

REPORT REPRINT

Cloud management: Readiness and governance, Part 1

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There is a landgrab under way as industries and public agencies convert to multi-cloud and hybrid architectures. We take a look at how enterprises are preparing for and undertaking this conversion by using cloud-readiness services, and how they can then manage and optimize those deployments on an ongoing basis with cloud governance.

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There is a massive landgrab under way as industries and public agencies convert to multi-cloud and hybrid architectures. Ultimately, we believe that the more effective a company is in supporting this transformation, the more right it will have to play in the ongoing (and long-term) management and optimization of deployments designed to ensure that cloud computing works as advertised. In a two-part Spotlight report (this is Part 1), we will be looking at how enterprises are preparing for and undertaking this conversion by using cloud-readiness services, and how they can then manage and optimize those deployments on an ongoing basis with cloud governance.

THE 451 TAKE

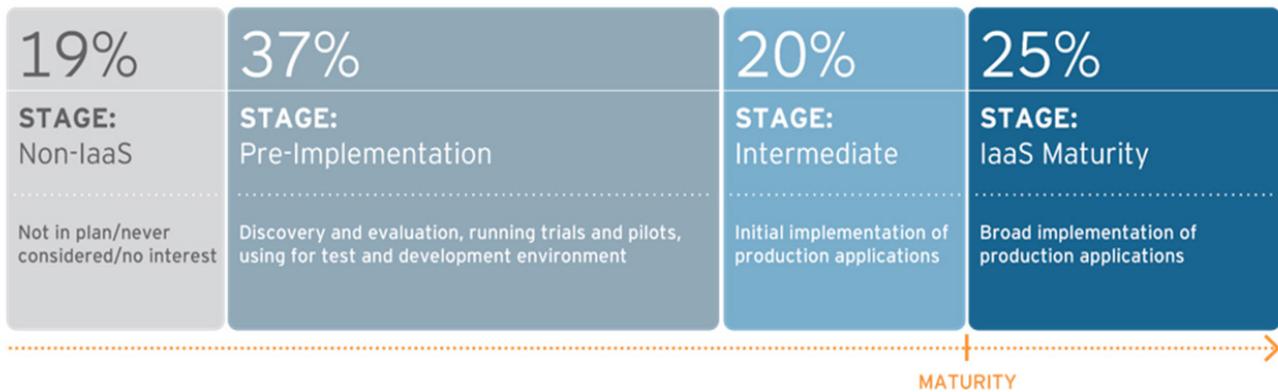
There's been a sea change in attitude toward the use of public cloud over the last couple of years across all industries, but especially in highly regulated sectors such as banking and insurance. Private cloud has found a role supporting specialized use cases. As this conversion to a multi-cloud world and hybrid architectures gathers pace, enterprises and public agencies are seeking assistance from partners with the key stages of this journey, essentially pre-flight, boarding and in-flight management. Cloud readiness and cloud governance are two critical issues.

While 451 Research's Voice of The Enterprise: Cloud, Hosting and Managed Services, Workloads and Key Projects 2018 study finds that 93% of enterprises surveyed are now using some form of cloud services, Figure 1 shows that only 25% have reached a stage of broad implementation of IaaS. However, the price of change is less than the price of not changing, and we believe the conversion to cloud is an opportunity that – even after 12 years of cloud computing – is almost entirely ahead of the industry.

Figure 1: IaaS maturity: Only one-quarter of businesses at broad implementation

Source: 451 Research, LLC

% of respondents indicating stage of organizational use of IaaS/public cloud (n=623)



Q: Which of the following best describes your organization's use of IaaS/public cloud?

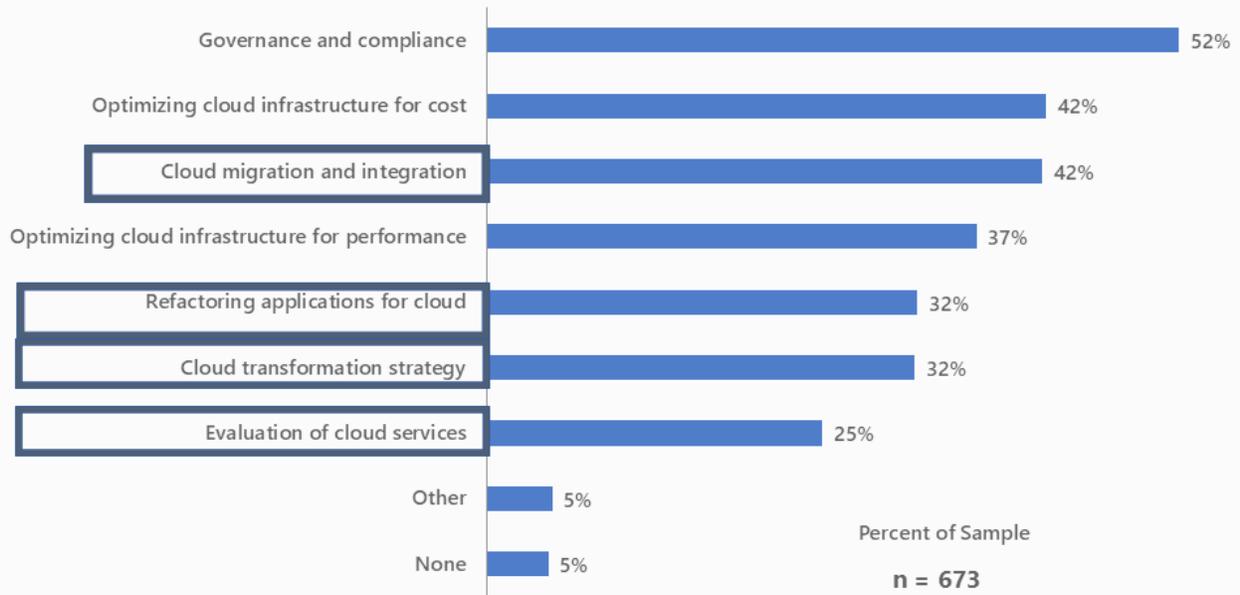
Source: 451 Research, Voice of the Enterprise, Cloud, Hosting and Managed Services: Workloads and Key Projects 2018

Cloud readiness used to be a term heard mostly from the global systems integrators as part of big IT transformation outsource projects. However, since the hyperscale cloud providers ramped up their enterprise efforts and an ecosystem of new integrators has emerged, the term has fallen into use to cover all aspects of advisory, planning and design; operating model development; integration with existing resources; application refactoring; onboarding and migration; and the creation of secure 'landing zones.'

Enterprises are seeking ways to ready themselves for this conversion to cloud in ways that remove as much complexity, cost and disruption as possible beforehand. The challenges associated with cloud readiness identified in 451 Research’s Voice of the Enterprise are shown in Figure 2. (The other tasks are associated with post-conversion management and optimization, and are covered in the second part of this Spotlight report.)

Figure 2: Key challenges: Cloud readiness

Source: 451 Research, LLC



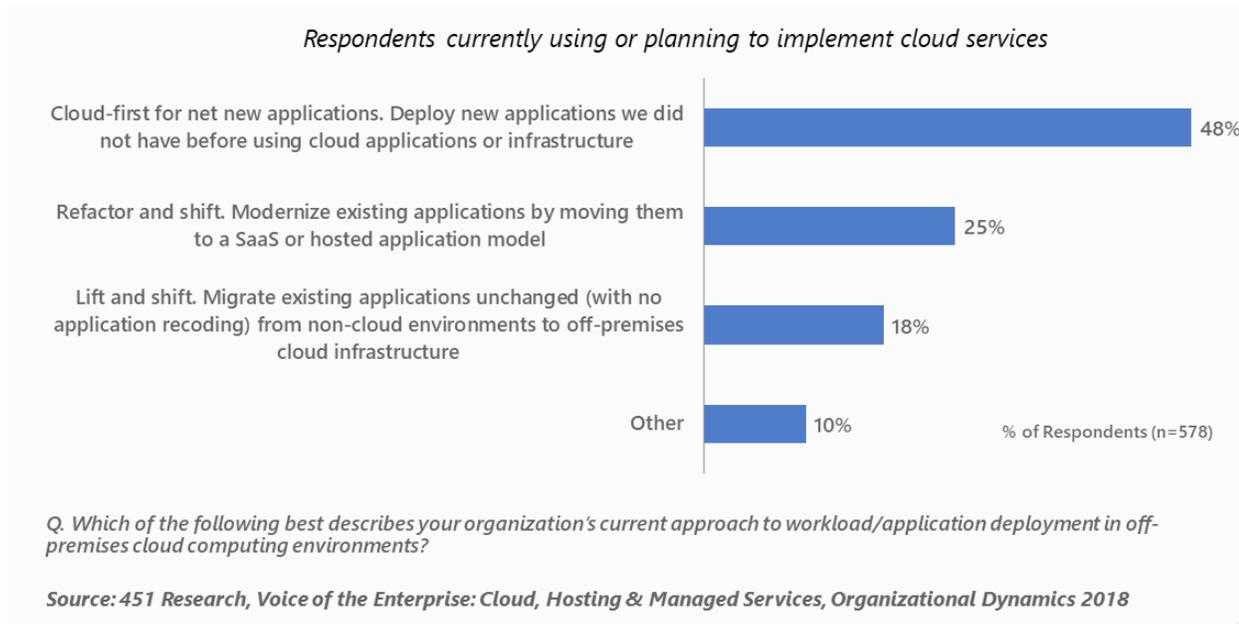
Q. Which of the following challenges does your organization face as you implement cloud technology, services platforms and environments?

Source: 451 Research, Voice of the Enterprise: Cloud, Hosting and Managed Services, Budgets and Outlook 2017

As far as the migration itself is concerned, cloud-first for net new applications is the key driver of adoption, and accounts for about 50% of primary cloud deployment (see Figure 3). The other 50% is either refactor/modernize and ‘lift and shift’ (or other) migration approaches. It is cloud-native development that characterizes the deployment of new applications to the cloud – containers, Kubernetes, microservices, serverless, etc. As for the other approaches, lift and shift is now losing ground to refactor/modernize because it has proven too complex, costly and disruptive for many. Unmodified code shifted to cloud in cloud-first approaches simply doesn’t work.

Figure 3: Approach to deployment in off-premises cloud environments

Source: 451 Research, LLC



CHALLENGES

There isn't universal buy-in to the staged approach to cloud readiness, which usually involves some combination of advisory, planning, design and testing. There are two problem sets. The first is 'mind the gap', or analysis paralysis. This when an organization is assessing migration and the available tools – and perhaps consulting peer group migration experiences – and appears to identify a gap in the process. The discussion and debate around what will or won't work to bridge the gap means the migration doesn't ever begin.

The second is the 'Humpty Dumpty' question. How well are all the dependencies known and accounted for in the landing zone? And, therefore, how can all of the pieces be put back together again once the application has moved? Trying to uncover every dependency in existing IT portfolios or to reconcile inaccurate data from asset management systems or CMDBs can cause projects to stall.

A number of vendors advocate that using their approaches, customers can skip multiple phases of migration and avoid the expense and time. (It is these phases of migration on which so many companies have built entire businesses.) These approaches are typically rooted in abstracting away dependencies as far as possible and remediating any problems post migration.

Rotating to cloud-native and DevOps is an imperative. While containers, microservices, Kubernetes and serverless represent where the puck is going, getting there is going to be tough for many. It's becoming more difficult to find talent than it is to find capital – raising software IQ is hard.

OPPORTUNITY

Cloud readiness is typically seen as the domain of global systems integrators and professional services companies that can support assessment, transformation planning and migration through consulting, advisory, planning and design services. However, there continues to be a healthy market for other kinds of suppliers here. They are typically 'born in the cloud' companies, independent providers of advisory, planning and migration services, as well as managed services providers that resell hyperscale cloud infrastructure together with cloud-readiness services. However, the pace of M&A activity here is reducing the available stock of independent providers as incumbents build out portfolios and investor groups use M&A to establish new powerhouses to attack the opportunity.

The reason this market is white-hot right now is that the more effective a supplier is in supporting enterprise cloud readiness, the more right it will have to play in the ongoing management and optimization, which is where the majority of the opportunity is.