

# Cisco Mobility Services Platform

Simplify complexity and rapidly monetize innovative 5G services



## Cisco's® Mobility Services Platform: 5G value acceleration as a service

Cisco radically streamlines 5G deployments, empowering Communication Service Providers to instantly configure and activate innovative use cases that seamlessly connect people, places, and things. By simplifying rollouts, CSPs can swiftly monetize a wide variety of cutting-edge services. This drastically cuts the time, cost, and effort required to leverage 5G's potential for driving revenue and business value.

## Unlocking 5G's full potential with Enterprise Mobility Services

5G promises unmatched connectivity speeds, presenting immense potential for CSPs to enable innovative services. However, capitalizing on this potential poses major hurdles: high costs, complexity, unclear business cases, long deployment timelines, and substantial integration challenges. These obstacles have stalled many CSP 5G deployments.

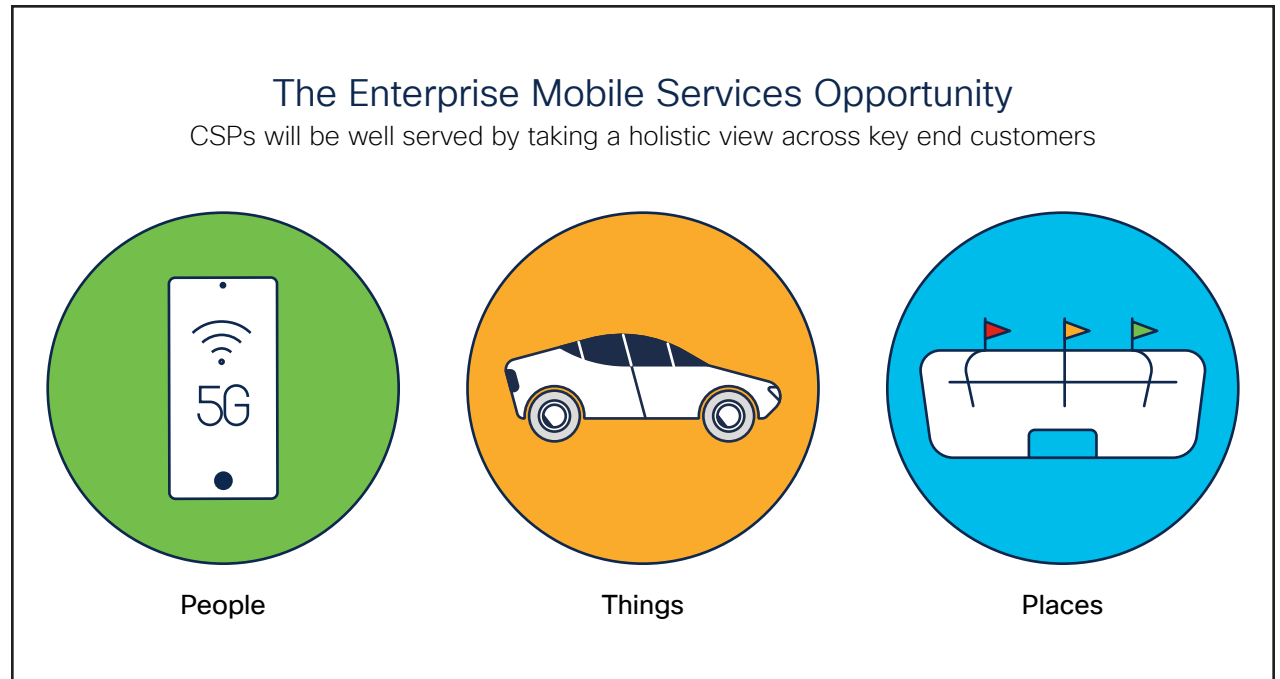


Figure 1. The connected mobility opportunity

To overcome these barriers, the Cisco Mobility Services Platform offers an as-a-service solution for rapidly deploying value-added 5G offerings. By providing pre-integrated, cloud-native 5G core network functions, it streamlines the complexity of mobile service delivery at scale.

Powered by proven Cisco technologies for 5G, Internet of Things (IoT), and multicloud, the platform simplifies operations via a flexible subscription model. This allows CSPs to redirect investments toward developing compelling 5G use cases across verticals that drive sustainability through new revenue streams.

The Mobility Services Platform empowers CSP innovation, agility, and speed to market—unlocking 5G’s full potential to connect people, places, and things in new ways.

## Cisco Mobility Services Platform provides CSPs with a simplified path to unlocking the full potential of 5G

Our aim is to abstract away the complexity of subscriber onboarding, retention, and experience from the underlying mobility network architecture and functions. This simplification empowers customers to provide flexible and tailored 5G offerings aligned with specific business needs. In short, by handling network complexities, we empower our customers to deliver on the promise of 5G in connecting people, places, and things in new ways.

### New revenue streams, monetization opportunities, and marketplace

- Increase ARPU (Average Revenue Per User) by bundling high-value enterprise applications with premium 5G offerings.
- Diversify services beyond connectivity by expanding into IT services, analytics, automation, security, and more through targeted 5G and IoT solutions.
- Create new revenue channels beyond connectivity with a digital storefront for monetizing specialized services tailored to verticals.

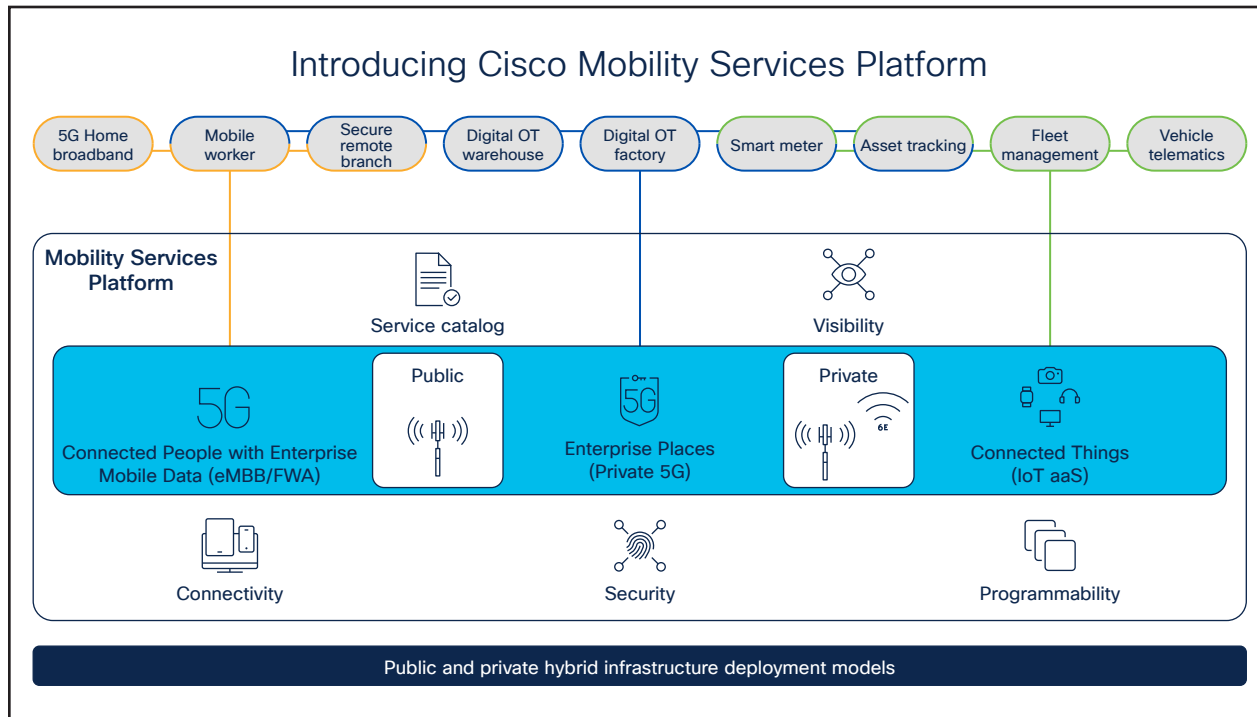


Figure 2. The Cisco Mobility Services Platform

The platform empowers providers to unlock the potential of 5G to drive sustainability through new monetization opportunities. By offering innovative vertical use cases rather than merely connectivity, CSPs can customize bundled solutions to increase ARPU and expand their role in diverse 5GaaS offerings.

### **Faster time to market and increased agility**

- Accelerate time to value by avoiding lost time and revenue from network re-architecture and infrastructure investments.
- Bring new services to market faster through flexible service creation, rapid prototyping, and industry-standard APIs (Application Programmable Interfaces) for service catalogues and ordering.
- Cloud-based platform ideal for rapidly developing and launching next-gen 5G innovations.
- Easily scale services up and down based on changing business needs.
- Enhanced agility to deploy additional mobile, analytics, and automation solutions by leveraging a cloud delivery model.

The platform empowers providers with the agility, flexibility, and faster time to market needed to continuously deliver compelling 5G solutions and drive new revenue streams.

### **Improve profitability and operational efficiency**

- Reduce CapEx by shifting infrastructure ownership and operations to Cisco through a subscription model. This enables customers to redirect investments into developing compelling 5G services and enhancing customer experience.
- Minimize financial and execution risks with a zero-CapEx, subscription-based model.

The platform allows CSPs to optimize profitability and operational efficiency. By leveraging Cisco's infrastructure management, CSPs gain flexibility to refocus investments on driving revenue through value-added 5G solutions.

### **Deliver exceptional customer experiences with increased loyalty**

- Enable secure, consistent customer experiences with end-to-end visibility and control leveraging Cisco's service provider and enterprise portfolios.
- Build stronger customer loyalty with specialized 5G services tailored to enterprise business needs, driving continued long-term contracts.

By providing customized and secure solutions for meeting specific use cases, CSPs can foster increased customer loyalty and retention. This sustains revenue streams over longer horizons by continually delivering exceptional 5G experiences.

### **Fuel collaboration and innovation with an API-enabled developer ecosystem**

- Comprehensive ecosystem empowering developers, enterprises, and operators to easily build, distribute, discover, and monetize mobile network-based products and services globally.
- Allows instant activation of partner solutions to accelerate time to market for innovative offerings.

By enabling an ecosystem for co-creation through open APIs and strong collaboration channels, CSPs can tap into shared innovation to quickly turn promising ideas into innovative 5G services.

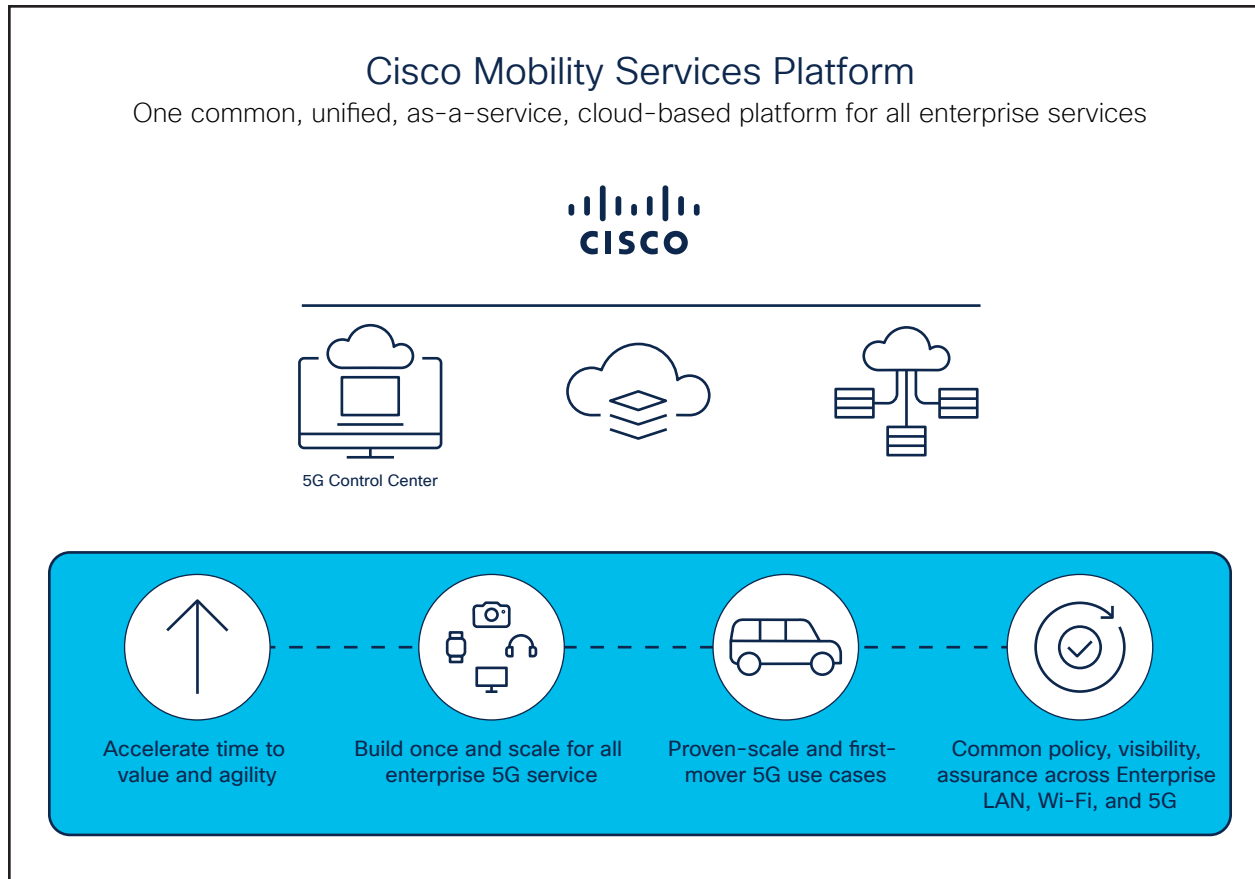


Figure 3. Cisco Mobility Services Platform eliminates roadblocks, drives revenue, and reduces cost and risk

### Top CSP 5G adoption challenges addressed by Cisco’s Mobility Services Platform

Communication Service Providers (CSPs) need to swiftly evolve their wireless network technologies to overcome key barriers to 5G adoption. By simplifying IT complexities in network management and enabling cost-efficient digitization of connectivity, Cisco’s Mobility Services Platform empowers CSPs to deliver unified 5G experiences for global business customers.

The platform tackles major complexity, cost, and time-to-market obstacles that have hindered widespread 5G deployments. With Cisco’s cloud-first approach combining simplified infrastructure with expertise in large-scale mobility service delivery, CSPs can rapidly roll out innovative offerings that maximize the potential of 5G for driving business value.

### Profitable monetization difficulty

- While 5G enables new revenue opportunities, the ROI (Return On Investment) is still uncertain. With heavy network investment requirements amidst a maturing market, finding new sources of revenue and ways to monetize 5G use cases can be problematic for CSPs.
- CSPs need to identify new revenue streams as legacy services decline (for example, voice, SMS). This requires capabilities to launch and monetize innovative new services quickly.

## Remove complexity with a focus on operational simplicity

- Integrating advanced capabilities, multi-tier architectures, edge compute, and network slicing makes 5G deployments significantly more complex compared to past network generations.
- Organizations need to focus on operational simplicity, ease of doing business, and enterprise integration.

## Transform existing business models

- 5G requires an evolution of traditional Mobile Network Operator (MNO) business models, including expansive partner ecosystem and transitioning from connectivity to digital platform providers, with diverse use cases.

## Improve network agility and automation

- Manual network operations are costly and slow innovation.
- Lack of automation limits the ability to respond rapidly to customer demands.

## Overcoming customer experience shortcomings for 5G reward

- Growing competition requires excellent customer experiences to attract and retain users.
- High churn rates result if offerings don't align with customer needs.
- Personalized, contextual services are becoming expected.
- Bridging the gap between 5G's promised and delivered benefits.
- Justifying premium pricing through tangible 5G advancements that map to customer priorities.

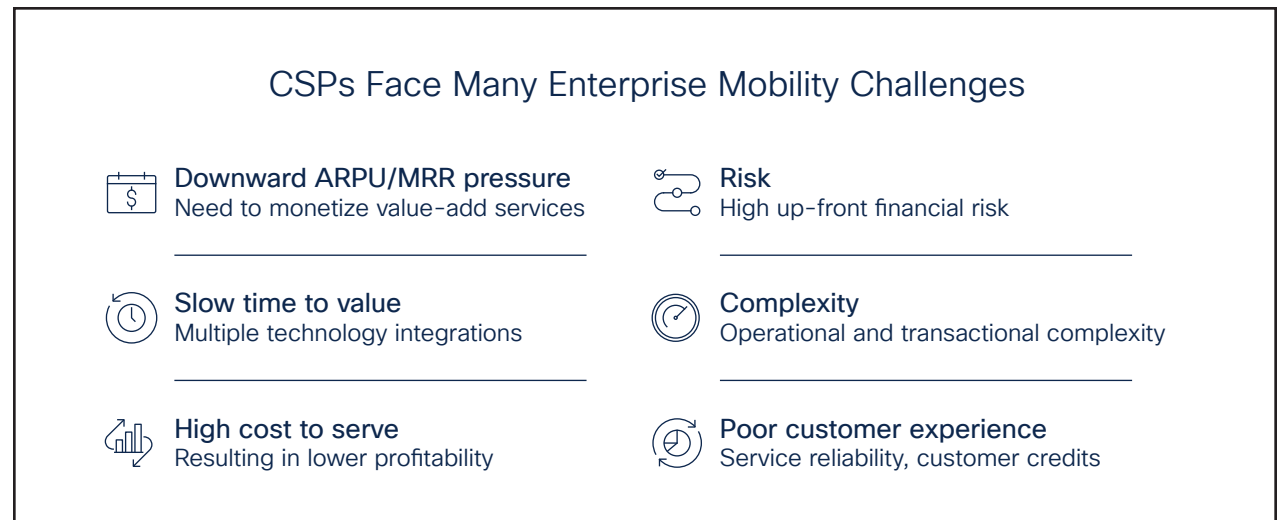


Figure 4. Top CSP Challenges



## Providing a cloud-based approach to swiftly deploy innovative services that connect people, things, and places

This Software-as-a-Service (SaaS) model leverages proven Cisco technologies like IoT Control Center, Packet Core, and APIs to reduce complexity.

The goal is to accelerate time to market and business value for targeted use cases through simplified integration. This cloud platform shifts infrastructure ownership to Cisco, enabling CSPs to focus on developing compelling 5G solutions. The as-a-service commercial model also improves the economics of 5G investments by eliminating upfront CapEx and reducing early OpEx before revenue generation.

The platform offers ready-made and customizable templates to instantly activate services. It provides a unified API that abstracts away complex, disparate technologies, streamlining network configuration, service activation, subscriber, and SIM management. Pre-integrated, enterprise-ready value-added services from Cisco allow CSPs to immediately launch and monetize services.

The Mobility Services Platform supports a full range of core capabilities, including:

- Data and voice session management (VoNR [Voice over New Radio], VoLTE [Voice over LTE], EPS Fallback) for 4G, 5G NSA (non standalone), 5G SA, and Wi-Fi, with IPv4 and IPv6 support.
- Mobility and handover across access technologies.
- Inbound and outbound voice/data roaming.
- Lawful intercept and emergency calling capabilities.
- Charging and event records.
- Dynamic policy control and usage monitoring.
- Inline user-plane services: application detection and network address translation.

- Common use case support for eMBB (Enhanced Mobile Broadband), IoT, and FWA (Fixed Wireless Access), including private and enterprise deployments.
- SIM and subscriber management as well as provisioning.

By tackling major cost and agility obstacles, Cisco's as-a-service solution empowers CSPs to rapidly deliver and monetize high-value 5G offerings. This cloud-based approach reduces risk, accelerates time to value, and unlocks 5G's full potential through simplified integration with existing infrastructure.

### Expand your network, expedite 5G services

Cisco's Mobility Services Platform complements and extends CSPs' existing network investments to meet the business needs of their enterprise customers more quickly and cost-effectively. By simply plugging their Radio Access Networks (RANs) into Cisco's cloud-hosted platform instead of replacing the RANs, CSPs can rapidly augment and scale their capabilities. With Cisco providing and managing the additional network resources, the Mobility Services Platform works with the CSPs' installed base to enable services and business outcomes that CSPs can bundle into offerings for enterprise customers.

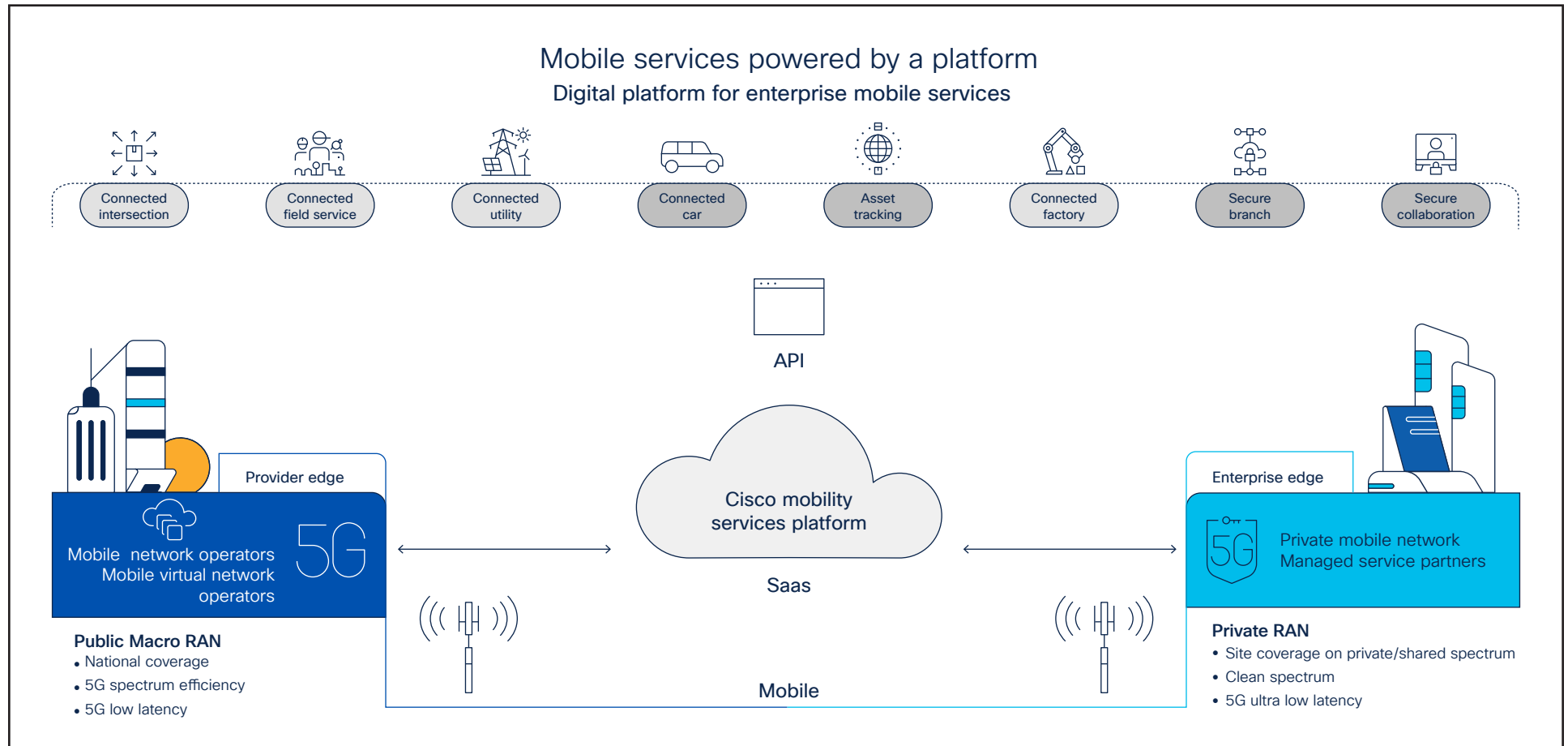


Figure 5. One Platform for Enterprise Mobile Services



## Use cases

Cisco's Mobility Services Platform empowers CSPs to deliver on the promise of connecting people, places, and things by enabling them to offer a wide range of innovative mobility use cases including the examples found in the table below:

Mobility Services subscription offers	Key enterprise use cases addressed
<b>Connected Places with Enterprise Private Networking (Private 5G)</b>	<p><b>Manufacturing:</b></p> <ul style="list-style-type: none"><li>Automated guided vehicles for materials transport</li><li>Augmented reality for production line troubleshooting</li><li>Video analytics for quality control</li><li>Digital twin simulations for virtual factory modeling</li></ul> <p><b>Mining:</b></p> <ul style="list-style-type: none"><li>Autonomous haul trucks</li><li>Remote operation of machinery</li><li>High-res cameras and sensors for condition monitoring</li><li>Personnel and equipment tracking</li></ul> <p><b>Ports:</b></p> <ul style="list-style-type: none"><li>Automated cranes, trucks, and straddle carriers</li><li>Container tracking and analytics</li><li>Yard automation and optimization</li></ul> <p><b>Oil and Gas:</b></p> <ul style="list-style-type: none"><li>Video surveillance and analytics of remote assets</li><li>Connected sensors for predictive maintenance</li><li>Robot-assisted inspections and repairs</li><li>Remote expert guidance for field technicians</li></ul>

Mobility Services subscription offers	Key enterprise use cases addressed
	<p><b>Utilities:</b></p> <ul style="list-style-type: none"><li>• Automated grid reconfiguration and outage response</li><li>• AR-assisted field worker processes</li><li>• Connected sensors and analytics for predictive maintenance</li><li>• Drones with thermal cameras for inspections</li></ul> <p>Private 5G enables the real-time connectivity and reliability needed for these innovative deployments.</p>
<p><b>Connected Things with IoT-aaS</b></p>	<p><b>Connected Cars:</b></p> <ul style="list-style-type: none"><li>• Real-time navigation and traffic updates</li><li>• Predictive vehicle maintenance</li><li>• Usage-based insurance</li><li>• In-vehicle entertainment/productivity</li><li>• Enhanced roadside assistance</li></ul> <p><b>Autonomous Vehicles:</b></p> <ul style="list-style-type: none"><li>• High-definition remote monitoring and control</li><li>• Geo-fencing and fleet management</li><li>• Software, sensor, and map updates</li><li>• Vehicle-to-vehicle and vehicle-to-infrastructure communication for safety and efficiency</li></ul> <p><b>Asset Tracking:</b></p> <ul style="list-style-type: none"><li>• Real-time visibility of equipment/vehicle location and status</li><li>• Predictive maintenance alerts based on telemetry data</li><li>• Contactless user authentication and access control</li><li>• Automated inventory management</li></ul>

Mobility Services subscription offers	Key enterprise use cases addressed
	<p><b>Smart Meters:</b></p> <ul style="list-style-type: none"><li>• Real-time utility consumption monitoring</li><li>• Dynamic pricing and billing optimization</li><li>• Automated outage and restoration notifications</li><li>• New customer onboarding and service activation</li></ul> <p><b>Fleet Management:</b></p> <ul style="list-style-type: none"><li>• Vehicle health monitoring and preventative maintenance</li><li>• Route optimization, dispatching, and traffic avoidance</li><li>• Driver safety, credentialing, and hours tracking</li><li>• Cold chain/perishable goods monitoring</li></ul>
<p><b>Connected People with Enterprise Mobile Data</b></p>	<p><b>Fixed Wireless Access:</b></p> <ul style="list-style-type: none"><li>• High-speed home/business connectivity alternative to fiber</li><li>• Support for remote work/learning during outages</li><li>• Affordable internet access in rural areas</li></ul> <p><b>Secure Collaboration:</b></p> <ul style="list-style-type: none"><li>• Real-time unified communications across modalities</li><li>• BYOD (Bring Your Own Device) enablement with enhanced end-user privacy</li><li>• Global team coordination and document sharing</li><li>• Enterprise social networking</li></ul>

## Mobility Services subscription offers

## Key enterprise use cases addressed

**Secure Remote Offices:**

- Site-to-site VPN (Virtual Private Network) connectivity over mobile networks
- Secure guest Wi-Fi access and BYOD policies
- Unified endpoint management and access controls

**Telemedicine:**

- Remote health monitoring and assessments
- HD video appointments and mobile test result sharing
- Wearables for patient vitals streaming to cloud electronic health records
- Enterprise imaging data transfer to cloud analytics

**Augmented and Virtual Reality:**

- Immersive simulations, training, and troubleshooting
- Multiuser mobile gaming
- 3D/volumetric video streaming
- Onsite visualization overlaying physical environment

High-throughput use cases like streaming 4K video, mobile gaming, and Augmented Reality (AR) showcase 5G's substantial bandwidth and low-latency capabilities in serving consumers and enterprises alike through advanced connectivity.

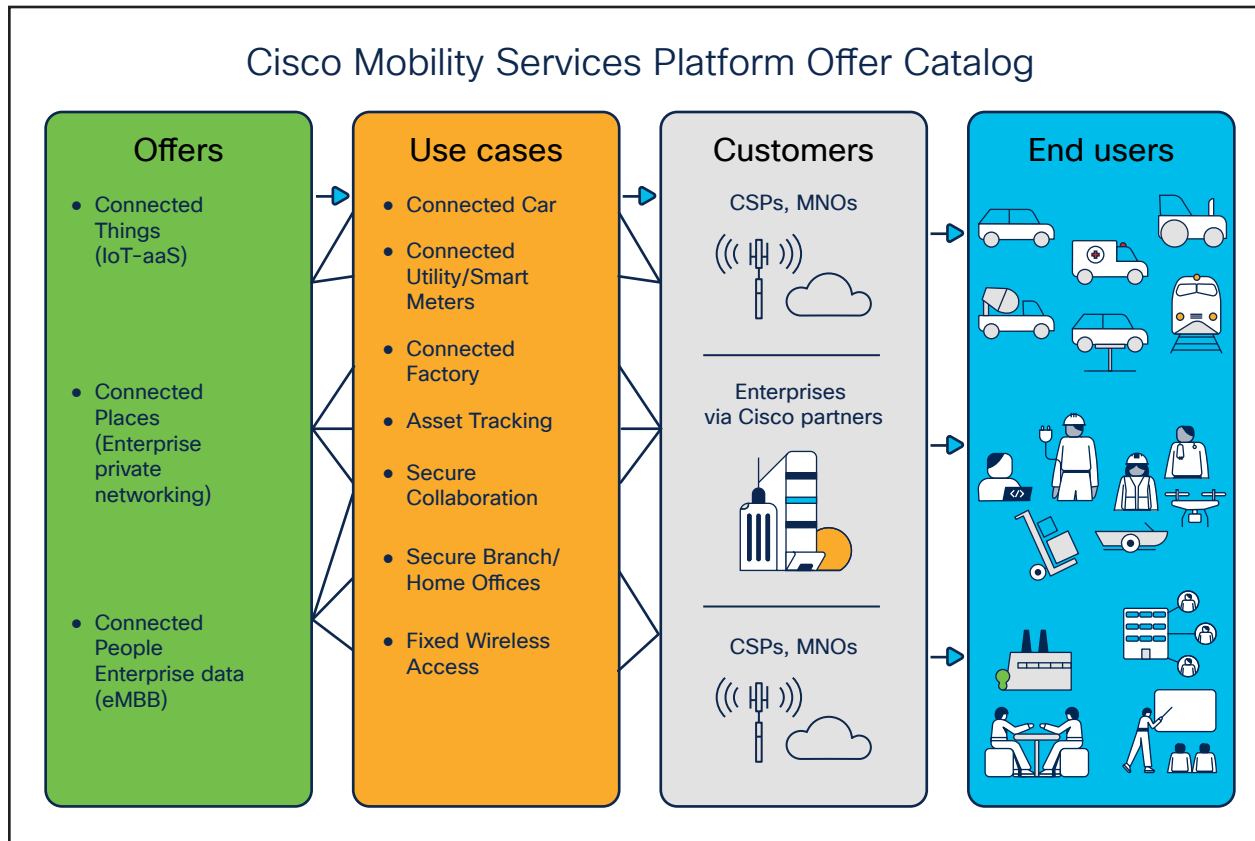


Figure 6. Cisco Mobility Services subscription offers and example use cases addressed

## The Cisco Advantage

Built using Cisco’s proven portfolio of 5G, edge, and cloud innovations, the Mobility Services Platform accelerates the launch of monetized services and use cases. This minimizes risks and costs while maximizing new revenue opportunities across industries like automotive, energy, logistics, and healthcare.

The platform features the world’s first fully automated, cloud-native converged 5G core with distributed edge deployment. This simplifies the evolution from 3G and 4G while eliminating complexity and time barriers. Enterprises gain the visibility and control they need.

Cisco has over a decade of experience enabling IoT solutions. Our IoT Control Center, the industry-leading platform, is used by 60+ CSPs and 32,000 enterprises to manage connectivity for 250 million+ devices, including over 100 million connected cars.

This unparalleled expertise in both IT and operational technology places makes Cisco uniquely positioned to help CSPs rapidly launch and monetize innovative 5G solutions. With reduced complexity, investment protection, and faster ROI, the Mobility Services Platform accelerates 5G adoption and revenue.

The focus is on Cisco’s expertise, proven technology portfolio, and ability to simplify complex 5G deployments for faster time to value.

## For more information

Cisco's innovative Mobility Services Platform accelerates the delivery of monetizable IoT, public, and private 5G-as-a-service offers to enable smart use cases and drive enterprise adoption. By seamlessly integrating with existing networks and Wi-Fi, Cisco simplifies 5G operations, reduces costs, and supports pervasive mobility.

- To learn more about Cisco IoT Control Center [here](#).
- To learn more about Cisco Converged Mobile Core, click [here](#).
- To learn more about Cisco IoT aaS, click [here](#).
- To learn more about Cisco Private 5G, click [here](#).
- To schedule a demonstration of Cisco Mobility Services, contact your Cisco sales representative.

