451 Research

S&P Global
Market Intelligence **Business Impact Brief**

The Value and Role of Unified Cloud Automation Platforms

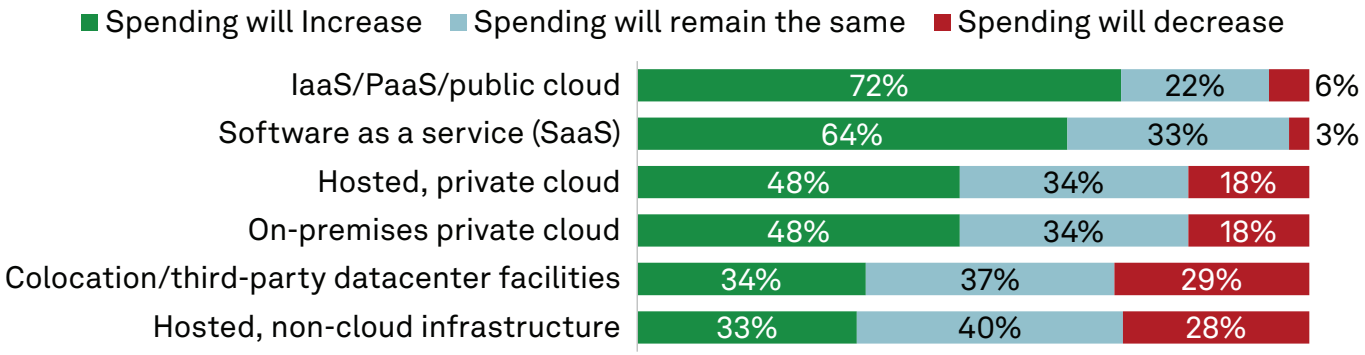
The 451 Take

Our research across a variety of IT industry surveys reveals an accelerating pace of enterprise IT migration. Enterprises continue to shift toward a hybrid multicloud architecture encompassing disparate on-premises infrastructure, public and private clouds, and hosted services. This migration brings with it concerns around how to best manage hybrid IT and the workloads that run within it.

In a recent 451 Research Voice of the Enterprise survey, we asked business and IT decision-makers about infrastructure spending for 2022. Over two-thirds of respondents stated that their organization will be increasing spending on public IaaS, PaaS and SaaS offerings. Nearly half will be increasing spending on hosted and on-premises private clouds, while one-third will be increasing spending on colocation and hosted non-cloud infrastructure.

These findings indicate that the shift toward hybrid multicloud architecture remains consistent and strong, and spending increases still outpace decreases. This migration is being driven by many factors, including the desire to improve IT performance and resource availability; the need to modernize applications, optimize for costs and improve operational resiliency; and a growing appetite for the productivity benefits of cloud-native computing. While the use of on-premises datacenters has diminished as cloud services take on more workloads, they remain relevant for many enterprises concerned with data isolation, regulatory compliance and the security of intellectual property.

Infrastructure Spending Changes Slated for 2022



Q. Looking at each of the following, please indicate if your organization's spending over the next 12 months will increase, decrease or remain the same compared to the previous 12 months?

Base: Users of each service listed

Source: 451 Research's Voice of the Enterprise: Cloud, Hosting & Managed Services, Budgets & Outlook 2022

Hybrid multicloud architecture brings near-limitless options for application and workload development and deployment. But it also creates new challenges to provision and manage multiple on-premises and cloud services, migrate workloads to their most efficient and cost-effective execution venues, and orchestrate their interactions. These challenges require new tools to shift and migrate workloads to the best execution venues, and manage and monitor them across hybrid architectures that also must inevitably adapt to the changing needs of digital businesses. New means for automation, provisioning, access control, capacity management, performance analysis, governance, billing, cost control and more are being sought.

Many IT vendors, cloud service providers and other cloud management platform vendors offer tools that control the use of infrastructure and services and how workloads are managed within them. These tools, however, are often confined to the vendor's platform or technology ecosystem, or they lack the ability to connect with and integrate multiple IT vendors and CSPs. IT productivity suffers when IT operations staff must access such tools individually and manually execute workflows that can span the functions of these tools, such as when workloads must be deployed or redeployed into production.

An evolving class of infrastructure and cloud management technology is coalescing. New unified cloud automation platforms are being designed to create a common control plane and low-code user experience that enables users to view and programmatically access any cloud or other IT infrastructure providers' administrative capabilities using pre-configured, reusable, customizable automated workflows. They will perform identity access management and include automated workflows for resource provisioning, migrating workloads across clouds and on-premises infrastructure, and creating and executing continuous integration/delivery (CI/CD) pipelines. They will also enable patching and maintenance, dynamically generate support documentation, and assist with overall application lifecycle management. These platforms can manage runtime execution and performance across all venues and enact policies to automate scaling, high availability and disaster recovery. They may also maintain a service library of OS images, databases, serverless functions and other cloud-native services.

From an enterprise managerial perspective, they may also include features for IT inventory management to help view and manage assets and assure corporate governance and policy compliance, as well as more advanced analytics able to provide constant awareness of where and how workloads are executing, and the state of the underlying resources. Overall, modern unified cloud automation platforms will bridge the gap that exists between legacy on-premises infrastructure and monolithic applications and emerging containerized application development and cloud-native computing architecture.

Business Impact

On IT organizations. IT organizations equipped with new cloud automation platforms can be more responsive, work backlogs can diminish, and scarce IT skills can be allocated more efficiently. These platforms can also offer greater IT resiliency when all resources can be monitored and administered via one control plane. Moreover, these automation platforms can extract greater value and returns from existing investments in on-premises infrastructure, hosted services and hybrid multiclouds.

On developers and users. Modern cloud automation platforms can tie into existing DevOps environments and assist with the automation of CI/CD pipelines across a hybrid IT architecture. They can minimize or even eliminate mundane, repetitive tasks involving multiple tools that diminish the productivity of IT teams, empowering them instead to respond to the changing needs of the digital business.

On the enterprise. Emerging cloud automation platforms can enable greater enterprise agility by helping absorb new technology innovations, cloud services, applications and processes – all able to interoperate and run in the execution venues with the best price/performance characteristics. These platforms can also provide greater awareness of IT execution efficiency, and help improve ROI for in-place IT infrastructure and subscription-based cloud services.

Looking Ahead

Modern digital businesses will be built to take full advantage of cloud-native computing's benefits. Their applications will be composed using container and microservice architectures, making them adaptable and portable, able to run across distributed and diverse on-premises infrastructure, multiclouds, hybrid clouds and at the network edge. Inevitably, business logic and data will continue to be widely dispersed across an increasingly hybrid IT landscape. Unified cloud automation platforms will further evolve using AI/ML technologies to provide real-time awareness of all workloads, infrastructure and cloud services. They will use automation technology to enable more autonomous operations, relieving IT organizations of burdensome infrastructure and cloud admin tasks and allowing them to focus on bringing greater value to the enterprise.