

# Hybrid Cloud – From Happenstance to an Explicit IT Strategy

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## The 451 Take

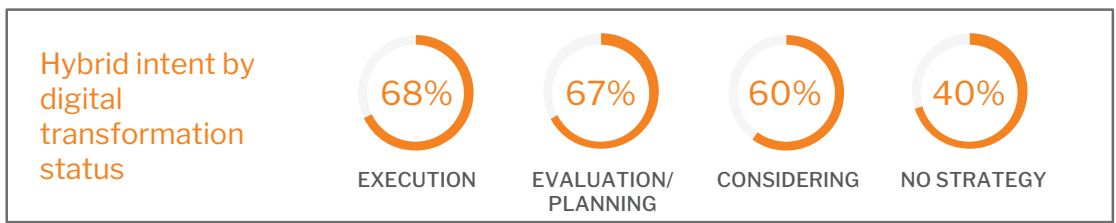
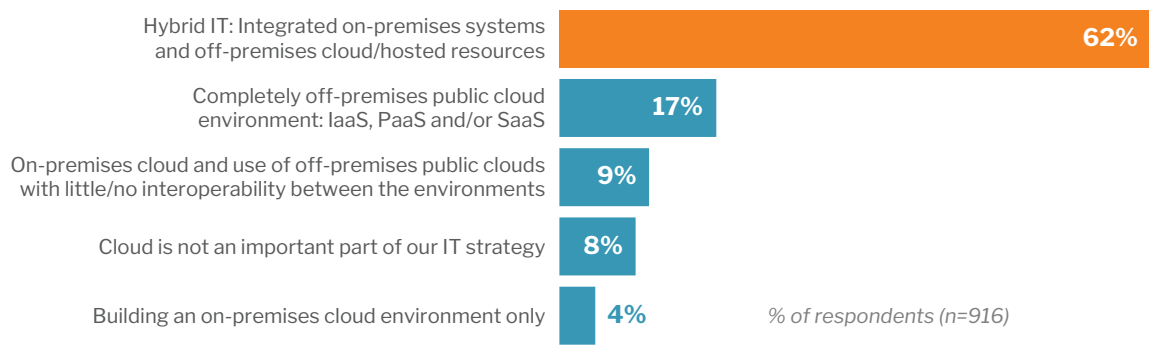
In the early days of cloud, when decentralized purchasing across different groups was the primary adoption dynamic, hybrid cloud was something that ‘just happened.’ With the IT landscape having matured, the imperatives of digital transformation have become more apparent, and cloud-native technology is making infrastructure more ‘invisible.’ Hybrid cloud is now a design point, and has become an explicit IT strategy for infrastructure, applications and data as enterprises seek the optimal combination of resources and services to meet business priorities.

According to 451 Research’s Voice of the Enterprise, Digital Pulse: Budgets and Outlook 2019 survey, 62% of organizations are all-in on hybrid, telling us they plan to operate a hybrid IT environment (including on-premises and cloud), and this is stronger for larger businesses. It’s notable that the same survey found that 17% of organizations are all-in on public cloud (completely off-premises), which is a big shift from the early years of cloud. There is no ‘one cloud to rule them all!’ But ultimately this is not a battle between on-prem and off-prem; it’s about how organizations want to consume and pay for machines – and who owns the resources to deliver that. This currently favors those who do so in a consumption-based, service-driven, retail-model discipline.

### Hybrid/Multi-cloud: The New Normal in IT

Source: Voice of the Enterprise, Digital Pulse: Budgets and Outlook 2019

Q. Which of the following best describes your organization’s overall IT approach and strategy?



So, what are companies doing on hybrid cloud? The same survey finds that data-centric technologies continue to drive value creation and competitive differentiation as companies seek to capitalize on the interactions delivered from their digital transformation. Organizations’ top technology priorities for 2019 included data platforms and analytics (47% of respondents) and artificial intelligence/machine learning (32%). But technologies vital to the execution of digital transformation such as containers and software-defined infrastructure are also picking up steam in terms of overall importance and adoption.

## Business Impact

**SECURE THE SKILLS TO ENSURE SUCCESS.** Access to talent is becoming more of a constraint than access to capital. While the ‘what’ of digital transformation (i.e., data) remains a top technology priority, the ‘how’ (i.e., approaches such as containers and software-defined infrastructure) is ramping up.

**IT’S ALL ABOUT FLEXIBILITY.** Workloads are everywhere and may conceivably need to be anywhere (on-/off-prem) and move around at any time. Composite applications may have different elements running in different environments, while self-contained applications may need to scale out based on business needs. Migration and movement here might be a one-time thing or a continuous process to ensure optimal workload experience for cost, performance, security or regulatory compliance.

**ON-PREMISES, MANAGED CLOUD IS PART OF HYBRID IT.** At the heart of the hybrid/multi-cloud value proposition is the idea that on-premises private infrastructure doesn’t go away. Some workloads will move to cloud, but most companies – particularly large enterprises – cannot start over.

**CODE WILL ONE DAY WRITE ITSELF.** Cloud-native and composable approaches will ensure hybrid operation, but someone (or something) will need to manage the execution. Work with suppliers that can provide an ‘open approach’ to the services, optimization tools and operational support that enable businesses to realize the hybrid and multi-cloud vision.

**RE-PLATFORMING TO CLOUD NATIVE IS AN IMPERATIVE.** Hybrid cloud is the infrastructure view, and cloud native is the application view; however, a data strategy must traverse both. To avoid the expense of doing this multiple times or being locked into a specific set of provider APIs, open source platform approaches should be considered.

**THE CLOUD MODEL IS THE BASIS OF DIGITAL TRANSFORMATIONS.** Transforming to become ‘digital’ requires organizations to operate continuous deployment pipelines. This demands infrastructure that can be accessed flexibly and on-demand, by APIs – and this is cloud.

## Looking Ahead

Given the breadth of hybrid IT and cloud services available, the key to success will be finding the right combinations and operationalizing them to deliver the benefits advertised by suppliers (namely speed, scale, and agility) that support digital transformations. The main use case businesses cite for hybrid is being able to continuously move workloads and associated data to the right environment for the sake of cost, performance, security or another priority. This will only be realized if management and orchestration across these platforms is done effectively and with transparency to assure end users that services meet their performance standards.

The key question is which applications and workloads in what sequencing are going into which ‘venues’ over what time period. The answer will be determined largely by the ability to move data and analytics between venues without interrupting business. Indeed, enterprises tell us that with the increased use of multiple services in hybrid environments, it’s going to be very important to move applications and data into, out of and around these deployments based on business policy and SLA. DR is the primary use case; however, we expect this kind of mobility to become a normal part of IT activity. The key challenges here will be ensuring security and governance requirements are met with so many different deployment options, and then managing all applications across all of these options. Having to use different management consoles for each will make management a major burden and lead to inefficiencies.

Cloud native enables bridging different worlds in hybrid IT – including different build, consumption and management models within the same IT estate. The key organizational impact is that application developers are getting a bigger say in workload deployment. Integrated application development taking advantage of shared data and analytics resources continues to drive digital business, and access will become more common, leading to expanded degrees of business/IT alignment. Like the re-platforming to the internet and web that every business undertook in the 1990s-2000s, re-platforming to cloud-native applications and services is going to take years. Transforming to new ways of working that are agile and automated is a big leap from legacy approaches, but this is no doubt the way forward.

Optimize your data architecture to take full advantage of hybrid cloud agility, scale, speed, and cost. An enterprise data cloud can unlock the value of any data, anywhere with consistent security, governance, and control across hybrid and multi-cloud environments. It enables multiple analytic functions to work together on the same data at its source, eliminating costly re-platforming and inefficient data silos. Cloudera Data Platform is the world’s first enterprise cloud. To learn more, visit [www.cloudera.com/cdp](http://www.cloudera.com/cdp).