

Technology, Media & Telecommunications Practice

Cloud-migration opportunity: Business value grows, but missteps abound

Companies aim to embrace the cloud more fully, but many are already failing to reap the sizable rewards. Outperformers have shown what it takes to overcome the costly hurdles.

by Tara Balakrishnan, Chandra Gnanasambandam, Leandro Santos, and Bhargs Srivathsan



By 2024, most enterprises aspire to have \$8 out of every \$10 for IT hosting go toward the cloud, including private cloud, infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS). Achieving that aspiration will require significant effort from both enterprises and technology providers.

The COVID-19 pandemic is one factor driving the ambitious goal, as it triggered the need to speed the pace of enterprise digitization. But the more significant catalyst is the \$1 trillion in business value that cloud adoption can unlock. Some organizations, however, are leaking their share of that value instead of capturing it, with inefficiencies in orchestrating cloud migrations adding unexpected cost and delays. Approximately \$100 billion of wasted migration spend is expected over the next three years, and most enterprises cite the costs around migration as a major inhibitor to adopting the cloud.

But not everyone is suffering these growing pains. A McKinsey survey of nearly 450 chief information officers (CIOs) and IT decision makers globally finds that a subset of organizations has shifted a majority of IT hosting to the cloud on time and on budget. This article reveals the aspirations and hurdles that business leaders are facing in their journey to the cloud—and what outperforming organizations are doing right.

Businesses that follow the lead of cloud-migration outperformers stand to unlock some \$1 trillion in value.

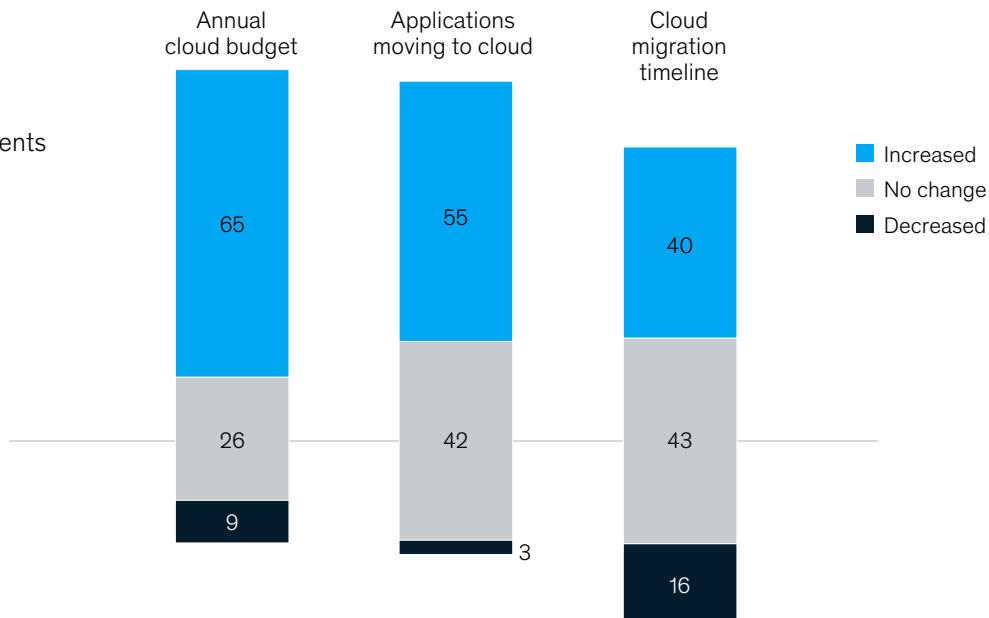
Businesses were embracing the cloud even before the COVID-19 crisis, but the pandemic lent new urgency to its use. At one fast-casual-restaurant chain, for example, the number of online orders jumped to 400,000 per day, from 50,000. That volume would have overwhelmed the company’s legacy infrastructure, but the business had transitioned its e-commerce and online-ordering system to the cloud before pandemic-related lockdowns occurred. Having seen the benefits, leaders in the company now plan to compress their five-year migration plan to less than one year.

That company is not alone. Two years ago, legacy infrastructure accounted for the lion’s share of the average IT-hosting budget. At that time, enterprises set an aspiration to move around 45 percent of their IT-hosting spend to the cloud by 2021. But nearly two-thirds (65 percent) of surveyed decision makers say their organizations increased their cloud budgets as a result of the pandemic, and 55 percent moved more workloads than initially planned. With the cloud having proven its value, 40 percent of companies expect to pick up the pace of their implementations going forward.

Looking forward, leaders remain bullish. Our data show that by 2024, the average company aspires to have cloud spend represent 80 percent of its total IT-hosting budget.

Companies aim to shift the majority of their IT-hosting spend to the cloud.

Pandemic-driven shifts in cloud computing,¹
% of respondents
(n = 443)



¹Questions: How has the COVID-19 pandemic affected your annual cloud budget? How has the COVID-19 pandemic changed the proportion of applications you are migrating to the cloud? How has the COVID-19 pandemic changed your migration timelines?
Source: McKinsey ITaaS Survey, 2020–21

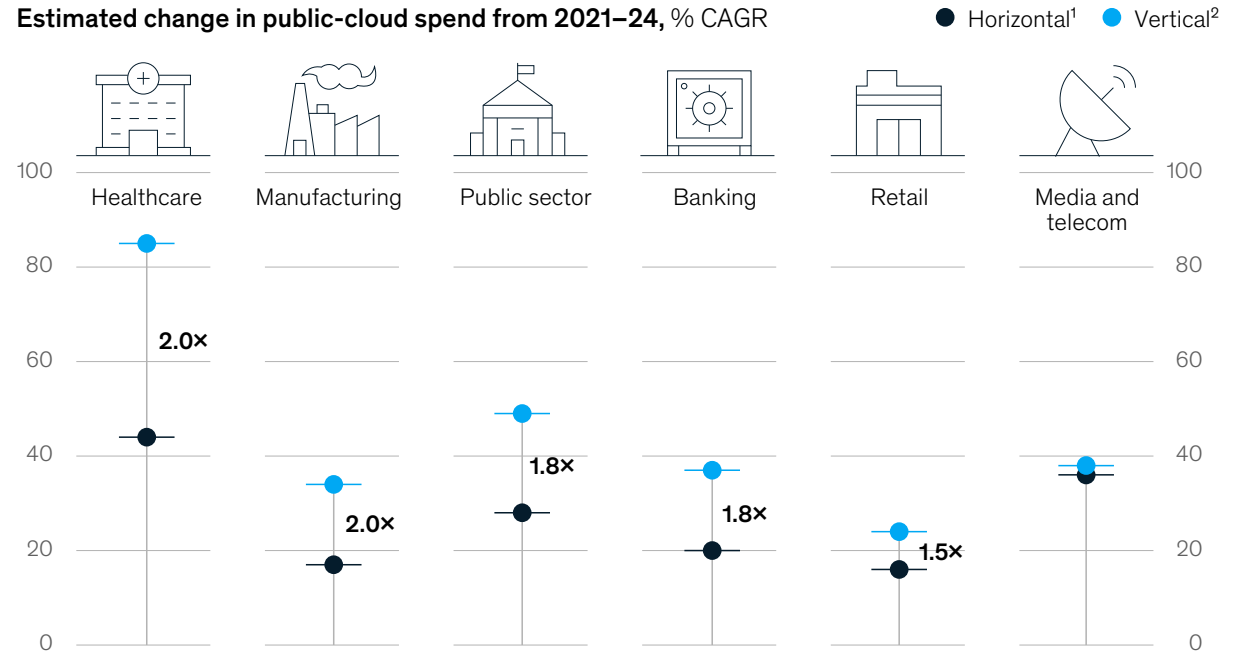
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Hosting industry-specific applications on the cloud has growing appeal for businesses across sectors. Between 2021 and 2024, public-cloud spend on vertical applications (such as warehouse management in retail and enterprise risk management in banking) is set to grow by more than 40 percent annually, compared with around 25 percent for horizontal workloads (such as customer relationship management). And in healthcare and manufacturing, organizations plan to spend around twice as much on vertical applications than on horizontal ones.

The benefits for cloud-base vertical applications can be transformative. An apparel retailer moved its e-commerce application to SaaS so that it could expand into multiple international markets at once, a shift its homegrown system could not accommodate without a major rebuild. Avoiding custom development saved cost, time, and complexity and, because key competitors lacked a similarly robust e-commerce presence, the retailer could grow share faster, increasing its international revenues by more than 30 percent year on year.

Cloud-based vertical applications are a major draw.

Estimated change in public-cloud spend from 2021–24, % CAGR



¹IT and functional workloads that are applicable across verticals.
²Vertical-specific workloads that are closely tied to the verticals' operations.
 Source: McKinsey ITaaS Survey, 2020–21

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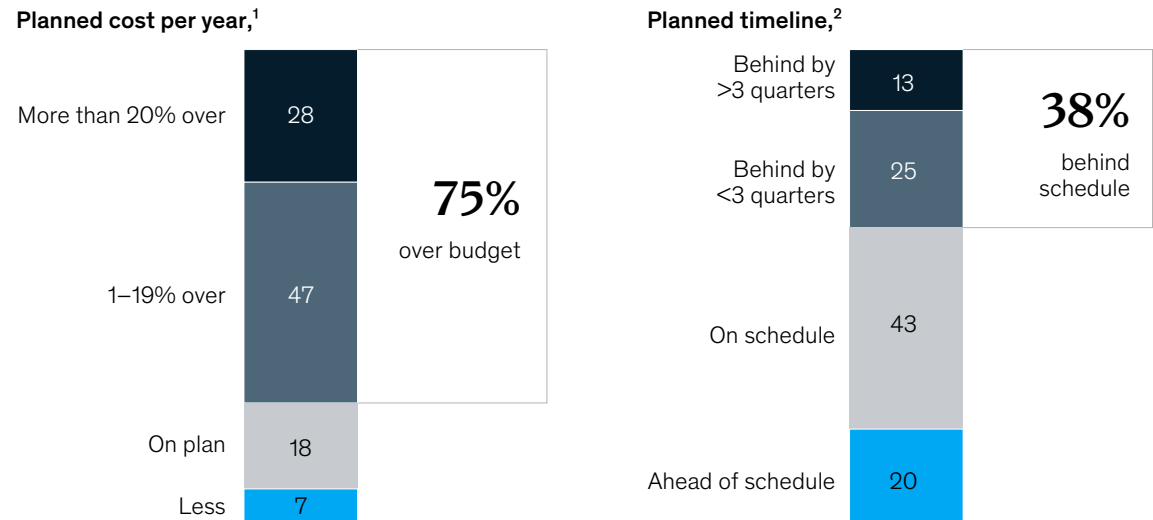
Although companies are transitioning more workloads to the public cloud, missteps in coordinating the migration are taking a toll. Data show that those inefficiencies are costing the average company 14 percent more in migration spend than planned each year, and 38 percent of companies have seen their migrations delayed by more than one quarter.

When the 14 percent in unanticipated cloud-migration spend is tallied globally, the price tag is eye opening. Cost overruns at a global level add up to well more than \$100 billion in wasted spend over the course of migration in three years. Left unchecked, those costs of moving workloads to the cloud could wipe out more than \$500 billion in shareholder value over the same period.

A global pharmaceutical company sought to move nearly all its workloads to the cloud. At the end of 12 months, however, it had shifted only 40 percent of its first-year target. Overwhelmed, the company cut the scope of its cloud-adoption plans by roughly 50 percent and chose to retire more applications rather than move them. With the program now more than three quarters behind plan and costing 50 percent more than budgeted, the company hopes that with the right incentives in place, its systems-integrator (SI) partners will be motivated by the increased spend to accelerate the migration.

Cloud-migration cost overruns are mounting.

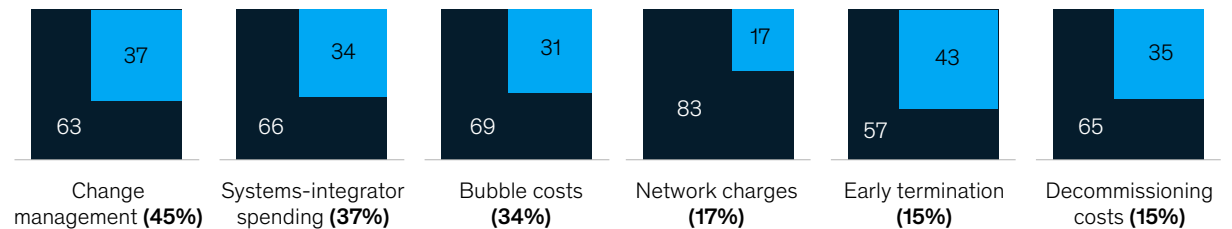
Budget for cloud migration vs actual spend on cloud migration, % of respondents (n = 443)



Degree to which spend was over budget by area,³ % share of respondents (n = 443)

(share of respondents who indicated over-budget spending)

■ 1–25% over ■ More than 26% over



¹Question: Overall, how have your actual costs of cloud migration compared to planned budget?

²Question: How far ahead/behind are you compared to your planned cloud-migration timeline?

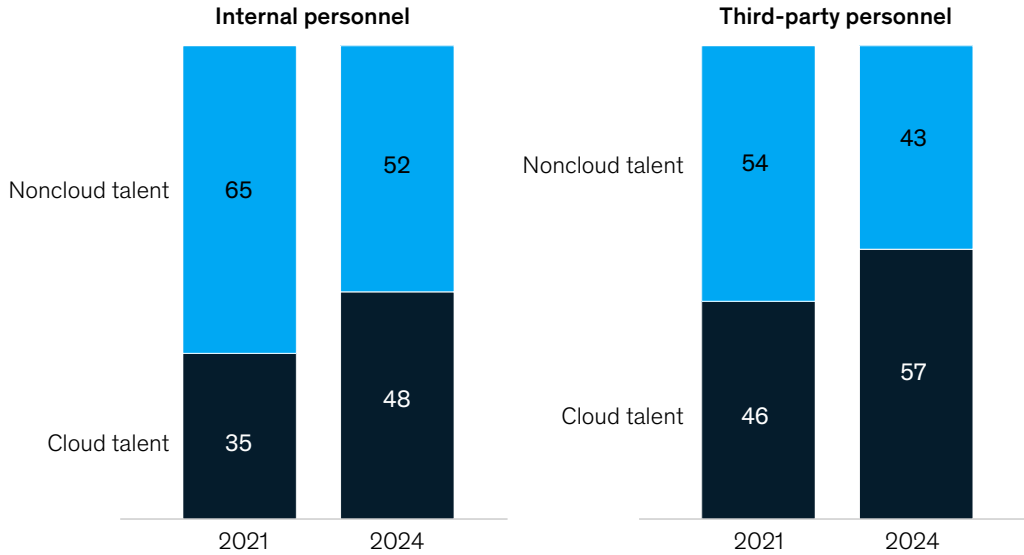
³Question: By how much were your actual costs over your planned budget?

Source: McKinsey ITaaS Survey, 2020–21

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To compensate for cloud skill gaps, some lean heavily on outside support.

Estimated spend allocated across IT personnel type,¹% (n = 443)



¹Question: How is your annual IT commitment/budget enterprise-wide allocated across the following cloud/IT personnel categories?
Source: McKinsey ITaaS Survey, 2020–21



Today the average company staffs around 35 percent of its cloud needs in house. To meet companies' cloud ambitions, however, most hope to bring that number up to roughly 50 percent by 2024. That means organizations around the world will be looking to hire or reskill at least one million new cloud developers over the next three years. That demand is likely to exacerbate already tight talent supplies.

External labor is a way to fill the void, but some companies engage SIs without thinking through the best way to structure that partnership. Lacking in-house enterprise-architecture expertise, for example, a global pharmaceutical company turned its cloud migration almost entirely over to SIs. But because the SIs' fees were based on time spent rather than on performance outcomes, they had little incentive to speed the migration, with the result that some projects took far longer than planned and cost more than budgeted. Across our study, spending on SIs was the most cited cost overrun outside of change management.

While most companies struggle with implementation delays, our study found that a subset—15 percent of the total sample—succeeded in migrating more than 60 percent of their IT-hosting spend to the cloud and did so within the timeline they set.

Analysis shows that those outperforming companies are 32 percent more likely than others to have active CEO sponsors. They are 9 percent more likely to develop the full implementation road map, including the security and compliance framework, up front rather than funding a series of one-off initiatives. And they are 57 percent more likely to hire for advanced skill sets (such as DevOps and FinOps). As important, they are also more decisive in pulling the plug on data-center funding to galvanize the cloud migration, even if it means paying early termination fees.

For example, at one consumer-packaged-goods company, the CEO pressed the case for cloud adoption, setting the top-down strategy and communicating with the entire company in written updates and town halls. Employees knew that the cloud strategy had the CEO's direct support. As the company's head of IT told us, "It's not enough to have the CIO on board; you need CEO and board-level support to provide 'air cover.' It's important to know that they have your back when you engage with others in the business."

Outperformers reveal the winning recipe for cloud adoption.

Characteristics of outperformers,¹% of respondents (n = 443)



¹Question: Rank the top challenges you encountered in the migration. To what degree are different CxOs in your organization involved in the cloud-migration journey?
Source: McKinsey ITaaS Survey, 2020–21

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A path forward

Businesses can set their cloud migrations on a stronger foundation by following the example of outperformers. But providers and partners must do their part as well. Cloud-service providers should make value creation, not consumption, a core metric, and SIs and channel partners need to adapt their recipes for success, since the results of our study show that the approaches used for on-site implementations are not scaling effectively to the cloud.

Cloud-service providers that focus on value creation as a core metric can help businesses set a strong foundation in their cloud-migration efforts.

Tara Balakrishnan is an alumna of McKinsey's Seattle office; **Chandra Gnanasambandam** is a senior partner in the Silicon Valley office, where **Bhargs Srivathsan** is an associate partner; and **Leandro Santos** is a senior partner in the Atlanta office.

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