Accelerate financial services innovation

Achieve digital success with hybrid cloud technologies

See what's inside

Change is a constant for financial services organizations

Address customer demand for digital experiences

The digital era has significantly changed the way financial firms interact with customers. To meet escalating expectations, financial organizations must offer exceptional customer experiences that incorporate capabilities like mobile and internet access, automated payments, faster insurance claim processing, and customized product and pricing models.

This digital disruption presents business growth opportunities for organizations that can adapt rapidly. Financial firms are responding to this disruption in several ways: 47% plan to improve their customer experience, 33% plan to launch new products or services, and 29% expect to expand into new markets or regions.[1]

Digital success requires modern technologies

Hybrid cloud and container technologies are essential for success in the digital era. Accordingly, 43% of financial firms say they currently use a hybrid cloud, and 46% more are planning to implement one within two years.[1] By 2023, nearly 9 out 10 financial firms will be using a hybrid cloud model.[1]

Even so, the cloud and container platforms you choose can greatly impact the effectiveness of your IT and business operations. The right combination of enterprise open source technologies can help you overcome these challenges and become a successful disruptor in your industry segment.

Advance your business with Red Hat OpenShift

Red Hat® OpenShift® is an enterprise-ready Kubernetes container platform that provides a flexible, reliable, and security-focused foundation—with full-stack automated operations—for your hybrid cloud or multicloud environment. It is optimized to improve developer productivity and promote innovation throughout your organization. Red Hat OpenShift also gives you access to a large ecosystem of certified, validated solutions that provide additional security, operations, and management capabilities.

Deploy a platform for innovation without limitation

Bring your big ideas to life with a hybrid cloud platform open to any application, team, or infrastructure. Red Hat OpenShift opens possibilities for your firm. It is powerful, so you can build anything, and flexible, so it works anywhere.

- **Proven**
  Evolve with a trusted enterprise leader. Red Hat OpenShift is a proven platform that is trusted across industries by more than 2,000 enterprise innovators around the world, including **Deutsche Bank**, **AvivaSA**, **Paychex**, and **Royal Bank of Canada**.

- **Ready**
  Start now and scale for the future. Red Hat OpenShift works across technologies and applications to deliver speed and consistency at any scale across any infrastructure—on-site and in the cloud.

- **Empowering**
  Develop fast with freedom. Red Hat OpenShift gives developers the tools, frameworks, and languages they need to build applications more quickly and efficiently.

Red Hat OpenShift provides benefits across your organization.

- **Application developers** can code rapidly using familiar tools and deliver applications without meeting roadblocks.

- **IT operators** can automate processes, reduce complexity, and operate more securely.

- **Business leaders** can deploy a platform to power their business today and create a cloud strategy for the future.

Red Hat OpenShift also delivers specific advantages for many segments within the financial services industry. This e-book discusses the benefits of Red Hat OpenShift for the banking, insurance, payments, and capital markets and wealth management industries, as well as actual customer outcomes for each.

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1 Frost and Sullivan. *"Why Financial Services Firms Need an Open Hybrid Cloud to Succeed in the Digital Era,"* Oct. 2020.
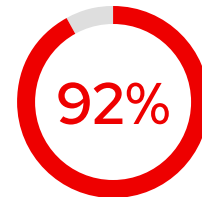
Banking

Banks play a key role in the global economy and face several challenges as the financial services industry becomes more digital. Customers expect new and enhanced services across multiple channels, but traditional development and integration processes are not responsive enough to meet this demand. Regulatory requirements continue to evolve, making compliance an ongoing and time-consuming effort. And an increasing number of competitors makes it more difficult to differentiate services, retain current customers, and gain new clients.

Banks must modernize their infrastructure and applications to operate more efficiently and innovate more effectively. Modernization efforts should address service time to market as well as the scalability and resiliency of infrastructure and processes.

92%

of banks are accelerating or planning to accelerate digital transformation of their business services within 6-12 months.[2]

Modernize with Red Hat OpenShift

Red Hat OpenShift can help you modernize your banking systems and processes to better compete in a digital world.

Boost service resilience

- ▶ Consistently deploy applications environments to increase resiliency and redundancy while optimizing costs and developer effort.

- ▶ Improve software version and update control to ensure reliable application deployment and operation.

Increase operational efficiency

- ▶ Containerize and run more applications on each physical server to reduce overall costs.

- ▶ Manage IT resources across your hybrid cloud and multicloud environment in the same manner with a consistent foundation.

Speed application development and deployment

- ▶ Use built-in automation and continuous integration/continuous deployment (CI/CD) capabilities to speed application life cycles and new feature development.

- ▶ Accelerate development with microservices and application programming interfaces (APIs) that let you connect and reuse code more easily.

Create engaging digital services

- ▶ Readily adopt emerging technologies like artificial intelligence (AI) and machine learning (ML) in production and at scale to personalize services and better understand risks.

- ▶ Create portable, user-friendly applications that provide on-demand services to customers.

Red Hat OpenShift can help you:

Innovate faster with hybrid cloud.

Improve customer engagement.

Participate in the API economy.

2 Deloitte. "**2021 banking and capital markets outlook: Strengthening resilience, accelerating transformation,**" 3 Dec. 2020.

Banking

MACQUARIE BANK

To meet evolving customer expectations in a competitive market, **Macquarie's Banking and Financial Services Group (BFS)** needed to transform the digital banking experience for its retail customers in Australia. Macquarie moved to a cloud-based solution using Red Hat OpenShift.

Reduced application development time from weeks to 10 minutes

Improved customer engagement with an early access program

Improved developer productivity by 50%

BBVA

BBVA needed to update its technology to better support its digital transformation goals and improve its customer experience. The company used Red Hat OpenShift to build a unified, global, cloud-native platform that is fully automated, self-service, and data-centric.

"Our Red Hat technology will help facilitate innovation at BBVA and accelerate the transformation of processes to be more digital, more automatic, more convenient for customers, and definitely more efficient."

Raquel Martín
Global Head of Business Process Architecture and Artificial Intelligence Technology, BBVA

ANZ

ANZ Bank needed to streamline their application development and deployment processes to meet rapid growth in their customer services platform. The bank deployed Red Hat OpenShift across multiple channels within their organization to build an automated continuous delivery (CD) pipeline.

Accelerated deployment times by 98%, with no downtime

Improved productivity to save 6,000 work hours per year

Reduced total cost of ownership

Read the success story

**Read the success story**

Watch the video

Insurance

Improve speed, agility, and customer experience

Insurers must modernize and integrate their systems to increase flexibility, save costs, and address their policyholders' growing digital needs. In fact, 62% of decision makers at insurance companies believe their core system modernization initiatives are the most critical component of their digital business strategies.[3] Additionally, 79% say the performance of their core systems differentiates their firms in the broad insurance marketplace.[3]

A modernized core can help you deliver innovative online services like digital claims reporting for first notice of loss (FNOL), virtual inspections, and AI-based damage assessment. With modernized applications, you can also boost productivity, speed development, and improve cost efficiency while enhancing your customer experience. A modern core architecture based on containers, APIs, and cloud-native technologies also lets you connect and integrate with third-party services and products to collaborate within the larger insurance and FinTech community.

Top technology challenges when modernizing insurance core systems[3]

46% Data conversion

57% Cloud migration

62% System integration

69% Data migration
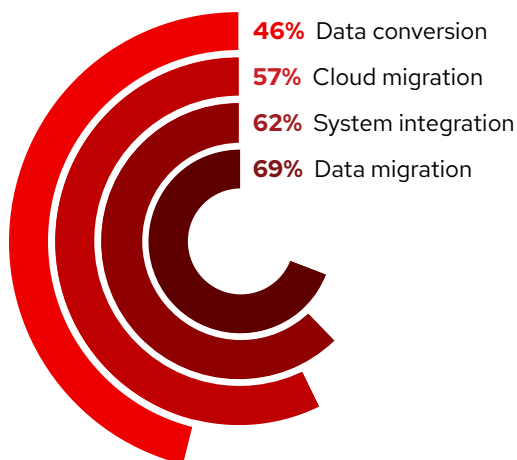
Modernize more easily with Red Hat OpenShift

Red Hat OpenShift can help you modernize more simply and efficiently. It provides an integrated application platform with advanced DevOps and cloud-native tools, cross-infrastructure portability and scalability, and the ability to run both existing and new cloud-native insurance applications.

Development tools and automation capabilities allow developers to design, deploy, and integrate value-adding cloud-native insurance applications — using their preferred tools and current skills — across hybrid cloud infrastructure. Application portability across infrastructure simplifies cloud migration and allows you to place applications according to regulatory, corporate, and data privacy requirements.

Using Red Hat OpenShift and other Red Hat products, you can deploy the services you need now, integrate with existing core and partner systems, and expand as needs change. Red Hat OpenShift Container Storage allows you to more easily manage active and legacy data for use with containerized applications. Red Hat Ansible® Automation Platform speeds processes and development pipelines. You can also customize your installation with access to a large certified technology partner ecosystem and open source interoperability.

Red Hat OpenShift can help you:

▶ Speed claims processing.

▶ Enhance fraud detection and prevention.

▶ Simplify policy administration.

▶ Improve underwriting systems.

▶ Gain insight to make more informed risk decisions.

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3 Forrester, commissioned by Red Hat. "Core System Modernization: Time For A New Roadmap," May 2020.

Insurance

EMPLOYERS

EMPLOYERS needed to overhaul its technology systems to compete with emerging fintech startups and support customers in new markets. The company worked with Red Hat Consulting to establish systems of record based on the legacy technology and surround them with modern, more flexible and easier to update applications, delivered on Red Hat OpenShift.

Reduced time to deliver new customer quotes from 20 minutes to 2 minutes

Grew policyholder base by 14%

Improved customer, broker, and stakeholder experience

Read the success story

helvetia

Swiss insurance company **Helvetia** faced availability and performance challenges while running its customer-facing applications on legacy, on-site hardware. To gain agility, the company expanded its Red Hat application environment to a new public cloud solution based on Red Hat OpenShift running on Amazon Web Services (AWS).

Increased service uptime to over 99.9%

Reduced time to market for new applications

Improved issue resolution with support from Red Hat

Read the success story

"Red Hat helped us modernize our technologies, which is not easy in a highly regulated industry, and in doing so, helped us offer our customers more innovative and competitive solutions."

Jeff Shaw
Executive Vice President and Chief Information Officer, EMPLOYERS

Payments

Adapt your payments infrastructure for success

Payment processing generates significant revenue for consumer and corporate banks, payment networks, and payment providers. Even so, the payments industry segment is changing rapidly and organizations must modernize their payments infrastructure and processes to keep up with market trends.

▸ **Declining margins:** While payment volumes are increasing, dated technologies and processes are complex and costly to maintain.

▸ **Digital disruption:** Digital technologies — and increasing demand for digital services — help competitors and new market entrants disrupt the traditional payment value chain.

▸ **New standards:** New standards like International Organization for Standardization (ISO) 20022 and Payment Services Directive (PSD) 2 change the way financial organizations exchange data, presenting both challenges and opportunities.

▸ **Real-time processing:** Real-time payment clearing and settlement are becoming the new norm globally.

▸ **Growing threats:** Financial crime and compliance are top issues for payments organizations and can result in significant sanctions and fees.

Red Hat OpenShift can help you:

▸ Create new real-time payment networks.

▸ Detect financial crime more easily.

▸ Speed delivery of new payment services.

▸ Reduce operational costs and improve resilience.

Modernize your payments with Red Hat OpenShift

Red Hat OpenShift provides the efficiency, adaptability, and connectivity you need to modernize your payments infrastructure, processes, and services.

Modern infrastructure

Red Hat OpenShift makes it simpler to manage your payment service across any cloud using operational tools that improve productivity and make it easier to adapt to change.

Real-time payment support

Combined with **Red Hat Integration**, Red Hat OpenShift provides a cohesive, efficient cloud platform for event streaming with support for the most demanding business services.

Connectivity and integration

Red Hat OpenShift works seamlessly with Red Hat Integration to provide built-in application services that simplify the adoption of event-driven microservices using open APIs.

Broad partner ecosystem

Red Hat OpenShift is certified with a large ecosystem of third-party products and services, many of which can be deployed directly through **Red Hat Marketplace**.

Payments

LOTTE CARD

Korean payment card company **Lotte Card** sought to modernize its credit card and payment services to better respond to rapid changes in market and customer demand by releasing new features and services faster. Using a flexible cloud platform from Red Hat, Lotte Card can create and deliver the digital services its card holders demand.

SIa

Financial services company **SIA** provides Italy's national payment platform. When its platform faced growing transaction volume and short-term peaks in demand, SIA decided to build a new solution based on Red Hat OpenShift Container Platform and open source technologies.

Increased scaling to support more than 10x higher processing volumes

Scaled payment processing growth from 12 million to 60 million transactions

Reduced time needed to provision infrastructure for new services by 53%

Increased operational efficiency with simplified management and DevOps

Expects to achieve 47% savings for 5-year total cost of ownership

Eliminated planned downtime for higher availability

Read the success story

Read the success story

"With OpenShift Container Platform, we have the right technology to deliver our payment platform and to continue improving our services. No other solution provider in Italy can offer the same capabilities that we can."

Stefano Menotti
Head of Digital & Data Driven Solution, SIA

Capital markets and wealth management

Like other areas in financial services, capital markets and wealth management organizations face rapid change in customer preferences, regulatory requirements, and competition. Capital markets firms must become more agile, increase efficiency, and speed development of new services to address current market trends.

▶ **Fee compression:** Zero-commission and passive investing reduce traditional revenue streams.

▶ **Digital customer experiences:** Customers expect their financial interactions to deliver the same digital experiences they receive from popular technology companies.

▶ **New competition:** New technologies help industry incumbents, FinTech companies, and new market entrants innovate faster, increasing competition.

▶ **Regulatory change:** The regulatory landscape evolves rapidly as regulators react to perceived risks associated with capital, privacy, technology, and social changes.

IT modernization can help you transform to become more competitive in these market conditions. Even so, implementing modern infrastructure and applications can be challenging. Complex legacy processes impede visibility, cause delays, intensify risks, and increase costs. Slow delivery of tools and environments reduces developer productivity and delays the launch of new services and algorithms. And managing existing and new applications across on-site and cloud environments can be complicated.

Red Hat OpenShift can help you:

▶ Provide new services to customers.

▶ Manage your risks more effectively.

▶ Protect your business reputation.

▶ Migrate applications to the cloud.

▶ Increase operational efficiency.

Respond to change faster with Red Hat OpenShift

Red Hat OpenShift provides a coordinated container solution that helps you respond quickly and effectively to market, regulatory, and customer changes.

Rapid development

▶ Build automated development and test pipelines to create applications and update trading algorithms.

▶ Collaborate within the financial services ecosystem using consistent APIs and data exchange.

Emerging technologies

▶ Collect and analyze data at the edge to provide faster insight.

▶ Build AI and ML into your applications to deliver services to low-touch customers.

Security-focused design

▶ Isolate and protect workloads and data using containers and access and placement controls.

▶ Increase application security using control checks within your development and deployment pipelines.

High performance

▶ Optimize workload performance with graphics processing unit (GPU) support and automatic placement across your infrastructure

▶ Dynamically scale compute-intensive applications like risk analysis using cloud resources.

Capital markets and wealth management

SIX

Swiss financial services company **SIX Group** wanted to modernize, consolidate, and standardize its IT infrastructure to deliver innovation to market much quicker and generate more value for customers and the business. SIX deployed **Red Hat Enterprise Linux®** as the primary operating system and adopted a DevOps strategy supported by Red Hat OpenShift.

Achieved cross-functional collaboration through DevOps

Increased number of deployments and decreased time to market

Sped delivery of developer resources from 2-3 weeks to 2-3 days

Read the press release

Royal Bank of Canada

Royal Bank of Canada (RBC) and its AI research institute Borealis AI wanted to build an AI infrastructure to speed time to market for intelligent applications and deliver an enhanced experience for clients. The company deployed Red Hat OpenShift with NVIDIA's DGX AI computing systems to create a new private cloud infrastructure.

Improved trading execution and insights

Reduced client calls

Accelerated delivery of new applications

Read the press release

"The Red Hat solutions we have deployed are key to modernising our infrastructure and to implementing the DevOps strategy that will determine our digital future."

David Brupbacher
Head Global IT Operations, SIX Group

Ready to innovate?

All financial services organizations must adapt to digital disruption. Red Hat OpenShift delivers the flexibility, resilience, and efficiency you need for success in the digital era.

Discover Red Hat solutions for financial services:
redhat.com/en/solutions/financial-services

Learn more about Red Hat OpenShift:
openshift.com

Read about the differences between
Red Hat OpenShift and Kubenetes:
openshift.com/k8sebook

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