

Hybrid, Multi-Cloud IT Strategies Demand Specialized Platforms, Services

The 451 Take

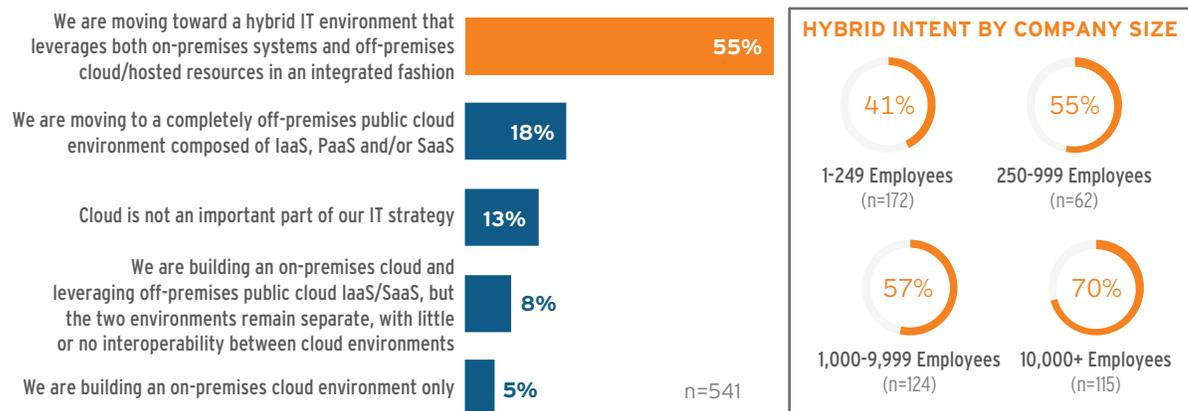
Businesses rightly regard cloud platforms as having the potential to transform the operation of enterprise IT for the better, and many have begun this process of transformation. However, for most, the challenge of cloud execution will not be a wholesale migration to public cloud, but the careful integration of off-premises resources with new and existing internal IT systems.

According to 451 Research's [Voice of the Enterprise: Cloud, Hosting and Managed Services](#) study, a majority of businesses (55%) intend to move toward a hybrid IT environment that includes both on-premises infrastructure and external or cloud-based resources, integrated to enable workload portability and seamless delivery of function across environments (see figure below). This majority increases along with company size, reaching 70% among companies with more than 10,000 employees. A majority are also adopting a multi-vendor position in the public cloud, with 63% of IaaS users indicating they have multiple public cloud vendors in place.

The Future is Hybrid for Most

Source: 451 Research's Voice of the Enterprise: Cloud, Hosting and Managed Services, Vendor Evaluations 2018

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



The objectives expressed for hybrid and multi-cloud strategies are similar to those for the use of cloud in general: improvements to business agility, operating costs, and application performance and availability. Enterprises see hybrid IT environments as a means of reaching cloud objectives while addressing the realities of existing IT investments, dependencies, and security and compliance requirements. The use of multiple public clouds is driven by access to platform-specific features, avoidance of vendor lock-in and opportunities to optimize cost across platforms.

This increasingly holistic view of IT requirements is connected to the growing trend toward what 451 Research describes as 'invisible infrastructure.' By this we mean the users of IT systems require less visibility into the resources they use, and instead prefer a simple, seamless and automated way of accessing and paying for services they can effectively use to address their business requirements. The principles of invisible infrastructure are already reshaping the IT landscape. But invisible doesn't mean unimportant. Addressing the full scope of business requirements demands a hybrid of on-premises and external resources, and a multi-cloud combination of public cloud platforms. Delivering these resources with the seamlessness of invisible infrastructure requires an additional layer of management tools and services that create interoperability, integration, orchestration, management and a shared application architecture across environments.

For many businesses, successfully navigating the demands of hybrid and multi-cloud IT strategies will require the involvement of a partner that can provide up-front strategic planning, hands-on work connecting disparate environments and reconciling cost and service levels across multiple public clouds, tools for management and middleware, and services offering ongoing management and optimization of workloads running across clouds.

451 Research is a preeminent information technology research and advisory company. With a core focus on technology innovation and market disruption, we provide essential insight for leaders of the digital economy. More than 120 analysts and consultants deliver that insight via syndicated research, advisory services and live events to over 1,000 client organizations in North America, Europe and around the world. Founded in 2000 and headquartered in New York, 451 Research is a division of The 451 Group.

Business Impact

APPLICATION ARCHITECTURES MUST SUPPORT HYBRID IT EXECUTION. Effective use of a hybrid IT environment requires the use of a modern application architecture, including components such as containers and container management tools, microservices, unified orchestration and management tools, and shared data functions. This will help to enable workload portability and seamless delivery of functions.

HYBRID STRATEGIES ADDRESS A BREADTH OF ENTERPRISE USE CASES. Businesses will use unified, hybrid IT environments to support a variety of use cases. These may include backup and disaster recovery efforts; the use of platform-specific functions across multiple public clouds; support for a complete application lifecycle in which developers build and test applications on-premises to ultimately run in public cloud; the refactoring of legacy applications into cloud-native forms; and eventually the migration of those to off-premises environments.

HYBRID OBJECTIVES WILL DRIVE ENTERPRISE TECHNOLOGY DECISION-MAKING. With hybrid IT as the objective, businesses will be inclined to make technology choices (for platforms, tools, services and partners) that support that goal. This includes selecting technologies that integrate easily with existing systems or rely on common standards. Open architectures and systems can contribute to the overall compatibility of the IT environment.

GROWING COMPLEXITY WILL DRIVE DEMAND FOR SPECIALIZED ENABLEMENT SERVICES. Efforts to implement hybrid IT systems that tie together multiple platforms and multiple public cloud vendors to deliver the business outcomes intended by the organization introduces a new level of complexity to operations. This will lead enterprises to increasingly rely on service providers capable of providing end-to-end management and optimization across disparate systems, as well as strategic consulting on modernization, migration, integration and other tasks.

Looking Ahead

As businesses continue to progress and accelerate the execution of their hybrid IT strategies, they will introduce additional complexity into their IT operations, which will expose skills gaps and other barriers to realizing the intended businesses benefits of hybrid and multi-cloud strategies. With growing complexity will come more acute and specialized requirements for cloud-enablement services, including expertise related to public cloud platforms, advanced cloud functions and tools, integration, operational management, and managed security.

Businesses on this hybrid IT path will increasingly look to providers to deliver services that support their IT systems from end to end, including up-front engagement and assessment, supplying and managing private cloud platforms and cross-cloud management tools, managing multiple vendors, assisting with application modernization and cloud-native design, and providing ongoing operational management and security for hybrid IT deployments. Hybrid requirements will drive the need for cloud-enablement service providers with complementary capabilities, such as network-based services, datacenter facilities-based services (including colocation) and hosted private cloud offerings.

Overcoming these complexities and implementing systems that provide seamless access to resources that deliver business benefits without necessarily exposing the underlying infrastructure will position businesses to take leading roles as agile, cloud-enabled players in their respective markets.