



Win with Mobility

Mobility provides the
transformational foundation
for a digital business.

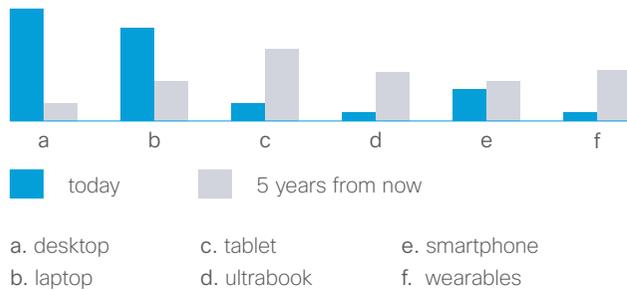


Introduction

With the rapid digitisation of modern life, organisations must go digital or risk being left behind. And mobility is the first vital step to becoming a digital company.

By 2020 the primary work device is set to shift dramatically. Desktops are expected to disappear while mobile technology takes over. It's important to prepare for this now rather than be disrupted later.

Primary Work Device



Source: Cisco Enterprise Mobility Landscape Survey, 2015

Mobility's importance can't be overstated. In the 2015 **Cisco Enterprise Mobility Landscape Survey**, 69% agreed that over the next decade it will have the same impact as the World Wide Web did in the past 20 years.

% Strongly Agree



Mobility offers new opportunities to improve the experience of your workforce and customers. Alongside cloud, analytics and social technologies, mobility provides the transformational foundation for a digital business.

It helps you better understand and engage your market and enables new, more flexible workstyles for today's business needs and demographics.

When employees aren't desk-bound, they can work productively outside their workplaces, engage with long-distance customers, and collaborate remotely with colleagues.

Winning with mobility can boost performance, operational efficiency, revenue and agility. But there are many potential pitfalls between creating your mobility vision and implementing it successfully.

Read on to discover the business case for making the most of mobility, and guidance on Cisco's five key pillars of a successful mobility strategy.



Globally, portable devices such as smartphones and tablets accounted for 10% of IP traffic in 2014, and will be 42% of IP traffic in 2019.

- "VNI Global IP Traffic Forecast," 2014-2019.



The business case for mobility

With the right network and security foundation in place, mobility can drive a wide range of business benefits.

It enhances the Workforce Experience within your organisation as well as how you engage with your customers, and enables you to offer a superior customer experience.



Deliver exceptional experiences for employees

It's important to make mobility simple and seamless for users and IT, with a secure, robust and manageable workspace environment available anytime, on any device.

That includes the ability to adapt to provide new innovative mobile apps as well as existing collaboration tools, virtual desktop and web applications on mobile devices.

Employees have better experiences if you provide more choice as to how they work and what corporate or employee-owned devices they can use.

Exceptional mobile experiences mean more satisfied employees, more satisfied customers, and in turn more competitive business performance.



Over 45% of GenX and Gen Y professionals want the freedom to work and play from anywhere at anytime with no restrictions – as opposed to being in the office from 9am to 5pm every weekday.

– “Cisco Connected World Technology Report,” 2014, Future of Work.

Increase productivity, collaboration and innovation

If your people can work how they want, where they want, they're more engaged and productive, and your business is more profitable.

The ability to work using any app and any device also helps them to be more collaborative at their convenience. That means taking conference calls on the move, moving from PC to mobile – collaborating and sharing ideas wherever they are.

Better mobility means employees can work together better, despite being apart, and deliver innovation that's vital for the future of your business.



59% of IT and line-of-business decision-makers believe that employee productivity is the top benefit of mobility.

– “Cisco Enterprise Mobility Landscape Survey,” 2015.

Secure and streamline your operations

Security leaders are expected to provide the conditions for innovation while reducing risk. When your security policy management and enforcement strategy is well implemented, it can remove the barriers to innovative mobility deployments.

If your mobility solution makes security less complex, it can also lighten the load for IT and cut down costs. Centralising and unifying access to your network helps you to provide a consistent access policy for your employees and guests.

Visibility is crucial, so ensure you're able to monitor the users and devices that are connected, and make sure each is granted the level of access they actually need.



IT and business leaders identify security/risk and budget/resources as the two biggest obstacles to successful mobility deployments.

– “Cisco Enterprise Mobility Landscape Survey,” 2015.

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Innovate your customer experience

Detect, connect and engage customers inside your premises or venue. If your mobility solution lets you discover and locate customers' smartphones and tablets, you can deliver improved and innovative experiences and services. Use Wi-Fi and location analytics to understand customer behaviour and traffic flows, so you can deliver the services your customers need, where they need them.



Retail stores can better allocate staff where queues are forming, and deliver real-time promotions to shoppers based on their buying preferences and physical location.



Museums can offer visitors information on exhibits as they walk around.



Airports can use mobile location data to instantly find passengers who are late for their flight, which minimises delays.



Stadiums can use Wi-Fi to pinpoint audience members and connect them to entertainment and crowd participation activities.

Make your operations more efficient

Optimise your resources so that everything works better thanks to data analytics insights from location-based services.



Hotels can instantly check if a room is vacant and deploy a nearby member of housekeeping staff to clean it.



Hospitals can reduce missed appointments by guiding patients using a smartphone wayfinder app, or use location data to send the nearest available doctor or nurse to attend them.



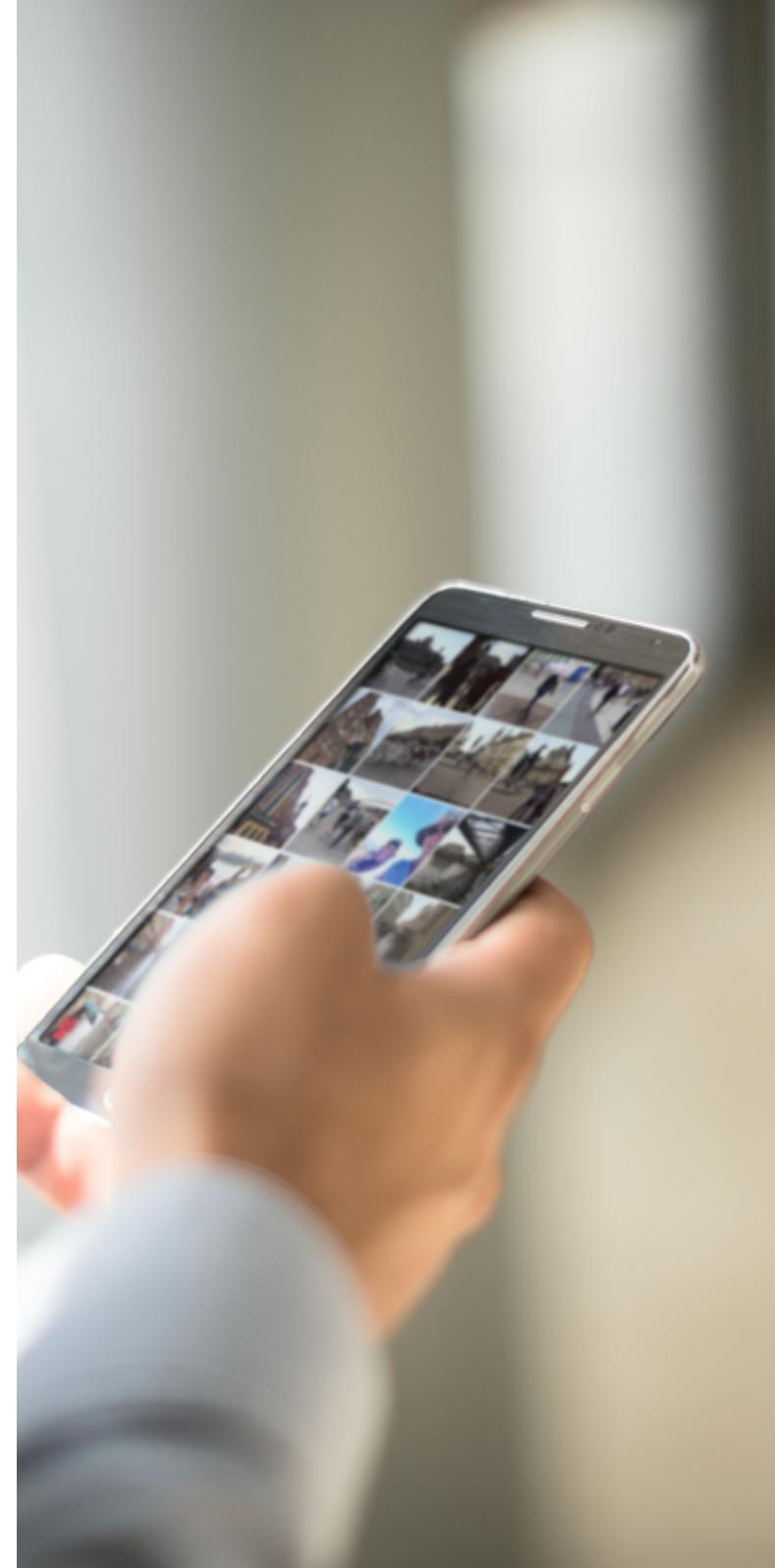
Office facilities managers can track and measure the usage of their meeting rooms, workspaces and branches to optimise real estate and save costs.

5 steps to mobility success

Once you've established the business benefits, it's time to make the move. The growth of mobility in both the commercial and private spheres means that organisations risk being left behind if they don't take steps forward.

But mobility success is about much more than just mobile devices. It's about securely delivering the applications and tools your employees, guests and customers need with a superior user experience. And it's about doing it all affordably and efficiently. To achieve this requires a solid infrastructure foundation to build your solutions on, and neglecting any of the elements now will mean problems later.

Cisco's five pillars of mobility can help you meet all of the key mobile networking challenges faced by business today.





1. Enable the experiences

Cisco Connected Mobile Experiences (CMX) is a smart Wi-Fi solution that uses the Cisco wireless infrastructure to detect and locate customers' mobile devices such as tablets and smartphones. You can then directly send them targeted, personalised content and offers, and find new ways to engage and assist them.

The insight you can gain from analytics allows you to understand customers' behaviour and capitalise on it, and improve customer experience so that their loyalty increases. You can also build new advertising revenue through third-party mobile advertising opportunities.

2. Keep Wi-Fi performance high

Increased mobile users and devices, with even greater mobile app usage, including bandwidth-hungry apps, such as video and Voice over IP (VoIP), can put a strain on legacy Wi-Fi networks.

However, Cisco offers the latest **Gigabit Wi-Fi (802.11ac) solution** that provides up to three times faster speed than the previous 802.11n Wi-Fi standard. This can also preserve the battery life of mobile devices.

Additionally, **Cisco's unique High Density Experience (HDX)** innovation ensures an excellent mobile experience for users.

3. Reduce security risk

More corporate and employee-owned mobile devices means a greater security risk. Strong policy management and enforcement across network access, devices, applications and content are critical factors.

Cisco Identity Services Engine (ISE) gives you a simple, streamlined way to provide posture and policy for users across the wired, wireless, and VPN networks, along with guest access.

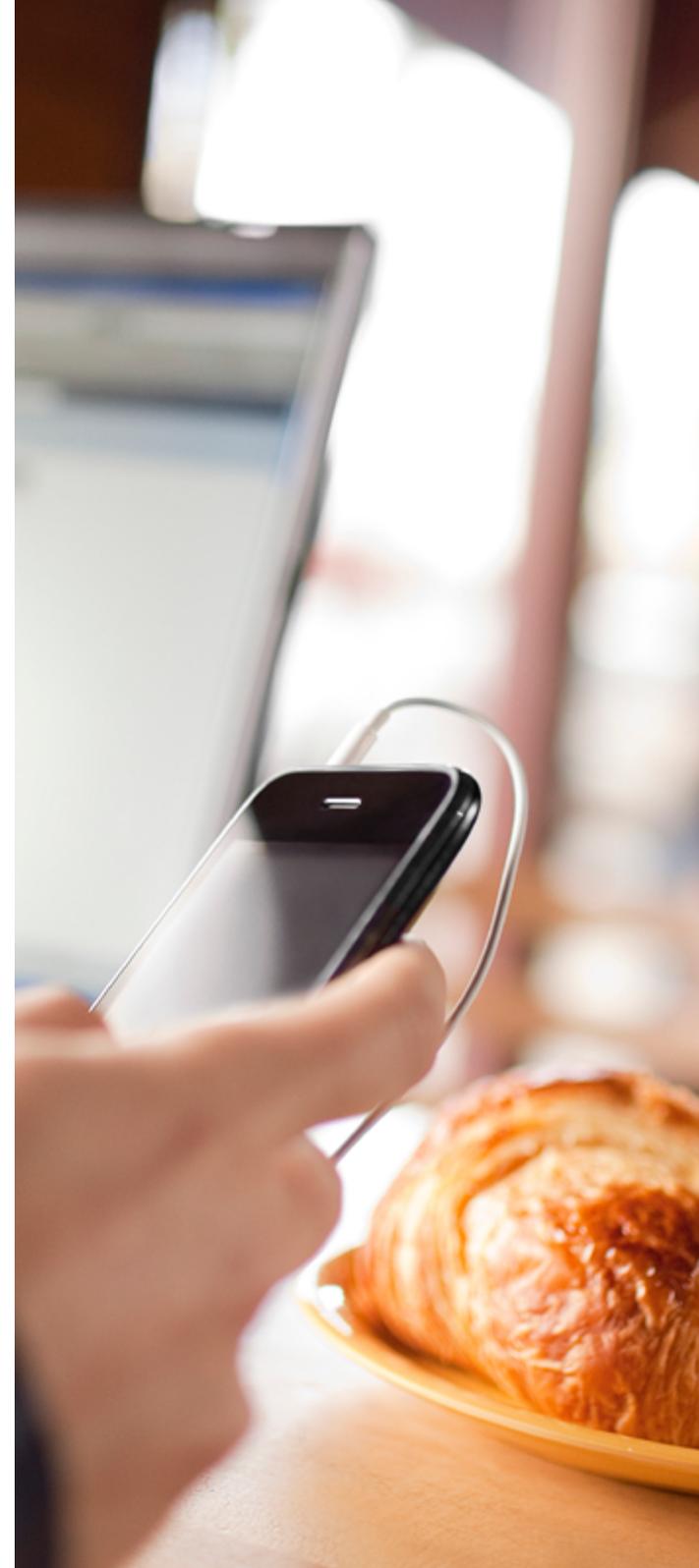
This gives you complete and exceptionally robust control to grant, limit, and quarantine network access in alignment with the company's appropriate business policy or security compliance requirements and guidelines.

By also integrating with **Mobile Device Management (MDM)** systems, ISE provides seamless on-boarding and greater control over devices coming onto the network and what they're able to do. That is crucial when employees connect their personal smartphones and tablets.

ISM and MDM integration lets you gain insight into how secure these easily lost devices are, for instance if a PIN-lock or data disk encryption are configured. This information means you can enforce the right network access policies and maximise the security of bring-your-own-device (BYOD) usage.

Cisco AnyConnect provides secure VPN access from any device, anywhere.

Cisco's TrustSec provides a robust security layer built into the switches and routers, offering extra protection for your systems, your valuable data and your business.





4. Increase infrastructure performance

Increasing wireless network traffic can create a bottleneck in performance due to the limitations of existing cable infrastructures, which have a maximum throughput capacity of approximately 1 Gigabit.

Cisco's unique Multigigabit Technology can significantly increase the throughput over existing wired infrastructures, offering you significant cost savings and investment protection.

The Cisco Unified Access platform converges wired and wireless networks into one integrated platform. Instead of having to manage the switch and wireless controller separately, they're bound together to make management simpler and easier.



5. Improve mobile user experience from the branch

More mobile employees, guests and visitors means a lot of new traffic for your network – at head office or branches, within Multi-Protocol Label Switching (MPLS) or out there in the cloud.

It also means a lot of new traffic types that require different levels of service and treatment – whether the traffic is bandwidth intensive video, voice, web, cloud or even non-work-related.

Cisco's Intelligent Wide Area Network (IWAN)

solution dynamically routes traffic according to the application that is being used, as well as the endpoint and network conditions, so that your employees have the best experience possible.

You can make the most of your WAN usage, which means a better return on investment (ROI). Increased traffic from cloud usage, guest services and video can all be balanced to minimise congestion, and your organisation can keep up with today's growing bandwidth demands from your branches.

Benefits of Cisco Intelligent WAN (IWAN):

- A single integration platform that dramatically simplifies IT operations
- Granular control from the branch office to the cloud for consistent management
- Proven security at scale to protect all branch-office endpoints from threats
- Dynamic, real-time decisions through context-aware routing to deliver the best experience
- Significantly lower costs to deliver a solution that pays for itself in a just months

Case Studies

See how other organisations have made their mobility plans a success thanks to Cisco Mobility Solutions.

ONS Norway

Taking place every two years, the Offshore Northern Seas (ONS) is one of the international oil and gas industry's key exhibitions and conferences. ONS occupies about 40,000 square meters in multiple buildings throughout the Stavanger Forum, so the foundation wanted to introduce wayfinding maps for attendees. Because GPS can't provide accurate location coverage in buildings, they deployed Cisco Connected Mobile Experiences (CMX) for real-time location data and analytics.

Jon Are Rørtveit, vice president and commercial director at ONS Foundation, said: *"We host more than 1,000 exhibitors and 90,000 visitors, so digitising information can save us a great deal compared to printing maps, guides, and updates. By developing our own digital app, we also offer more forward-thinking services to our visitors."* He added: *"Cisco CMX gives us many new possibilities for how we can interact with our guests. Demographic data and analysis help us identify what they appreciate the most."*

Brunel University London

Brunel University London has an emphasis on engineering, science, and technology. It aims to create a consistent campus user experience, including wireless network access. Thousands of users bring their own devices to the network, so the university needed to maintain security as well as visibility into Wi-Fi usage patterns to avoid service bottlenecks.

A complete Cisco BYOD Smart Solution enabled Brunel to automate policy enforcement, authentication and management. They overlaid Cisco Identity Services Engine for security policy management and deployed Cisco wireless access points and Cisco Mobility Services Engine. It allows them to provide reliable, fast Wi-Fi for 17,000 users without compromising security.

"Students expect the same experience on campus as they have at home," said Simon Furber, the university's network and data centre manager. *"Students want to do their computing anywhere. They don't want to be a slave to the cable. With our 802.11ac capable Wi-Fi network, we're exceeding student expectations for service quality."*

Mondi Group International

Mondi Group International keeps the paper and packaging industry moving. The company is present in 30 countries and is targeting growth in emerging markets. This needs an agile business model. The firm built a new Vienna headquarters and its infrastructure, as well as encouraging mobile and collaborative working patterns, would have to help them quickly integrate newly-acquired businesses with mixed legacy infrastructures. Mondi also wanted to standardise security architecture across its wide area network (WAN), embracing all factories and offices worldwide within one best practice model.

Roman Scarabot-Mueller, head of infrastructure at Mondi Group International, said: *"Cisco TrustSec integrates seamlessly with switches, access points, and firewalls. It provides a true end-to-end security architecture: at our new headquarters and beyond."* He added: *"The Cisco solution gives us a precise way, from the wireless access point or the switch, to identify who is trying to access what. It allows us to place users in the right category and have the right policy to match information security demands."*

Whirlpool

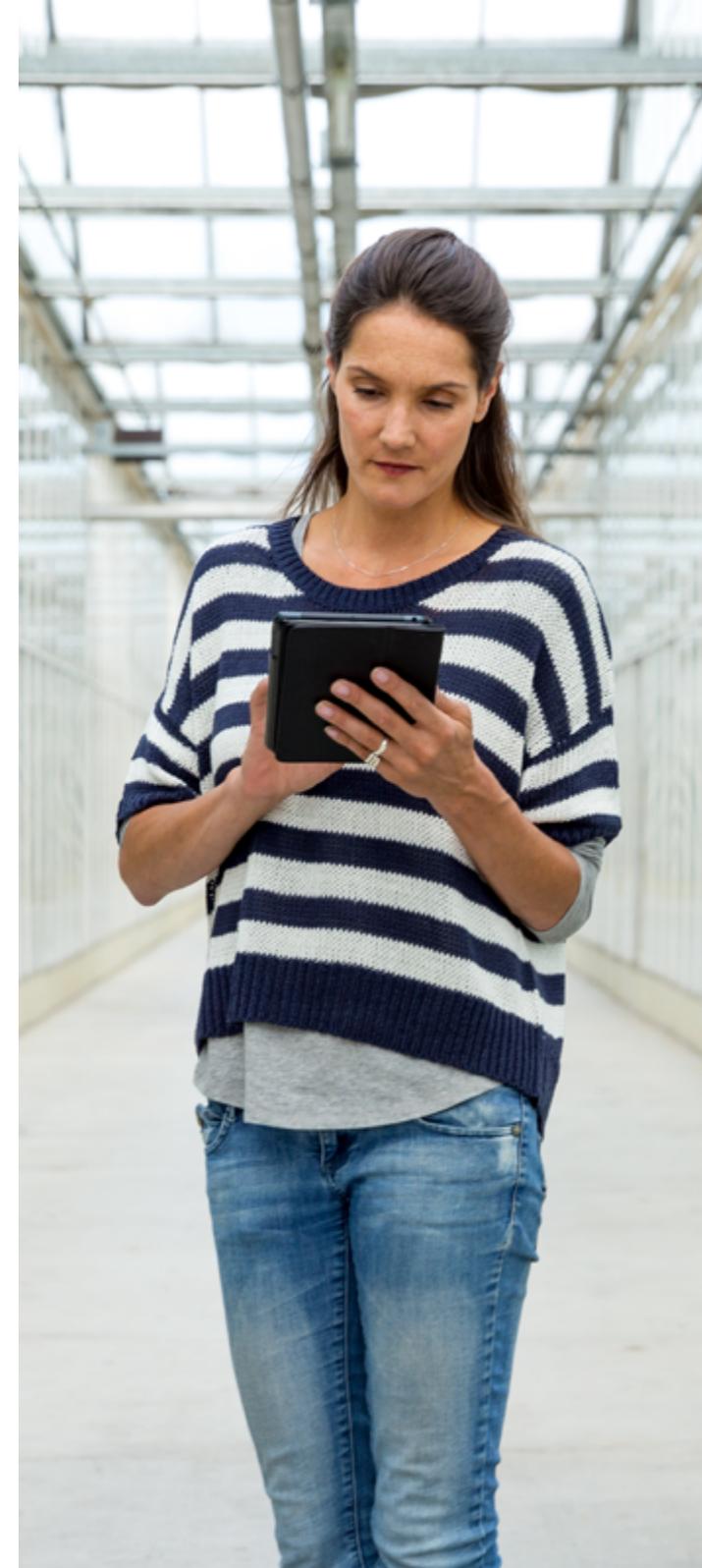
Whirlpool Corporation is the world's largest appliance maker, with market-leading products sold in 170 countries. But it had a legacy of mixed network devices, even in the same manufacturing plants. Wireless networks struggled to keep pace as logistics looked to go beyond barcode scanning. This unstable set-up was costly to run and hard to troubleshoot. So they deployed end-to-end Cisco integrated architecture in a worldwide refresh of 85 facilities using leading Cisco networking technologies and Cisco Prime central monitoring and management.

Greg Fisbeck, Whirlpool Corporation program manager, said: *"We didn't want to have to come back in a few years and do another refresh. So we chose Cisco as our global standard."* He added: *"Some engineers say they never realized how bad the old network was. Jobs that used to take half an hour now take just a few minutes. People can go to any location, plug in a laptop, and work like they're in the office. And with a global IT standard, it's much easier to run transglobal business processes."*

Lufthansa

With operations in 81 countries, Lufthansa is Europe's largest airline. Supporting operations is a monumental task, and Lufthansa Systems GmbH & Co.KG, a 100 percent subsidiary of Lufthansa Group, handles IT infrastructure. They embarked on an initiative to build a worldwide network for Lufthansa and Star Alliance carriers. The SkyConnect solution connects more than 1,800 locations and dozens of customers. As SkyConnect expanded in scope, Lufthansa Systems GmbH & Co.KG faced increasing inside and outside costs and complexity. Cisco Intelligent WAN (IWAN helped) them to dynamically route application traffic to deliver better performance for less.

"To expand our customer services, we needed performance routing, load sharing, and greater utilisation," says Markus Voegele, senior systems and design engineer at Lufthansa Systems GmbH & Co.KG. *"In other words, we needed an intelligent network. With the Cisco Intelligent WAN solution we can optimise scale and performance using our Cisco routers."*



Start winning with Cisco Mobility Solutions

We've already helped thousands of businesses around the globe to win with mobility.
To find out more about what Cisco Mobility Solutions can do for you, get in touch today.

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