

E-book

# The Application Modernization Playbook

A Guide for IT Directors

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technology





# Application Modernization Lies at the Heart of Building the Digital Enterprise

Building an IT infrastructure equipped for digital business involves many challenges, yet few components are as crucial as application modernization. Up-to-date applications are the backbone of a digital-ready IT environment, a requirement for reacting and adapting to the fast-changing conditions of today's business environment. Considering most workloads are now in the cloud — including SaaS-based enterprise solutions like Office 365 and Enterprise Resource Planning (ERP) — there is urgency to the task.

The journey to application modernization is easier said than done. It's no simple task to optimize performance for an array of internal and external

applications, particularly when there's a mixture of cloud and legacy workloads that connect and intersect. You must update processes before moving to the cloud, but you also need to support emerging technologies such as artificial intelligence (AI), blockchain, Internet of Things (IoT), robotics and 3D manufacturing. Addressing these tasks is vital. As the number of users increases, and the IT resources required to support a digital business expand, the fallout of not modernizing can affect performance across departments, partners and customers.

Continuous application modernization is at the center of success. An organization's ability to combine and connect legacy and SaaS enterprise applications, public and private clouds, mobile apps and internal processes used for connecting software and systems determines whether it soars or stumbles. Although there's no single route to successful application modernization, it begins with an application assessment. This guides the next steps: aligning applications to business outcomes and transforming processes. This comprehensive approach allows an enterprise to optimally integrate, migrate, deploy and manage its applications.

## The problem: Your applications don't add up

A common problem for organizations is that, over time, they procure, build, customize and deploy a collection of tools and solutions that address specific issues, but collectively introduce complexities and inefficiencies. In addition, application customizations designed to address the specific needs of the business are lost when the enterprise upgrades and/or moves to SaaS-based versions and rework its systems. It's a bit like continually adding new parts and components to a car. It eventually becomes so bloated and overloaded with features that the benefits of each cannot be fully realized. At some point, it makes sense to consider buying a new car with features fully integrated into the design.

If processes are breaking down and desired outcomes aren't being reached, there's a high probability that applications are not optimized to work with each other. In this situation, performance lags, costs spike and the amount of resources required to manage systems increases. Too often, businesses lack the tools to address the problems. Additionally, with enterprise data residing in disconnected silos, key groups lack insight to make well-informed decisions that can have a significant impact. For example, sales

teams may lack deep visibility into a customer, operations managers may lack insight into production and teams collaborating on new product development may not have the tools to execute at their best.

Decision-making becomes more difficult, objectives become muddled and innovation and progress are thwarted. The problem won't go away on its own. In fact, the process of slipping into a lagging state often isn't apparent to management or IT teams. To resolve the problem, it's vital to work with a partner who can help perform a detailed assessment so that you can identify a path to improved performance.

**Under these conditions, an enterprise cannot act and react at digital speed.**

## Eight Ways to Know Your Processes and Outcomes Need Application Modernization

Your enterprise may not be able to adapt to new and changing business models if it experiences any of these issues:



**Lack of agility.** Your enterprise cannot react quickly to changing business and market demands. You are more reactive than proactive and scramble to keep up with changes and competitors.



**Lack of flexibility.** You cannot make necessary changes to applications. As a result, your organization lacks needed functionality.



**Lack of scalability.** Changes, including new features or extending existing features in applications, are extraordinarily difficult to implement when new users or capacity are necessary.



**Diminished performance.** Applications do not perform to desired standards and metrics. For example, resources like CPUs, bandwidth and storage are continually taxed.



**Lack of data insight.** Because too many data silos exist, it's difficult to connect data and extract value from it through business intelligence (BI). This bogs down digital innovation.



**Heightened security risks.** Old and antiquated application frameworks are more prone to security vulnerabilities. They create gaps and vulnerabilities that don't exist within newer application frameworks where the security is built in from the ground up and integrated throughout.



**Inability to add new applications and services.** Your organization is stuck with applications that were cutting edge when they were deployed, but are now outdated in an era of instant data available anywhere and anytime. You may also struggle to adopt new technologies and a more modern architecture. This can impact compute speed, network performance and the ability to embrace new operating models.



**Higher costs.** Legacy applications and application frameworks often consume more staff time and resources than newer and more modern application platforms. Legacy platforms often create more redundancies and inefficiencies.





### **The solution:**

## Taking performance to a digital level

At some point, an organization must address application modernization. Issues associated with legacy applications and new applications not working together won't go away if each application's issues continue to be addressed in isolation. The move to a more streamlined and modern framework transforms the chaos into order. It can help an organization manage processes and workflows more efficiently, ensure that critical data is available when and where it's needed, promote business expansion and unleash innovation.

Not surprisingly, application modernization requires a comprehensive strategy, an execution roadmap, and specific technical knowledge to redesign infrastructure and connection points across applications and systems. Like other digital transformation initiatives, success spins in a tight orbit around people, processes and technology. If any of these three factors don't measure up, an initiative fails to deliver the desired results and return on investment (ROI).

## **There are three key factors to consider for a successful modernization journey:**

- 1.** Finding a highly qualified end-to-end partner. Not all providers and partners are created equal. It's crucial to connect with a partner that has the knowledge, resources and commitment to ensure your application modernization initiative achieves maximum performance results. Look for a partner that has experience updating and integrating legacy applications, is certified to help with SaaS and that has worked with other organizations like yours to achieve application modernization successfully.
- 2.** Adopting a multi-cloud environment that fully supports agility, flexibility and scalability. Success depends on an optimized IT framework. This involves everything from understanding cloud and network topology to compatible software applications, APIs and open source code resources. It also translates into needing to remap processes and workflows.
- 3.** Building a framework that embraces powerful emerging technologies. This framework should consider AI and machine learning, augmented reality (AR) and virtual reality (VR), the IoT, robotic process automation (RPA), image and speech recognition systems, and 3D manufacturing, to name a few.

# Essential Areas to Focus on for Application Modernization Success

There are seven key aspects that organizations embrace in all successful application modernization efforts:

**Focus on the customer.** When you identify key value points for your customers, it's easier to identify needed performance criteria and map out an application modernization initiative that delivers real-world gains.

**Understand your end goal.** An organization that starts by identifying desired business outcomes can establish application objectives that better match opportunities. This alignment is essential for application modernization — and digital success.

**Make it part of something bigger.** It's important to understand that application modernization is an ongoing process. It's about building a framework that continually and consistently connects to value.

**Address technical debt.** Facing enormous pressure to have applications and systems operating as soon as they are needed, it's not unusual for an organization to deploy

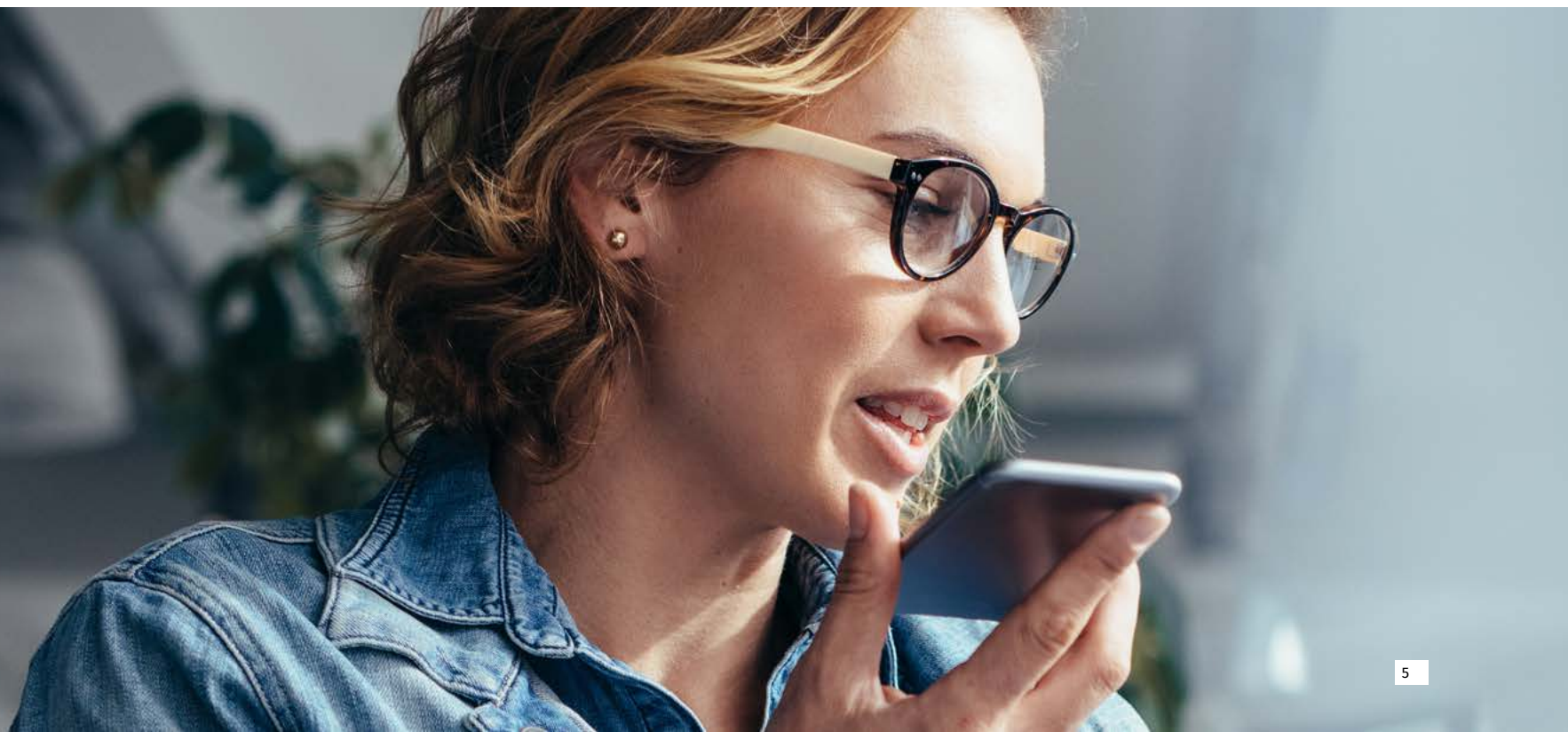
software and applications that aren't ideal. This is an opportunity for organizations to re-evaluate their critical applications and bring them up to standards.

**Enlist the right team.** People with the right knowledge and expertise are a critical part of the equation. Enlisting the right skill sets puts an organization on track to achieve success with applications that deliver as promised.

**Change your operating model.** An application modernization initiative requires a detailed assessment of current applications and how they fit into the IT environment. An organization that develops an

application transformation roadmap starts from a business value-driven approach.

**Embrace cloud-native.** A high level of ability, flexibility and scalability are needed in the digital enterprise. The appeal of native cloud applications is that they support speed and change. An organization can deploy, scale and update applications at digital speed — while introducing stronger security.





## Five Key Opportunities for Application Modernization

Although opportunities for application modernization span enterprise applications, the initial focus should be on five vital areas that are essential to business operations:

### 1. ERP systems and connecting applications

Your support needs grow with your business, and a modernized ERP environment can scale to meet them. This includes supply chain, operations and systems that connect to finance, legal and human resources. By modernizing your ERP and connecting all of your systems, you'll have increased staff resources for upcoming projects. With a more connected framework and a greater use of cloud to streamline connections, an organization can dig deeper into data, spot opportunities for cost and efficiency gains, and forge tighter and stronger bonds with partners and customers.

### 2. CRM

A common problem for organizations is managing the growing mountain of customer information. Too often, organizations wind up with siloed data repositories and data sources. This fractured and sometimes chaotic approach reduces visibility and diminishes customer intelligence. By tying all of these data sources together within an omnichannel framework, marketing, sales and support teams gain broader and deeper insights about their customers.

### 3. Digital experience

Cutting-edge digital experience platforms can deliver a powerful competitive advantage, but implementing and maintaining them is often difficult, expensive and time-consuming. Key challenges associated with managing and optimizing digital experience applications include the rapid delivery of new deployments to production and monitoring application

performance. Many organizations also struggle to integrate intelligent and actionable insights into the customer experience while boosting system performance and optimizing resource utilization.

### 4. Productivity and collaboration

There are many tools, including Microsoft's cloud-based productivity suite, that offer powerful capabilities to connect people across an organization. However, moving from legacy systems while ensuring the security of your applications often proves challenging, especially when those systems have been customized. By optimizing an Office 365 deployment with strategic planning, remediation, migration and configuration, you can reduce issues that will likely increase costs and lower productivity. An enterprise can maximize its investment by unleashing higher levels of individual productivity and team communication.

### 5. Managed data services

It's not unusual for companies to devote too many resources to keeping the lights on. Doing so bogs down IT and deprives teams of the time required to test, innovate and extract intelligence from their organization's data. It also impacts time-to-market and the ability to pipe transactional data into modern BI platforms for real-time insights. Outsourcing some of these tasks to a trusted managed service provider (MSP) will help ensure that an enterprise and its leaders remain nimble and have the ability to make data-driven decisions that grow the business.





## Five Overlooked Benefits of Application Modernization

While many organizations focus on the lower cost and improved ROI of a digital application environment, many realize additional benefits:

- 1. Digital readiness is built into the IT framework.** Organizations establish a framework that fully supports digital processes and requirements. They are no longer constrained by the limitations of older and less powerful applications, and they can quickly implement and integrate new technologies.
- 2. Agility becomes the new normal.** A cloud framework supports rapid and flexible change by moving the dial closer to digital optimization and performance. New and improved processes become more seamless. An enterprise can make changes quickly while gaining functionality.
- 3. Actionable data becomes a reality.** Organizations that embrace application modernization are better able to connect data and make it more actionable – in real time.
- 4. The full value of IT investments can be realized.** Technology can drive business outcomes with streamlined systems and processes, aggregated data, real-time analytics capabilities, mobile apps for an increasingly dispersed workforce, collaboration tools and more.
- 5. Digital speed emerges.** Application modernization delivers faster deployments, increased stability, lower costs, improved scalability and better manageability.

## The vision: What success looks like

An effective application modernization strategy builds a digital-ready environment that combines legacy systems with SaaS and other cloud platforms. The result is a more modern delivery model — one that revolves around higher levels of agility, flexibility and scalability that matches modern business and IT demands. This application environment delivers maximum results and value for an organization, its customers and partners. It's equipped to find new and better ways to interact with customers, lock into business objectives and execute purposefully to ensure that all processes, workflows and tasks within the organization are strategically synced and aligned. It allows the enterprise to embrace innovation and transformation — and even emerge as a disruptor.

The Rackspace Application Services (RAS) team helps you create a digital-ready application environment that allows the incorporation of leading technologies. We use a comprehensive approach that aligns to business outcomes, examines the current IT environment, and assesses the gaps. We then develop and present to you a customized,

process-led plan. As an established 24x7x365 managed services company, Rackspace Technology leverages industry-leading resources and processes to handle demanding projects, so complex tasks will unfold smoothly and efficiently. With modernized applications from Rackspace Technology, your organization will be equipped to eliminate pain points, optimize application performance and tap into the enormous opportunities today's business environment presents. Application modernization isn't just about ROI — it's about architecting for your future.

**Learn more about digital-ready application environments at [www.rackspace.com/application-management](http://www.rackspace.com/application-management)**

## About Rackspace Technology

Rackspace Technology is the multicloud solutions expert. We combine our expertise with the world's leading technologies — across applications, data and security — to deliver end-to-end solutions. We have a proven record of advising customers based on their business challenges, designing solutions that scale, building and managing those solutions, and optimizing returns into the future.

As a global, multicloud technology services pioneer, we deliver innovative capabilities of the cloud to help customers build new revenue streams, increase efficiency and create incredible experiences. Named a best place to work, year after year according to Fortune, Forbes, and Glassdoor, we attract and develop world-class talent to deliver the best expertise to our customers. Everything we do is wrapped in our obsession with our customers' success — our Fanatical Experience™ — so they can work faster, smarter and stay ahead of what's next.

Learn more at [www.rackspace.com](http://www.rackspace.com) or call 1-800-961-2888.

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