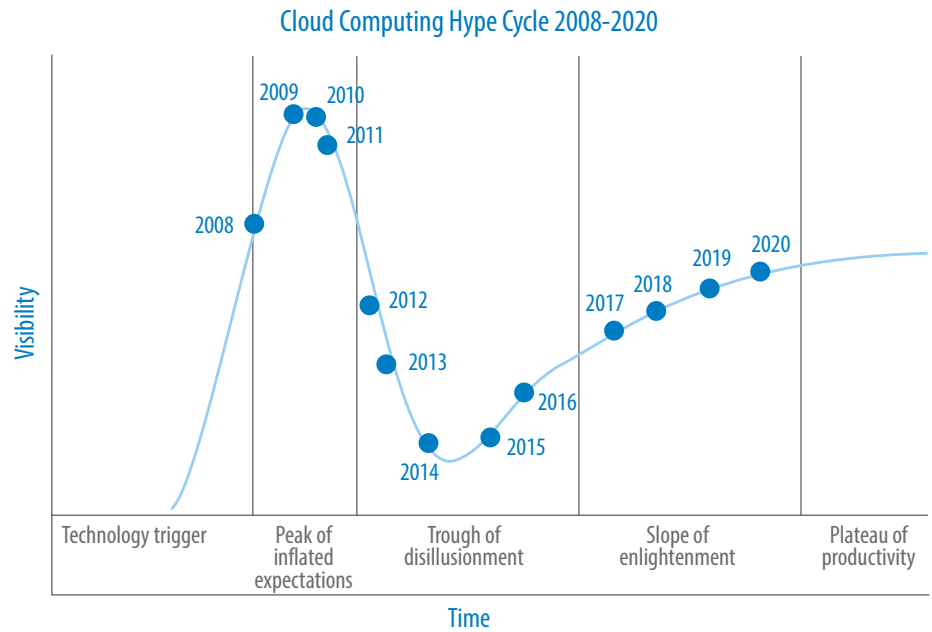# A 4-IN-1 METHOD TO A BETTER CLOUD

Cloud is a game changer for business transformation. However, it isn't easy to do. Overspend, shadow IT and finding the right cloud solution from thousands of products leads to cloud burn-out. A cloud center of excellence solves these problems in concert, transforming cloud from a cost center to a pivotal value driver across the organization.

Achieving better business outcomes by shifting to cloud is no longer a question under discussion. Cloud computing has progressed along Gartner's Hype Cycle for more than a decade, advancing from the peak of inflated expectations to the slope of enlightenment. In the next few years, the plateau of productivity is in sight (Figure 1). Instead of asking the question "Should we move to cloud?," business and technology executives must now focus on maximizing value from a move to public and private cloud infrastructure. But the ability to derive this value isn't easy. In fact, some studies show that just 3% of organizations have optimized cloud adoption to the extent that it supports tangible revenue growth.[1]

The difficulties of operating in the cloud

So what stands in the way? We have identified four problems that get in the way of effectively driving cloud transformation. We refer to these as the "hype problem," the "choice problem," the "silo problem" and the "culture problem."

The hype problem: Cloud success stories are easy to find. Just look at the internet; it has hundreds of stories about Netflix's and Wall Street Journal-like successful cloud transformations. Those who get carried away by this hype may start their cloud journey with an overly optimistic view of what cloud can offer. In doing so, the cost to achieve is often underestimated. Instead of realizing incremental value on their cloud journey, organizations find they spend too much, too soon, leading to cloud burnout. The inherent complexity of cloud adoption then becomes even more of a challenge, with additional money spent on buying solutions, building capabilities and training staff, often on the fly. Those that don't fare well at this stage fall into traditional ways of

Figure 1: Gartner's Hype Cycle for Cloud Computing : 2008-2020

Cloud Computing Hype Cycle 2008-2020

Source: Gartner and Infosys Consulting

working in the cloud. In doing so, they relinquish cloud-native benefits such as improved business agility, resilience and faster innovation.

> Organizations find they spend too much, too soon, leading to cloud burnout

The choice problem: The sheer number of cloud offerings can be mind-numbing. To begin with, there are over a dozen well-known hyperscalers, including AWS, Azure and Google. Each of these IaaS/PaaS companies has hundreds, if not thousands, of cloud products with thousands of SKUs. When it comes to SaaS offerings, Crunchbase found more than 600 companies that have cumulatively raised almost $7 billion in funding in the past year.[2] Similarly, there are countless products and solutions to manage the various aspects of cloudlike migration, DevOps, security, finance and operations. Due to this plethora of choices, decision-makers are often

stuck in analysis paralysis, slowing down cloud transformation. Even those who proceed may continue to remain unsure of their choice.

The silo problem: Most organizations adopt cloud in small pockets, often organically. Each team toys with cloud solutions that serve their specific needs, through the path of least resistance, using niche cloud solutions and service providers. Without enterprise guardrails, this leads to mushrooming of disparate cloud solutions, with excess capacity and duplicate capabilities. This increasingly complex operating environment is difficult to manage and leads to a lot of waste. In early 2019, one of our leading automobile clients had more than 30 line-of-business cloud solutions and spent 25% more on cloud than they needed to.

The culture problem: Traditionally, managing IT infrastructure required some big decisions to be made every few years by a handful of leaders in a relatively stable environment. With cloud, several smaller decisions need to be made every few weeks in

a decentralized manner, by a larger number of SMEs in a continuously evolving environment. This requires setting up an operating model and developing the right ways of working to match. Companies must become agile to benefit from the agility of cloud technology, fostering an approach that is continuously learning, collaborating and getting smarter through human-augmented automation. Without this investment in people, processes and a dynamic operating model, the "Cloud Ferrari" continues to drag on the old dilapidated road.

> Companies must become agile to benefit from the agility of cloud technology

Fixing 4 problems with 1 cloud center of excellence

As organizations grow more complex, hierarchical and rigid, teams find it hard to collaborate and optimize their use of new technologies. Cloud pushes this problem further, as it also requires a completely different mindset and new ways of working. This is where a CoE proves its worth, focused primarily on governing cloud usage rather than controlling outcomes. This construct brings together a cross-functional team of "rightly skilled" experts who evangelize the change in technology, strategy and operations. The CoE also establishes decision models, best practices and standards, and then disseminates this knowledge to the wider organization, driving both efficiencies and innovation. In many ways, a cloud CoE is exactly what is needed to overcome the four problems that get in the way of driving value from cloud projects.

Specifically, a cloud CoE drives excellence across four hubs of activities

or offices: business, technology, operations and governance. By setting best practices based on realistic plans, the cloud CoE can break silos, ease adoption, encourage collaboration, enable faster decision-making and change culture.

Cloud business office — driving business value

The primary marker of the cloud business office is assurance that all cloud adoption activities are geared toward driving business value. It does so by acting as a hub for stakeholder management. It does so internally across lines of businesses, technology teams and IT finance, and externally with vendor partners. With business teams, it evangelizes cloud and oversees adoption, thereby ensuring delivery of cloud-enabled services for the business in line with their needs. Within the technology teams, it helps organize, find or groom the right talent and then develops an agile culture and ways of working. Once workloads are moved to the cloud, the office uses cloud financial management frameworks to optimize/derive maximum value from cloud spend and measure business value delivered. It also has capabilities to manage cloud vendors and drives change throughout cloud teams by acting as a central point of reference for knowledge gathering and sharing.

> The cloud business office acts as a hub for stakeholder engagement and helps drive business value

Cloud technology office — helps select the most appropriate cloud solution

The cloud technology office helps establish best technology practices and learnings for cloud adoption throughout the enterprise. It uses guiding principles to aid application

teams in choosing the right cloud solution and tool, limiting ad hoc adoption of cloud across business units (thereby solving the choice problem). This unit is also involved in establishing security architecture models, data standards and relevant policies to ensure compliance across different industries and regulatory environments while meeting regional and internal needs.
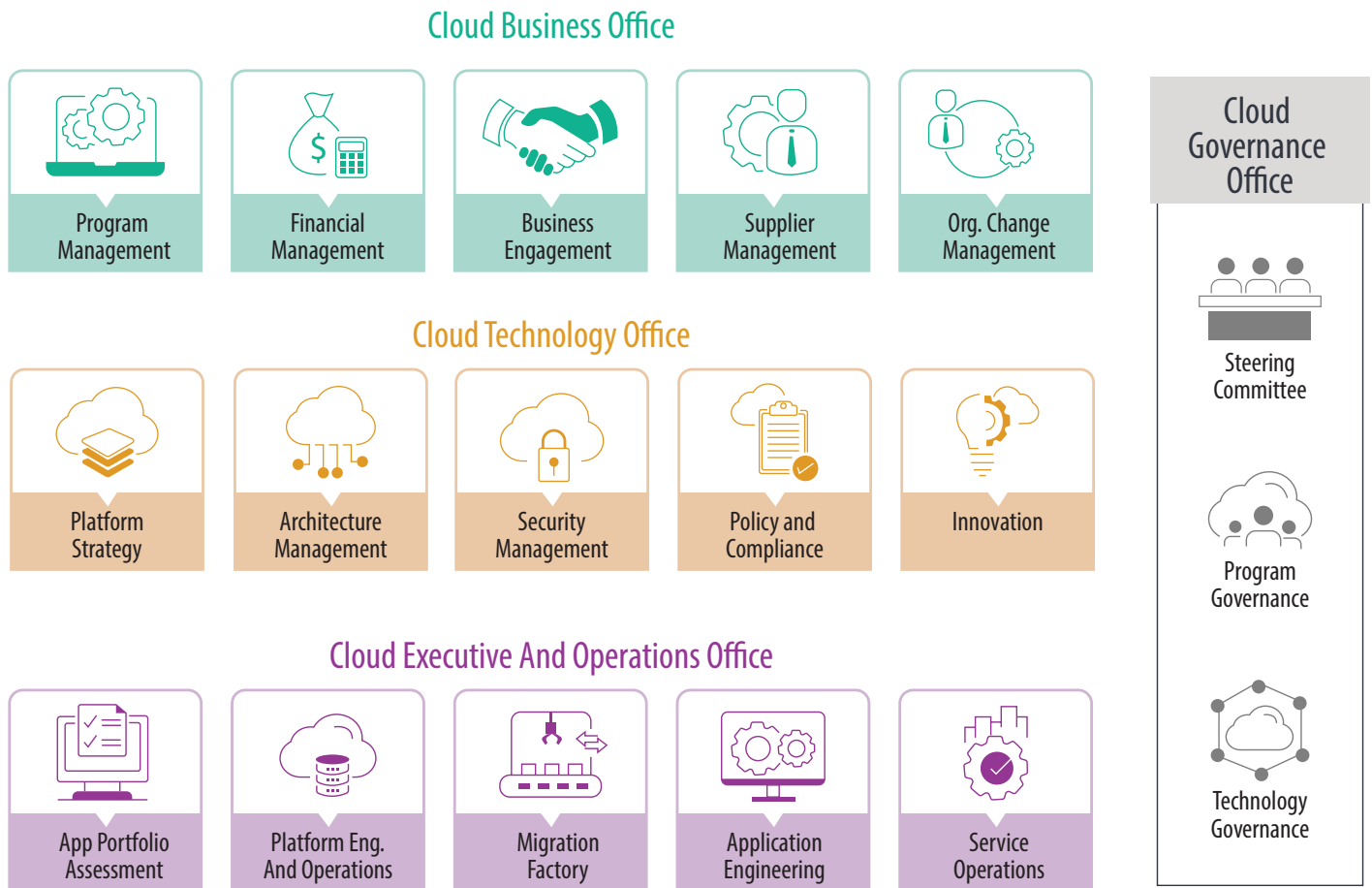
Cloud execution and operations office — establishes guardrails and frameworks for cloud adoption and operations

The cloud operations office begins by creating frameworks and guardrails for the applications portfolio assessment, thereby identifying the right cloud adoption strategy. This strategy could either be portfolio driven or implemented using a cloud factory with playbooks to industrialize application migration. Best practices and engineering guardrails are developed for applications built entirely in the cloud, or for those that need wholesale changes once migrated from on-premises infrastructure. Finally, this office helps adjust service operations processes to support cloud and manages ongoing cloud operations.

Cloud governance office — establishes frameworks, boundaries, makes decisions and resolves ambiguities

The fourth pillar of the CoE is the cloud governance office, providing oversight on cloud strategy, implementation and operations. This office helps establish cloud-specific controls, frameworks and policies that are essential to cloud planning, architecture, deployment, operation and management of cloud solutions. Done effectively, some studies show that cloud governance can increase enterprise profits by as much as 20%.[3]

Figure 2. Infosys Cloud Center of Excellence Framework

Cloud Business Office

Program Management	Financial Management	Business Engagement	Supplier Management	Org. Change Management

Cloud Technology Office

Platform Strategy	Architecture Management	Security Management	Policy and Compliance	Innovation

Cloud Executive And Operations Office

App Portfolio Assessment	Platform Eng. And Operations	Migration Factory	Application Engineering	Service Operations

Cloud Governance Office

- Steering Committee
- Program Governance
- Technology Governance

Source: Infosys Consulting

Cloud living up to the hype

With these core cloud offices in place, cloud transformation can provide tangible value to the business. But a note of caution: This isn't an easy undertaking.

Setting up a cloud CoE requires a thoughtful approach. It begins with setting up the cloud CoE mission and span of influence, making sure to evangelize the fact that the model is not about outright control of cloud resources. Smaller organizations or ones with a strong cloud mandate may prefer a construct that governs all business units throughout the enterprise. Conversely, larger and more complex organizations with

decentralized business unit IT divisions may set up a cloud CoE in each business unit. Whatever route taken, it is critical to seek executive sponsorship and establish just how much authority the CoE has in the organization. Without this, policies driven by the CoE will not have authority and the mission statement will have no impact. An equally important step is to identify and appoint a designated leader for the CoE. Such a person must have stakeholder support across the company and be entrusted to provide a forward-thinking collaborative style of technical leadership.

The cloud strategy, dovetailing with the mission statement, should be holistic, with both business and IT support. KPIs that measure progress of

this strategy should be in effect before beginning the cloud journey. Both a short- and long-term plan is necessary here, inspiring everyone working within cloud as the business moves toward an optimal level of cloud maturity.

With all of these elements in place, siloes will be broken, capability velocity will increase, confusion over choice will be reduced, teams will think more clearly about the cloud product being released and the whole organization will find that cloud finally lives up to the hype.

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