



Get set... GO!

Since the 5G starting gun was fired, the potential impact of each business decision has greatly increased. The most forward-looking CSPs see operational and financial consequences now and right down the track. That's why choosing the right partner is critical. At VMware, we understand the obstacles and opportunities ahead. We can help plan your course, and stay with you all the way.

The key is the digital transformation of infrastructure. With the VMware Telco Cloud framework, you can unleash innovation and wow your customers. You can bring seamless, personalized experiences to market faster — and at lower cost — to stay ahead of your competition.







Getting you up to speed

A fast pace of innovation and efficiency at scale are no longer ambitious goals; they're fundamental to winning. 5G will be built on the principle of software-defined services. Network Functions Virtualization (NFV), and Software Defined Networking (SDN) have been the first steps on the journey to Cloud Native Telco.

To deliver a future-focused service, respected by enterprises and consumers alike, you need proven technologies from an experienced player. VMware's Telco Cloud is the world's most deployed and best understood virtualization and cloud platform.

Our platform is relied upon by more than 100 operators including TIM, Telia, Singtel and Millicom/Tigo to deliver their telecoms services to over 800 million subscribers globally¹. Vodafone alone runs hundreds of Virtual Network Functions (VNFs) across deployments spanning 80+ locations and 21 markets, and almost 50% of its core network nodes providing voice and data services run on VMware vCloud NFV². AT&T — well known for innovation — is enhancing its enterprise services with the integration of VMware SD-WAN by VeloCloud, and 5G service capabilities.

VMware Telco Cloud technologies are helping service providers accelerate to compete.

[.] https://www.vmware.com/company/news/releases/vmw-newsfeed.Communications-Service-Providers-Globally-Select-VMwares-5G-Ready-

https://www.vmware.com/company/news/releases/vmw-newsfeed.Vodafone-Completes-European-Roll-outof-VMware-Network-Virtual Infrastructure-to-Accelerate-Shift-to-Digital-Network.214d91bcc4db-42a1-9c24-82e37872ee2b.html

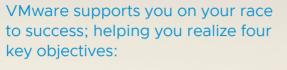
Keeping pace with you, all the way

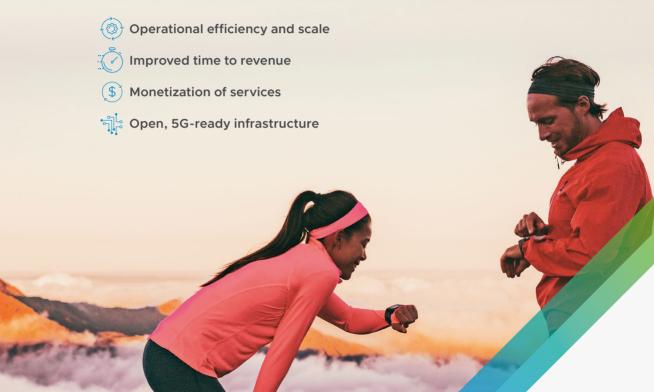
Customer loyalty requires that they see you as more than just another service provider. You must become their information and communications technology partner, with agility as well as speed. That means becoming a Digital Service Provider, delivering a premium portfolio of high-value services with 5G and software-defined at the center.

VMware's Telco Cloud is the industry's only comprehensive platform optimized for 4G, 5G and fixed-line — a single architecture supporting all networks. Our Telco Cloud framework of infrastructure, automation and operations accelerates you to new services and network efficiencies on a massive scale. Partnering with VMware gives you instant access to industry-proven solutions and the world's largest pool of skilled virtualization and cloud technicians.

All of this means VMware delivers the fastest time to revenue, the lowest cost of ownership and the lowest deployed risk of any Telco Cloud solution on the market. Plus, with the largest ecosystem of application (VNF) and hardware vendors, a best-of-breed strategy that differentiates your business becomes a reality. At VMware, we understand where you're going and we know how to get there.









Operational efficiency and scale

Enabling and supporting new service innovation, developing more personalized, high-value services, and deploying with confidence in a multi-cloud environment.

Investing in the future needn't mean compromising services today. In fact, Vodafone is already seeing a 50% saving in costs and a 40% reduction in time to market from deploying VMware Telco Cloud technologies¹. With VMware as your partner, you can cut costs while enabling an agile, responsive service capability that keeps you out in front.

VMware can enable you to predict, prevent and troubleshoot faster across virtual and physical devices, using VMware Smart Assurance to provide a superior customer experience. Predictive analytics identify requirements and automatically balance workloads, optimizing both network performance and resource consumption.

With the power to deploy combined telecoms and IT-related workloads across a multi-cloud footprint with consistent operations throughout, our Telco Cloud solutions allow you to meet your profitability, customer satisfaction and sustainability targets. That means less churn and better service economics with carrier-grade performance and availability.

Improved time to revenue

Delivering a common service platform and consistent operations is key to reducing time to revenue for new services.

Imagine you were told you needed to buy a separate phone for every app. How long would it take you to roll out 10 apps?! Yet that is exactly what the traditional siloed approach to delivering telecoms services has done to CSPs for decades.

What if, instead, you were told you can buy one phone and load as many apps as you want? That's what VMware Telco Cloud solutions deliver. Instead of buying a phone and downloading apps, you deploy a consistent, common, software-driven infrastructure and onboard network and IT functions.

And building that common infrastructure needn't take long: One VMware customer delivered the platform and onboarded their first service, a full Voice over Long Term Evolution (VoLTE) service, from scratch, in under 16 weeks.

VMware can play a key role in supporting your service design through a common platform and consistent operations philosophy. And our professional services team won't walk away when the design is complete; they can also support your own teams through knowledge transfer, resident engineers and a 'Build, Operate, Transfer' deployment model, to provide quality assurance. Let us help you give your customers the best of what you have to offer today, and tomorrow, faster!





\$ Monetization of services

Providing the agility and flexibility to innovate fast, to create higher-value, truly personalized and relevant services.

The current network architecture of too many telcos doesn't allow for the delivery of high-value services. Lack of flexibility and inability to innovate and monetize new, personalized services at speed is slowing growth and reducing relevance for many.

With VMware Telco Cloud Operations, you benefit from advanced service assurance analytics and monitoring insights that allow you to optimize capacity and customer experience from the core to the edge to the RAN. With Telco Cloud Automation, you can maximize efficiency and reduce downtime to support the massively distributed set of endpoints and devices future services require.

Our technology enables you to create an end-to-end software-based network architecture. So you can deliver consistent, pervasive connectivity and intrinsic security to applications and VNFs – wherever they're located. And you can do so at scale, and regardless of underlying physical infrastructure.



Open, 5G-ready infrastructure

Move your digital transformation forward, with an agile, flexible platform that supports current business functions and is ready for the future of connectivity.

Technological acceleration makes predicting the future impossible. There are no more safe bets; no decades-long trends. In a sprint rather than a marathon, what we think of as cutting-edge today will be seen as legacy tomorrow. That's why VMware is focused on building a service delivery environment that's capable of embracing technological evolution. We want to maximize business effectiveness and help you avoid both vendor lock-in and the risk of creating 'future legacy'.

VMware's commitment to protecting our clients' investments includes evolving reference architecture and incorporating both in-house and open-source community developments. Our best-of-both-worlds approach means you can quickly adopt industry requirements, from Multi-access Edge Computing, Cloud Native and container-based services, to 5G – and many future technologies as yet beyond sight.

With technology evolving at such a furious speed, where you need to be, the hurdles you must get over and what you need to change into may not always be clear. However, knowing that you can change lanes – quickly, intelligently and with great flexibility – counts. Now and always.

A crowd-pleasing finish

Helping you, your customers and your employees succeed in the 5G era.

Millions of purchasers of new 5G devices will soon be switching their custom to the network that offers the best experience. VMware can help you make sure that network is yours. VMware Telco Cloud Solutions, combined with our Enterprise and IT Service solutions, provide the platform you need to attract customers, excite your workforce and stay ahead of the competition in the 5G era.

Get ahead and stay ahead in the 5G era with VMware's solutions for Communication Service Providers:

- Telco Cloud framework production proven in 100+ CSPs
- Enterprise Services spanning SD-WAN to Workspace Management
- IT Solutions for Modern Apps and Multicloud with embedded security
- Technologies that deliver for you and the environment



