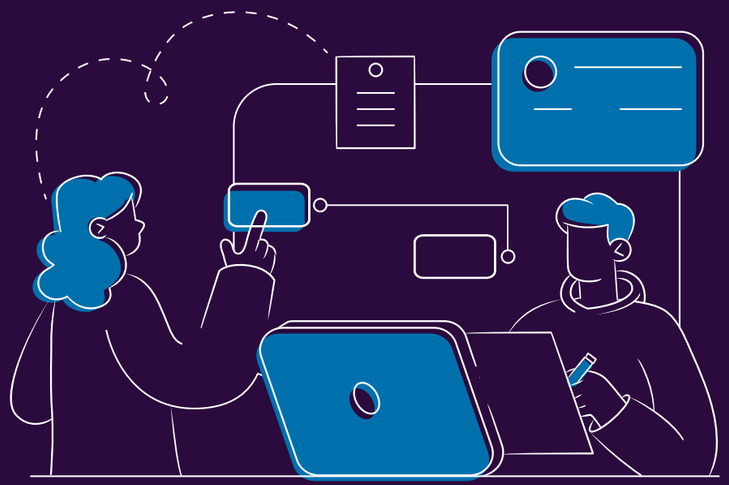
Capgemini

A HOLISTIC CLOUD STRATEGY FOR BUSINESS TRANSFORMATION

Bridging the legacy models with cloud native

THE COMPLEX NATURE OF LARGE ENTERPRISES MEANS THAT A MIX OF TRADITIONAL AND CLOUD-NATIVE APPLICATIONS WILL CONTINUE TO COEXIST FOR THE NEAR FUTURE



As businesses of all sizes accelerate their move to public cloud, difficulties in scaling, optimizing, and cost containment, in addition to constantly changing regulatory requirements, will mean that some applications continue to reside in more traditional datacenter models. However, this does not mean that these applications should continue to struggle with legacy infrastructure and outdated support models. There are opportunities to elevate these legacy applications, many critical to the business, by investing in the foundation of the IT side of business—**the infrastructure.**

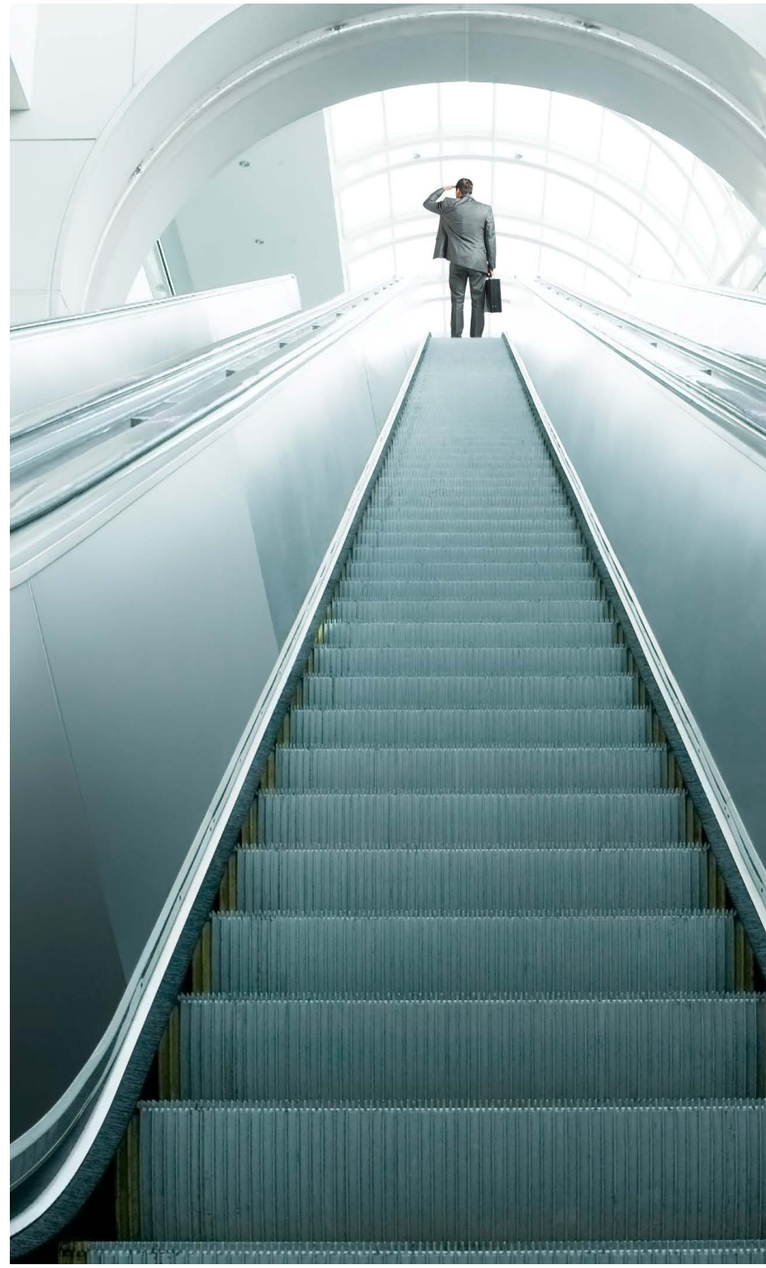
The 2020 global pandemic left many IT leaders scrambling to provide the tools and resources needed to ensure the business could support a suddenly displaced workforce. Corporate infrastructure was quickly stretched to the breaking point while applications designed for on-premises use buckled due to the limited availability of WAN capacity. In the past, programs to improve external access to the corporate network, or investments in a flexible infrastructure, were routinely denied to provide funding for costly line of business applications with long-term return on investments. Even the employee user experience was frequently considered a low-value investment with no clear line of sight to productivity or cost improvements. When the pandemic hit, most businesses were simply unable to react quickly to the changing needs of not only employees but also of new customer dynamics.

THE CHALLENGES THAT ENTERPRISES FACE

Prior to 2020, there was a slow but accelerating march towards public cloud. Many companies had developed a cloud-first strategy with a clear intent: **move to the public cloud as quickly as possible** to enable the business to respond to rapidly changing market conditions, counter external threats, and reduce the capital-intensive investments that traditional datacenter models brought with it.

From a high level, this strategy not only makes sense but would appear to be straightforward to execute—**How hard could it be?** It's just moving an application from one server to another in the cloud, right? Changing from monolithic applications to microservices certainly improves business agility and brings a raft of other benefits.

Where this simple edict began to fall apart is in the execution. **Many IT departments quickly found that they didn't have staff with the appropriate skill sets.** Organizational inertia was frequently ignored as entire groups suddenly began the march towards a very foreign DevSecOps model. People skilled in managing through waterfall methodologies had difficulties with the idea of multiple releases in a day. Legacy tools designed for managing physical datacenters were suddenly called on to manage applications in the cloud where abstraction is the rule. Concepts such as CI/CD pipelines, Functions-as-a-Service, and Infrastructure as Code (arguably the core of cloud services) were quickly ignored as the skills gap was filled by old ways of managing infrastructure. Meanwhile, many development shops had already progressed significantly towards cloud native, creating a polarizing conflict between the two sides of IT.



FINDING A MORE HOLISTIC APPROACH

While these observations may paint a bleak short-term picture, the reality is not as bad as it seems. The key is to bridge legacy models with cloud native through a hybrid cloud model. This move will need to be made while focusing on several things that, once again, can be summed up as **people, process,** and **technology.**

One area in which many cloud-first initiatives fail is **people.** While many IT managers will acknowledge that there is a skills gap, only a few have a workable plan to bridge that gap. Understanding your current workforce strengths and weaknesses is crucial to how you can begin to plan and execute a cloud strategy. Putting together a datacenter modernization program to begin the move from traditional datacenter models to a private cloud model can allow people the time needed to begin the upskilling process while ensuring the business continues to operate without what can be called "knowledge disruptions." This also provides an opportunity to begin chipping away at the organizational inertia that can drag down a transformational program as significant as this. A well-thought-out datacenter transformation program will not only highlight organizational issues but can also help to identify applications that can quickly move to the cloud. The injection of cloud-native engineering teams will further provide cross training to teams that may not have wide experience with cloud methodologies.

This brings me to **process.** Short of replacing a large part of an IT organization, the move away from waterfall methodologies will take time and needs to have end-to-end analysis on exactly how the business operates. Understanding not only the applications but how they interact with each other and the value they bring to the business are all key indicators of readiness to move or modernize. As opportunities are identified to move towards an agile infrastructure, cross-domain teams can be formed with coaches to help shift the organization in this new direction. This fundamental shift in thinking can be applied to modernization of a legacy datacenter to a private cloud infrastructure, thereby providing a path forward.

Finally, **technology**—and the rapid flexibility it can provide—underpins the entire transformation of the business. IT is no longer something that can be ignored as it is now core to every business. Software-defined everything is where infrastructure is going, and it continues to accelerate. While the trend has been underway for decades with compute virtualization technologies, we have since seen it applied to everything from networking to discrete application functions. The ability to rapidly reconfigure or expand and shrink the infrastructure required to support an application is fundamental to the shift to cloud. This has also necessitated the abandonment of monolithic tools that only look at one piece of the infrastructure puzzle. Tools that can look across any cloud type to determine application performance and health are now table stakes. Equally important is the ability to deploy an application anywhere without needing to customize it to a specific provider; this can generate unparalleled speed and flexibility to combat something as disruptive as a provider outage or a malware attack while being able to adapt to sudden shifts in business models like work from home.

This approach leaves us with a holistic cloud strategy to bring the business forward and enable an overall business transformation strategy. Starting with datacenter modernization and transformation to a private cloud model allows for an orderly transition of the people, processes, and technology to the public cloud. Additionally, this provides the engine for significant organizational change while protecting existing investments in the people as they move to a cloud-first model. This combined view and the implementation of a hybrid cloud model can support almost any scenario that the business can face, and underlines what is now a critical business function—IT.

TALK TO US

For more information, please contact the author of the Point of View:

Michael Sausen

Global Portfolio Lead for Infrastructure Services

michael.sausen@capgemini.com

Visit: **Infrastructure Services**

About Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of 290,000 team members in nearly 50 countries. With its strong 50 year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2020 global revenues of €16 billion.

Get the Future You Want | www.capgemini.com

For further information please contact:

infra.global@capgemini.com