Finding a New Normal in the Cloud

BY: NORBERT FAURE

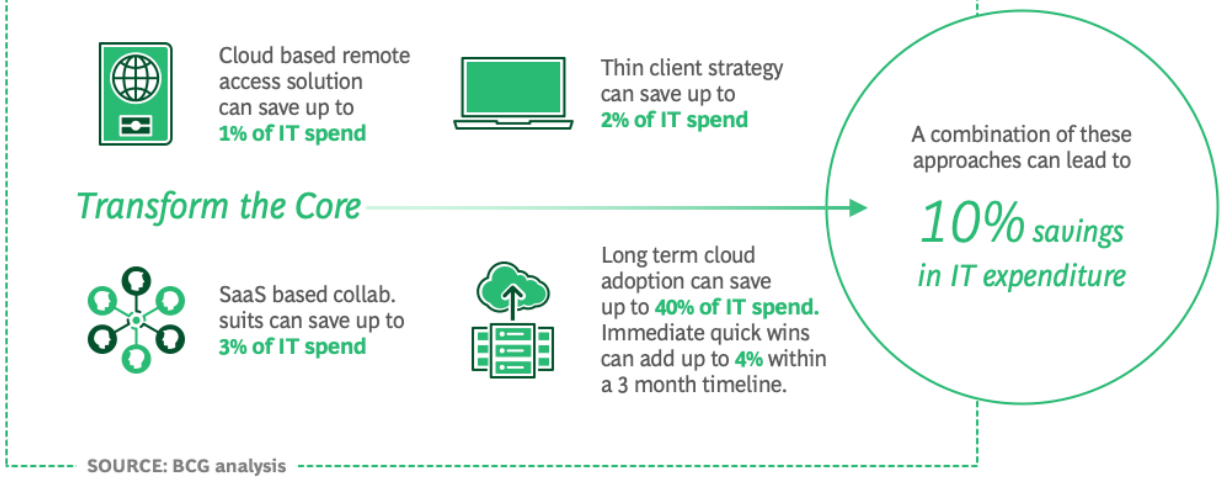
The COVID-19 pandemic has pushed countries into recession and upended the way most companies run their businesses. As governments have enacted new rules and regulations to keep people at home and encourage social distancing, organizations have tasked their CIOs with sourcing and implementing a wide range of digital products and tools to facilitate communication, collaboration, remote access, and enterprise backends.

To maximize productivity and efficiency in this digital new normal environment, organizations will need to combine technology with organizational innovation.

Meanwhile, economies have contracted, and revenues have fallen sharply in many sectors and industries. As companies search for the best 'new normal' way to run their operations digitally and remotely, they also need to cut costs and lower their cash burn rate.

BCG Platinion has identified five key areas where CIOs can leverage cloud computing resources to optimize operations while lowering cash burn rates and reducing total IT expenditures by up to 10%.

Exhibit 1



SOURCE: BCG analysis

BCG PLATINION

Support workforce with better remote access

In an era of social distancing, employees need to access their corporate environments remotely to ensure business continuity.

Traditionally, companies have provided this remote access through virtual private networks (VPNs) that have inherent security and efficiency issues. In addition, most existing appliances were neither designed nor provisioned to support the current needs associated with a full remote workforce.

Companies need rapid, efficient, highly scalable, and device-agnostic remote access solutions that can cope with the new demands of entire workforces working remotely.

Cloud-based solutions meet all these requirements while offering a pay-as-you-go model that eliminates the need for capacity planning, upfront CAPEX costs, and all of the maintenance expenses associated with traditional solutions. Furthermore, cloud-based solutions often provide better SLAs than on-premise VPN appliances.

While adopting such solutions, companies have to maintain a strong security posture. Context-aware authentication can provide another layer of security by using situational information (e.g., geolocation or device control) to combine contextual rules with user credential validation before granting remote access to corporate systems.

By leveraging cloud-based solutions such as Google's BeyondCorp Enterprise, companies can save up to 50% versus the cost of a VPN-based solution. This translates into a 1% reduction of total IT expenditures.

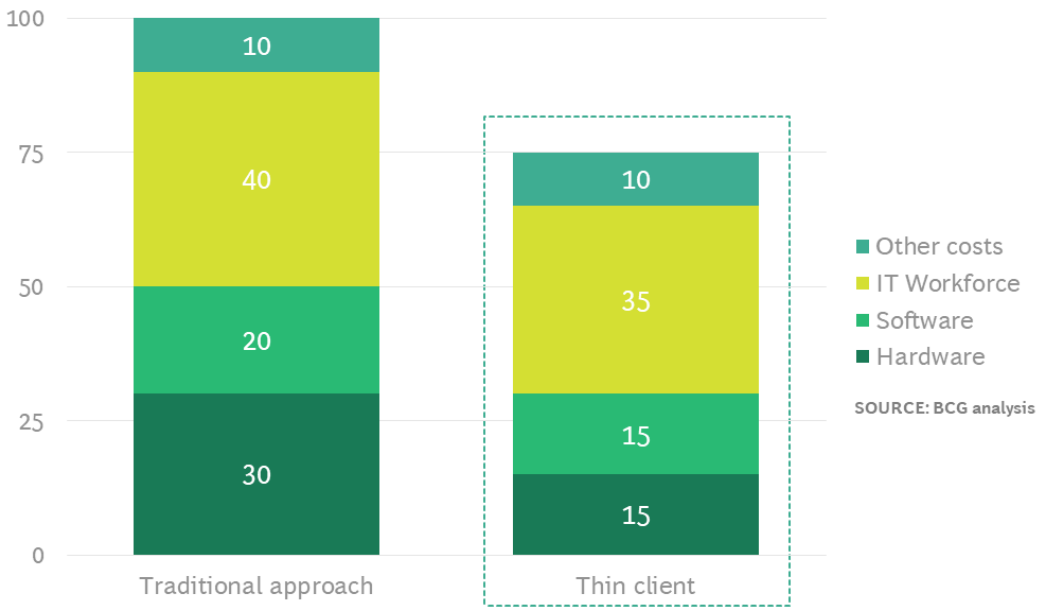
Adopt cloud native devices

BCG analysis projects that companies can save 2% of their total IT expenditures by transitioning from full-fledged PCs to cloud-native thin-client devices.

At many companies, purchasing and maintaining laptop and desktop hardware for end users is both expensive and time-consuming. Thin-client PCs offer a modern, flexible solution. These devices are designed to work seamlessly with the cloud-based business applications allowing remote or office workers to stay productive.

Because they are so affordable, thin-client devices are easily replaceable. This allows organizations to treat end-user hardware less as a precious commodity to be rationed, and more as a useful appliance that should be wherever it can add value – in the office, on the front line in a factory or warehouse, or even in a customer-facing information or point-of-sale kiosk.

Exhibit 2: A thin-client approach can yield 25% savings in end-user technology and support costs



Cloud-native devices such as Google's Chromebooks and Chromeboxes are inexpensive, easy to deploy, simple to use, and highly secure.

CIOs should define a clear management strategy for these thin-client end-user devices and review the application landscape to see whether specific end users may need supplementary solutions to access non-web clients on their devices.

Use SaaS to enable digital collaboration

Due to COVID-19, millions of employees who once worked alongside one another in offices are now siloed and isolated at home.

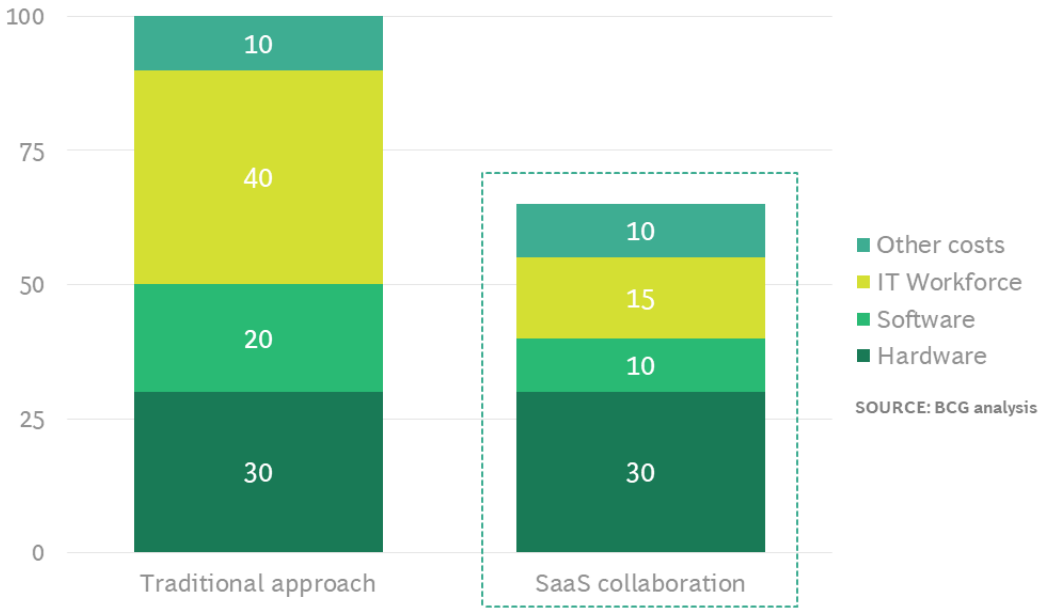
Cloud-based collaboration tools help companies cope with social distancing and mobilize the collective intelligence of their dispersed workforce while implementing leaner and more agile ways of working.

Full software-as-a-service (SaaS) products delivered through the cloud offer new ways of collaborating, sharing information, and distributing content. These products also alleviate the traditional costs and burdens around availability, backup, and maintenance of on-premise collaboration infrastructure (e.g., file shares or mail servers). Moving to a SaaS solution allows companies to have fewer software licenses and lower capital expenditures.

Furthermore, cloud-based solutions with integrated software bundles help companies strengthen security by providing consistent cross-feature mechanisms to manage access to information for both employees and external partners.

By adopting a cloud-based SaaS collaboration solution, CIOs can lower computing costs for end users by as much as 35%, which translates into as much as a 3% reduction in total IT expenditures.

Exhibit 3: *SaaS collaboration suites can deliver 35% savings on end-user technology and support costs*



In addition to these anticipated savings, a Forrester study found that one SaaS solution boosted revenue growth by 1.5%, reduced the need for on-demand tech support by 20%, and cut the risk of data breaches by more than 95%. [1]

To ensure successful implementation of SaaS, CIOs should identify business use cases and requirements, define a security posture, and establish standardized processes for migrating from on-premise to the cloud. These technological measures will need to be matched with at-scale organizational changes in processes, training, and skills.

Lift-and-shift to lower burn rate

Making a complete shift to cloud computing can seem like a massive undertaking that requires application refactoring to facilitate total business transformation. That approach typically requires years to implement, plus heavy investments of time and manpower.

As BCG has noted, executives responding to COVID-19 need to make big decisions right now to reduce cash burn rates.

Companies can quickly achieve reduce their total IT expenditures by up to 4% within three months by migrating non-critical workloads to the cloud using a 'lift-and-shift' approach. Lift-and-shift simply means rehosting workloads in the cloud without additional transformation. Cloud providers offer several off-the-shelf services to turn off unused workloads and begin the application refactoring process through advanced cloud managed services.

Once they have demonstrated the value of cloud migration through quick-win initiatives, CIOs can develop standardized metrics and processes for evaluating which portions of the business workloads should be moved to the cloud, as well as how to implement the migration at scale while tracking its successful progress.

Cloud migrations will likely have ripple effects throughout IT workflow and planning. For example, migrations might generate opportunities to consolidate IT environments, such as combining User Acceptance Testing with Technical Testing environments. The cloud also offers built-in redundancy and ease of rebuilding that could reduce the need for costly infrastructure-based disaster recovery mechanisms.

To fully realize savings from cloud migrations, CIOs will need to implement a strict decommissioning plan on existing parts of their company infrastructure. In the long run, cloud migrations can help organizations cut infrastructure costs significantly, while also accelerating reporting times, improving platform stability, enabling rapid scale-up of capacity as needed.

In addition, companies that use 'Green' cloud hosting providers may be able to seek and obtain tax refunds or other incentives in certain jurisdictions.

Beyond the expected cost savings, companies migrating to the cloud can expect a wide range of additional benefits, including greater team productivity, a stronger security and compliance posture, higher customer satisfaction, faster time-to-market, and more innovation around new products and business models.

Finally, cloud computing can help enterprises attract and retain top IT talent who want to work on such modern technology frontiers.

Cloud migrations do have ripple effects throughout global organizations. CIOs should conduct market studies to develop the business case and projected savings for the migration. An assessment of the organization's existing IT resources can identify gaps that might impede the migration.

By presenting these findings to the Board and explaining all the potential benefits of cloud migration, CIOs can improve their chances of obtaining Board sponsorship and support for necessary investments in technology and upskilling. CIOs should then deploy a strong governance structure to boost transparency and provide continuous updates on the migration process and associated savings.

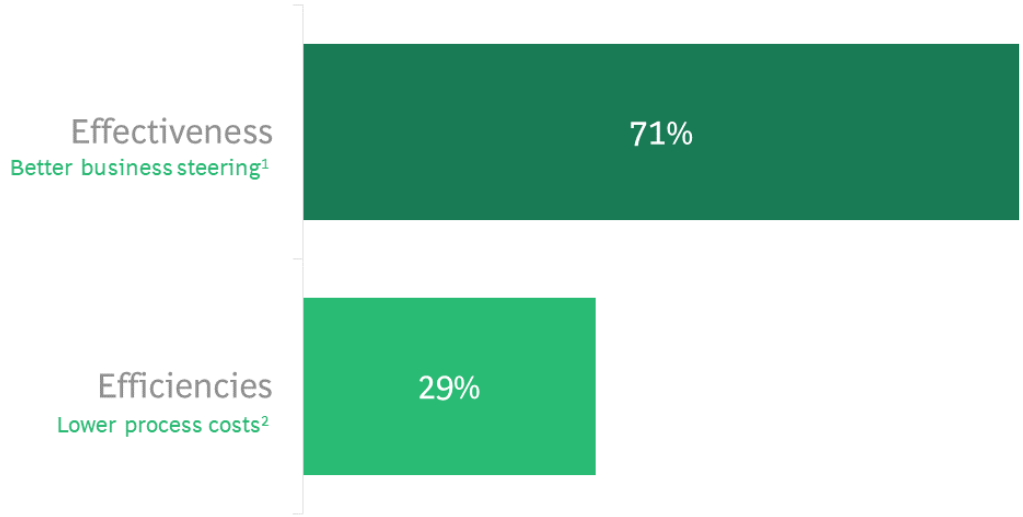
Maximize data value

In addition to all the ways that cloud computing can help enterprises become more efficient and productive, a cloud migration can also make companies more effective at leveraging the full potential of all the data they collect and generate.

Today, data sits at the core of every industry, where it represents a key source of profitability and competitive advantage. In 2017, BCG noted that data-driven companies represented a majority of the 10 most valuable countries in the world.

Internal BCG studies show that the benefits of using a cloud-based data platform more effectively are nearly 2.5x greater than the efficiency benefits of moving operations to the cloud.

Exhibit 4: *Split total benefits expected by transformation*



1. Increase sales, lower costs of procured goods, reduced inventory holding cost / 2. FTE rationalization & IT cost savings

SOURCE: BCG analysis based on multiple engagements

By combining the unique data capabilities of cloud computing with BCG's Data & Digital Platform, companies can manage various use cases to address strategic challenges such as finding new customers, improving customer service, increasing customer retention, optimizing marketing campaigns, and predicting sales trends.

The first step is to identify and prioritize business use cases for leveraging data while considering factors including data availability and regulatory compliance requirements.

Once CIOs know how they want to use data to optimize business processes or introduce new operating models, they can then define and build data governance

rules, data infrastructure, and data lakes. These structures and rules enable the creation, ingestion, and processing of massive data flows at an industrial scale. If necessary, a data mapping program can be useful in homogenizing data in preparation for cloud migration.

Cloud computing providers offer off-the-shelf automation and other data oriented managed services that help CIOs get to market faster with a fully functional data platform.

BCG Platinion recently helped Veolia—a French multinational provider of water, waste, and energy services—to implement a cloud-based SaaS solution that helped the company to maintain smooth operations and encourage teamwork even with 20,000 employees working remotely due to Covid-19. "Providing digital SaaS solutions reflects our global digital strategy," said Veolia CIO Didier Bove in an interview with Le Journal du Net. "By rolling out a data lake, we gave operational teams the data and predictive machine-learning models they needed to optimize the performance of water distribution networks and improve the energy efficiency of buildings or factories. In short, we developed new digital services."

Thriving in the Digital New Normal

COVID-19 has caused massive disruption and pain, but this crisis has also prompted the adoption of digital tools and new ways of working. At a time of great fluidity, CIOs have an opening to explore the ways in which a cloud migration can reduce costs, improve efficiencies, lower cash burn rates, and ultimately even lead to the discovery of data-driven insights that improve competitiveness and uncover new business opportunities.

Of course, there are risks and challenges associated with cloud migration that are unique to each company depending on its industry, its stakeholders, its legacy technologies, and its strategic goals. For example, finance companies must take care to ensure that any cloud data migrations do not contravene regulations on data residency and access.

Amid all the uncertainty and risks caused by COVID-19, success depends on being nimble and adaptive. Cloud migration can help companies improve their resilience by improving their efficiency and effectiveness. For CIOs, cloud migrations can offer important near-term savings and benefits, while also reinvigorating progress toward the long-term goal of digital transformation.

Citations:

[1] Google Cloud, Forrester white paper on the economic impact of G Suite