OPEN UP NEW HORIZONS

Why hybrid cloud and open source are key to enterprise transformation
CHANGE IS INEVITABLE. ENTERPRISE TRANSFORMATION IS ESSENTIAL.

As we move from the digital to the post-digital era, where “being digital” is simply the baseline standard every business is expected to meet, organizations large and small face a growing challenge in finding competitive differentiation.

The technology and business landscape is changing faster than ever. The pressure to innovate keeps rising, while the need to maintain operational agility and efficiency is also intensifying. Inertia is not an option. The simple fact is that every enterprise must look to transform its organization for this new era. Digital technology must be integrated deeply into all areas of the business, changing the way operations are run, the way people work and the way value is delivered to customers.

However, organizations are challenged by old ways of developing, delivering and maintaining applications and IT infrastructure services that are simply unable to keep pace with the demands of a post-digital world. Legacy systems jostle with modern, digital applications in a complex IT landscape riddled with multiple environments (virtual, private, public)—each with unique features and moving at different speeds—making the transformation to an agile, modern enterprise a challenging proposition for most organizations.

The good news? Organizations now have access to a wealth of options to accelerate change. And there are two ingredients that lie at the heart of virtually every successful transformation: cloud and open source.
LIFT PERFORMANCE WITH CLOUD...

Cloud’s centrality to enterprise transformation is no surprise. Organizations now routinely turn to cloud platforms and solutions to increase agility, support creativity, drive innovation and streamline operations, while reducing cost. According to Accenture’s Future Systems research, 95% of Leaders have adopted sophisticated cloud services compared to 30% of Laggards.¹

As organizations develop their application and data strategies, research shows they are increasingly settling on a hybrid cloud strategy (leveraging both public and private cloud solutions) with a multi-cloud provider approach (using multiple public cloud providers) to optimize application and data workload placement. This strategy balances the public cloud benefits of innovation, agility and scale with the private benefits of stronger regulatory compliance, lower latency and cost effectiveness, effectively offering the “best of both worlds”.

OPEN UP IT TO THE FUTURE...

Open source is becoming more and more important to enterprise IT. Accenture’s Future Systems research shows 98% of Leaders have adopted open source technology as compared to only 46% of Laggards.²

This reflects the fact that qualities synonymous with open source—innovation, agility and open culture, among others—are all essential drivers of enterprise transformation.

Open source empowers organizations and communities to collaborate across different environments to meet their needs and business and industry standards, while promoting open innovation and the advancement of technologies.

There’s no better example of this trend than IBM’s acquisition of Red Hat, clearly signaling the market’s validation of community-driven innovation and the value of open source.

ENTERPRISE TRANSFORMATION: Always a work in progress

Change is hard. Enterprise transformations are complex undertakings. Leaders recognize the imperative to shift to the New—new ideas, new technologies and new ways of working. But in a fast-moving technology landscape, many are still figuring out how to make it a reality.

The result is a tendency to overemphasize the current state at the expense of the future. For example, research from Flexera shows the number one enterprise spending priority in 2019 has been optimizing the existing IT estate.³

There are many reasons why enterprise transformations might be stalling. Here are some of the most common:

1. **Overwhelming complexity**

   Modern enterprise IT topologies are complex and have many fast-moving parts. Moreover, legacy enterprise technologies don’t always sit well with today’s pace of change. It’s also easy to get lost amid the sheer number of technology options in the market. That makes it vital to choose technology and service partners who can guide the enterprise through the fog of uncertainty, making smart choices that drive change without making the topology unmanageable.

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**Seeing the bigger picture**

While most organizations understand the value that new technology brings, many lack a coherent vision and strategy for the whole enterprise. They get caught up in day-to-day operations, or in siloed initiatives, without ever developing a structured enterprise-wide model and strategy for innovation. Without guidance from technology and service partners who share their vision, the enterprise risks falling into organizational fragmentation and inertia.

**Managing risk**

As complexity rises, IT gets harder to manage. That’s especially true with the constant security threats that a connected enterprise must face. Organizations are still struggling to get a truly real-time overview of what’s happening in their IT ecosystems. The risk here isn’t just a security one—it’s also harder to make the right strategic business decisions. So, improving visibility (through real-time analytics, AI and similar technologies) while enhancing security across the IT estate is essential.

**Culture and skills**

A cultural shift is not just a hoped-for byproduct of digital transformation; it’s a central driver. But organizations must overcome people’s natural fear of the new. Organizational siloes must be broken down and cross-function collaboration improved. That’s not easy. It’s about knowing how to articulate the value of disruptive technology and upskilling the workforce in a carefully considered and targeted way, embracing an open culture as the operating system of the entire organization.
CLEARING A PATH TO THE NEW

The best way to overcome the complexity and the blockers to a transformation? It’s all about balance. Organizations must find the right compromise between optimizing legacy systems and carving out space for innovation, while simultaneously addressing the human aspects of a transformation.

Transformation is particularly difficult because of the enormous challenge of innovating with legacy systems. The conventional IT stack—spanning software applications, data, hardware, telecommunications, facilities and data centers—wasn’t built for today’s cloud-oriented world of mobile computing, artificial intelligence, the Internet of Things (IoT), and analytics.⁴

Successful transformation requires making the right investments with the right technology and service partners to bring greater efficiency, agility and speed to the organization, while also making a careful shift to the new pools of value that will fuel the business in the future. It means building trust with the workforce, creating a common purpose across the business, and upskilling employees, all the while creating new processes and platforms to transform IT operations.

In this, there are four crucial elements to consider:

To position the business to take advantage of new applications and innovative services while also driving up operational efficiency, it’s essential to standardize. This includes services and processes, as well as the underlying infrastructure. It’s not a new requirement, but one that many still struggle to achieve in practice. The goal is not only to align around a standard set of IT services from an enterprise-wide catalog, but also to adopt open standards-based technology solutions as a common fabric that can run anywhere (increasing flexibility and portability) and open up new possibilities through automation. Look for technology and service partners with the skills and experience that can help the organization successfully navigate to the New and deliver real value to the business faster.

Successful cloud transformations are application driven. To effectively capture the value of cloud and deliver more value to the business, organizations need to develop application and data modernization strategies first. A vision needs to go beyond migration, creating and implementing a multi-discipline, fit-for-purpose approach for modernizing the organization’s application landscape to become resilient, intelligent, agile and with the ability to engage with customers. This approach usually starts with an assessment of the application estate, including analysis of the data, as described in *Hybrid Cloud: Enabling the Rotation to the New*. This analysis then informs the entire cloud strategy, ensuring technology solutions are the right fit and workloads are balanced appropriately across a hybrid cloud environment to meet strategic business objectives.

Not all applications are alike. A coherent cloud strategy and agile operating model allows the enterprise to run at different speeds, each appropriate for the application and the business need in question. That means supporting rapid and agile deployment of cloud-native applications while allowing legacy technology to evolve at its own pace (and exposing its functionality through microservices)—simultaneously ensuring security across the whole IT estate. To effectively manage this increasingly complex IT landscape, organizations need to rethink their operating model to provide greater interaction between applications, data, cloud, infrastructure and security, as well as power from analytics, automation and AI.
4 Transform your culture.

In today’s fast changing technology landscape, transformation must go beyond just technology and address the human connection. The introduction of new technologies, application patterns and operating models requires new skills to avoid a workforce immersed in yesterday’s technologies. This means upskilling developers, operators as well as business owners by teaching them next generation skills to enable everyone to participate in the digital transformation—building inclusive and diverse teams to enable better decision making with stronger outcomes and investing in experiential learning that leverages innovative technologies such as AI, analytics and virtual reality.

It bears repeating: transformation is hard. However, with a coherent vision—plus the right building blocks, the right partners and the right technologies—it is entirely achievable.
SHIFT THE IT LANDSCAPE
TO BUILD A MODERN,
AGILE DIGITAL ENTERPRISE

With Accenture’s cloud-native approach and transformation experience and Red Hat’s open hybrid cloud strategy for enterprise IT architecture, the two technology leaders are providing crucial building blocks for modern, agile enterprises.

THE ACCENTURE PERSPECTIVE

Cloud has enabled many organizations to successfully use emerging technologies, adopt a uniform approach to data, security and governance, and explore unconventional partnerships—giving businesses almost infinite opportunities to improve how they operate.

But unlocking the next level of benefits from the cloud requires a “cloud-native” approach—designing, delivering and managing applications that truly exploit the unique characteristics “native” to the cloud. A clutch of technologies such as microservices, containers and serverless, along with Agile and DevOps, are helping organizations cross the cloud-native divide and reap rich dividends. Accenture’s vision for enterprise transformation is rooted in6:

• **Microservices architectures**: Break down big, monolithic applications into smaller
  smaller components with microservices, each of which can then be developed, scaled and maintained independently by different development teams.

  • **Agile development**: Agile makes development processes fast and easy. By splitting the development process into time windows and providing a continuous feedback loop, Agile enables rapid, more effective development—and the ability to innovate quickly.

  • **DevOps**: DevOps focuses on speed and how quickly a program can get from the design stage into production. It’s largely about automation—*i.e.*, eliminating the need for human involvement in the production process.

  • **Cloud**: Cloud is an extremely flexible delivery platform. It can support many different architectural and deployment styles, from big, monolithic systems, to large, virtual-machine deployments, to nimble clusters of containers, to farms of serverless functions.

6. [The impact of a cloud-native modern approach](#)
Organizations need to embrace all of the elements that define a cloud-native modern approach: change the architectural style to microservices, modify development processes to Agile, adapt DevOps processes, and select the right hyperscale cloud platform. Missing any one of these means missing out on the combined effects of the cloud-native era.

A major travel company was having a hard time meeting customer expectations as its reservation system was tightly coupled with legacy mainframe technology. Leveraging Accenture’s cloud-native and digital decoupling approach along with Red Hat OpenShift, Accenture extracted key features of the legacy reservation system and delivered a state-of-the-art microservices-based global distributed reservation system—bringing the needed agility and speed-to-market to the company. The solution is running successfully, distributed across the company’s private and public cloud estate, with a scale-out in progress to other public cloud providers.

Another Accenture team streamlined the automation capabilities for a European Union agency, using Red Hat Ansible Automation Platform. Deployment times were drastically reduced, while significantly optimizing existing OS update processes and enhancing release deployment quality.

**THE RED HAT PERSPECTIVE**

Open source technology and hybrid cloud have emerged as essential components of digital transformation—whether organizations are looking for discrete implementations or end-to-end transformation, whether they are looking to shift or extend existing workloads to the cloud or build new workloads on the cloud.

A cloud transformation could easily span multiple years, involving a multitude of disparate technologies, environments and isolated data and organizational repositories. An approach based on common, open standards and cloud-agnostic solutions that create a common fabric to move across different environments helps mitigate risks from technology and vendor lock-in as business needs evolve.

Red Hat is renowned for its open source culture and development model, which means everything it does is community-led, ensuring a total focus on collaboration, transparency and trust. Thanks to its robust portfolio and partner ecosystem, Red Hat sets the standard for taking open source software into the enterprise, enabling a more robust and higher performing IT foundation for an organization’s business operations.

Red Hat’s open hybrid cloud strategy epitomizes its open and agile ethos: the strategy is based on an open culture designed to fast-track a transformation journey, offering support for the entire IT stack. It helps ensure the entire organization is aligned around a shared set of goals that
motivate, inspire and encourage trust while focusing on achieving success through cross-functional collaboration and development of next-generation skills.

Red Hat Enterprise Linux is the innovation engine, enabling interconnections between hybrid cloud infrastructure, cloud-native development, management and automation capabilities. It fuels all Red Hat’s technologies including OpenShift Container Platform, a vendor-agnostic container application platform that provides organizations flexibility to evolve their hybrid cloud strategy.

Red Hat OpenShift works across all environments, enabling identical experience irrespective of where the application resides. Red Hat Enterprise Linux also drives Ansible Automation Platform, an automation solution that brings consistency to all layers of the IT ecosystem by focusing on the standardization and automation of IT operations.

Red Hat solutions are open standard-based and certified on all major cloud providers, minimizing the risk of vendor lock-in.

TAKE A LEAD IN THE OPEN HYBRID FUTURE

With change an ever-present reality, the need to digitally transform the enterprise has never been greater. Open source technology and hybrid cloud are essential components of that transformation. That’s why Red Hat’s open hybrid cloud strategy and its solution portfolio, combined with Accenture’s market-leading expertise in successfully enabling end-to-end digital transformation, is so vital. It’s nothing less than the future of enterprise IT.
**About the Authors**

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**About Accenture**

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world’s largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With more than 505,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Its home page is [www.accenture.com](http://www.accenture.com).

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**About Red Hat**

Red Hat is the world’s leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.

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