451 Research's most recent Voice of the Enterprise: Digital Pulse survey provides insight into the decisions, challenges and considerations related to workload/application deployment and best execution venues (BEVs). Public cloud is certainly a big part of the mix here, but it's not the whole story.

THE 451 TAKE

Organizations must balance the imperatives of business growth and IT modernization against the mundane reality of day-to-day operations that 'keep the lights on.' As IT organizations strive to address both transformation and maintenance objectives, workload placement decisions stand out as a particularly acute challenge. IT decision-makers are pursuing a variety of workload deployment approaches across increasingly heterogeneous off-premises and on-premises IT environments. The factors that determine the best execution venue for any individual workload are multi-faceted, including application characteristics, end-user profiles, data locality, security, performance requirements and sunk capital investments. The end result is a 'hybrid by default' IT environment in which on-premises IT environments (both legacy non-cloud and private cloud) continue to play a (diminished) role in enterprise IT estates.

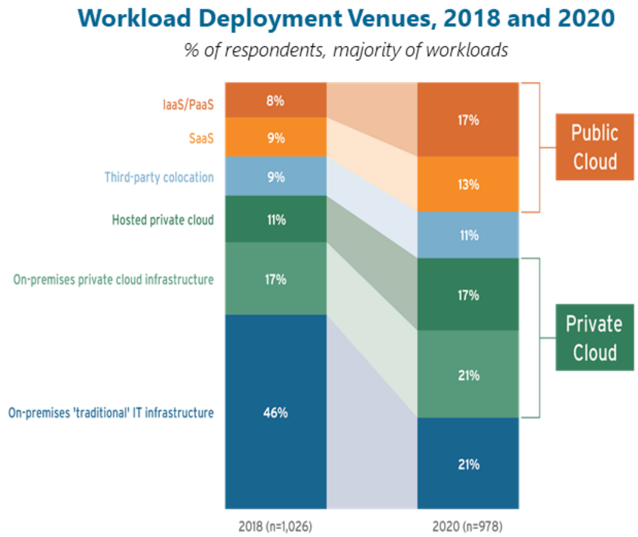
ALL ROADS LEAD TO PUBLIC CLOUD? NOT SO FAST...

Growing proportions of organizations are shifting the bulk of their workload and application estates to cloud and (largely, but not exclusively) off-premises IT environments over the next two years. As our most recent VotE: Digital Pulse survey reveals, private cloud (both on-premises and hosted) and even colocation will continue on viable workload execution venues alongside public cloud IaaS/PaaS and SaaS environments.

Private cloud (both on-premises and off-premises hosted) is carving out a position in the workload venue landscape, with 38% of organizations citing this environment as the location for a majority of workloads in 2020 (up from 28% in 2018). Factors such as the technical debt of legacy applications and data protection, compliance and gravity considerations put private cloud infrastructure in the digital transformation mix for organizations in the manufacturing, healthcare and government/education sectors.

On the public cloud front, organizations in large enterprises (1,000+ employees) and organizations in the finance and utilities sectors are primed for above-average migration to IaaS/PaaS venues. SMBs, B2B software/IT services companies and government/education organizations will lead the charge for SaaS migration during the next two years.

FIGURE 1: WORKLOAD DEPLOYMENT VENUES



Q. Thinking about all of your organization's workloads/applications, where are the majority of these currently deployed?
Q. Thinking about all of your organization's workloads/applications, where will the majority of these be deployed two years from now?
Source:* *Voice of the Enterprise: Digital Pulse, Workloads & Key Projects 2018

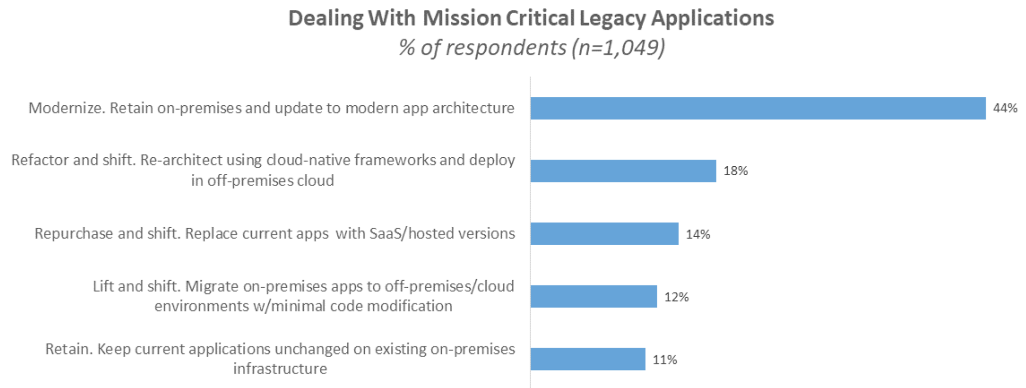
The persistence of multiple execution venues spells continued opportunity for vendors and service providers with migration- and enablement-oriented offerings as deployment environment decisions shift in-line with the imperatives of the digital economy.

MISSION-CRITICAL LEGACY APPS: MEET THE NEW BOSS, (ALMOST THE) SAME AS THE OLD BOSS

Going forward, organizations are about evenly split on how to deal with legacy applications deemed to be mission-critical (i.e., those that cannot tolerate more than one hour of downtime without severe business consequences). A plurality of respondents (44%) pointed to 'modernization in place' as the way forward – keeping the workloads on-premises but updating the underlying application/infrastructure architecture.

The 'modernization off-premises' contingent (32% of organizations) encompasses two distinct approaches – repurchase and shift ('software, not hardware') and refactor and shift (simultaneous modernization and 'cloudification'). Digital leaders and large enterprises posted above-average inclination toward the refactor-and-shift approach. Organizations with above-average proportions of workloads currently running in on-premises private cloud environments gravitated somewhat more strongly to the repurchase-and-shift approach, indicating application or infrastructure issues that preclude a 'modernization in place' strategy or a more new SaaS-enabled software approach.

FIGURE 2: STRATEGIES FOR MISSION-CRITICAL APPS



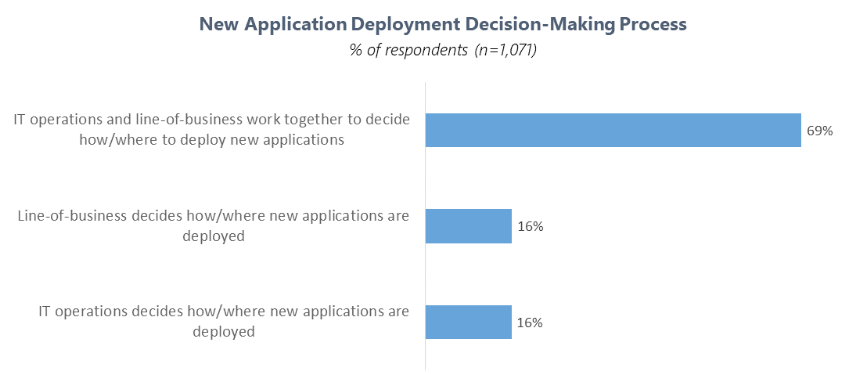
Q. Which of the following best describes your organization's overall IT infrastructure approach to mission-critical legacy applications and workloads going forward?

Source: Voice of the Enterprise: Digital Pulse, Workloads & Key Projects 2018

DEPLOYMENT VENUE DECISION-MAKING: WHO RUNS THE SHOW?

Decisions about deployment of new business applications/workloads are currently an IT/line-of-business joint venture. Furthermore, the non-IT roles within organizations are poised for enhanced influence over application/workload strategy, with more than half of organizations reporting that corporate executive management, digital strategy, marketing/sales and business analytics players will have a say in deciding where (and how) new workloads get deployed. Given that net-new workloads often involve strategic digital business initiatives, vendors' IT value propositions must speak to ever broader constituencies of buyers and internal end users.

FIGURE 3: DEPLOYMENT DECISION-MAKERS



Q. How are decisions about new application/workload deployments typically made at your organization?

Source: Voice of the Enterprise: Digital Pulse, Workloads & Key Projects 2018