

Infrastructure Evolves to Enable Cloudlike Efficiency

The 451 Take

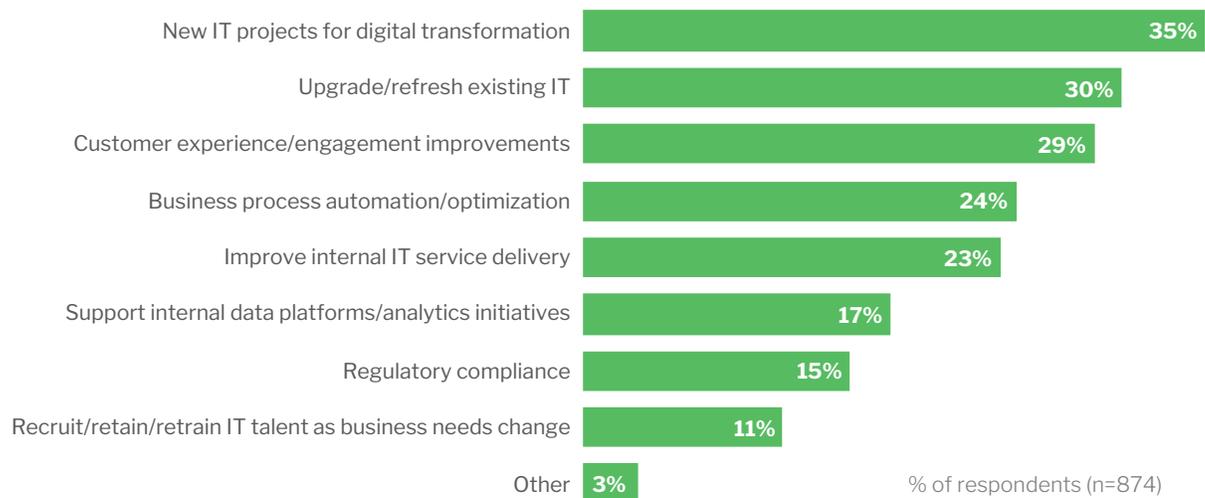
The notion of cloud architectures implies a hands-off approach from IT leaders who must trust the effectiveness and accuracy of infrastructure deployments to satisfy business requirements. On-premises IT environments are moving toward invisible infrastructure where the underlying hardware technology sits unassumingly beneath software platforms but efficiently provisions resources for a wide array of enterprise workload requirements. However, this concept is innately difficult to execute with traditional, three-tier infrastructure that provides seamless provisioning across bare-metal, virtualized and containerized infrastructure only in the most well-equipped and knowledgeable environments.

For everyone else, IT modernization requires a new look at the underlying infrastructure. Composable infrastructure represents the most effective architecture to date for organizations seeking to create standardized, secure and highly scalable private cloud environments. Barring significant investment of both funds and personnel resources into existing three-tier infrastructure, no technology is better equipped to move businesses into the cloud-centric realm of efficient provisioning across bare-metal, virtualized and containerized workloads.

Top IT Spending Priorities for 2019

Source: 451 Research's Voice of the Enterprise: Digital Pulse, Budgets & Outlook 2019

Q. Which of the following are your organization's top two IT spending priorities for 2019?



A recent 451 Research study found that the top IT spending priorities for organizations in 2019 centered on digital transformation and upgrading or refreshing existing IT. For many firms, complete success in digital transformation strategies is not easily achieved with traditional, stand-alone infrastructure due to the significant time and expertise required to automate resource provisioning for all workload types. Composable infrastructure, on the other hand, takes a fundamentally cloud-centric approach to provisioning and standardization that builds on the transformational success of hyperconverged infrastructure (HCI).

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Business Impact

RECONSIDER THE NORM. The rapid rise of public cloud services has accelerated the need for private clouds – and their underlying infrastructure – to be highly configurable, agile and easily managed. In turn, infrastructure decisions remain critical to the success of on-premises IT environments. Attempting to modernize traditional infrastructure not only is a technically difficult endeavor, but it is not future-proof. Configuration and management complexities inherent in stand-alone storage, for example, create barriers on the road to software-defined environments that prevent rapid, seamless provisioning of resources for increasingly varied business workload requirements.

ADD INTELLIGENCE TO PROVISIONING. Modern datacenters contain an intricate array of applications spanning bare-metal, virtualized and containerized infrastructure resources. This presents a daunting landscape to manage with efficient provisioning, especially if the infrastructure is not intrinsically designed to deliver the right resources for the right applications. Instead, many organizations continue to grapple with traditional infrastructure that forces IT teams to manually provision resources or, at best, assemble an inefficient medley of automation tools in hopes of accelerating processes. Composable infrastructure takes a disaggregated infrastructure approach that delivers on-demand provisioning for any workload type. This future-proofed infrastructure provides rapid datacenter transformation that supports private and hybrid clouds, all without the need for specialized IT expertise.

OPTIMIZE IT TEAMS. According to 451 Research's Voice of the Enterprise: Compute Infrastructure, Organizational Dynamics 2019 study, more than half of organizations currently face a skills shortage of infrastructure-based personnel. These shortages are particularly prevalent in businesses currently planning or executing digital transformation strategies, which can hasten the need for cloud-centric skills. Composable infrastructure – as we have seen with HCI – helps to overcome skills shortages by automating provisioning tasks and boosting overall efficiency of IT teams.

Looking Ahead

The road to digital transformation is littered with tales of unsuccessful ventures into software-defined modernization, especially when those efforts are applied to traditional, stand-alone infrastructure. For an increasing number of organizations, HCI continues to serve as a catalyst for transformation strategies, as the platforms enable businesses to accelerate automation of a host of infrastructure tasks, including provisioning. According to 451 Research, scale-out capabilities are by far the most important feature for customers when selecting an HCI platform, and this is noteworthy for two key reasons.

First, not all HCI platforms allow independent scaling of compute and storage, which can lead to overprovisioning of either resource type when expansion is required. Second, while HCI deployments are generally simple compared to deployments of stand-alone servers and storage arrays, the procurement process can be lengthy, especially in appliance deployments that require full (and costly) compute/storage nodes to be purchased in building block fashion.

Composable infrastructure represents the next transformative step beyond HCI. Heterogeneous workload environments demand fluid, flexible infrastructure that pools and provisions resources with no limitations to resource type or delivery model. Cloud architectures ultimately succeed through standardization and consistency, and building or transitioning private cloud infrastructure to composable platforms will be a rewarding step for organizations seeking to accelerate their digital transformation.



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