

Three actions CEOs can take to get value from cloud computing

Leaders need to accelerate their journey to the cloud in order to digitize quickly and effectively in the wake of COVID-19.

If you are a CEO, you already know what the cloud can do for your business in a post-COVID-19 world. You've probably even told your organization to get you there already. So why is your move to the cloud¹ coming along so slowly, even though you may have been talking about it for years? It might be because you and your management team have yet to take a sufficiently active role, or provide the air cover your chief information officer (CIO) and chief technology officer (CTO) need.

CIOs and CTOs are on the front foot right now thanks to their crucial role during the COVID-19 pandemic. That makes this a good moment to further elevate top-team support for the cloud enablement needed to accelerate digital strategy, the digitization of the company, its channels of distribution, and its supply chains—all of which already needed to be moving more quickly than they were.

The CEO's role is crucial because no one else can broker across the multiple parties involved, which include the CIO, CTO, CFO, chief human-resources officer (CHRO), chief information security officer (CISO), and business-unit leads. As we explain in this article, the transition to cloud computing represents a *collective-action problem*—one that requires a coordinated effort across the team at the top of an organization. It's a matter of *orchestration*, in other words, and only CEOs can wield the baton.

To get to cloud more quickly, CEOs should ask their CIO and CTO what support they need to lead the organization on the journey. Chances are good that three interventions will emerge:

1. establishing a sustainable funding model to support the investments required to get business value from the cloud

¹ In this article, we use "cloud" to refer to the public cloud rather than companies' private clouds, in which they attempt to create highly automated and virtualized application-hosting environments on premises.



About this article

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2. developing a new business-technology operating model² that exploits cloud for speed, agility, and efficient scalability
3. putting in place the HR, compensation, and location policies required to attract and retain the specialized engineering talent required to operate in the cloud

Together, these interventions will help the executive team unite around a coherent point of view about the business-driven value that the cloud represents, how to capture that value, and how to evolve the company's operating model accordingly. Without this perspective, your company may continue to move too slowly toward cloud computing³ for a post-COVID-19 "next normal"—creating the risk of disruption from nimbler attackers.

Invest for business value

During the past 20 years, IT organizations have adopted a range of innovations—for example, virtualization and Linux—that have made running

business applications much cheaper and that have required only modest investments. Cloud adoption has a different economic profile. While exploiting cloud requires investment in building capabilities and migration applications, it's more efficient in the long term, sometimes markedly so for companies that have not fully optimized their technology environment.

The biggest benefits accrue to the business from faster time-to-market, simplified innovation, easier scalability, and reduced risk. Cloud platforms can help deploy new digital customer experiences in days rather than months and can support analytics that would be uneconomical or simply impossible with traditional technology platforms.

Unfortunately, technology-funding mechanisms can stymie cloud adoption—they prioritize features requested by the business now rather than critical infrastructure investments that will allow companies to add functionality more quickly and easily in the future. Each new bit of tactical business functionality built without best-practice cloud architectures adds to your technical debt⁴—and thus to the complexity of building and implementing anything in the future.

² An integrated operating model organizes technology teams around user-facing products and the underlying platforms that enable them. For more, see Ross Frazier, Naufal Khan, Gautam Lunawat, and Amit Rahul, "Products and platforms: Is your technology operating model ready?," February 2020, McKinsey.com.

³ Nagendra Bommadevara, James Kaplan, and Irina Starikova, "Leaders and laggards in enterprise cloud infrastructure adoption," October 2016, McKinsey.com.

⁴ Technical debt is the implied cost of rework caused by implementing a quick but brittle or otherwise architecturally suboptimal solution.

CEOs can help the senior team recognize that infrastructure investments in cloud platforms represent a source of competitive advantage rather than a cost to be managed. Once the top team gets that right, a lot else falls into place, including your technology-funding process, which begins shifting toward *products* or *platforms* rather than *projects*. Projects are one-time investments funded in a yearly boom-and-bust cycle. Products in general (and cloud platforms in particular) require more stable, ongoing funding and consistent “ownership” to optimize new functionality and mitigate technical debt.

The top-team conversation will benefit, too, from a prioritized, sometimes multiyear road map of domains in which the cloud will accelerate performance and digital transformation. This will help prioritize investments—and avoid defaulting to applications that are technically easiest to migrate. By asking which business domains (such as order capture, billing, or supply-chain optimization) would benefit most from the speed, innovation, and scalability that cloud platforms can provide, top teams can arrive at the highest-priority areas for movement to the cloud.

Inevitably, resource-allocation issues will arise. Growth businesses, for example, may be most likely to benefit from the cloud, but they are the least likely to have high margins or excess cash to pony up for a cloud investment. More mature business units may have higher margins, but where, exactly, should they get the money needed for the cloud—by spending less on tactical functionality this year and next, or by reducing marketing expenditure? Does a legacy business have the legs to support a long-lived cloud investment? Should the CEO transfer money from one business unit to another, or accept lower margins when a business invests in the cloud? Such questions are unlikely to be asked, much less answered, without serious engagement from the CEO and other members of the top team.

A big financial-information provider, for example, determined that moving applications in its customer-facing business domains to the public cloud could enable much faster and less expensive entry into promising markets. Hosting these applications in the cloud meant that technology operations in a new country could be set up in a couple of weeks at a negligible cost, versus a couple of million dollars of up-front investment for each country. A health-insurance carrier, meanwhile, examined its current project portfolio and found that it could speed up the capture of several billion dollars in additional revenue by adopting the cloud. Moving the systems that help the insurer interact with healthcare providers was especially attractive because of the opportunity to accelerate the onboarding of new providers.

Then, once the investment is made, it's up to the CEO to demand higher business performance in return for the cloud investment—no more deflecting blame for subpar outcomes to a subpar technology environment. If the strategic case for the cloud is real, it should translate into better performance. The CEO must demand that it does.

A new operating model

Once the funding model is straightened out, companies must ground the new partnership between IT and the businesses in an operating model that reflects and supports their growing investment in the cloud.

Here, it will help to think about an integrated system rather than a set of individual technologies. Doing so implies organizational change across all of IT, and many of the business units and functions as well. This operating model combines cloud-based digital technologies and agile operational capabilities in an integrated, well-sequenced approach that can rapidly accelerate digital strategy and transformation. The model helps to coordinate end-to-end operations across silos—supporting customer and employee journeys, for instance—while taking technology out of quarantine and making the most of it across all lines of business.

A cloud-ready business-technology operating model has many requirements. Here, we focus on the few that need intervention from the CEO.

Improving business interaction

Achieving the speed and agility that cloud platforms promise requires frequent interaction—for instance, to define and optimize customer journeys—between IT managers and their counterparts in the business units and functions, particularly those who own products and capability areas. CEOs need to encourage business leaders to appoint knowledgeable decision makers as product owners for each business capability.

Too often, business units appoint product owners who are too new or too junior, and who lack either the knowledge or the organizational throw-weight to make their decisions stick. Many of these product or capability owners are “process jockeys,” whose expertise is coordinating stakeholders and tasks. Look instead for more senior folks capable of thinking broadly and strategically.

Going agile in IT

If your company is to gain value from the cloud, your IT department must become more agile, if it isn't already. That involves more than moving development teams to agile product models. Agile IT also means bringing agility to your IT infrastructure and operations by transforming infrastructure and security teams from reactive, “ticket driven” operations into proactive models in which scrum teams develop the application program interfaces (APIs) that service businesses and developers can consume.

Counterintuitively, you should avoid inserting translators between IT and the businesses. Instead, look to organizational groupings that unite business, technology, governance, process, and people management. These quickly moving *modular platforms* should be run by a platform owner who takes end-to-end responsibility for providing a solution and operating the platform as a service.

Accounting for the risks

Everything in enterprise technology implies risk. To mitigate security, resiliency, and compliance concerns relating to the adoption of the cloud, companies must be clear-eyed about these risks. Among other things, that means holding rigorous discussions about the best mechanisms for aligning the appetite for risk with decisions about the technology environment. Getting the organization to take the right tone on risk will require particular attention from the CEO. It's easy to let worries about security, resiliency, and compliance stop a cloud program in its tracks. Instead of letting risks derail progress, CEOs should insist on a pragmatic risk appetite that reflects the business strategy, while placing the

risks of cloud computing in the context of the existing risks of on-premises computing and demanding options for mitigating risks in the cloud.

Companies that get the operating model right can see dramatic improvements. These include better target-state economics and lower transition costs. They will also see improved agility and ability to innovate. One natural-resource company implemented agile ways of working for business-application development, infrastructure, and security. In particular, it invested in creating automated, API-based services that developers could use to provision workloads on cloud platforms securely and resiliently. As a result, the company started releasing new capabilities in days rather than months, while limiting risk and technical debt.

Revisit talent

As your cloud investment picks up speed, supported by a new, cloud-ready operating model, your CIO will no doubt be asking for the talent needed for cloud. Although cloud computing can dramatically boost the productivity of technology, it requires specialized and sometimes hard-to-find technical talent—full-stack developers, data engineers, cloud-security engineers, identity- and access-management specialists, and cloud engineers. Such talent can be hired externally or upskilled from within. Just make sure current HR policies and approaches don't hobble your approach. The basis of performance management and promotion, for example, should be expertise rather than the number of direct reports someone oversees.

If your HR policies are not up to speed, you may need to provide some air cover for your CIO with the CHRO. Some policies, put in place a decade ago to contain IT costs, can get in the way of onboarding cloud talent. Over the years, companies have adopted policies that limit costs per head and the number of senior hires, for example, and that require the use of outsourced resources in low-cost locations. Collectively, these policies produce the reverse of what the cloud requires, which are relatively small numbers of highly talented and expensive people who may not want to live in traditional low-cost IT locations. The location issue is why CEOs who are serious about the cloud have suggested that their CHROs reverse policies encouraging the use of low-cost, commoditized tech talent. In some cases, this new direction takes the form of newly established tech centers, in places such as the US West Coast, which are specifically designed to attract cloud talent.

CEOs must also make sure their technology leaders get sufficient voice in senior forums and management process given the increasingly fast integration of digital and business strategy. At many companies, CIOs and CTOs have been among the heroes of the COVID-19 response by pivoting their organizations to enable pervasive remote working, often in a matter of days. The cloud allows CIOs and CTOs to play an even more critical role in making business strategies successful.

Compared with traditional IT managers, successful CIOs and CTOs in this environment will be both more plugged into a company's digital transformation and more technologically savvy. In a post-COVID-19 next normal, these executives cannot rely on vendors to figure everything out for them. They must be open to new ideas and willing to learn, to take risks, and to fail fast and then quickly correct course when necessary. It helps if they're

compelling communicators who can inspire both business partners and their own teams to undertake dramatic change.



The COVID-19 pandemic has heightened the need for companies to adopt digital business models—and only cloud platforms can provide the agility, scalability, and innovation required for this transition. Although there have been frustrations and false starts in the enterprise journey to the cloud, companies can dramatically accelerate their progress by focusing investments in it where they will provide the most business value and by building cloud-ready operating models.

But they have to get there first. And that's where CEOs have an important role to play—first by becoming more technologically savvy than they have been in the past and next by addressing the collective-action problem that often prevents companies from embracing new strategic roles for IT. If companies are to be successful in a digital next normal, their CEOs must ensure that their management teams understand the specific ways that cloud computing can raise revenue growth and margins and how, in close alignment, those teams will rally to capture value. Q

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