REPORT REPRINT

Understanding the late adopter: A closer look at inhibitors to public cloud use

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451 Research's VotE research shows that public cloud adoption is widespread, but some organizations remain resistant to using cloud infrastructure. These businesses identify inhibitors in the cloud itself, within their organizational structure, and within their existing IT systems.

Enterprise cloud adoption is well under way, with cloud services (including SaaS, IaaS and various forms of private cloud) now in place at a majority of businesses. Cloud infrastructure models are serving as normal components of enterprise IT, and the majority of hosted infrastructure spending is going to public cloud. Although use of public cloud infrastructure is widespread and increasing, it is not yet universal. According to 451 Research's recent Voice of the Enterprise, Cloud Hosting and Managed Services: Workloads and Key Projects study, the majority of businesses will have adopted in the next year; 46% of respondents currently have IaaS in use, and an additional 12% plan to implement it in the next 12 months. The remainder likely includes businesses that plan to adopt IaaS further than 12 months out, as well as others that have no plan, but will adopt at some point.

The 42% of businesses not using public cloud or planning to in the near future include organizations that are slow to adapt to cloud and those that choose to execute entirely on private cloud (hosted or in-house). In either case, the barriers to public cloud adoption are firmly held, and it's important for cloud service providers to understand them. Responses to the VotE Cloud Hosting and Managed services study indicate these businesses typically see the barriers to adoption as being more connected to traits of the public cloud itself (such as cost and security) than to attributes of their organization or their IT environment.

THE 451 TAKE

Progress along the public cloud adoption curve opens doors for service providers focused on enablement. Many of the early adopters of public cloud possess the capability to execute successfully on cloud themselves. However, those skills are scarce among the late adopters, so the case for third-party enablers is stronger. Businesses not using public cloud are a critical market for the success of these enablers. Understanding where these late adopters identify impediments, and which specific barriers they consider to be the strongest will enable service providers to design services, strategic messaging and sales tactics that position them to offer value to these customers. Possessing the ability to overcome the major inhibitors faced by late adopters is precisely the means by which enablers will create strong and highly valued relationships with the businesses they serve. It will also position the enablers as key players in the partner ecosystems of public cloud vendors – a position that is likely to result in more referrals, and more partnerships with other specialized ecosystem players.

NOT THERE YET – THE PUBLIC CLOUD LATE ADOPTER

As public cloud usage reaches the majority of businesses, the late adopters (with IaaS neither in use nor in plan) become an increasingly small category defined by the types of technology they are not using. However, demographic data among respondents shows that late adopters share some common traits.

For example, there is a correlation between company size and IaaS usage; smaller businesses are more likely to be late adopters of public cloud. IaaS penetration shows a fairly linear increase along with company size by headcount – from 34% among small businesses (1-249 employees) to 66% among large businesses (10,000+ employees). Similarly, usage increases with company revenue. However, the inverse is true when it comes to company age; the highest usage rates are among companies under five years old, and the late adopters more likely to be among the older businesses.

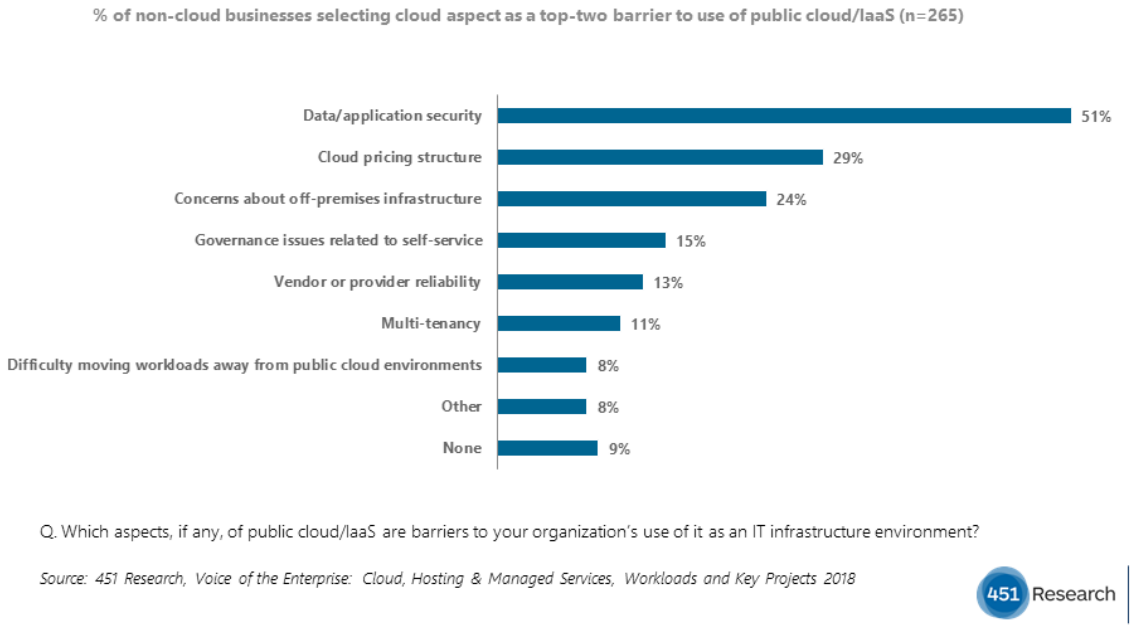
Companies in certain vertical markets are more likely to be late adopters; public cloud usage is lowest among companies in the utilities business and the public sector. Demographic categories begin to paint a picture of the traits that oppose public cloud usage. However, survey respondents also offered direct insight on which inhibitors relate directly to the cloud platform itself, to characteristics of the organization and to traits of its existing IT environment.

CLOUD-BASED INHIBITORS

Among businesses with no public cloud infrastructure in place, the cloud itself was most strongly identified as the location of barriers to adoption. Just 9% identified no cloud-based inhibitors to public cloud use. Security and pricing structure top the list of cloud-based inhibitors (see Figure 1), with 51% of these respondents identifying data and application security as a top-two inhibitor.

The appearance of data security concerns as an inhibitor to public cloud adoption is a familiar sight, so it is no surprise that this opinion persists among businesses that have not adopted IaaS. However, the notion that public cloud infrastructure presents an inherent security challenge has diminished in recent years as the capability to execute security in the cloud has been broadly demonstrated.

FIGURE 1: CLOUD-BASED INHIBITORS TO USE OF PUBLIC CLOUD



Q. Which aspects, if any, of public cloud/IaaS are barriers to your organization's use of it as an IT infrastructure environment?

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

Overcoming deeply rooted beliefs that public cloud is inherently insecure is a challenge that cloud-enablement specialists must overcome. The capacity to change that perception or to address specific security requirements may make these specialists essential to the cloud-transformation initiatives of this type of late-adopter client.

Cost is a similarly consistent concern about public cloud, even among those businesses actively using IaaS platforms. The utility pricing structure can make it difficult for businesses to manage procurement or to control runaway costs. Overcoming the cost management aspect of public cloud use is an increasingly common case for managed services. Service providers focused on the managed third-party cloud model, such as Rackspace and Logicworks, have made optimizing public cloud deployments for cost a central feature of their offerings.

Overall, businesses not currently using public cloud were comparatively unconcerned with traits such as the reliability of public cloud vendors (13%), the multi-tenancy of the platform (11%) and the difficulty of moving workloads out of public cloud (8%).

ORGANIZATIONAL INHIBITORS

Businesses were less likely to identify organizational issues as reasons for not having public cloud in place, with 14% of these respondents identifying no organizational issues (see Figure 2). Among organizational issues identified as barriers to adoption by businesses without public cloud IaaS in place or in plan, the issues most commonly identified are loss of control (23%), difficulty of integrating with the existing IT environment (20%) and limits of internal resources (18%).

FIGURE 2: ORGANIZATIONAL INHIBITORS TO USE OF PUBLIC CLOUD

Q. Which organizational issue, if any, is the most significant barrier to your organization's use of public cloud/IaaS as an IT infrastructure environment?

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

The organizational traits identified as barriers to public cloud illustrate key challenges of cloud transformation in general – obtaining necessary expertise, integrating workloads deployed into cloud with existing IT environments, and developing systems for maintaining organizational control over external environments. These are all areas in which specialized service providers can deliver value to customers while making transformation possible.

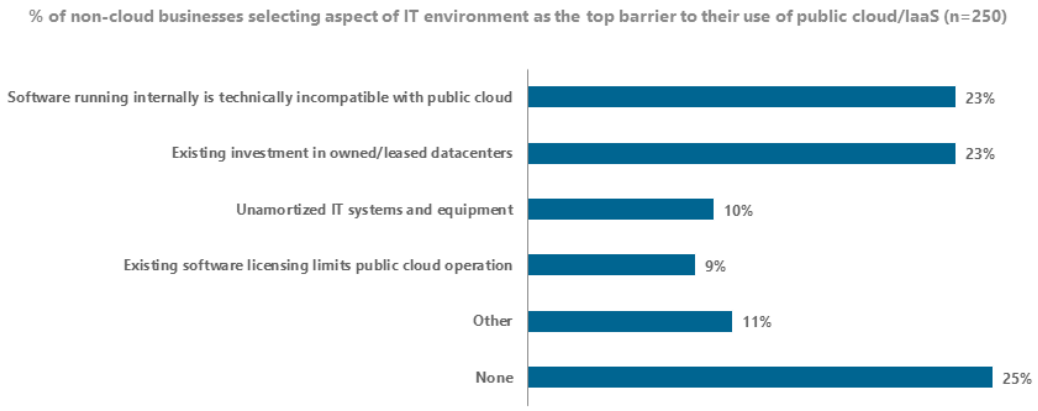
Notably, workload and data-migration challenges were not identified as a major concern, appearing in only 10% of responses. However, these are commonly identified as a challenge encountered along the way by organizations that have implemented public cloud. The fact that businesses appear to underestimate the scope of migration challenges they will face should influence how service providers approach delivering these types of services; for example, they should prepare customers for eventualities they are likely to face.

IT-ENVIRONMENT-BASED INHIBITORS

Businesses without public cloud IaaS in use were least likely to name aspects of their own IT environment as inhibitors to public cloud usage. In this category, one-quarter of respondents indicated that none of the inhibitors to their use of public cloud reside within their own IT environment (see Figure 3).

Among the affirmative responses, respondents cited the incompatibility of software running internally with cloud platforms (23%) and the existing investment in owned or leased datacenter facilities (23%) as the characteristics of existing IT environments creating barriers to public cloud.

FIGURE 3: IT-ENVIRONMENT-BASED INHIBITORS TO USE OF PUBLIC CLOUD



Q. Which aspect, if any, of the existing IT environment is the most significant barrier to your organization's use of public cloud/IaaS as an IT infrastructure environment?

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

These arguments may be more difficult for a service provider to overcome than some of the basic reservations about public cloud. However, benefits do exist in these cases as well. Some successful service providers focus their practices on helping businesses to reengineer custom applications to run in the public cloud. Specializations around moving packaged software to public cloud are becoming increasingly common – Rackspace, CenturyLink, DXC Technology and NaviSite, for example, have created specialized cloud managed services for various enterprise software tools, including various SAP and Oracle software products. Businesses that have significant capital investments in datacenter space could stand to save considerably on operating costs by incorporating public cloud into their IT strategies.

OVERCOMING INHIBITORS AND SPOTTING SERVICE PROVIDER OPPORTUNITY

The fact that businesses that do not use public cloud identify the cloud itself as the source of their concerns more frequently than the shortcomings of their own organization or IT environment shows that many late adopters continue to believe there are inherent flaws in the platforms. The good news here for cloud enablers is that counterarguments to some of the beliefs about inhibitors are well established. There are many examples of well-executed, compliant security policies in the public cloud –in many cases more secure than what businesses are doing on-premises – and an optimized cloud deployment can be more cost-effective than executing internally, especially where it facilitates some consolidation of the existing datacenter footprint.

Winning the business of these organizations or overcoming mistrust of public cloud may take some market-education efforts by service providers, but in some ways, the skeptical stance of the late adopters makes them ideal candidates for the services of cloud enablers.