

vmware®



FIVE STEPS:

TO MODERNISING YOUR APPLICATIONS FOR GREATER BUSINESS SUCCESS

Find out how organisations are
ramping up application modernisation
to enhance business agility
and competitive advantage

LET'S GO





APP MODERNISATION

MEETING CUSTOMER DEMAND FOR SECURE, RELIABLE AND FEATURE-RICH APPLICATIONS

In today's digital-first culture, a brand's applications are key to its competitive advantage. Applications need to be intuitive, look great and include the latest features. They also need a rapid deployment.

If an organisation can't deliver applications in a timely manner to meet customer demand, customers may switch to competitors that can. Similarly, employees want a great experience with their internal solutions. Poor usability and performance of workplace applications can quickly impact employee productivity and engagement.



The most successful organisations are those that can meet customer expectations in their digital capabilities and respond quickly to changes in the market. The ability to quickly launch reliable and secure applications is now key to retaining customers and competitive edge across nearly every industry.

Irfan Khayal, Senior Alliances Manager, VMware Tanzu



The link between performance in application creation and business success is verified in research by analyst McKinsey. The firm found that organisations considered top performers at software creation had four to five times faster revenue growth and were on average 20 per cent more profitable at an Operating Profit (EBIT) level. The benefits weren't just economic; organisations were on average 60 per cent more innovative (considered as their ability to build new products), had 50 per cent better brand perception and customer satisfaction and 40 per cent better talent management (satisfaction of their own employees).



ESTABLISHING A MODERN APPROACH

To optimise time-to-market, reliability, agility and scalability organisations need a modern approach to development. This approach needs to encompass agile methodologies, loosely-coupled architectures, cloud-native application development platforms and integrated DevSecOps.

Modern application development is not just important to business agility and customer experience, but also key to simplifying security and IT management. "Legacy applications and infrastructure can be cumbersome and limiting" comments Bryan Ross, Executive Advisor at VMware Tanzu. Bryan continues, "As IT environments become increasingly complex, applications and their infrastructure must be manageable for IT teams that are often already stretched thin."



In this insight guide, we look at the challenges facing organisations in modernising their applications and the five steps they can take to enable a more scalable approach.

THE CHALLENGES OF SCALING UP

Many market-leading organisations have adopted a cloud-native approach to development using containers and container-based platforms such as Kubernetes.

According to **Gartner**, by 2025, **15 per cent** of enterprise applications will run in a container environment, up from five per cent in 2022.

"Kubernetes and similar platforms provide better visibility into applications and their performance while making it easier to implement updates," explains Bryan. "But while many organisations are using containers and Kubernetes to a limited extent, it's often in small-scale, tactical deployments – the issue comes with scaling up."

To successfully modernise applications at scale, organisations not only need to establish a modern approach to development, but also a roadmap for how they're going to move legacy applications to the cloud. Consistency, standardisation and a high quality developer experience are all essential to success.

MANAGING SECURITY DEBT

Technical debt is one of the biggest challenges hampering organisations in their efforts to modernise applications. With high profile security breaches drawing significant media attention, an incident can quickly have a detrimental impact on brand reputation.

"Highly publicised breaches have highlighted a lack of understanding of legacy applications and their security vulnerabilities," comments Bryan. "With hundreds of applications built over the years by internal and external teams, often using different approaches, it can be difficult for organisations to govern and understand security risks."

Although platforms such as Kubernetes can simplify security and governance of new applications, there are still risks. "In an open source environment, developers may choose to re-use existing code without fully understanding its origins, which can introduce unknown security risks," comments Marc Zottner, Executive Advisor in Application Modernisation at VMware. "There's also a risk of shadow IT as developers may take it upon themselves to purchase additional tools in a siloed manner."



A woman with curly hair and glasses is smiling while looking at a laptop screen. She is wearing a patterned top and a necklace. The background is blurred, showing an office setting with warm lighting.

ACCELERATING APPLICATION MODERNISATION WITH TALENTED PEOPLE, PROVEN PROCESSES AND CONSOLIDATED TECHNOLOGIES

Research from McKinsey shows that best-in-class tools are the top contributor to business success – enabling greater productivity, visibility and coordination. Yet only **five per cent** of executives recognised this link and ranked tools among their top-three software enablers.

The right toolsets are vital to empower developers, but application modernisation requires more than just investment in technology.

Organisations also require proven processes and skilled people. To attract top developer talent and keep them working at their full potential, organisations must provide an experience that meets their needs and expectations.



FIVE STEPS TO A MORE MATURE, SCALABLE APPROACH

Whether organisations have started to leverage cloud-native development or are still using traditional approaches, there are **five steps** that can help keep them consistent and on track in their application modernisation journey.

1

Benchmark current processes

With application development often conducted in siloes, the first step to enabling modernisation at scale is to understand the existing resources and processes across the business. By identifying which teams are using which processes and to what level of success, organisations can gain a better understanding and greater control. With visibility across teams, they can start to standardise processes and share best practices.

2

Consolidate toolsets

Most teams use a combination of tools, and while providing developers with choice is important, an excessive number of overlapping toolsets can add to costs. "For many organisations, it's worth investigating the tools currently in use in order to identify opportunities for consolidation," explains James Morris, Head of Sales, Cloud Services at Computacenter. "By centralising and consolidating toolsets across the business, organisations will not only reduce expenditure but also increase efficiency by enabling a more consistent and scalable approach."

3

Establish a unified cloud-native development platform

To support modern, agile development methodologies, organisations need loosely-coupled architectures that enable incremental changes and more frequent software deployment. "Migrating to cloud-native development on an enterprise-level can be challenging, but by approaching it in a consistent and integrated manner, organisations can eradicate siloes and maximise their chances of success," comments James.

Bringing developers onto a common platform can simplify security, maximise productivity and enable knowledge-sharing. Include a modern, fit-for-purpose API library within the platform, and developers can bring together modular services more easily to maximise agility.





Automate security controls

Fixing security breaches earlier on in the development cycle, rather than once an application is in production, not only reduces risks, but also costs. "Assisted by suitable tools, developers can identify and correct security vulnerabilities before they're built into new applications, rather than relying on post-development penetration testing," explains Zottner. "The right DevSecOps tools can also scan existing component from open source libraries to enable developers to re-use code without security concerns."

With security automation tools, organisations can also support a zero-touch approach with far less complexity and effort, removing the burden from developers so they can focus on creating fit-for-purpose applications.



Measure and assess to enable continuous improvement

You can't improve what you can't measure. The most successful application creation teams carefully monitor digital experiences to understand application performance and identify areas for improvement. "Using tools and processes for digital experience management, organisations can capture data to verify the end-user experience, and use this to guide future changes and enhancements by development teams" comments James.



Simplify the modernisation journey by working with experienced IT partners

Application modernisation is a continuous journey that will look different for every organisation. But there are significant benefits from working with IT partners that have previous experience. With proven methodologies and the relevant skills, services and structure, experienced partners, such as Computacenter, can help reduce risk, accelerate application modernisation efforts and ensure organisations continue to get the most from their investments in an area where technology is rapidly evolving.

In response to customer needs, Computacenter has created a range of Developer Velocity offerings. Our services are designed to help developers to operate with more quality, speed, insight and efficiency. We work with the latest technologies and platforms, such as VMware Tanzu, to help customers achieve their application modernisation goals.



Maximising platform adoption

An organisation can invest in the best development tools on the market, but they're worthless if they're not adopted. Organisations need to make it as easy as possible to discover, onboard and use the toolsets that they provide. This can be achieved by providing access to training videos, documentation and knowledge-based articles that range from quick-start guides for quick wins to in-depth details for more complex projects. Some organisations choose to take a PaaS approach, providing cloud-native development platforms with appropriate wrap-around services to ensure they meet developer needs.



BOOSTING COMPETITIVE ADVANTAGE

By optimising their approach to application modernisation and improving Developer Velocity, organisations can achieve a faster time to market for new applications to enhance their competitive advantage.

They can also:

- **Reduce risk** and protect data with a DevSecOps approach that includes automated security capabilities built into application development as early as possible.
- **Improve agility** by enhancing the speed and frequency of deploying application innovations.
- **Minimise costs** by increasing the efficiency of ongoing application development and management and eradicating 'black box' spending on development tools.
- **Attract and retain talent** by offering a better developer experience.
- **Optimise the customer experience** by making it easier to develop and deploy applications that meet customer needs.

APPLICATION MODERNISATION SUCCESS STORIES



- 1 One ground-breaking organisation developed an app to connect essential workers to childcare providers during the COVID pandemic. Working with VMware Tanzu, it was able to launch its new app in less than a month.¹
- 2 A US-based retailer was able to increase Developer Velocity by 40 per cent with VMware Tanzu supporting cloud-native application development. It is now able to create a new production-grade platform environment in just 30 minutes, and fix bugs in less than an hour in production with zero downtime.²
- 3 A renowned automotive company has been working with VMware Tanzu for more than five years to support cloud-native development. Working with VMware enables the team to adopt new technologies faster and enables a smoother developer journey.³

¹ From project launch to app launch in just 11 days, VMware Tanzu.

² Developing software as a team sport, VMware Tanzu.

³ Behind the Wheel with Mercedes-Benz.io, VMware.



LET'S TALK

To find out how Computacenter and VMware can help your organisation accelerate application and development modernisation, please contact your Computacenter Account Manager, call 01707 631000 or email enquiries@computacenter.com

About Computacenter

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