Broadcom Redefines VMware Engagement and Solutions

Since closing the acquisition of VMware in November 2023, Broadcom has been committed to enhancing VMware's portfolio and aligning it to market needs. In this endeavour, the company has been steadfast in focusing on simplifying IT operations, managing licences efficiently, and improving partner engagement and relationships.

It should therefore come as no surprise that the VMware product catalogue and go-to-market channels have since undergone significant changes. This has resulted in a lot of commentary on what it means for partners and customers, and how they can take forward existing investments in VMware software and retain their confidence in the supplier to make new ones.

The ongoing announcements about its portfolio and partner engagement — the latest made at the end of June 2024, ahead of its flagship cloud event, VMware Explore Las Vegas in August — reinforce Broadcom's promise of simplification of the core product set with further clarity on the go-to-market strategy for the VMware portfolio and the partner supply chain for clients.

Given VMware's heritage and long-standing market presence, customers want to be sure they can continue to invest in the technology and solutions with a path for further progression. This report investigates how Broadcom's innovation, product and go-to-market strategies for VMware provide added value and meet the needs of customers and partners for efficient, secure and flexible IT solutions.

BACKDROP TO THE EVOLUTION OF DIGITAL OPERATIONS

The foundation of a digital enterprise is its ability to make the most of digital technologies and services to deliver new levels of experiences and capabilities that improve growth, value and well-being across an organization.

Businesses know that information and communications technology correctly applied can deliver great flexibility, secure interactions and new ways to connect and engage with suppliers, clients, partners and their workforces. They are looking for the most appropriate strategy and best technology products to resolve their challenges.

Digital operations see the role of technology fundamentally as a means to drive productivity improvements, which includes improving relationships and engagement, streamlining and automating workflows, and providing a host of efficiency savings that minimize distractions and time-wasting tasks.

An important demand of digital transformation is business resilience, for which robust infrastructure and processes enabled by the flexibility of cloud operations are key. Data is the proven provider of value, with organizations demanding new and better ways of extracting insights from the data they own and other relevant sources.

Strong foundations for technologies such as AI and generative AI need to support responsible adoption and operations, although poor data quality is a common challenge. Equally important are improved user experiences, especially in accessibility, integration, the speed of executing a task, and ensuring that interactions are relevant.

Controlling the cost of operations and ensuring efficient and effective spending reflect the strategic value of technology and reasons for businesses to embrace digital transformation.

MODERN IT OPERATIONS IN PRACTICE

No matter the strength of different technology platforms, the hybrid cloud model is the order of the day for IT operations in many organizations. Businesses and their regulators want choice in application workloads and production environments to achieve desired outcomes, and smartly. They want operational resilience that removes single points of failure and recognizes different technology stacks deliver specific performance and operational requirements for different business strategies.

The notion of a consistent, homogeneous IT environment is a fanciful concept, especially for many organizations faced with diverse and complex operational environments and regulatory requirements, as well as investments in older software.
Peel back the cover of most organizations' IT environments and you will be confronted with a multitude of applications running different versions of programming frameworks on different versions of runtime systems from a broad range of software and service providers. The larger the organization, particularly those with more widely located clients, the more likely that IT environments will be formed of diverse operating environments deployed in multiple geographical regions, subject to differing policies and regulations.

The reality is that a hybrid environment will continue to exist because people want choice or face specific requirements. Differing levels of operational maturity and technology adoption exist in organizations.

CLOUD IMPLEMENTATION DYNAMICS

What runs in the cloud has also evolved in recent years, from the early days of "lift and shift" to modern cloud-native applications. The latter typically involve new technologies and processes that need new tools, skills and ways of thinking about application architecture, development and deployment. There is also an openness to embrace what different clouds offer, even if this means proprietary services with some degree of lock-in.

But cloud delivery can be hard. Although cloud strategies have evolved and cloud adoption has become widespread, cloud implementation has not necessarily become any easier. For many, just getting into a single cloud environment is challenging and it can be difficult to know where to start. This is often against a background of pressure from senior leadership to be "in the cloud".

THE ROUGH TERRAIN FOR MODERN CLOUD OPERATIONS

Most organizations started their cloud journey through experimentation, R&D and using various cloud platforms. This has exposed several dynamics with different benefits and challenges.

Diverse Cloud Platforms

A free-for-all approach lets teams use any cloud platform or proprietary service, but this causes challenges. If an application switches teams, the new team may lack the necessary cloud service skills.

Operational Complexity

Managing workloads requires learning multiple cloud environments, products and services, leading to potential chaos and high costs. This approach might work for small organizations with few custom workloads, but it is problematic at an enterprise scale.

IT Operations and Control

IT operations teams traditionally managed enterprise workloads by controlling infrastructure, making management and support easier and more cost-effective. With multiple cloud environments, teams lose control and must quickly learn new, complex cloud services.

Containers and Standardization

Containers managed by Kubernetes running alongside virtual machines offer an optimal way to run scalable cloud workloads. Despite some standardization, different clouds have unique container capabilities, requiring operations teams to develop diverse skills.

Deployment Flexibility

Using both on-premises and public clouds offers a notable flexibility benefit for IT operation teams, conferring them with the ability to move workloads between different cloud environments.

The benefits of the cloud can be challenged by the operational realities of diverse environments and the need for extensive skills for different cloud platforms. Other recognized problems add to the list of challenges that underscore the benefit of Broadcom's approach to simplify and streamline the VMware portfolio through an integrated, consistent platform with a common cloud deployment and management stack.

- **Cost management:** Managing costs for different cloud environments is complex owing to their varied pricing models. For instance, the way that one cloud charges for its serverless capability can be very different from another. A unified view of overall cloud costs is essential for effective management.

- **Governance:** Security remains a priority, but managing it across multiple cloud environments while addressing various regulatory requirements is increasingly complex.

- **Data sovereignty:** Regulatory and legislative requirements, like the EU's General Data Protection Regulation (GDPR), make controlling the storage, processing and movement of data critical. For example, Internet of things solutions can inadvertently violate compliance requirements by transmitting data across unsuitable territories.

- **Integration and interoperability:** Some workloads operate in a single cloud, and others span multiple clouds. A system running in an on-premises private cloud connecting to an application running in a public cloud complicates integration. As a result, the ability to integrate across clouds has proven challenging for many.

Solving data and security problems is critical for AI solutions reliant on large data sets, with providence and location requiring strict governance to ensure compliance with internal policies and external regulations.

CLOUD REALITIES

Organizations face several cloud-related challenges, priorities and opportunities, as outlined in the table below.

Challenges

Attracting talent to address skills gaps, securing operations, and understanding how to use emerging technologies effectively. Organizations must manage complex technology changes, unify hybrid IT management, and ensure data security, privacy and quality. Integrating data across silos for a comprehensive view, providing effective and accessible data analytics, and increasing visibility of supply chains are critical. Additionally, organizations need better traceability of asset origins and more insights to make informed decisions.

Priorities

Combating cybercrime and mitigating security risks, promoting innovation and digital transformation, and enhancing cross-organizational integration. Effective data, security and governance management are crucial, as is aligning data strategy with organizational goals. Priorities include enabling data-driven decisions through analytics, making data accessible and supporting self-service applications. Improving system integration, increasing workflow visibility and ensuring compliance through reporting are also key. Businesses must also provide forward-looking insights and a range of analytical support to keep stakeholders informed and reassured.

Opportunities

Migrating core workloads to the cloud, transforming business and operational processes, and demonstrating returns on investment and value. Other opportunities include improving customer and employee experiences, enhancing metadata management and data processing transparency, and establishing a data management centre of excellence. Additional areas of focus encompass making workflows and supply chains adaptable to changing demands and achieving greater predictability and balanced asset management.

Market optimism for cloud platforms remains high, as businesses view cloud services as essential for resilience and agility, despite lingering concerns about costs and migration challenges. Cloud services will significantly shape the future of enterprise IT, with many organizations adopting a mix of on-premises and third-party public clouds. This typical cloud strategy involves using multiple clouds from various providers.

Managing multiple cloud environments to meet diverse business strategies is complex and can reduce productivity, requiring a thoughtful approach to handle effectively.

THE BENEFITS OF A UNIVERSAL STACK STRATEGY

A brief look at any of the public cloud offerings from hyperscale providers can quickly leave one feeling overwhelmed. Amazon Web Services, Google Cloud Platform and Microsoft Azure have considerable breadth and depth in what they offer, including solutions for data sovereignty and integration with on-premises environments.

The pace of evolution in the breadth of cloud offerings is relentless, as products change, new ones arrive and others are phased out. For example, prior to November 2022 there was minimal interest in generative AI; it is now at the top of many organizations' ambitions. Furthermore, managing different solutions for various environments remains challenging.

This leaves organizations looking for ways in which they can generate value from both private and public clouds more quickly and easily but retain flexibility and ensure solid governance and security.

One way of achieving this is through a common platform that can run across clouds, providing a consistent base on which to build and deploy traditional and cloud-native applications. Such platforms make it easier to connect the on-premises environment, such as a private cloud, to the public cloud.

SCOPING THE ADVANTAGES OF VMWARE SOFTWARE

The VMware portfolio has offered solutions in this area for several years. Its heritage is in enabling customers to realize maximum value from their infrastructure investments. These can include different hardware from different suppliers running different operating systems, pulled into a common virtualized platform that makes it easy to deploy and manage applications.

VMware offers a standardized, secure and privacy-focused way to manage the complexity of modern IT operations. The significantly streamlined portfolio allows for consistent management and deployment in different environments: on-premises, public clouds and edge computing. This standardization simplifies IT operations and management.

Employing consistent, common application and governance controls no matter the target environment offers a smart, flexible and straightforward approach to IT operations. It is one that can help to reduce complexity, reassure with a level of predictability and repeatability, and shore up the prospect for stable long-term growth through a managed services offering.

VMWARE CLOUD FOUNDATION FOR HYBRID ENVIRONMENT IT OPERATIONS

VMware Cloud Foundation (VCF), has evolved from years of investment in traditional on-premises virtualization and cloud solutions. It provides a unified private cloud platform that operates both on-premises (including the edge) and in public clouds, offering a consistent experience for managing production workloads wherever they are hosted.

VMware developed technologies for a full-stack solution: VMware vSphere for compute virtualization, VMware NSX for virtual networks, VMware vSAN for storage, and VMware Aria for management. VCF represents an evolution, integrating these technologies to address diverse cloud

requirements with a unified management experience. Also, VMware has integrated Kubernetes into vSphere so organizations have a single platform for running virtual machines and containers.

Even before its acquisition by Broadcom, VMware brought many of these capabilities together into a single offering — VCF — and began a gradual transition to a subscription model. These capabilities cover many of the challenges previously outlined:

- Combined virtualized compute, storage, and networking
- Management and optimization tools for cloud spending, utilization and risk
- Self-service capabilities for platform engineers and DevOps to increase speed
- Security features including ransomware defence, lateral security, and detection and response
- Deployment tools for infrastructure-as-a-service
- Easy provisioning and management of virtual machines and containers

The vast legacy product catalogue of VMware often left customers confused, with the ambition of a unified platform sometimes clashing with product reality. Broadcom CEO Hock Tan recognized this and emphasized the need for simplification to help customers take full advantage of VMware's capabilities. Since acquiring VMware, Broadcom has been streamlining the offerings, resulting in significant changes in the VMware portfolio and its ecosystem. It has looked to complete the transition to a subscription model as devised by VMware before the acquisition. This transformation, although beneficial, has caused some market confusion, partly fuelled by competitors.

Mr Tan's vision is straightforward: to simplify private cloud adoption for customers as VMware did for on-premises virtualization 25 years ago, making it easy to manage, deploy and support hybrid environments without restricting platform and development teams. VMware was already moving in this direction, but Broadcom has accelerated the change with substantial investment.

Almost all large enterprises have used VMware over the past 25 years, mainly running vSphere, often without development teams realizing their applications ran in VMware virtual machines. The vision for VCF is to offer the same seamless experience for an integrated private cloud, providing a single platform across on-premises, the edge, hyperscalers and partner cloud suppliers that ensures consistent management and support for operations teams, particularly in security and governance, while offering flexibility and self-service for platform and development teams.

For instance, a workload can be developed to run in containers or virtual machines, deployable to any VCF end point, and use native services from different hyperscalers. This approach allows enterprises to benefit from a consistent platform and flexibility across different clouds, choosing what best fits their needs.

Broadcom recognizes that although customers already possess much of the technology needed to do this, they are not necessarily aware of it or how to use it. Hence the simplification of the VMware product catalogue with a main focus on VCF — it has rationalized 8,000 product variations into four core solutions.

<table>
<tr><th colspan="2">Small and Midsize Businesses</th><th colspan="2">Enterprise and Full-Stack Solution</th></tr>
<tr><td>VMware vSphere Essentials Plus Kit</td><td>VMware vSphere Standard</td><td>VMware vSphere Foundation</td><td>VMware Cloud Foundation</td></tr>
<tr><td colspan="4">Optional add-ons for ransomware and disaster recovery</td></tr>
<tr><td colspan="2"></td><td colspan="2">Optional add-ons for storage, network and container management</td></tr>
<tr><td colspan="3"></td><td>Optional add-ons for advanced network and security, cloud service platform and AI service</td></tr>
</table>

With this come a simplified licensing model and a reduced total cost of ownership to customers. Broadcom will continue to offer versions of vSphere for customers not needing VCF. It will also continue to provide technical support for existing customers with perpetual licences until the end of their support agreements.

However, subscriptions represent the present and future of enterprise software— a move VMware began to make before the Broadcom acquisition. In fact, Broadcom offers VMware vSphere Foundation as an alternative to VCF for customers who do not need or are not yet ready for a full private cloud. Broadcom's VCF subscription licence is half the price of VCF's subscription price before the acquisition. In addition, the length has been made more flexible and there is a pay-as-you-go model. The subscription model is based on per-core pricing, reflecting the industry standard, rather than per CPU; it requires a minimum one-year term.

Broadcom has improved the portability of its licences for VCF specifically to make it easier and more cost-effective for customers to operate across on-premises, hyperscaler and cloud service provider environments. Essentially, customers can deploy their VCF subscriptions and any associated add-ons to any compatible VCF end point.

REGAINING CUSTOMER CONFIDENCE

The licensing changes within VMware have caused some concern, but the shift to a subscription model is not new. Companies like Microsoft and Adobe transitioned successfully to this model years ago, and Cisco has also embraced it. The change has benefited suppliers and customers, notably in ensuring that they receive the "latest and greatest" of the products offered through subscription. Aligning the VMware portfolio with this model can provide similar additional value.

Through a subscription model, customers receive constant updates and new innovations, unlike traditional release cycles that take months or years and depend on licence renewals. For Broadcom, it makes sense to offer VCF customers the same rapid innovation seen in public clouds.

The VMware partner network is also evolving. Broadcom wants customers to work with partners to maximize their VCF investment. Although large customers can buy directly, most will go through partners which can ensure they get the most value from the product. Recent changes include reorganizing the channel and reclassifying partners to provide value-added services rather than just shipping licences.

Finally, version 5.2 of VCF delivers attractive new value that aligns with the three strategic pillars outlined in the table below. It is one of the latest examples of the innovation that Broadcom is delivering to customers with its additional R&D investment.

Modernized Infrastructure		Cloud Experience for Developers		Security and Resilience	
VCF Import — vSphere, vSAN	Enables integration of existing vSphere and vSAN environments into VCF without a full rebuild of the customer environment	VMware vSphere Kubernetes Service (VKS)	Independent service delivering asynchronous VMware VKS releases for upstream Kubernetes	Live patching and flexible upgrades	Allows admins to apply critical patches to VMware ESX hosts. Flexible upgrades allow latest patches to be applied when upgrading VCF
VCF Edge	Provides optimized VCF configurations for edge applications	Simplified adoption of virtual networks	New streamlined processes that reduce the complexity of deploying virtual networks	Dual data-processing unit (DPU) support	Increased DPU acceleration performance improves DPU availability

UPDATED RELATIONSHIP MANAGEMENT FOR PARTNER SUCCESS

The Broadcom Advantage Partner Program builds on VMware's previous partnership programmes. It supports direct customer partners and those who assist them, with industry and regional capabilities integrated into the network.

This restructuring has altered go-to-market channels for VMware solutions, especially for VMware Cloud on AWS. Previously bought directly through VMware, Amazon Web Services or each company's partner network, it will now only be available directly from Broadcom. Despite some confusion, the service remains, but the way of acquiring it is changing to align with the VCF vision. Customers should acquire VCF independently of the operational environment, allowing operation across multiple environments.

Broadcom has also expanded its relationship with Microsoft, offering VCF through partners on Microsoft Azure. Microsoft, Google and IBM are the first to adopt the new portable licence model, showcasing Broadcom's commitment to major public clouds. Although licensing and market strategies are evolving, these changes reaffirm Broadcom's dedication to public cloud partnerships.

Since February 2024, the partner programme has welcomed more members and we expect further announcements from Broadcom that detail additional public and private cloud support and subscription model updates.

REASSURING TRAJECTORY FOR PROGRESSION

Broadcom aims to simplify how customers acquire and use VCF in various cloud environments. Simplifying IT operational infrastructure is a widely recognized goal as organizations seek to streamline workflows, supply chains and application models. This simplification can enhance engagement experiences, boost workforce productivity, reduce costs, improve client retention and expand operational reach.

Investing in a common platform across multiple clouds can tackle challenges in hybrid cloud management by ensuring consistent security, governance and operations. This approach supports the market drive for simplification by managing underlying complexities. However, caution is needed to avoid future limitations. Common platforms provide immediate benefits but over time may become restrictive. The key is balancing current utility with future flexibility.

The path determined for VMware solutions may cause some disruption for customers and partners. There is still work to be done by Broadcom at the product level to match its overall ambition and specific product requirements. Some customers of other VMware products might need to transition to VCF, a potentially complex and costly task, particularly customers who do not require all the additional capabilities or scale. Others may need to adjust their partnerships.

The changes to the new product portfolio and partner ecosystem have led to some market confusion and anxiety, but the situation is evolving quickly. If Broadcom can meet its goals promptly, customers should ultimately benefit.

Broadcom has committed to investing heavily to achieve these changes, drawing on its success in the semiconductor market to fund the necessary developments. For long-term VMware customers, the potential benefits of this investment might outweigh short-term disruptions, given the value of their existing skills and knowledge.

A BRIGHT FUTURE

The product direction of VMware by Broadcom and signs of support for customers and partners suggest a bright future, with:

1. A simplified inventory that offers product improvements to reduce deployment times and improve GPU usage with monitoring capabilities
2. A VMware private AI foundation with Nvidia and the included benefit of a joint generative AI platform
3. Committed support from manufacturer partners Dell, Hitachi Vantara, Hewlett Packard Enterprise and Lenovo
4. Modern services for data and cloud sovereignty, underscored by the claim of deployments with 58 VMware sovereign cloud service providers
5. Retention of long-term customers adopting the core portfolio services
6. Confidence of partner community with ongoing sign-ups of VMware Cloud Service Provider Pinnacle, Premier and Registered Partners

These factors should help to quell the myths that have arisen since Broadcom's acquisition of VMware.

As enterprises invest in hybrid cloud environments, having a consistent private cloud platform with unified management for running virtual machines and containerized workloads is likely to provide long-term stability for development and operations. This platform should not restrict but enable them to exploit each cloud's unique value, whether it is on-premises, at the edge or in a public or partner cloud. If the VMware portfolio lives up to Broadcom's promises, it is well-positioned to provide such a platform, supporting customers in the cloud as effectively as it has on-premises environments for the past 25 years.

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