

2021 Report

# The State of Application Modernization



# Table of contents

- Introduction and key findings ..... 3
- Digital transformation today ..... 4
  - Benchmarking digital transformation .....4
  - Maturity of digital transformation activities .....5
  - Cloud adoption & application modernization .....6
  - Application modernization priorities .....7
- What drives application modernization? ..... 8
  - Desired application modernization outcomes .....9
  - The costs of standing still .....10
- Keys to application modernization success ..... 12
  - Top criteria for application modernization partners .....13
- Big-picture takeaways ..... 15
- How Rackspace Technology helps ..... 16



# Introduction and key findings

## 2020 drove a large-scale push for application modernization

From the perspective of IT and business technology leaders, the COVID-19 pandemic has been the ultimate digital transformation pressure test. As organizations scrambled to support fully distributed workforces and securely integrate new cloud-native data platforms and collaboration apps into already-complex ecosystems, many cranked their existing application modernization efforts into overdrive.

The question is to what extent — and to what effect? Now that the dust has settled, where do we stand? What have we learned? How have different IT organizations across different industries and sizes shifted to adapt? And where are we headed next?

To benchmark the current state of application modernization, we conducted a global survey, analyzing 1,400+ responses from companies averaging \$300M in annual revenue. Respondents included IT decision-maker (ITDM) roles in both IT and non-IT business units, such as marketing, sales, operations and other line-of-business leaders who make major application decisions.

### Key findings

- **Organizations are waist-deep in application modernization** — 71% say at least one out of four applications are undergoing active modernization, and 24% say more than half of all their applications are undergoing modernization.
- **Most have already paid a price for dragging their feet** — Over half say delaying application modernization has resulted in prior failures to meet compliance requirements (56%) and/or to scale critical services when required (51%).
- **Cloud expertise is the #1 desired trait in a partner** — The top criteria for selecting application modernization partners is proven ability to deliver to the cloud (especially for enterprises).

# Digital transformation today

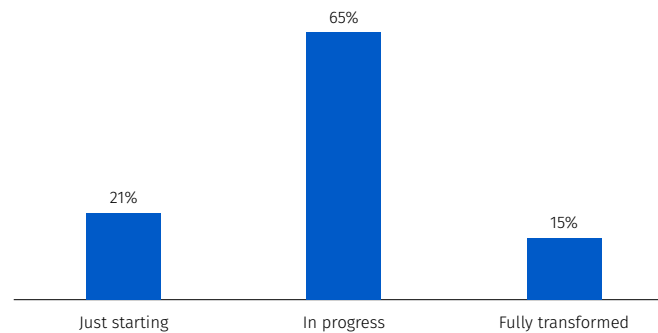


## Benchmarking digital transformation

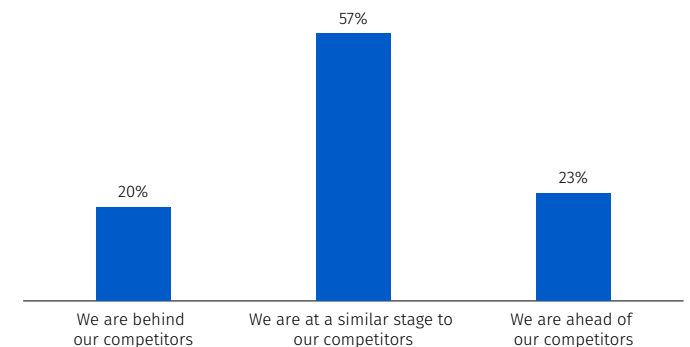
The study results suggest a landscape in which most organizations are actively engaged in a systematic process of digital transformation. Self-assessment questions around digital maturity consistently fell along a bell curve, and were largely consistent across organizations of all sizes and industries.

Most described their digital transformation journey as actively “in-progress” (65%) (see figure 1) and “at a similar place relative to their peers” (57%) (see figure 2). Just over half said they have “a system in place to coordinate cross-functional modernization activities,” with “digital initiatives extending beyond a single business unit” (53%) (see figure 3).

**Figure 1 — Where are you in your digital transformation journey?**

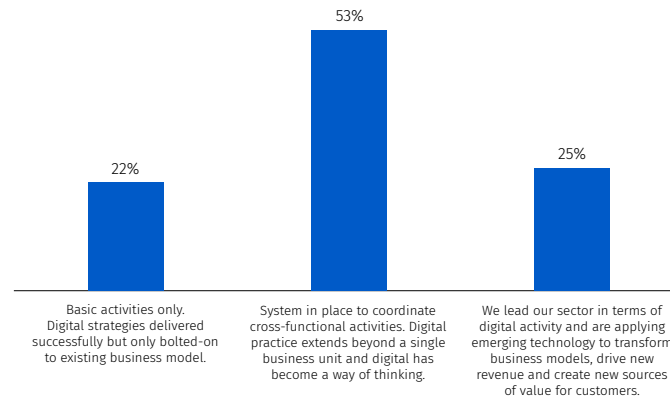


**Figure 2 — Where do you perceive your organization to be in relation to your competitors in their digital transformation journey?**



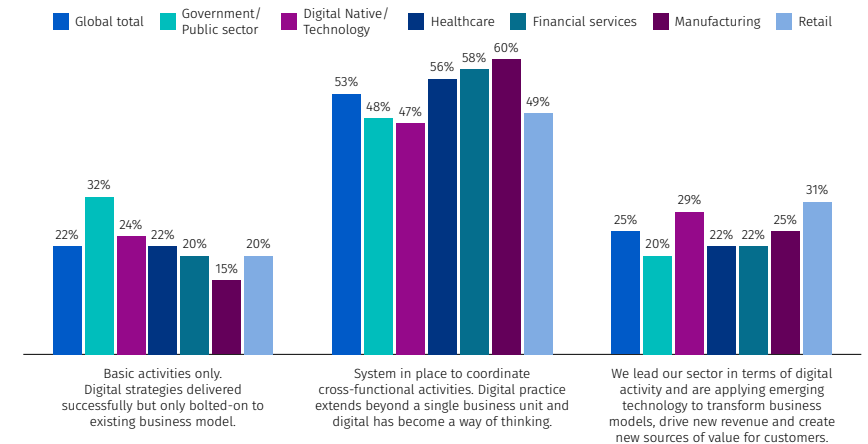
# Maturity of digital transformation activities

**Figure 3 — How would you categorize the maturity of digital transformation activities within your organization?**

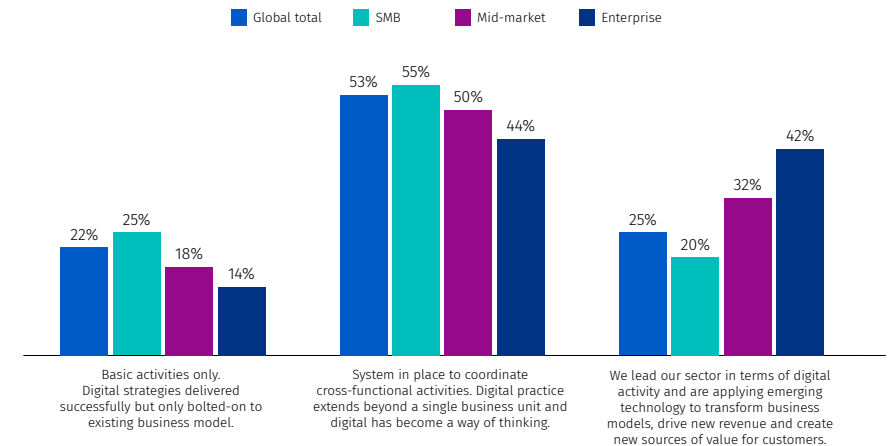


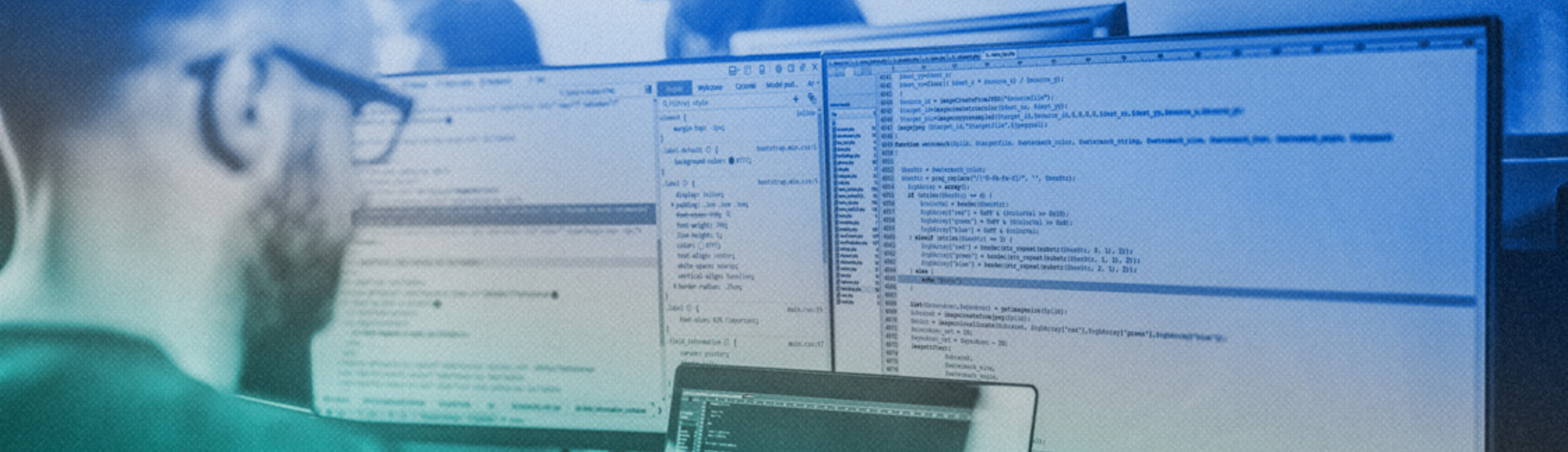
Although results were fairly consistent across business sectors, public-sector respondents were more likely to describe their digital transformation activities as “basic” or lagging behind (see figure 4). In addition, enterprise-scale organizations were over twice as likely to describe themselves as leaders in terms of digital transformation maturity (42%) compared to their SMB counterparts (20%) (see figure 5).

**Figure 4 — How would you categorize the maturity of digital transformation activities within your organization?**



**Figure 5 — How would you categorize the maturity of digital transformation activities within your organization?**



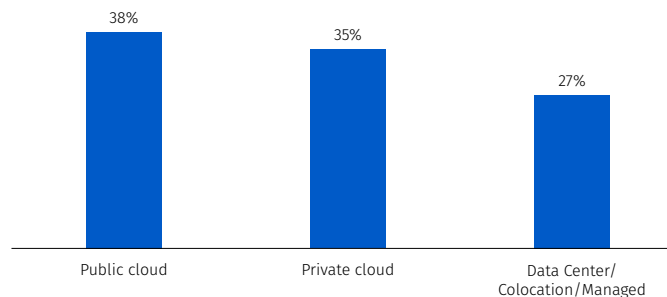


# Cloud adoption & application modernization

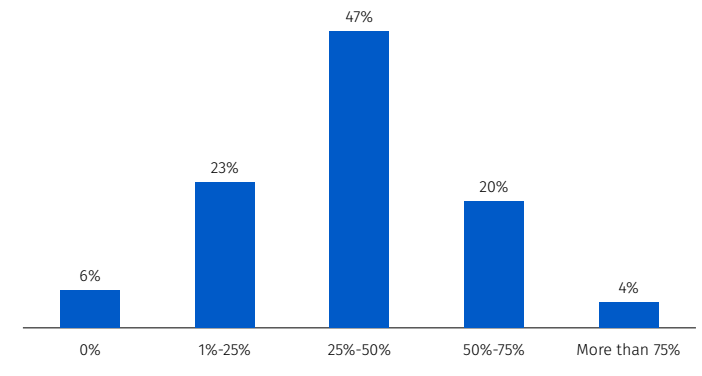
Results around IT infrastructure mix, which reflected the maturity of public cloud adoption, further indicated that for most organizations, the process of digital transformation is well underway.

On average, organizations now host 38% of all workloads on public cloud, surpassing private cloud (35%) and on-premises data centers or colocation (27%) (see figure 6). And this breakdown was remarkably consistent across both business size and industry vertical.

**Figure 6 — Thinking about the location of your organization's applications, what is the percentage split between cloud (both public and private) and data center?**



**Figure 7 — What percentage of applications are you currently modernizing?**

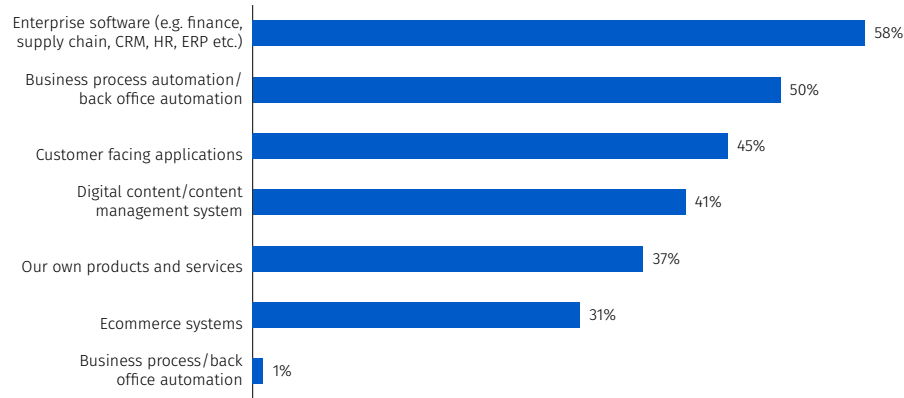


The study also found that most organizations currently have large numbers of applications undergoing active modernization. A large majority (71%) say they are modernizing at least one out of four applications, with 47% saying they're modernizing between 25%–50% of their portfolio, and 24% saying they're modernizing more than half (see figure 7).

# Application modernization priorities

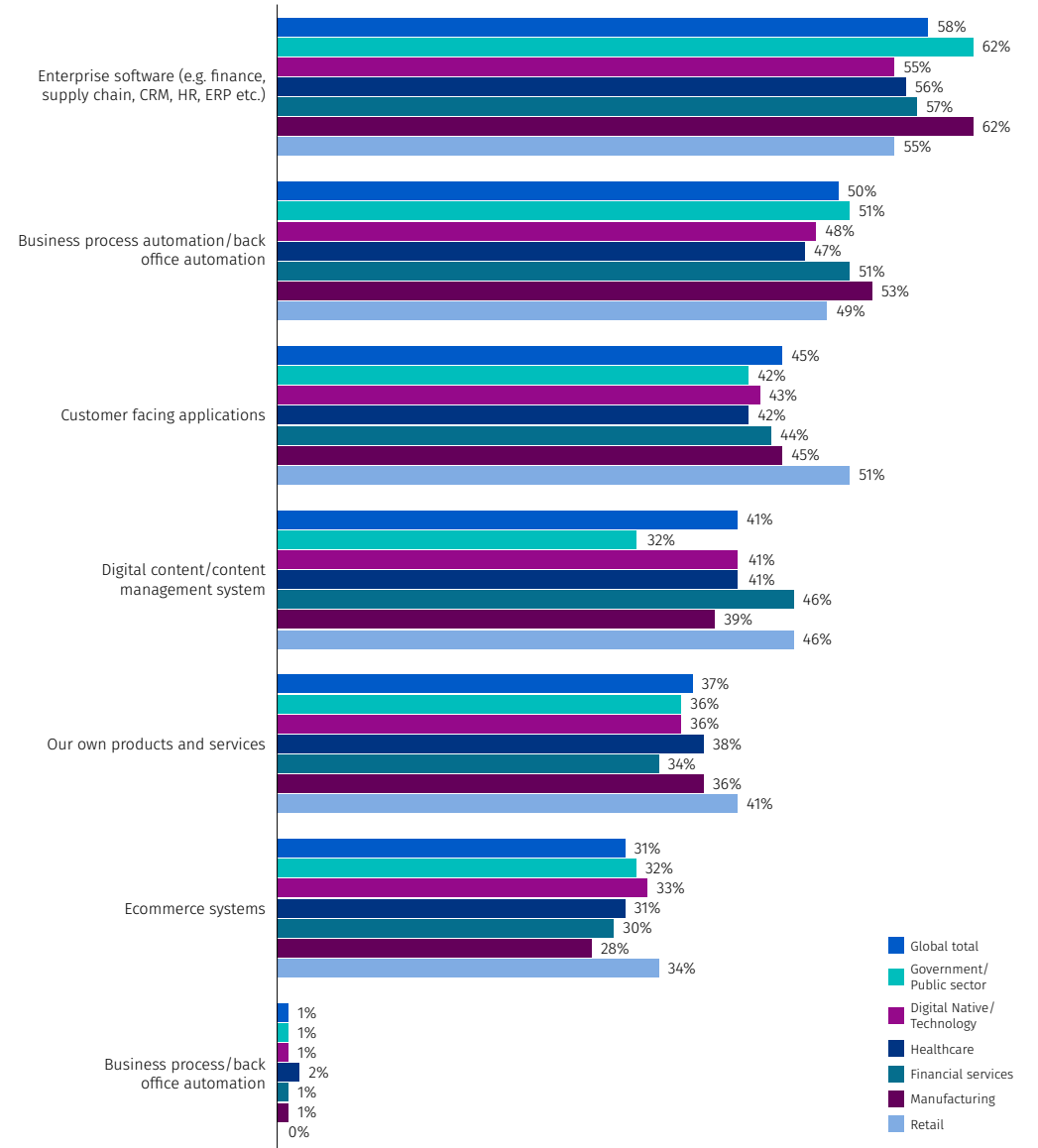
Surveyed organizations most often singled out customer experience as a top strategic priority (48%). However, IT security and compliance were close behind, at 45% and 41%, respectively; this may explain why more respondents flagged enterprise software like CRM and ERP as “highest priority to modernize” (58%) compared to customer applications (45%) (see figure 8).

**Figure 8 — In the next 18 months, which applications are the highest priority to modernize?**



There was a predictable degree of variance between the modernization priorities of different industries. Government and manufacturing organizations, for example, were more likely to focus on modernizing enterprise software, whereas retail businesses were more likely to prioritize customer-facing applications and digital content management systems (see figure 9).

**Figure 9 — In the next 18 months, which applications are the highest priority to modernize? (Sector view)**

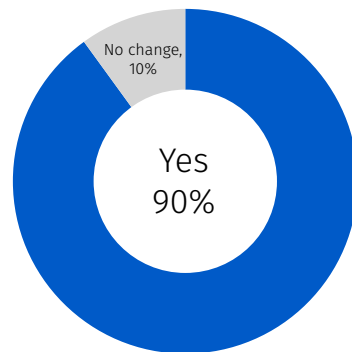


# What drives application modernization?



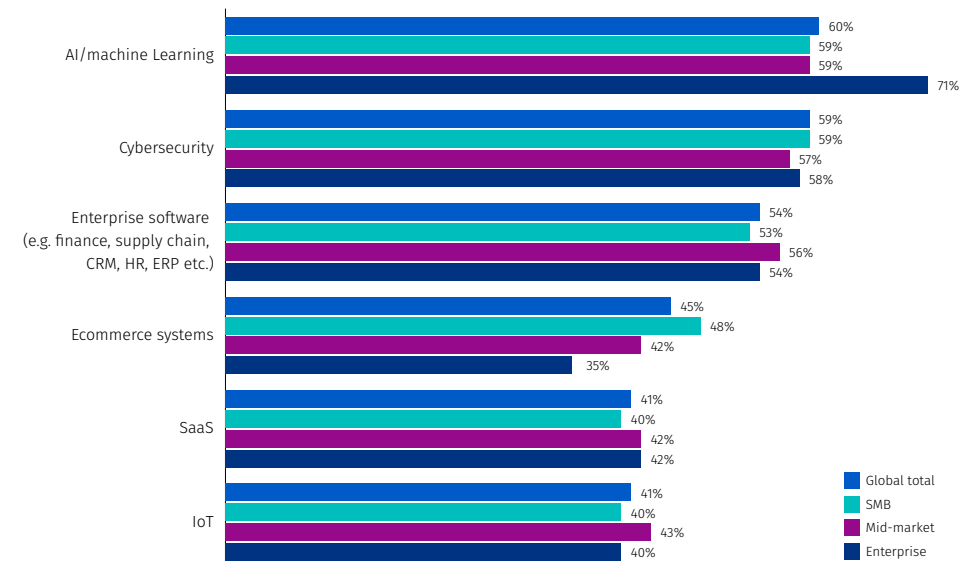
When asked whether the appreciation of the value of applications to the business had grown over the past five years, an overwhelming majority of respondents (90%) answered yes — a consensus that was remarkably consistent across verticals (see figure 10).

**Figure 10 — Has the appreciation of the value of applications to your business/industry grown over the past five years?**



The specific technologies most often described as providing the highest financial benefit were machine learning (60%), cybersecurity (59%) and enterprise business software like CRM and ERP (54%) (see figure 11). Notably, enterprise-level organizations were even more likely to value machine learning (71%), while being less likely to value ecommerce systems (35%, vs. 45% of all respondents) (see figure 11).

**Figure 11 — Which of the following technologies would you say helps benefit your business the most financially (driving revenue, minimizing costs)?**

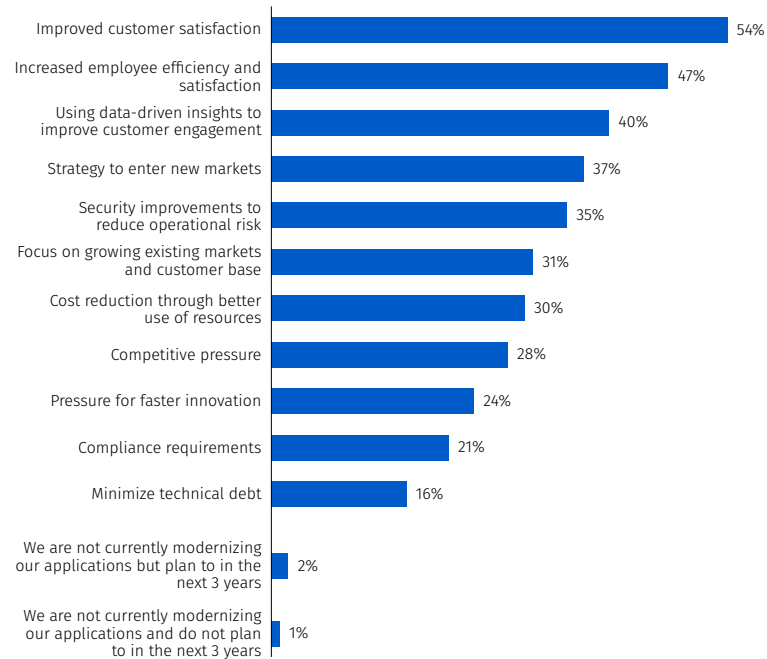




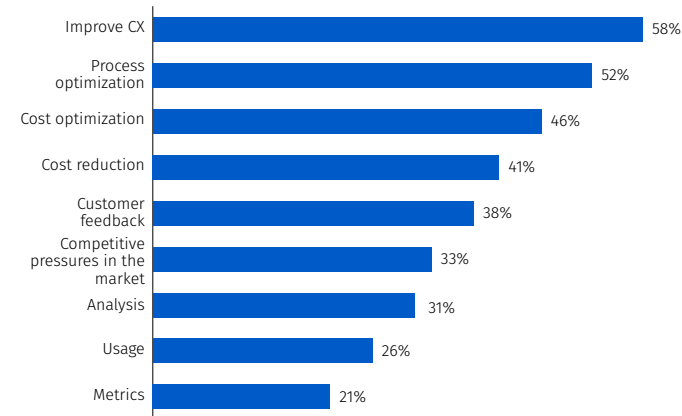
# Desired application modernization outcomes

When asked what prompts modernizing applications, over half of all organization (54%) singled out improved customer satisfaction, with nearly as many (47%) also citing increased employee efficiency and satisfaction (see figure 12). Motivations for replacing legacy applications with new solutions followed a similar pattern, with improved customer experience (CX) leading as a common driver (58%), followed by process optimization (52%) and cost optimization (see figure 13).

**Figure 12 — What prompts your company to modernize applications?**



**Figure 13 — Why would your organization choose to purchase or replace an application?**

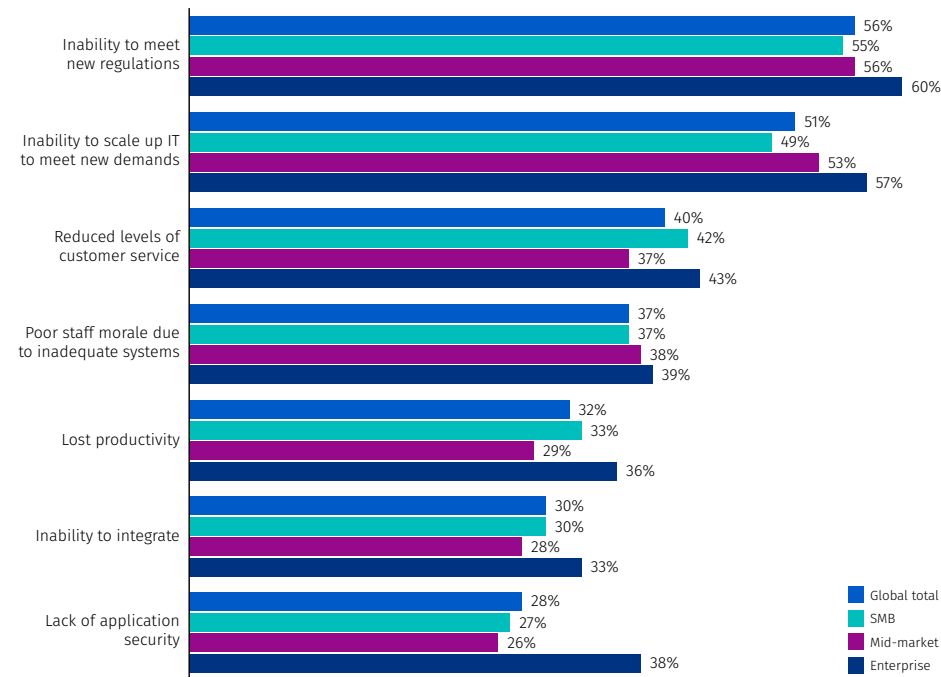


# The costs of standing still

Results suggest that the perceived risks of lagging behind are another factor driving organizations to transform their legacy systems. Many respondents reported that they have personally experienced a range of consequences due to holding off on modernization initiatives in the past.

Over half said that delaying application modernization had resulted, at some point, in their organization's failing to meet new regulations (56%) and/or to scale up to meet new demands (51%). Respondents at enterprise-level companies were more likely to report experiencing consequences across the board — particularly around compromised application security (see figure 14).

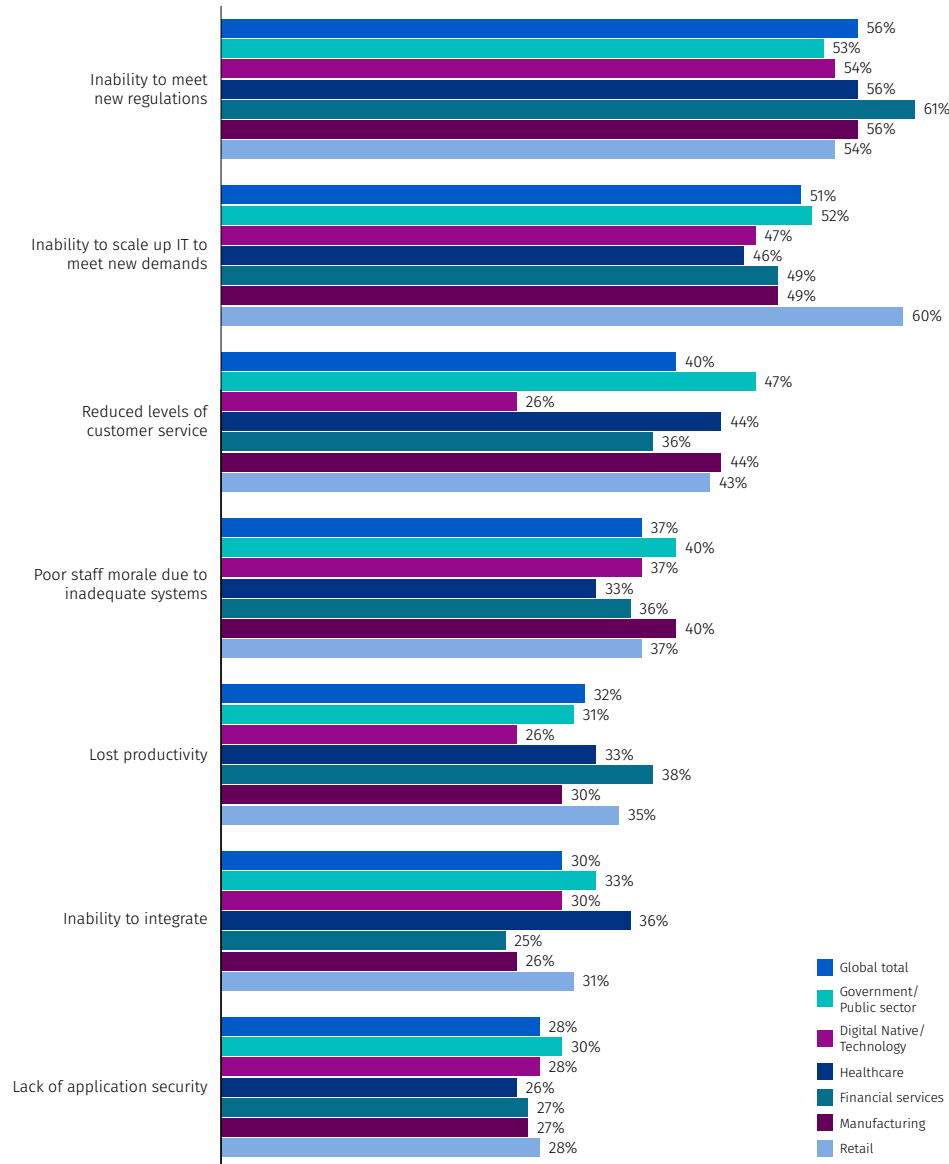
**Figure 14 — What consequences have you experienced as a result of delaying modernizing applications? (by company size)**



Meanwhile, financial services (FinServ) companies were more likely to have suffered from compliance breakdowns and lost productivity as a result of modernization delays; retail companies, from failures to scale; and healthcare organizations, from integration roadblocks.

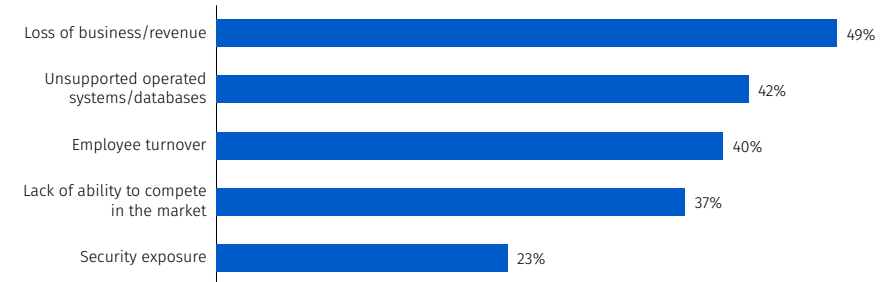


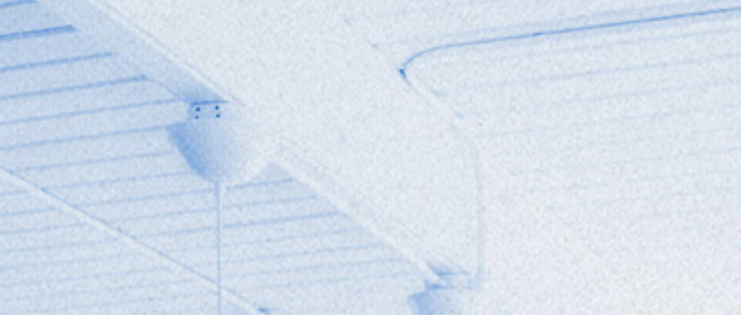
**Figure 15 — What consequences have you experienced as a result of delaying modernizing applications? (by sector)**



Among the small minority of respondents (43 of 1,420 surveyed) not currently modernizing any of their applications, many expect that continuing to delay will likely result in direct loss of business revenue (49%), employee turnover (40%) or even a lack of ability to compete in the market (37%) (see figure 16).

**Figure 16 — If you do not modernize your legacy applications in the next 2-3 years, how will this impact your business? (respondents not currently modernizing their applications)**





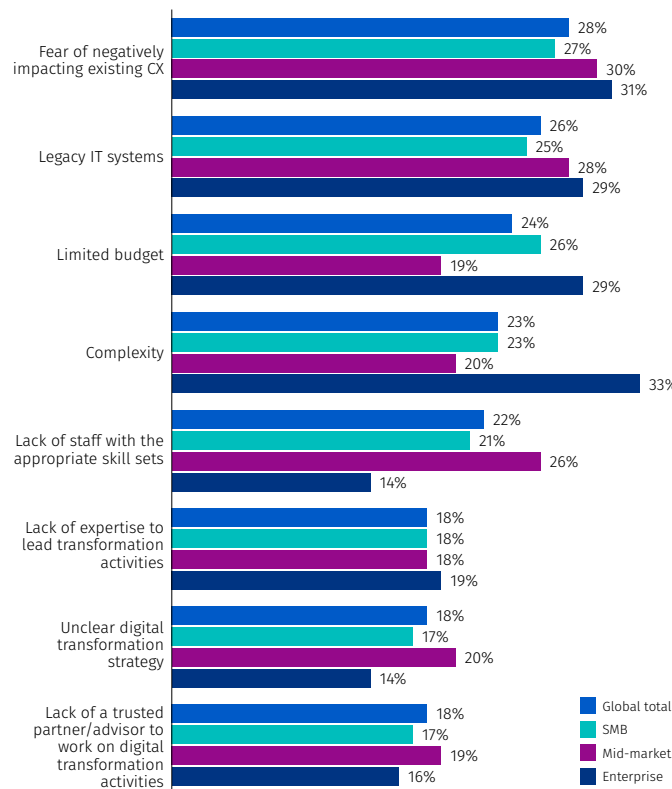
# Keys to application modernization success



Two key themes that surfaced repeatedly were the need to navigate complexity, and the need to minimize disruptions and risk.

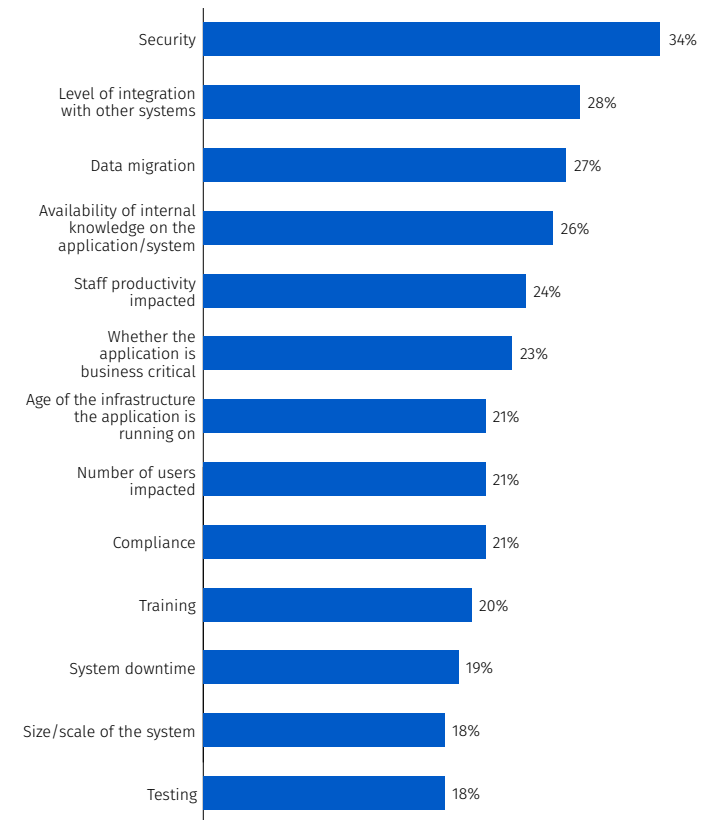
When asked about the top barriers inhibiting technological change at their organizations, respondents pointed to the fear of impacting CX (28%), the entrenchment of legacy IT systems (26%), and the need to work within budget constraints (24%). For larger organizations, the most common barrier was general complexity, as cited (perhaps unsurprisingly) by one out of three enterprise respondents (see figure 17).

**Figure 17 – What are the top three barriers-to-change within your organization, with regard to technology? (by business size)**



The most frequently flagged consideration for planning an application modernization project was security (34%), followed by system integration (28%) and data migration requirements (27%) (see figure 18).

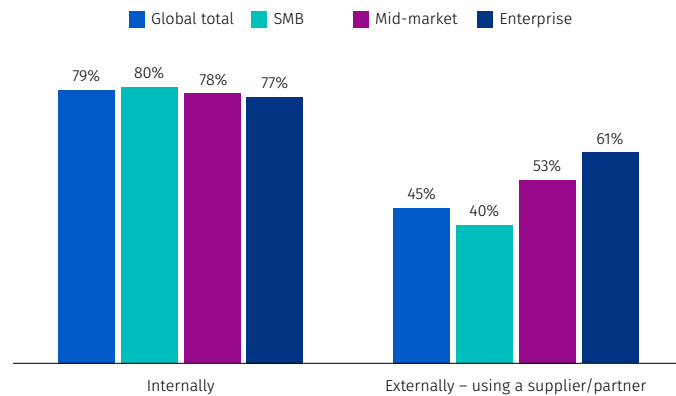
**Figure 18 – When planning a legacy application modernization project, which elements do you take into account?**



# Top criteria for application modernization partners

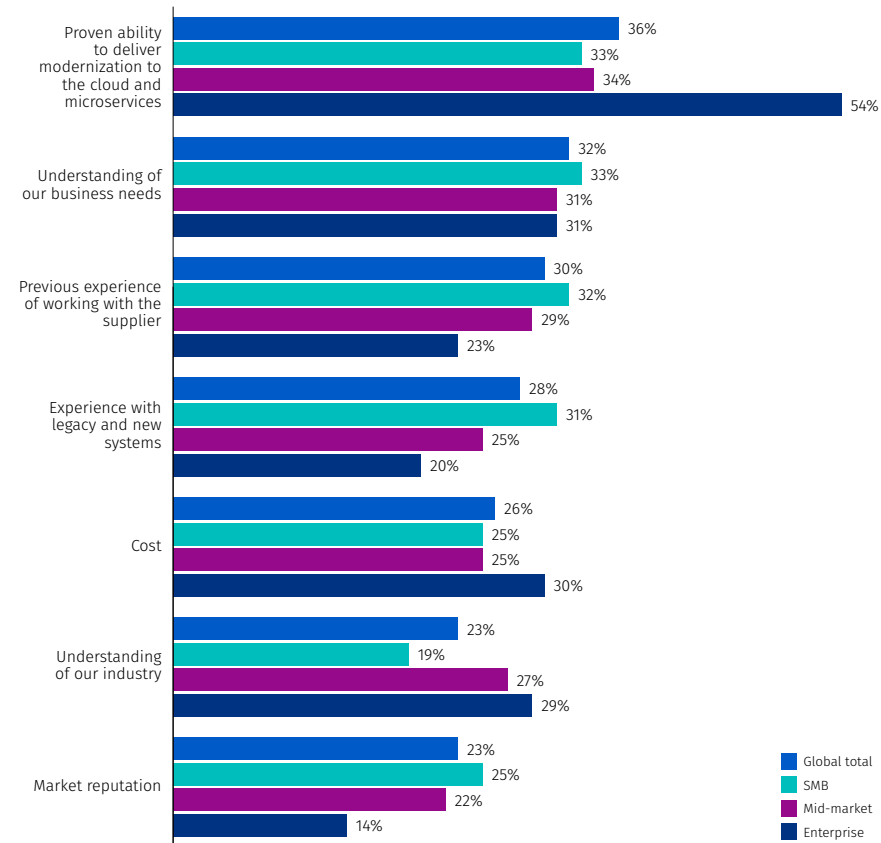
A large majority of all surveyed organizations (79%) rely on internal teams to handle at least some portion of their application modernization needs. The number relying on external partners (either partially or exclusively) varied widely by organization size — comprising 40% of SMBs, 53% of mid-market organizations and 61% of enterprises, respectively (see figure 19).

**Figure 19 — In general, does your organization modernize its applications internally, or do you use an external partner? Or do you do both?**



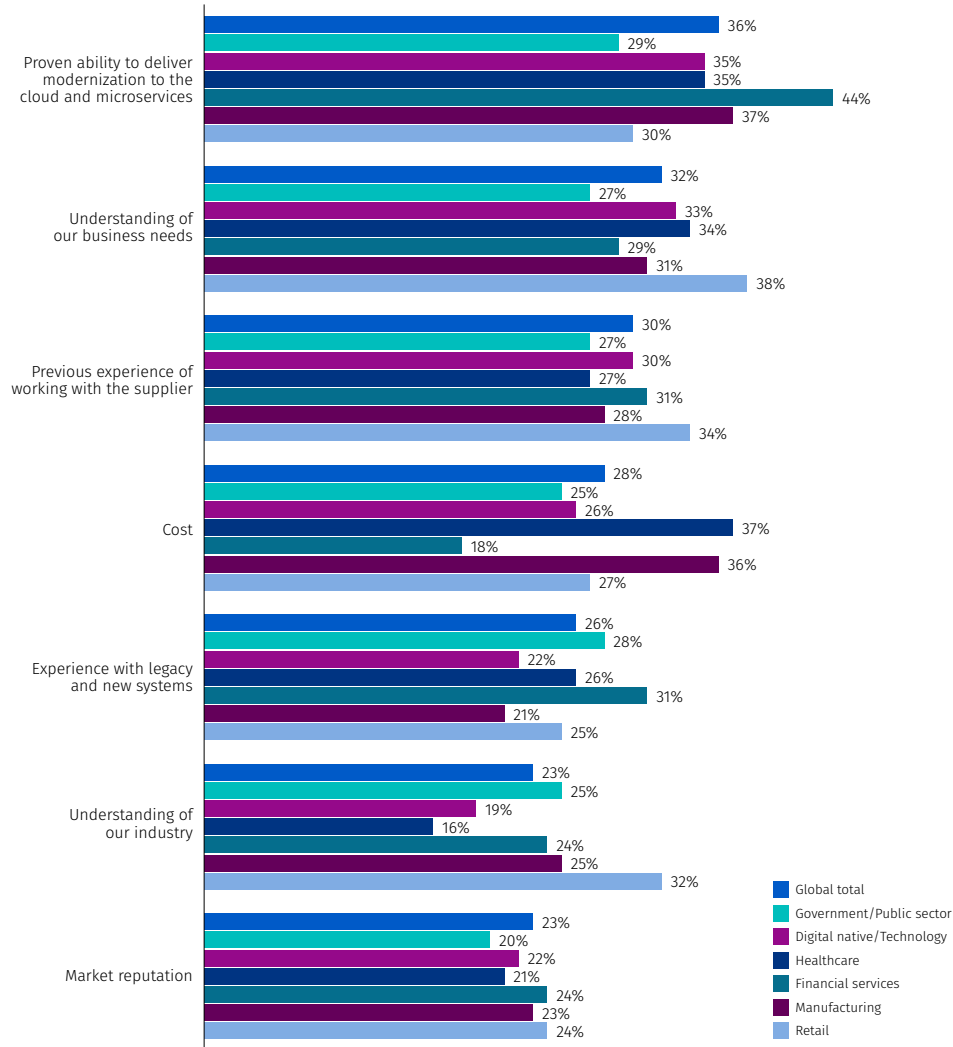
When asked to rank their top factors for choosing an application modernization partner, organizations most frequently singled out “proven ability to deliver modernization to the cloud” — including over half of enterprise respondents (see figure 20).

**Figure 20 — When selecting an application-modernization partner, which factors are most important to you? (by company size)**



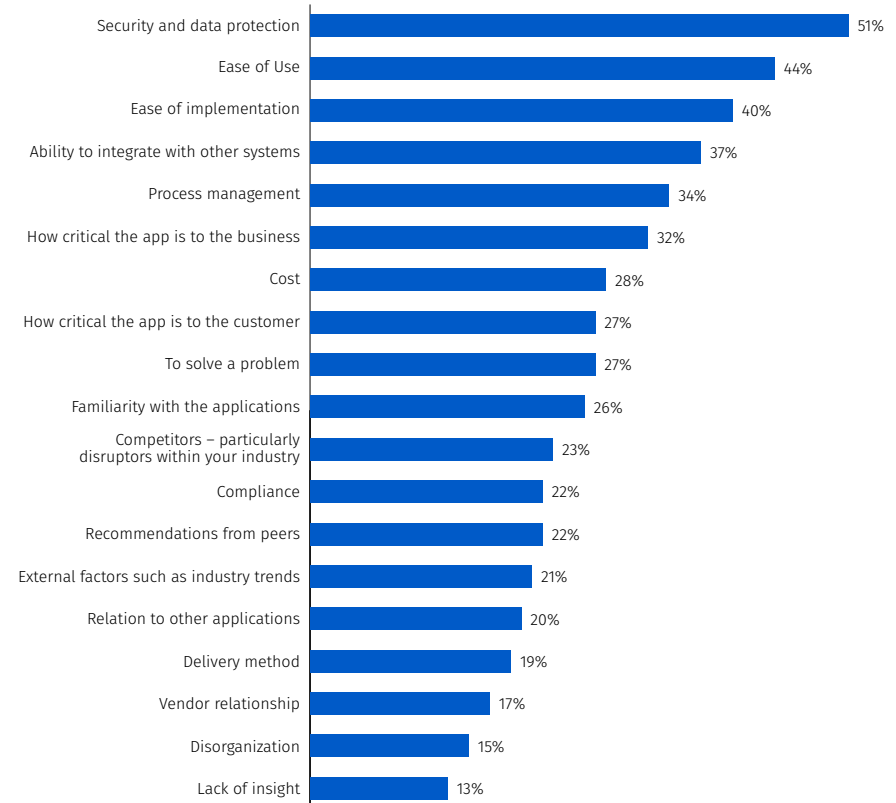
However, partner selection criteria did vary somewhat by industry. For example, FinServ respondents were more likely to cite “proven ability to deliver” (44%, as compared to 36% of all respondents), and healthcare organizations were more likely to focus on cost (37%, as compared to 28%) (see figure 21).

**Figure 21 — When selecting an application-modernization partner, which factors are most important to you?**



As for purchasing net-new applications, organizations pointed to security and data protection (51%), ease of use (44%) and ease of implementation (40%) as top selection considerations – once again emphasizing the importance of cutting through ecosystem complexity and minimizing the risks of large-scale transformation projects (see figure 22).

**Figure 22 — How does your organization decide which applications to purchase from a third party?**





# Big-picture takeaways

The results paint a clear and consistent picture. Organizations of all sizes and across all verticals have firmly bought into digital transformation, and are actively pursuing strategies of continuous application modernization.

In fact, many ITDMs have already experienced direct consequences from dragging their feet — which may explain why nine out of ten organizations say that appreciation for the business value of applications has increased.

In summary, 2020 may have been the year that application modernization morphed from being another corporate buzzword to becoming a central element of institutional survival. Given the high levels of reported digital maturity and cloud adoption today, it appears that the bandwagon effect is fully in motion. The question for organizations now is, where are they on the bell curve? And how can they execute an application modernization program they can trust to move the needle in the right direction?

# How Rackspace Technology helps



At Rackspace Technology®, we are the multicloud solutions experts. Our technical acumen with the world's leading technologies — across your applications, data and security — enables you to grow your business, increase efficiency and deliver the future.

We accelerate the value you get out of your applications, whether you run in the public cloud on Amazon Web Services (AWS), Microsoft® Azure®, Google Cloud Platform™, private clouds, or in your own dedicated environment. We're experts on your side, doing what it takes to get the job done right — from first consultation to daily operations. Everything we do is wrapped in Fanatical Experience™ — our obsession with customer success.

Offering strategy, design, migration, integration, implementation and managed services across leading applications, Rackspace Technology helps clients accelerate their transformation through application and industry expertise, unmatched support, and a Process First. Technology Second.® approach.

**Process First:** Our process-first methodology aligns to your business goals. This ensures that we transform, customize, integrate, implement and migrate a solution that delivers tangible value for your business.

**Unbiased Expertise:** With 20+ years of cloud operational expertise, we'll manage and continually optimize your solution, freeing up key resources and helping to maximize the return on your investment.

**Fanatical Experience:** Our experts help maximize the value of your technology investments by deploying the leading ERP, CRM, digital experience and productivity solutions on optimized infrastructure.

Learn more about our application services here:  
[www.rackspace.com/applications](http://www.rackspace.com/applications)