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VMware Cloud On AWS Provides Robust Disaster Recovery Capabilities And Business Flexibility

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 law firm in the United States, with 15 locations and 260 employees. The organization's VMware on AWS deployment has one cluster with six hosts. Primary production consists of 12 production servers and 280 instant clones managed by VMware Horizon.

In recent years, the organization has rapidly expanded, adding new locations throughout the southeast. Prior to its VMware Cloud on AWS investment, the organization had to purchase new infrastructure for each office opening, ensuring its data centers could accommodate new hires. With traditional on-premises infrastructure, this model proved inefficient. The CIO explained, "In an expansion model, if you base your infrastructure design on the number of people, at some point you find yourself in a situation where you've either purchased too much or too little."

Originally, the firm evaluated VMware on AWS as a disaster recovery tool; most of its locations are on the southeast Atlantic coast, an area that frequently experiences hurricanes and tropical storms. The firm had explored moving its data centers inland but felt the cloud was a better alternative. The CIO detailed: "We were evaluating what our response was prior to moving to the cloud, and if you're using site replication, there's always this manual approach to a failover to a different site. You're not ready for it. You're never ready for it. Whenever it happens, the plan was to back up servers and drive to the other site and restore backup sets in a data center that was isolated from the event. It's ridiculous to presume you can tell everyone to stop working because we're going to do a backup." The firm quickly realized that as a heavy user of VMware, it could move production assets to the cloud with VMware on AWS to both strengthen disaster recovery capabilities and support its expansion model more efficiently.

> "Why do I need to look at my data centers on the ground as primary and my disaster recovery solution in the cloud? Why not reverse that thought process? Put my production resources in the cloud on a global data center-quality service, backed by VMware on AWS, where I still have full control over the deployment of my internal resources from a vCenter standpoint."
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> — *CIO, law firm*

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 its VMware Cloud on AWS investment:

› **Reduced new server purchases by 100%.** As a rapidly expanding company, the interviewed organization frequently had to purchase additional data center hardware to accommodate the needs of new offices and employees. Furthermore, the organization required periodic hardware refreshes to provide top-level performance of current applications. The CIO explained: "I redesigned the entire infrastructure and took advantage of that, but I've not had to purchase data center compute resources. I've not had to buy racks. I've not had to buy servers. I have not had to make any of those purchases. We are not spending money on boxes that no one will ever see again. As I sit here today, as I tell you here today, I haven't purchased a server one since we've done this two years ago."

› **Provided necessary flexibility for expansion model.** The interviewee explained that the firm had historically struggled with projecting expenses and infrastructure requirements to accommodate new office openings. With VMware on AWS, the organization could accommodate its current technology needs, as well as additional capacity to accommodate future offices and employees. This helped the firm avoid unexpected capital expenses, as well as quickly provision infrastructure to new offices and reduce ramp time. The CIO detailed: "No one could plan for it all. What we do know is that we ended up with massive capital expenditures, whenever we decided to build another data center. Vulgar amounts of money were spent on that solution. Now, I have the six hosts at 60% utilization, which I purchased with a three-year growth model. And so far, we've been spot-on with our expected cost. The only expenses that I've had for hardware have been new flash drives in my on-prem data centers."

› **Reduced effort to maintain and provision IT resources.** The law firm provides employees with virtualized desktops and apps with VMware Horizon. The interviewee detailed that provisioning new resources for employees was a time-consuming effort with legacy on-premises equipment, but moving production to the cloud with VMware on AWS greatly reduces the required effort. The CIO explained: "Instant clones are nontrivial when spun up in bulk. If I were to recreate 250 instant clone machines, that would all be simultaneously logged on its significant overhead. With VMware on AWS, all I did was go into my console before I left work and spun up two new hosts. By the time I got home, they were fully operational; I increased my overall data center capabilities by 20% during my commute."

› **Provided access to new tools and capabilities.** Not only does VMware accelerate an organization's journey to the cloud — allowing it to recognize the economic benefit of shifting capex to opex — but firms also gain access to Amazon Web Services infrastructure and tools. The CIO stated: "Not only do I have what I'll call my vCenter in the cloud, but the AWS infrastructure affords me access to EC2 [Amazon Elastic Compute Cloud] resources and all the other services that AWS offers by way of a high-speed VPC, right? There's some really super cool solutions there."

› **Improved resiliency and disaster response capabilities.** The interviewed firm's offices primarily reside in an area impacted annually by hurricanes and tropical storms. While the firm had explored moving on-premises disaster recovery sites inland to recover from failures, decision makers discovered that moving production assets to the cloud prevented their resources from being impacted in the first place. The CIO detailed: "We've been in full production in the cloud for a year and a half, and some executive management came to us last week asking how to prepare for the upcoming tropical storm. My answer is 'what we did a year and a half ago.' We don't need to worry about IT now. We don't have to be worried about being fully dependent on any on-premises site or any one host for that matter."

"The decentralization of geographical-based solutions really freed us up. Now I can distribute the infrastructure in a more robust manner."

— *CIO, law firm*

"Hardware used to be a significant portion of our budget. Executive management would decide on expanding to a new market, and IT would have a 30- or 60-day window to go purchase equipment for that new office and dump it in there. Sometimes they did not fully know what the requirements were going to be — and to be fair, they almost have no way of knowing. They don't know how many people are going to end up being there or how long they are going to be there, so they make a best guess effort. This leads to overpurchasing."

— *CIO, law firm*

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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 organization profile representative of the interviewed organizations, and an associated ROI analysis that illustrates the areas financially affected. The following benefits were indicative of those the interviewed customers experienced and represented in the composite organization financial model.

Quantified benefits. The following risk-adjusted quantified benefits are representative of those the interviewed companies experienced:

> **Avoided application redesign, saving $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, saving $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 migrations 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 infrastructures 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 its 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.

> "I am able to expand and contract my data center capabilities over the weekend. Hands-free. That kind of flexibility is outstanding."
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> — *CIO, law firm*

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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.

ROI
108%

NPV
$4.5 million

Payback
<3 months
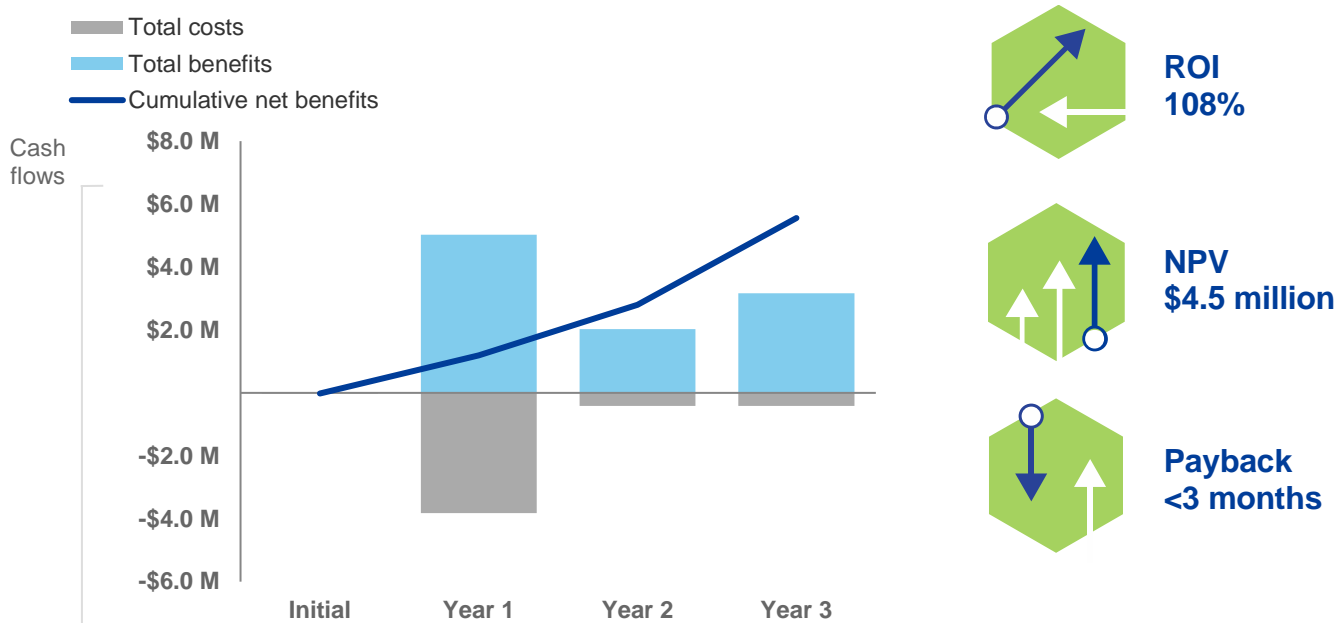
For more information, you can download the full VMware Cloud on AWS TEI analysis here.

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.

ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. Ranging in scope from a short strategy session to custom projects, Forrester's Consulting services connect you directly with research analysts who apply expert insight to your specific business challenges. https://go.forrester.com/consulting/

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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