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VMware Cloud Foundation Operations And VMware Cloud Foundation Automation Improve Visibility And Accelerate IT Delivery Speeds For Financial Services Firms

VMware commissioned Forrester Consulting to interview eight representatives of companies using VMware products and conduct two Total Economic Impact™ (TEI) studies to better understand the benefits, costs, and risks associated with VMware Cloud Foundation Operations and VMware Cloud Foundation Automation.[1] This abstract will focus on financial services organizations' use of VMware Cloud Foundation Operations and VMware Cloud Foundation Automation and their value to their organizations. Forrester Consulting conducted additional interviews to better understand how the combined use of these solutions drove value within organizations. We spoke with:

- A virtualization engineer for a financial services firm in South Africa with $1.1 billion in annual revenue.
- A cloud DevOps engineer for a financial services firm based in the United Kingdom with $16 billion in annual revenue.

Both organizations had large IT deployments, with tens of thousands of VMs deployed. The organizations struggled to manually manage these deployments without visibility, and they were slow to stand up infrastructure and meet customer demands. Oversubscription was a common problem, leading to millions of dollars in unneeded spend on licensing and hardware. Decision-makers at these organizations focused on:

- VMware Cloud Foundation offers a comprehensive platform for building and managing private or hybrid cloud environments. VMware Cloud Foundation leverages vSphere, vSAN and NSX to create and manage virtual machines and containers providing a workload compute platform.
- VMware Cloud Foundation Operations, which provides organizations with visibility into their private cloud infrastructure from virtual machines (VMs) and containers to applications. This visibility allows organizations to optimize infrastructure through monitoring and alerting for issues for rapid remediation.

- VMware Cloud Foundation Automation, which is a cloud infrastructure automation solution that delivers self-service access, enabling application and platform teams to deliver flexible, scalable solutions for agile application development. The solution empowers users with self-service consumption of Kubernetes and modernized cloud infrastructure-as-a-service (IaaS) capabilities, allowing organizations to harness the power of a private cloud ecosystem. VMware Cloud Foundation Automation supports organizations that are looking to new technologies such as Kubernetes, open-source software, multiple clouds, and different operating models and practices like DevOps and platform engineering.

> Reduced IT deployment time
>
> **50%**

> Saved **millions** with better capacity planning

INVESTMENT DRIVERS FOR FINANCIAL SERVICES

The interviewees' organizations adopted VMware Cloud Foundation Operations and VMware Cloud Foundation Automation to improve visibility, optimize resource utilization, and accelerate time to delivery. These organizations struggled with several challenges in their legacy environments, including:

- **Lack of visibility.** Interviewees had little visibility into the health and performance of their virtual environments. Furthermore, organizations struggled with capacity planning, using estimates and best guesses that could lead to over- or underprovisioning. A virtualization specialist at a financial services firm explained: "The tools we had for measuring

subscription, measuring overprovisioning, and giving insight into the VMware estate were not doing a great job. If you looked at the day-to-day data, you were not getting demand-based data. We were getting current CPU readings, but not getting the full picture."

- **Inefficient operations and remediation.** Without visibility into their virtual infrastructure, operations staff struggled to identify issues and implement solutions. Furthermore, organizations lacked self-service access for developers to request infrastructure. Subsequently, these organizations dedicated significant time to manually completing administrative approval tasks. Manual efforts also led to errors, failed deployments, and security and compliance risks. The cloud DevOps engineer for a financial services firm explained: "It would take four to six weeks really to get a [virtualized] server delivered to the customer because it would go to one team to create the virtual machine container, another team to install the operating system, another team to register with backups, and there were lots of manual steps."

> "You are saving — and I'm not exaggerating — millions of dollars on hardware and licensing for zombie VMs that would exist within your infrastructure."
>
> VIRTUALIZATION SPECIALIST, FINANCIAL SERVICES

KEY RESULTS FOR FINANCIAL SERVICES

The results of the investment for the interviewees' organizations include:

- **Reduced downtime.** VMware Cloud Foundation Operations allowed interviewees to proactively predict CPU allocation and CPU demand, identifying hot-running clusters and mitigating issues before performance was negatively impacted. A virtualization specialist at a financial services firm stated: "[VMware Cloud Foundation Operations] gave us enough observability within the space to be able to identify problems before they occur and start to capacity-plan properly so that we don't run into a situation where we've now run out of resources on a particular cluster."
- **Faster deployment and better troubleshooting.** Interviewees used VMware Cloud Foundation Operations and VMware Cloud Foundation Automation to accelerate fulfilling deployment requests. One interviewee used VMware Cloud Foundation Automation to create a self-service portal for developers and built governance into the automated approval process. Interviewees added that VMware Cloud Foundation Operations provided them with better visibility for troubleshooting, like being able to see impending hardware failures and proactively address them. The virtualization specialist at a financial services firm stated: "[Our architect] probably gets 20 to 50 requests for new systems. He looks at those. He has quick access. It's about a 30-minute meeting because they have all the tools available to them, they can quickly, at a very rapid pace, either approve or deny those requests. Then, those denied requests are filtered out so they don't go through the entire workflow, creating noise within the system."

  A cloud DevOps engineer for a financial services firm explained: "We essentially automated the entire process. They can now come along and request the server through a portal, and that would be delivered in a matter of minutes or hours depending on what they request, as opposed to weeks."
- **Accelerated IT delivery.** VMware Cloud Foundation afforded interviewees' organizations with increased agility to complete large-scale projects with reduced deployment times, improved capacity planning, and better resource allocation. The virtualization specialist for a financial services firm

stated: “The project plans are shorter. We have stripped them down by eliminating five weeks of pre-architecture work. We improved business planning and can now assign resources more efficiently that were previously tied up and wouldn’t be available for other projects.”

- **Reduced infrastructure and cloud costs.** VMware Cloud Foundation Operations and VMware Cloud Foundation Automation provided organizations with the visibility required to accurately gauge resource usage and rightsize their environments. Organizations developed automated policies to decommission unused VMs, allowing them to reallocate resources and avoid purchasing additional capacity. The virtualization specialist at a financial services firm said: “[VMware Cloud Foundation] allowed us to do an auto-decommission over a period of time, whereas previously, it would be an ask of people which of these VMs are the ones that we can get rid of, and typically everyone needs everything. Whereas here, you have empirical evidence that tells you, ‘You don’t actually need this VM because it’s occupying space in terms of storage. It might be shut down, but it’s still occupying space and it could be used for other VMs.’”
- **Downstream impacts of accelerated delivery.** Accelerating IT delivery times increases overall organizational agility — enabling business users to more quickly develop and deploy new products or services. A cloud DevOps engineer for a financial services firm stated: “[Teams running] fundamental applications within the bank have commented on the improvements that we’ve made in terms of timing and delivery of infrastructure [with VMware Cloud Foundation Automation]. It has allowed them to react quicker and release new products.”
- **Quickly generate reports.** Interviewees noted that VMware Cloud Foundation Operations allowed them to quickly prepare reports for management. In the past, it may have taken days to prepare reports, but now information is available when needed.

> “[VMware Cloud Foundation] allows us to automate a lot of manual processes and reduce that toil and speed up the time to market for customers.”
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> CLOUD DEVOPS ENGINEER, FINANCIAL SERVICES

TOTAL ECONOMIC IMPACT ANALYSIS

For more information, download the full study: The Total Economic Impact™ Of VMware Cloud Foundation Operations, a commissioned study conducted by Forrester Consulting on behalf of VMware, April 2024, or The Total Economic Impact™ Of VMware Cloud Foundation Automation, a commissioned study conducted by Forrester Consulting on behalf of VMware, July 2024.

Disclosures

Readers should be aware of the following:

This study is commissioned by VMware and delivered by Forrester Consulting. It is not meant to be used as 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 study to determine the appropriateness of an investment in VMware Cloud Foundation Operations and VMware Cloud Foundation Automation.

VMware reviewed and provided feedback to Forrester, but 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 of the study.

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

Appendix A: Endnotes

[1] Total Economic Impact 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.

ABOUT FORRESTER CONSULTING

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