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RESEARCH

CLOUD DELIVERS 4.01 TIMES THE ROI AS ON- PREMISES

ANALYST

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THE BOTTOM LINE

In an analysis of 101 ROI case studies published since our last update to this research (Nucleus Research *r208 – Cloud now delivers 3.2 times more ROI* – December 2017), Nucleus found that cloud technology deployments deliver 4.01 times the ROI as on-premises deployments over the time period from January 2018 to November 2020. Further, cloud deployments allowed the customer organizations to recover the cost of their initial investments 2.5 times faster than for on-premises deployments. We expect this value disparity will continue to grow rapidly as the COVID-19 pandemic has dramatically accelerated cloud adoption compared to pre-pandemic levels.

OVERVIEW

Nucleus analyzed the ROI case studies published from January 2018 to November 2020 to understand how the relative value of cloud and on-premise deployments changes as cloud technology continues to mature and become a core business technology. The value gap between cloud and on-premise deployments continues to widen as our analysis found that cloud delivers 4.01 times the ROI as on-premise deployments, on average. We analyzed 101 ROI case studies published between January 2018 and November 2020; of those, 82 percent covered cloud deployments, while 18 percent focused on on-premise deployments. This breakdown is in-line with our previous analyses on the topic. The biggest difference is the speed of deployment with cloud solutions commonly delivered on a timeline of weeks to months, while on-premise technology often takes multiple years. Further, for SaaS solutions delivered via the Web, integrations with existing business applications and other web services like cloud databases, security and authentication technologies, and data processing tools, among others, can be configured via API and other low-code tools. Integrating traditional software that is hosted on-premise requires a dedicated, skilled IT team and a longer project timeline. These additional cost areas are a key driver for the increased relative cost of on-premise deployments compared to cloud.

Cloud solutions offer improvements to business agility, change the acquisition of business technology from a capital expenditure to an operating expenditure, and crucially, enable work-from-home initiatives that have become essential since the COVID-19 pandemic caused offices worldwide to close or slash occupancy. Since SaaS technology is hosted, distributed, and accessed via the internet, it eliminates the need for costly in-house installation on servers or PCs on-site. Along with enabling massively shortened deployment cycles, it simplifies iterative development since updates can be continuously distributed rather than necessitating a full-blown installation. Cloud technology is critical for enabling modern technology trends like supporting mobile versions of business apps, the proliferation of low/no-code app development and “citizen developers,” and the widespread analytics boom, particularly those involving real-time streaming data and edge data from IoT devices. Now with offices closed and entire workforces forced to work from their homes, cloud technology is essential for enabling remote access to business systems and data, allowing workers to minimize disruption and continue doing their jobs from home. Further, since cloud solutions can be rapidly deployed, they offer a short time-to-value, especially relative to on-premise solutions, so they offer tremendous benefit to businesses looking to deploy new technology to address challenges or business changes brought on by COVID-19. Tellingly, since the pandemic started, cloud vendors have seen a massive uptick in demand for cloud technology. Businesses that already were heavily invested in the cloud have accelerated their project timelines and bought even more, while businesses and industries that had remained reluctant to adopt cloud solutions, such as government

organizations and the financial services sector, have made large-scale moves toward adoption.

It's likely this value gap will widen into the future as we see cloud technology maturing to address many of its earlier weaknesses and perceived vulnerabilities and becoming standard fare among enterprise technology. Chief among them is security; for years, customers balked at full cloud adoption citing the security concerns of storing and accessing data and workloads via the internet. As the technology has been available for longer, users and researchers have been able to identify, document, and share best practices. Organizations like the Cloud Security Alliance (CSA) and others provide a formal network for this knowledge to be shared; efforts like these "raise the waterline" at the market-level and improve the baseline cloud security for all. Additionally, cloud-native development and governance practices, led by the widespread adoption of DevOps to standardize and, in many cases, automate development security and delivery practices. Many SaaS vendors have DevOps partners and add-on solutions to help secure and streamline customer deployments, and take advantage of cloud-native capabilities and services. Further, many of the cloud security vulnerabilities were caused by careless data migration and faulty integrations. By now, these connectors have been iterated and many of the vulnerabilities resolved; additional data collection and usage regulations provide a framework for how data should be stored, migrated, and accessed. These are all major steps that continue to improve into the future. Cloud security is an ongoing effort as a cloud ecosystem is a dynamic environment with constantly changing data streams and distributed user bases accessing content via the Web providing a multifaceted attack surface that requires ongoing investment and education to ensure.

LOOKING AHEAD

Cloud technology won't go away. If that wasn't apparent before the pandemic, widespread work-from-home and stay-at-home orders have changed business norms have rendered cloud capabilities a necessity for any modern business. On-premises infrastructure still has a place, particularly as many of the largest, longest-tenured organizations look to preserve the value of their past investments in the technology. That suggests that the market for hybrid cloud technology will continue to grow and heat up just as the public and private cloud markets expand. Further, several trends in business forecast additional upticks in cloud adoption. Particularly focusing on data and analytics; cloud analytics technology enables real-time analytics on streaming data, as well as sophisticated multifactor analytics that incorporate several disparate data sources. As more organizations look to become data-driven at scale and become literate with common analytical practices and techniques, it will preclude yet another rush of cloud adoption and cause the relative value to increase further.