

VMware Cloud On AWS Improves Organizational Preparedness 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 West Windsor-Plainsboro Regional School District. The district consists of 10 schools and provides services to over 10,000 students. The West Windsor-Plainsboro RSD maintains a single data center, supporting technology services delivered to students, teachers, and administrators. The organization currently has 38 virtual servers and 11 TB of storage (of 31 available TB) on the cloud.

Prior to its VMware Cloud on AWS investment, the school district explored ways to improve resiliency, infrastructure flexibility, and reduce costs. The technology infrastructure manager stressed that these factors were of key importance, but they needed to be achieved in a cost-effective manner that would not incur additional support work. “In K-12, the dollars always have to make sense. Cost is always a primary concern. The next factor, once money is all sorted out, is ease of use. I like vacation, and I like for my team to be able to take time off. I want my team to feel comfortable. This had to be a solution that made things easier, or at the very least, not more difficult to manage and support.”

The school district evaluated multiple cloud vendors, but it worried about moving to a fully native environment as it would require refactoring of workloads and limit its flexibility to bring them back on-premises. The technology infrastructure manager explained: “All the options were priced competitively. What made me a little nervous about some of the other providers was that you can always go from on-prem to off-prem, but bringing things back down can be an ordeal.”

The district finalized its investment in August 2019, and gradually moved workloads to the cloud using VMware for AWS during the school year. The technology infrastructure manager explained: “We started with some basic things — desktops and print servers — and then, as we got more comfortable and saw that everything was stable, we moved caching servers, file servers, app directory federation servers, and domain controllers.”

Unbeknownst to West Windsor Plainsboro RSD, months after it decided to invest in VMware on AWS, its schools would be closed due to the COVID-19 pandemic, and students and teachers conducted class virtually. Students, teachers, and administrators found themselves relying on virtual desktops to complete everyday tasks hosted in the

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.

cloud with VMware on AWS. The interviewee stated: “When we first made the purchase, it wasn’t for production at all. Now, with everyone working from home, we need so much more infrastructure. We went from have a few hundred virtual desktops to suddenly having 10,000 plus people working remotely, and we wanted the virtual resources to be available to everyone. Now we can almost grow that infrastructure instantly. If we had been all on-premises when they closed the schools, we would have had to have gone out and bought all sorts of hardware or just not have been able to support the resources our students need.”

Key Business Results

West Windsor-Plainsboro RSD shared the following business outcomes as a result of its VMware Cloud on AWS investment:

- › **Reduced replacement costs by 50% to 75%.** As the school district moves workloads to the cloud, it can rely less on physical hardware and reduce spend on replacements. The technology infrastructure manager explained: “Typically, we were averaging about three to four servers every three to four years. So, instead of buying three to four servers, I can now buy one or two. As long as the CPUs are supported by the ESXi version we are running, I might even be able to drop that down to just one every three to four years.”
- › **Flexibility to move workloads onto and off of the cloud.** The interviewee highlighted the ability to easily move workloads onto and off of the cloud as a key benefit to their organization’s investment in VMware Cloud on AWS. With other providers, the organization would have needed to reconfigure workloads into a native format that wouldn’t have been compatible with its on-premises hardware. “What gets me excited is the flexibility, which is different now just in terms of being able to move something from point A to point B. It opens up so many more options for us as a K-12 organization.”
- › **Improved preparedness and agility.** The school district provides services to over 10,000 students — each of whom conducted school activities from home due to the pandemic. During this period, there were also several severe weather events that impacted the on-premises environment. Under normal conditions, teachers could continue to conduct most classroom activities without the need to access the district’s network. But with school being conducted virtually, uptime was of the utmost importance. Due to their investment in VMware on AWS, the district was well-positioned to provide uninterrupted services to students. The interviewee explained: “We had bad weather — high winds and power problems. Nobody mentioned anything. [There were] no complaints about anything hosted on VMC. We had staff on site working to keep the on-prem up and running, but nothing on VMC went down. Honestly, it paid for itself during that time.” Furthermore, the interviewee explained that if the district had not made the VMware Cloud on AWS investment, it would have had to bolster its on-premises environment to facilitate the rapid closing of schools and transition classrooms to an online format. The interviewee said: “[In the] short term, I would have had to have gone and built up the on-prem and buy more servers and more storage to fill that immediate need of everyone working from home.”
- › **Improved uptime.** The interviewee explained that migrating to the cloud with VMware on AWS improved the organization’s resiliency. With VMware Site Recovery, the school district can quickly spin up a VMware environment on AWS and replicate data with a 5-minute recover point objective. The interviewee said: “I don’t want to have to think about the power going out, and I don’t want to have to think about resiliency and uptime. If you’re worried about that, you can just engage the SRM. You can license however many nodes you want using that technology, and [VMware] has the recovery point time down to 5 minutes, which is phenomenal for something that is not [available] on-prem.”

“There really is no challenge with this solution. As easy as you can move workloads up, you can move them back down. They are 100% intact from point A to point B and from point B to point A.”

— *Technology infrastructure manager, West Windsor-Plainsboro Regional School District*



“Everything is natively built in the vCenter. It just makes it that much easier. It takes the complexity out of something that is inherently very complex.”

— *Technology infrastructure manager, West Windsor-Plainsboro Regional School District*



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.

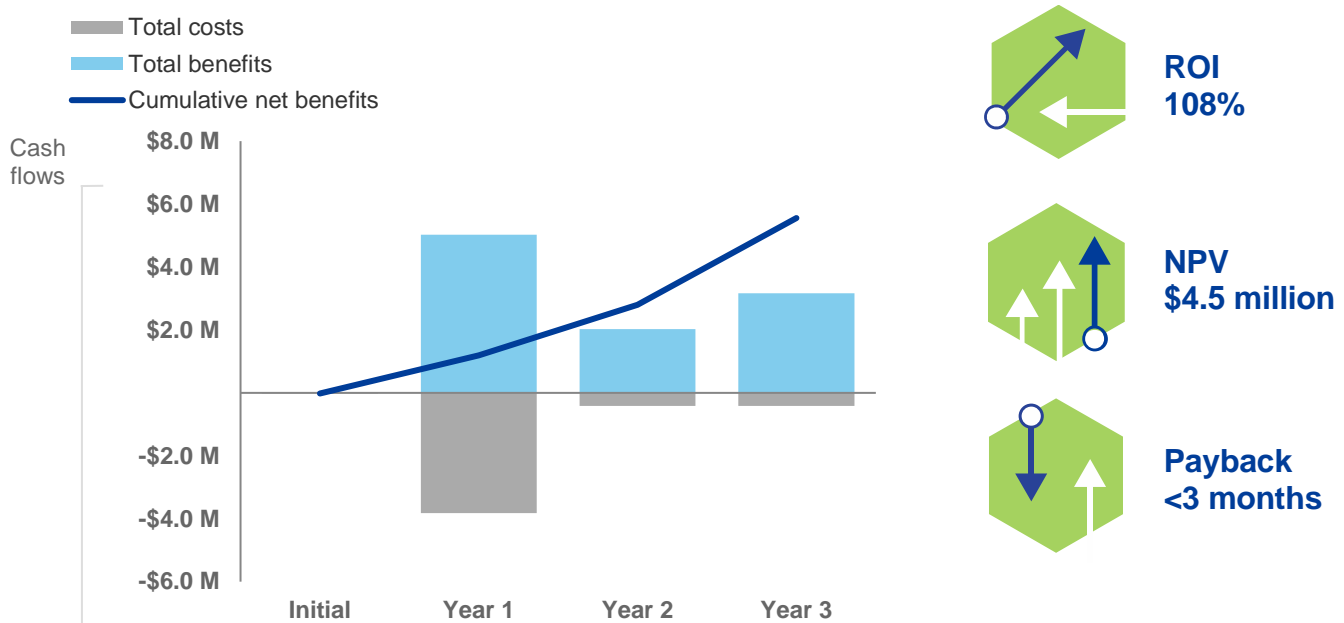
"A lot of people wish they had a deployment like this stood up [when the pandemic started]."

— *Technology infrastructure manager, West Windsor-Plainsboro Regional School District*



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.



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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