businesses can get there fast enough.

The approach organizational leaders take toward transformation will impact their success or failure. Laying the foundation for continual transformation is the key to success. Collaborative cultures, open and transparent processes, and industry-tested, open tools provide the agility and security needed to support transformation—today and tomorrow.

An **open culture** improves how teams collaborate and communicate to ensure success in expanding roles and changing technology landscapes.

An **open process** improves both speed to market and quality by breaking down divisions and building efficiency into every facet of business.

Open technology provides the modern, secure toolset that allows teams to deliver innovative work faster while maintaining the flow of business.
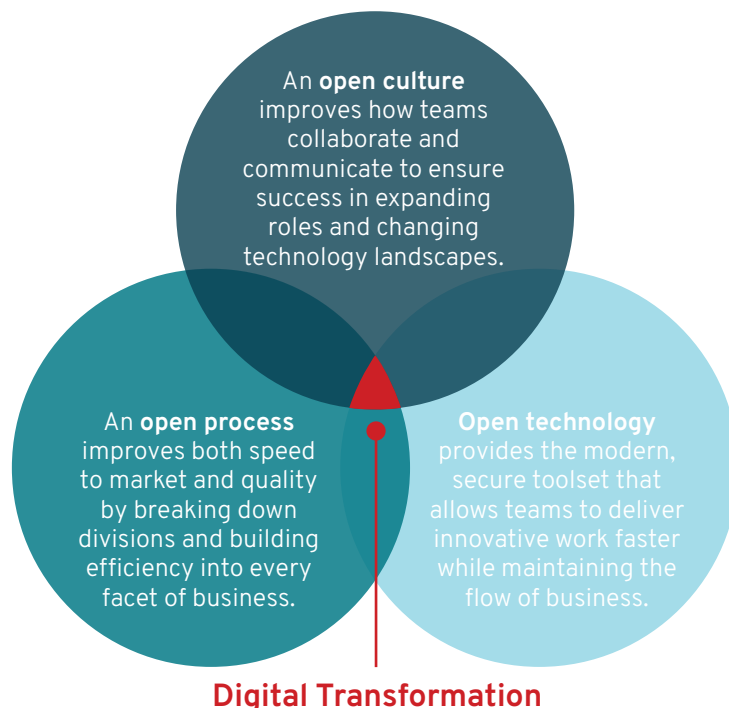
Digital Transformation

Figure 1. Digital transformation - the intersection of open source principles

Transformation begins when organizations adopt an open approach to business in three critical areas: culture, process, and technology.

> " A common thread I hear in my conversations with customers is this: Disruption is everywhere. Many people call this 'digital transformation.' But we should remember that transformation doesn't involve technology alone. It also involves people and values.
>
> **JIM WHITEHURST**
> PRESIDENT AND CEO, RED HAT

[1] IDC FutureScape: Worldwide IT Industry 2018 Predictions. IDC: The Premier Global Market Intelligence Company, Oct. 2017, www.idc.com/getdoc.jsp?containerId=US43171317

Chapter 2
Open culture:
Organize for innovation
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Business roles no longer fit into easy categories such as "tech" and "non-tech." Digital disruption impacts everyone, so everyone must be part of the transformative efforts to move the business forward. Responding to technological changes can mean rethinking how you work.

THE OPEN ORGANIZATION
At Red Hat, we believe the principles that power open source software communities are the same keys to organizational and cultural transformation—no matter the industry. When you embrace open principles at enterprise scale, you turn disruption into opportunity.

Open organizations are more agile, more accountable, more engaged, and more prepared to face what's ahead. Built on core principles like transparency, inclusivity, adaptability, collaboration, and community, open source practices provide the kind of innovation you'll need to succeed—no matter how quickly the world changes. Open organizations encourage creative problem solving, information sharing, rapid development, and focused alignment with the business' mission and purpose.

Cultural change can improve how your teams interact with one another, ensuring ongoing success throughout and beyond digital transformation. But it won't happen overnight. Fundamentally rethinking the values that power your organization requires adopting new organizational models and behaviors.

Transparent
Individuals and teams regularly disclose their plans, products, and processes to multiple stakeholders. Decision makers share data and resources.

Adaptive
Information flows freely, and individuals can make real-time decisions in response to changing conditions. Experimentation and learning are encouraged.

Community focused
A set of shared values and a clearly defined purpose help to break down barriers and empower team members to make meaningful contributions.

Inclusive
Established channels provide opportunities to give and receive feedback, decisions are made collectively and collaboratively, and leadership actively solicits diverse perspectives.

Collaborative
Cross-functional teams share work, initiate projects, and communicate effectively.

Open organizations cultivate people who are innovative, agile, engaged, and accountable—people prepared to help your business adapt to future waves of disruption.

THRIVE WITH A DEVOPS CULTURE

The DevOps culture recognizes that development, operations, platforms, lines of business, management, and support are all on the same team. It allows for cross-functional communication and automation practices to deliver increased business value and responsiveness through rapid, high-quality software and service delivery.

ORGANIZE FOR INNOVATION

The values that made your business so successful last year, last decade, or last century won't help you win today. The open approach to culture helps you cultivate an attitude of experimentation and encourages collaboration between departments that might not have been open to sharing previously. With small teams who are capable of, and empowered to, respond more directly to customer needs and ideas, your organization can become more naturally inclined to embrace innovation.

In his book, *Organize for Innovation*, Red Hat president and CEO Jim Whitehurst reflects on the technological, social, and economic forces impacting the ways we work. He explains how leaders in any industry can rethink data utilization, organizational approaches to failure, team structures, and goals—to become more innovative.

> 66 **The alignment between value and action will tell you if you're cultivating an organizational culture capable of weathering our current environment of constant disruption.**
>
> **JIM WHITEHURST,**
> PRESIDENT AND CEO, RED HAT

ORGANIZE FOR INNOVATION
Red Hat CEO, Jim Whitehurst, speaks at MWC18

WATCH THE KEYNOTE

READY TO ADOPT AN OPEN CULTURE
For practical tips on creating an open organization

READ THE E-BOOK

Chapter 3

Open process:
Rethink how you work

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What if the key to transformation was sitting across the room this entire time? Your infrastructure, application development, and creative groups need to collaborate, but they believe they have different goals, and they often don't think of themselves as part of the same team.

IT'S TIME TO UNITE I.T.

In the open business model, collaboration is key. Traditional development practices built on segmented and monolithic team structures lack the agility required to achieve transformation. Modern, open practices establish common goals and empower teams to move forward together.

With united IT that's focused on a singular purpose, your teams can:

- Rapidly prototype with design thinking and proven open source libraries.
- Use automation for continuous integration and deployment.
- Develop passionate, productive employees.

THE POWER OF RAPID FEEDBACK

In the past, a team might take a year or more to plan and deliver a solution. Only then could the business try it out. If the resulting product turned out to be unsuccessful in the marketplace, the team had to begin another plan-and-deliver cycle.
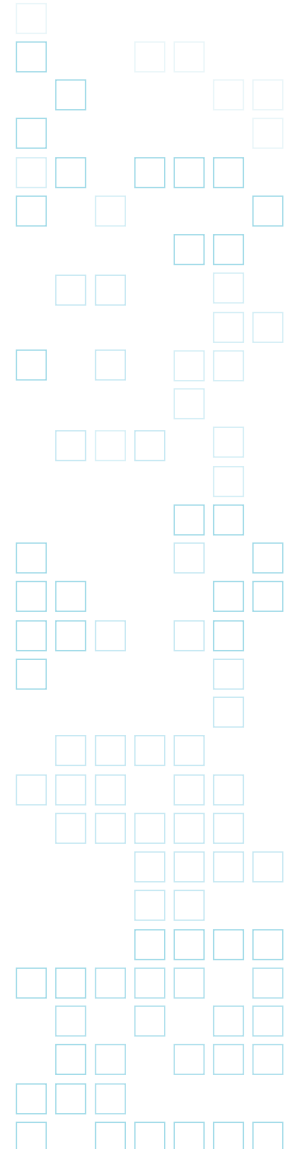
Open, collaborative teams do things differently. They build products iteratively, delivering business value in weeks instead of years. The business can see successes or failures immediately, and the team can respond and adapt without starting over.

At Red Hat, we develop and reinforce business agility with practices such as:

- Event storming to align software with business needs.
- Value slicing to rapidly prioritize work.
- Usability testing to gather real-world feedback.
- Retrospectives to foster communication within teams.

DISCOVER MORE PRACTICES
Learn more with the Open Practice Library, a community project organized by Red Hat.

YOU'RE NOT ALONE

At Red Hat, we have built our identity around open ideas and practices. The open business experts inside Red Hat Open Innovation Labs can help you elevate your processes to become more agile and innovative with the tools, technology, and ideals that define and support DevOps.

With Red Hat Open Innovation Labs, you can immerse your team in the best of open source tools, methods, and culture to transform your IT department and your entire business. You'll work side-by-side with experts in a residency-style engagement to build out a tailored transformation plan that takes into account your unique organization. With the right blend of tools, culture, and processes that work in your setting, you'll speed up your next application development project and make DevOps an ongoing reality.

SUCCESS STORY:

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A Red Hat Open Innovation Labs residency inspires a culture of innovation at Heritage Bank

OBJECTIVE
Heritage Bank wanted to win new customers and reinvigorate corporate culture by bringing digital innovation to their clients through new digital services, released to market faster.

STRATEGY
Heritage Bank invited in Red Hat for a six-week residency to deliver customized solutions for the bank, while simultaneously changing the culture within both the IT team and the bank.

RESULTS
The development of new services is more efficient and agile, and the corporate culture is better primed to promote innovation.

" We needed a significant change in direction, particularly the IT team. We believed bringing in highly skilled Red Hat guys was the best way of achieving that change.

WAYNE MARCHANT
CIO, HERITAGE BANK

Heritage Bank
People first.

FEATURED OFFER:
**Learn more about
Red Hat Innovation Labs**

READ THE E-BOOK

Talk to an expert about Red Hat Open Innovation Labs. Fill in the contact form to learn more about our half-day complimentary discovery sessions. **Let's transform together.**

Chapter 4
Open technology:
A catalyst for change

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THE FUTURE IS BUILT ON OPEN SOURCE

Open source software starts with curiosity and the desire to solve a shared problem. With the combined ideas and skills of a diverse talent pool, community-based, open source efforts result in quality solutions that evolve beyond simple profit motives. Built on passion and shared ideas, open source software shifts the power of technology from IT providers to the people using it.

THE EVOLUTION OF TRANSFORMATION

Originally, IT was constrained to the datacenter, where teams created monolith applications through long, slow waterfall processes. As businesses adopted n-tier and cloud technologies, application development became more agile, and open source libraries, software, and services became foundational for community-driven efforts.

THE OPEN TECHNOLOGY PRESENT—AND FUTURE

Today's technology is built on hybrid architectures, relying on continuous delivery of microservices to keep up with rapidly shifting customer demands. In this fast-paced environment, the ability to align IT with business strategies requires technology solutions that can keep pace.

Open source solutions are built on the best ideas that surface within a healthy developer-community ecosystem. Red Hat takes the best open concepts and provides stable, enterprise open solutions. For example, Red Hat® OpenShift® is the Red Hat answer to Kubernetes, providing a fully supported, as-a-service containerized development environment. With Red Hat OpenShift, you'll build, deploy, and manage your container-based applications consistently across cloud and on-premise infrastructure with professionally managed, supported, and compliant enterprise Kubernetes.

A CATALYST FOR CHANGE

Red Hat solutions help you bring IT and the business together with technology that connect teams through automation, hybrid cloud infrastructure, containers, application development tools, and more. With open technology, you can do more with the solutions you have, while transforming your business to support new initiatives that can set it apart.

RED HAT HAS HELPED BUSINESSES LIKE YOURS:

Optimize existing IT by maximizing the potential of owned assets while adopting open technology, culture, and processes to enhance both present-day utilization and future growth.
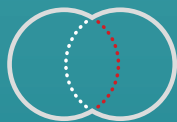
Achieve hybrid cloud agility with scale-as-you-grow architectures that allow for rapid delivery of new capabilities beyond the limitations of on-premise hardware and software.
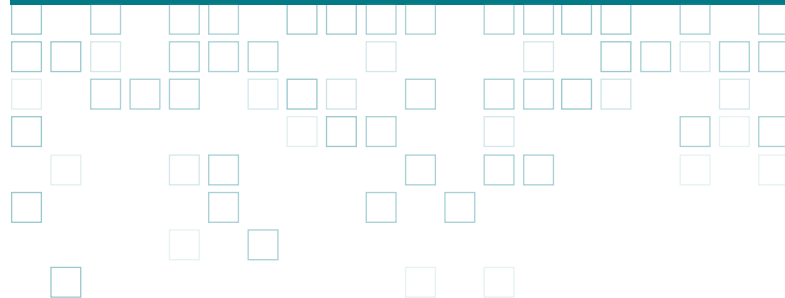
Automate processes to reduce manual work and free up IT staff so they can focus on new business objectives.

Develop a cloud-native approach to iteratively deliver products that matter to your business and your customers.

Integrate with ease using proven tools and techniques to quickly onboard new technology that provides enhanced capabilities and services for your customers.

SUCCESS STORY:

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Optimize existing IT

Over the years, you have undoubtedly invested heavily in infrastructure, applications, processes, and policies. While the pressure is heavy to adopt new technologies, it's equally important to balance your existing investments and assets with these new technologies and approaches. Standardizing and optimizing frees up resources for innovation and provides the flexibility to allocate workloads as needed. With optimized IT, you'll be able to bring innovation and insights to the business while also supporting and modernizing systems that help run and protect the business today.

INTERMOUNTAIN HEALTHCARE SUPPORTS THEIR MISSION WITH AGILE SOLUTIONS

The extensive, proprietary IT environment at Intermountain Healthcare resulted in complex change processes and long provisioning cycles that hindered development work. They wanted to find an agile, flexible solution that would simplify delivery and cut costs. Using Red Hat CloudForms® and Red Hat Ansible® Automation, Intermountain Healthcare reduced IT deployment time from weeks to hours and reduced virtual machine provisioning from three days to just 20 minutes.

READ THE SUCCESS STORY

SUCCESS STORY:
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Achieve hybrid cloud agility

Hybrid cloud infrastructure helps you meet the demands of rapid growth with access to an integrated suite of open source software that combines a container-based application development platform and massively scalable cloud infrastructure with a unified management framework that allows workloads to be deployed across any cloud environment.

CATHAY PACIFIC TAKES CUSTOMER EXPERIENCES TO NEW HEIGHTS

As a global airline offering passenger and cargo services to 200 destinations in 52 countries and territories, digital capabilities are critical to Cathay Pacific's business strategy for growth. In a push to create a responsive and adaptable customer experience while still maintaining its business, the company chose to migrate from legacy solutions to a hybrid cloud architecture. They used Red Hat OpenStack® Platform and Red Hat OpenShift Container Platform to increase application development throughput by a factor of 10, and the solution allows them to scale computing resources up and down as demand requires.

WATCH THE KEYNOTE   **READ THE CLOUD STRATEGY EBOOK**

SUCCESS STORY:

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Automate process

To remain competitive, organizations must deliver services faster and more efficiently. This shift in delivery means rapid changes in infrastructure, adoption of cloud technologies, enhanced development environments, and new processes that anticipate customer needs and future disruption. An automated IT management solution frees up your operations team so that they can keep pace with the demands of your lines of business, development teams, and customers.

THE BRITISH ARMY SPEEDS SERVICE DELIVERY AND IMPROVES USER EXPERIENCE

The British Army used open automation technologies to cut change delivery time by 75 percent, reduce upgrade times by 90 percent, and accelerate deployment of critical patches from three days to three hours.

READ THE SUCCESS STORY

FEATURED OFFER:
E-book: The automated enterprise

READ THE E-BOOK

Want to learn more about how to make automation an essential strategic component of your modernization and digital transformation? Download our guide to find out how easy it is to get started.

SUCCESS STORY:

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Develop with a cloud-native approach

Cloud-native applications use innovative technologies like containers and microservices to streamline maintenance and allow portability across complex hybrid cloud environments.

BBVA BUILDS A FULLY AUTOMATED CLOUD PLATFORM TO BETTER SUPPORT CUSTOMERS

After creating a top-ranking mobile banking app, the global financial group BBVA realized they needed to upgrade back-end systems to meet increasing customer demands. BBVA used Red Hat enterprise open source solutions to build a single, global cloud platform that is fully automated, self-service, and data-centric. The solution allows BBVA to deploy functionality to an entire country in just four hours.

READ THE SUCCESS STORY

FEATURED OFFER:
E-book: Six stages of digital transformation

READ THE E-BOOK

Learn how to take your IT from a cumbersome cost center to a strategic business partner in this e-book from Burr Sutter, Red Hat director of developer experience.

SUCCESS STORY:

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Integrate with ease

Transformation doesn't have to mean full replacement. By integrating new technologies with existing solutions, you can simplify the connection of different and often distributed software applications, services, APIs, data, or devices to maximize reuse. Integration projects often include software for connecting systems, a messaging layer, and an API management platform.

ARGENTINA'S MIGRATION DEPARTMENT UNIFIES NATIONAL SECURITY DATA WITH RED HAT

Working with Red Hat, Argentina's migration department created a private cloud migration analysis platform based on enterprise open source software to more effectively analyze potential threats and coordinate with national and international security organizations. They can now produce reports 50 to 65 percent faster.

READ THE SUCCESS STORY

> **" As opposed to providing a solution in 18 months, we can start giving value back to the business within weeks or months.**
>
> **CARLA MAIER**
> SENIOR MANAGER, CLOUD PLATFORMS AND TECHNOLOGY, UPS

UPS streamlines package tracking and delivery with Red Hat

READ THE SUCCESS STORY

Chapter 5

Transform together

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Open source is built on the idea that we can accomplish more together. When cross-functional teams share ideas freely, innovation accelerates, and teams deliver more, faster, and with less risk. With the same open principles applied to all aspects of your business, everything—and everyone—works together. You eliminate time- and talent-wasting activities, and you can anticipate and react ahead of each new wave of technology disruption.

OPEN IS IN OUR DNA

Red Hat has been working in open source for more than 25 years. We know that open source tools function best when combined with an open culture and processes. When you engage with Red Hat, you're partnering with people who understand open technologies, principles, and practices. Red Hat helps you deliver agile and flexible services, protect your business assets, and prepare for future change—by uniting teams and open methodologies—so you can move the business forward faster.

Request a discovery session with Red Hat, and we'll show you how you can start your transformation to an open business model.

REQUEST A SESSION