

# Transforming telecommunications with UST's cloud advisory practice

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## Executive summary

The telecommunications industry is transforming at an unprecedented pace. With the surge in 5G deployment, edge computing, and IoT expansion, telcos must rethink their network strategies to keep up with rising demand, evolving customer expectations, and intense competition. Scaling operations, increasing agility, and optimizing costs are no longer aspirations—they are essential for survival in the digital age.

However, modernizing telecom infrastructure presents unique challenges. Legacy systems, complex network architectures, and growing data volumes create significant hurdles. Traditional approaches to cloud consulting often fall short because they focus primarily on technical migrations rather than business transformation, apply generic best practices without considering unique organizational contexts, and fail to align technology, finance, and business stakeholders.

UST's Evolve Cloud Advisory Practice offers a fundamentally different approach for telecommunications providers—one that aligns cloud strategy with concrete financial objectives from day one and remains committed to measurable business impact throughout the transformation journey. Our business-centric methodology ensures that every architectural decision support profitability and strategic growth. At the same time, our practitioner-led expertise delivers battle-tested insights that lead to faster adoption and sustained business impact.



## Industry challenges in cloud adoption

The telco industry is at an inflection point, balancing traditional network operations with the demands of cloud-native technologies. Telecom providers have historically relied on proprietary hardware and legacy infrastructure, which are often expensive to maintain and inflexible in adapting to new market demands. However, as customer expectations shift towards faster, more reliable services, telcos must embrace cloud-native solutions to ensure agility and competitiveness.

### KEY CHALLENGES

#### **Legacy infrastructure and cloud migration: Striking a balance between innovation and continuity**

Most telecom operators still rely on decades-old legacy infrastructure designed for on-premises operations rather than cloud-native environments. Migrating mission-critical applications and core network functions to the cloud without disrupting service continuity is a formidable challenge. Legacy systems are often deeply embedded into operations, making a lift-and-shift approach ineffective. Instead, telcos must adopt a phased migration strategy—leveraging containerization, virtualization, and cloud-native architectures—to ensure a smooth transition while maintaining service quality.

#### **Operational complexity: Managing multi-cloud and hybrid environments with security and compliance**

The telecom cloud ecosystem is becoming increasingly complex, with operators adopting multi-cloud and hybrid cloud strategies to balance cost, performance, and regulatory requirements. While this approach avoids vendor lock-in and enables greater flexibility, it also introduces new challenges in orchestration, interoperability, and security compliance. Managing multiple cloud environments requires advanced automation, AI-driven network management, and a unified governance framework to ensure seamless operations, security, and regulatory compliance across public, private, and edge cloud infrastructures.

#### **Cost optimization: Controlling cloud expenses without sacrificing performance**

Cloud services offer scalability, but unchecked usage can lead to skyrocketing costs. Many telecom operators struggle with over-provisioning resources, inefficient workload allocation, and unexpected egress fees, leading to cost overruns. Without proper governance and FinOps strategies, cloud adoption can become a financial burden rather than a cost-saving initiative. AI-driven cost optimization tools, intelligent workload placement, and automation-driven scaling policies are essential for maintaining a cost-effective cloud strategy without compromising performance.

## **Service reliability and performance: Delivering low-latency, high-availability networks**

In the telecom industry, downtime is not an option. Whether supporting 5G networks, enterprise solutions, or consumer broadband, telcos must ensure ultra-low latency, high availability, and seamless connectivity. Traditional cloud infrastructures, primarily designed for IT workloads, may not meet the stringent performance demands of telecom networks. To address this, operators must adopt cloud-native network functions, AI-driven predictive maintenance, and real-time monitoring to proactively detect and mitigate performance bottlenecks before they impact customers.

## **Edge computing and 5G integration: Powering the future of connectivity**

The rise of 5G, IoT, and real-time applications has made edge computing a necessity rather than a luxury. Cloud adoption in telecom is no longer just about centralized data centers—it must extend to the edge, where ultra-low latency and real-time processing are critical. However, integrating cloud-native architectures with edge computing and 5G networks presents technical and operational challenges, including distributed resource management, security concerns, and data synchronization. Telecom operators must deploy AI-powered orchestration, scalable edge infrastructure, and software-defined networking to ensure seamless integration between cloud, edge, and 5G ecosystems.



## UST's business-first approach

UST's Evolve Cloud Advisory Practice takes a fundamentally different approach to cloud transformation for telecom companies. Our business-centric model begins with profitability and organizational alignment, integrating FinOps and ROI tracking into every recommendation from the outset.

### OUR KEY DIFFERENTIATORS FOR TELECOM CLOUD TRANSFORMATION

#### **Business-centric from day one**

We begin with business alignment, ensuring every architectural decision directly supports profitability and strategic growth for telecom providers. By integrating FinOps and ROI tracking from the start, we connect technology investments directly to financial outcomes, whether that's reducing infrastructure costs, accelerating time-to-market for new services, or creating new revenue streams through enhanced capabilities.

#### **Practitioner-led expertise**

Our advisors have operated large-scale, mission-critical enterprise systems themselves, including telecom networks and infrastructure. This real-world experience means our recommendations are grounded in practical reality, not theoretical frameworks. In an industry where five-nines reliability is expected, this operational expertise is invaluable for ensuring smooth transitions and minimizing service disruptions.

#### **Visual strategic mapping for enhanced situational awareness**

We use Wardley Maps and Value Stream Maps to show your capabilities, market position, and strategic opportunities in the evolving telecom landscape. These visualization techniques uncover underlying issues and constraints that traditional assessments miss, helping avoid costly mistakes and identify competitive advantages in a rapidly changing market.

#### **Relentless focus on attributable earnings impact**

Our engagements include clear goals tied to tangible financial outcomes: cost savings, capacity increases, and new revenue streams. For telecom providers, this might include reducing network operation costs, accelerating 5G monetization, or optimizing infrastructure for IoT services. We measure success by bottom-line impact, not by deliverables or presentations.

#### **End-to-end commitment**

We stay engaged beyond strategy, helping with implementation and governance to ensure recommendations work in production. For telecom operators, where the transition from legacy to cloud-native infrastructure is particularly complex, this ongoing support ensures that your transformation delivers bona fide business value through every phase.

## Holistic change management

We address the human elements of change, aligning Business, IT, Finance, and Security teams to reduce cross-functional friction and build sustainable cloud operations. In the telecom industry, where organizational silos can be particularly entrenched, this comprehensive approach to change management is critical for success.

## Telecom-specific cloud solutions

To address specific telecom industry challenges, UST helps implement tailored cloud solutions that drive efficiency and innovation:

- **Cloud migration and modernization:** Enable seamless migration of applications and workloads to the cloud while modernizing legacy telecom systems and network functions.
- **Multi-cloud and hybrid cloud management:** Implement governance frameworks to optimize cloud environments across private, public, and hybrid models, essential for telecom providers with diverse workloads and regulatory requirements.
- **AI and automation in cloud operations:** Leverage AI-driven insights to automate network operations, enhance security, and improve predictive maintenance for telecom infrastructure.
- **Edge computing and 5G readiness:** Deploy scalable cloud solutions to support next-generation connectivity, reducing latency and improving customer experience for 5G and IoT services.
- **Scalable cloud infrastructure:** Deploying flexible cloud architectures to support expanding service offerings and manage peak loads efficiently.
- **Enhanced network performance:** AI-driven network optimization reduces downtime and improves service delivery, which is critical for maintaining customer satisfaction in telecom.
- **Cost-efficient cloud operations:** Governance frameworks that prevent over-provisioning and optimize cloud spend, helping telecom providers maximize the ROI of their cloud investments.
- **Security and compliance:** Ensuring adherence to industry regulations while securing cloud workloads is particularly important in the highly regulated telecom sector.

## The UST advantage for telecom cloud transformation

UST's Cloud Advisory practice is backed by comprehensive capabilities that create significant value for telecom providers:

### **Depth and breadth of expertise**

Our global talent pool spans multiple technology domains, enabling us to rapidly involve specialized experts for telecom-specific challenges, whether it's network function virtualization, edge computing implementation, or AI-driven operational improvements.

### **Seamless transition from strategy to execution**

With UST's end-to-end IT services, we provide one-stop support throughout your transformation journey, reducing handover friction and accelerating time to value—critical in the telecom industry where time-to-market is a key competitive advantage.

### **Scalability and cost-effectiveness**

Our global delivery model optimizes costs without compromising quality or speed, ensuring 24/7 development and support capability for large-scale transformations across distributed telecom networks.

### **Industry-specific knowledge**

We bring deep experience in telecommunications, understanding the unique regulatory, competitive, and technical challenges facing the industry. This domain expertise ensures that our cloud strategies align with telecom-specific requirements.

### **Proven delivery frameworks**

Our mature delivery methodologies, governance structures, and program management practices ensure recommendations are grounded in real-world execution frameworks, reducing risk in complex telecom transformation initiatives.

### **Integrated innovation ecosystem**

Our partnerships with leading cloud providers, ISVs, and innovative startups enable us to introduce innovative solutions that open new revenue streams or operational benefits for telecom operators. assessments miss, helping avoid costly mistakes and identify competitive advantages in a rapidly changing market.

## Conclusion

To ensure a successful cloud transformation, telcos need a partner that provides advisors with firsthand expertise in complex integrations, production uptime, and operational challenges. This practical knowledge results in faster adoption, smoother transitions, and sustained business impact.

By partnering with UST's Evolve Cloud Advisory practice, telecom companies gain access to a business-centric, practitioner-led approach that drives measurable financial outcomes through strategic cloud transformation. Our methodology ensures that every cloud initiative supports profitability and strategic growth, while our commitment to seeing things through ensures that recommendations translate into real-world success.

In an industry where reliability, performance, and customer experience are paramount, UST's comprehensive approach to cloud transformation helps telecom providers modernize their infrastructure, accelerate innovation, and maintain their competitive edge in an increasingly digital-first world.

Connect with an expert to [learn more](#).

# Together, we build for boundless impact

Since 1999, UST has worked side by side with the world's best companies to make a powerful impact through transformation. Powered by technology, inspired by people, and led by our purpose, we partner with our clients from design to operation. Our digital solutions, proprietary platforms, engineering, R&D, products, and innovation ecosystem turn core challenges into impactful, disruptive solutions. With deep industry knowledge and a future-ready mindset, we infuse expertise, innovation, and agility into our clients' organizations—delivering measurable value and positive lasting change for them, their customers, and communities around the world. Together, with 30,000+ employees in 30+ countries, we build for boundless impact—touching billions of lives in the process.

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