VMware Cloud On AWS Accelerates Migration Times And Reduces IT Operating Costs

Forrester Consulting conducted a Total Economic Impact™ (TEI) study to provide readers with a framework to evaluate the potential financial impact of VMware Cloud on AWS on their organizations. To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed several customers with experience using VMware Cloud on AWS. This summary is based on a full TEI study, which can be downloaded here.

In addition to the original four customers interviewed, Forrester has conducted more interviews with customers to highlight their experiences. The following spotlight highlights the experience and benefits of a customer not included in the original study.

The VMware Cloud On AWS Customer Journey

For this spotlight, Forrester conducted an interview with a US-based manufacturer of scientific equipment, with 80,000 employees spread over 300 global sites. The organization maintains roughly two dozen data centers to support its business. Currently the organization has 20 hosts and 880 virtual machines in its VMware Cloud on AWS deployment

Two years prior to its VMware Cloud on AWS investment, the organization adopted a cloud-first strategy with a goal of migrating its data centers to the cloud. A senior engineer on the full stack team stated, "We've been a cloud-first company for the past three years, about 90% AWS focused, looking at cloud migrations as an overall strategy to get out of data centers."

The organization evaluated using VMware to forklift workloads to the cloud against using internal resources and third-party integrators to reconfigure to a cloud-native environment. While the firm was leaning toward VMware in its evaluation, it suffered a catastrophic data center incident resulting in outages to a primary storage array and other critical infrastructure at a critical time of business. To respond to the changing dynamics of the situation and to ensure business continuity, the organization accelerated its VMware Cloud on AWS migration. The senior engineer explained: "Half of our overall VM workloads went offline right in the middle of the week, at the end of quarter. So we had our healthy storage and our bad storage, and we needed to start freeing up the healthy storage to get production workloads restored from backup. To free up as much of that healthy storage as we could, [we] leveraged migrations to VMware Cloud on AWS — with rapid migrations of the nonproduction workloads from our data center. We had that set up within the first couple of days of the outage — in a week we had 300 workloads, and within around two to three weeks we had about 800 workloads running in the cloud, migrating and freeing up 170 terabytes of data."

> "VMware Cloud on AWS has been the silver bullet for our overall cloud migration strategy. Without it, we'd probably be stuck at the starting line of trying to get our native cloud migrations going."
>
> *-- Senior engineer, scientific equipment*

SUMMARY

Based on a commissioned study, "The Total Economic Impact Of VMware Cloud on AWS."

METHODOLOGY

The objective of the TEI framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact of VMware Cloud on AWS, including interviews with Forrester analysts, VMware stakeholders, and four current VMware Cloud on AWS customers. Forrester constructed a financial model representative of the interviews using the TEI methodology.

COMPOSITE ORGANIZATION

This analysis uses a composite organization, based on the interviewees, to present the aggregate financial analysis.

RISK ADJUSTMENT

Forrester risk-adjusted the financial model based on issues and concerns of the interviewed organizations to account for uncertainties in benefit and cost estimates.

Key Business Results

The interviewed organization shared the following business outcomes as a result of their VMware Cloud on AWS investment:

› **Data center footprint reduced by 25%.** As a result of moving workloads to the cloud, the organization has reduced its footprint by 25%, which is a larger part of its strategic goals. The senior engineer explained, "Long-term, we'll always have some footprint on-premises — a smaller footprint in our major center and then some smaller regional data centers. We're trying to shift the majority of our global footprint and just have small of mid-sized data centers."

› **Reduced support costs.** By moving workloads to the cloud, the organization discontinued use of older hardware — eliminating future replacement expenses. Furthermore, as the organization transitioned workloads to the cloud, it discontinued support contracts. The senior engineer stated: "We moved 20 hosts' worth of compute to the cloud, and that cascades down into the environment where we're well out of support with things. We had over 170 terabytes worth of storage we did not need to replace on-prem, and we could reduce the scope of support for existing infrastructure. It's managed and maintained by VMware once it is on VMC, so we don't have to worry about keeping visibility on that virtual structure and maintaining it."

› **Avoided architecture and accelerated journey to the cloud with a 90% reduction in effort.** In using VMware Cloud on AWS to transition to the cloud, the organization avoided a significant amount of labor and expenses it would have incurred by using internal resources or a third-party integrator. The senior engineer explained: "It's a massive, massive difference in time. You are talking about on-premises stuff that does not have defined ports and firewall rules that you must discover first. And then when you are ready to move it up [to the cloud], you can predefine your security groups, so it isn't blocked right out of the gate. Then you must monitor the firewall rules and communication back to the on-premises deployment, waiting, organizing the cutover, and making sure everything is set up correctly. Compare that to VMware Cloud on AWS; we've got up to 30 networks stretched up right now via HCX to our VMware Cloud on AWS environment, and we did not have to re-IP anything. It's basically a couple of clicks and setting up migration bulk bundles. There's no convoluted process of getting into native."

› **Reduced software license costs by 50%.** When retiring older hosts and migrating to the cloud, the organization could create a denser environment and consolidate software licenses. The new deployment will save the organization an estimated 50% of related software fees. The senior engineer stated, "We're moving off of these older hosts that were smaller, so with everything being denser, we are seeing a reduced need when it comes to licensing requirements."

› **Simplified incorporation of new business units.** The interviewed organization participates in significant merger and acquisition (M&A) activity, frequently growing through acquisition. Many acquired companies use aging infrastructure and applications, which can be time-consuming to bring into the organization's environment. The senior engineer said: "We can basically just spin up VMware Cloud on AWS clusters in those regions, migrate all the workloads up in a couple weeks, and close down their old stuff. It's basically been a magical solution from that perspective."

> "It's basically a couple of clicks and monitoring bulk bundles. No convoluted process of getting into native."
>
> *-- Senior engineer, scientific equipment*

> "From a cost avoidance standpoint, it's about a 4-to-1 savings migrating to VMware on AWS instead of doing it native."
>
> *-- Senior engineer, scientific equipment*

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The Total Economic Impact Of VMware Cloud On AWS

To better understand the benefits, costs, and risks associated with VMware Cloud on AWS, Forrester interviewed four customers across four industries with multiple years of experience using VMware Cloud on AWS. Based on these interviews, Forrester constructed a TEI framework, a composite company profile representative of the interviewed organizations, and an associated ROI analysis that illustrates the areas financially affected. The following benefits were indicative of those experienced by interviewed customers and represented in the composite organization financial model:

Quantified benefits. The following risk-adjusted quantified benefits are representative of those experienced by the companies interviewed:
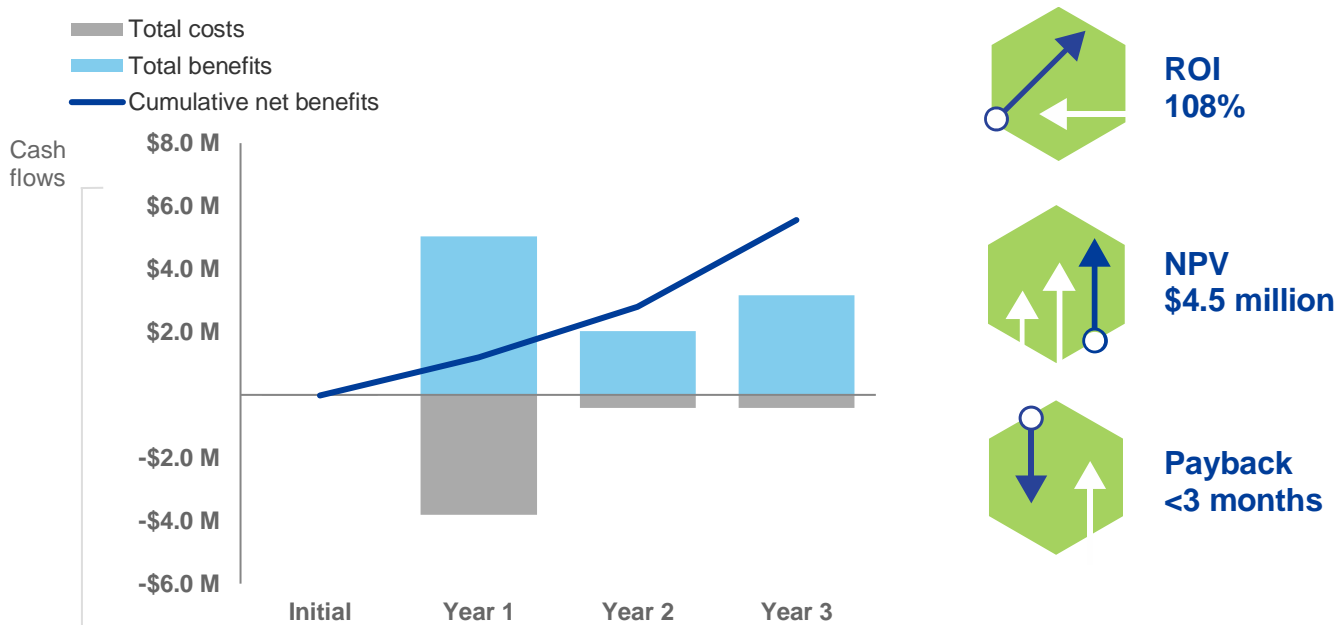
› **Avoided application redesign, totaling savings of $2.7M.** Organizations utilized VMware's vMotion bidirectional live application migration to seamlessly transition their vSphere workloads to the cloud and existing software-defined data center (SDDC) technologies to avoid application redesign.

› **Reduced labor hours for operations, saving $1.2M.** Eliminating physical servers and networking hardware, along with simplifying operating models, created a reduced demand for operations staff who were dedicated to managing on-premises VMware environments within interviewed organizations.

› **Reduction in data center operating costs, totaling $1.4M.** Organizations retired their on-premises deployments, eliminating the power, cooling, and facilities staff expenditures.

› **Software and hardware savings of $3.2M.** Organizations used their migration to the cloud as an opportunity to consolidate their networking and storage environments, facilitating a reduction in licensing fees. Furthermore, organizations avoided hardware refreshes required to maintain modern data center operations.

Unquantified benefits. The interviewed organizations experienced the following benefits, which are not quantified for this study:

› **Redeployed legacy servers to accommodate user upgrades.** One organization redeployed legacy servers to provision additional memory for end user email accounts.

› **Accelerated speed of disaster recovery operations.** Organizations found their new disaster recovery infrastructure to be faster and more reliable than their previous on-premises deployments.

› **Improved security and reduced likelihood of business disruptions.** Having more secure and responsive cloud-based disaster recovery operations reduced the risk of business disruptions.

› **Enabled new agile operations.** Being in the cloud enabled organizations to develop new business operations. One interviewed organization in broadcast media planned to use their new capabilities to rapidly deploy remote telecast teams.

› **Improved employee morale.** Interviewees explained that shifting resources from legacy networking to modern tools was more interesting for employees, noting that the reduction of maintenance time allowed teams the opportunity to explore new innovative projects.

› **Enabled the termination of expensive commercial leases.** Organizations in high-rent urban locations planned to not renew leases for buildings that were housing data centers, when they reached the end of their contracts.

Financial Summary

The financial results calculated in the Analysis Of Benefits and Costs sections of the initial study can be used to determine the ROI, NPV, and payback period for the composite organization's investment in VMware Cloud on AWS. Forrester assumes a yearly discount rate of 10% for this analysis.

Legend:
- Total costs
- Total benefits
- Cumulative net benefits

Cash flows ($8.0 M, $6.0 M, $4.0 M, $2.0 M, -$2.0 M, -$4.0 M, -$6.0 M)

Categories: Initial, Year 1, Year 2, Year 3

ROI 108%

NPV $4.5 million

Payback <3 months

For more information, you can download the full VMware Cloud on AWS TEI analysis here.

Disclosures

The reader should be aware of the following:

› The study is commissioned by VMware and delivered by Forrester Consulting. It is not meant to be a competitive analysis.

› Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in VMware Cloud on AWS.

› VMware reviewed and provided feedback to Forrester. Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning.

› VMware provided the customer names for the interviews)but did not participate in the interviews.

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ABOUT TEI

Total Economic Impact™ (TEI) is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders. The TEI methodology consists of four components to evaluate investment value: benefits, costs, risks, and flexibility. https://go.forrester.com/consulting/content-marketing-consulting/

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