

# **GenAI in Telecom & IT Services Market Forecasts to 2032 – Global Analysis By Component (GenAI Platforms, GenAI Services and GenAI Infrastructure), Deployment Model, Telecom Function, IT Services Function, Organization Size, Application, End User and By Geography**

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## **Abstracts**

According to Statistics MRC, the Global GenAI in Telecom & IT Services Market is accounted for \$679.46 million in 2025 and is expected to reach \$12162.11 million by 2032 growing at a CAGR of 51.0% during the forecast period. Generative AI is transforming Telecom and IT Services by streamlining workflows and enhancing digital interactions. Telecom companies deploy AI-enabled chatbots to resolve customer issues faster while offering tailored service suggestions. In the IT domain, GenAI boosts productivity through automated code writing, smarter quality checks, and instant debugging tools. Network operations benefit from predictive analytics that detect congestion, minimize downtime, and bolster system security. GenAI also improves cross-language communication, helping global tech firms support customers around the world.

According to PwC, 50% of telecom companies have already deployed at least one GenAI application. This compares to 80% in technology firms and 50% in media & entertainment, showing telecom is actively engaging but still catching up to tech leaders.

## **Market Dynamics:**

Driver:

## Automation & operational cost reduction

Cost savings and automation are core factors fueling GenAI growth across Telecom and IT Services. Large operators manage high-volume operations such as billing, troubleshooting, customer support, and network maintenance. With GenAI, many of these routine tasks become autonomous, significantly lowering reliance on human agents. Telecom companies deploy AI-based support systems, predictive outage detection, and automated provisioning processes. Meanwhile, IT service firms apply GenAI to shorten coding cycles, automate testing, and reduce project costs. The combined benefit of fewer errors, faster execution, and low operating expenditure makes generative AI a powerful enabler of efficiency and long-term financial gains for digital service providers.

### Restraint:

#### Data privacy & security concerns

Privacy risks significantly limit GenAI deployment in Telecom and IT sectors. Service providers manage confidential customer records, personal identifiers, and communication data, which must be protected from breaches. When AI models analyze such information, companies must follow strict compliance standards and ensure secure handling. Any breach can damage brand reputation and invite heavy fines. Enterprises with sensitive databases often avoid large-scale AI training to prevent exposure or unauthorized usage. Data localization rules also make cross-country implementation complex for multinational operators. Due to these compliance burdens and cyber risks, many organizations adopt GenAI slowly, delaying full-scale deployment in regulated telecom environments.

### Opportunity:

#### Workforce productivity & automation support

Workforce efficiency is a strong growth opportunity for GenAI in the telecom and IT domain. AI tools automate time-consuming activities such as ticket routing, documentation, customer interactions, and quality checks. GenAI copilots support engineers with coding suggestions and instant debugging advice, improving development output. Call center teams get real-time guidance during customer conversations, reducing handling time and error rates. Knowledge assistants help

employees find solutions quickly, cutting training efforts and enhancing accuracy. By taking over repetitive duties, GenAI frees employees to focus on critical tasks. This boosts productivity, raises service standards, and allows organizations to scale operations with fewer manual bottlenecks.

Threat:

#### Rising cyber security & misuse risks

Security vulnerabilities pose a significant threat to GenAI growth in Telecom and IT services. Attackers can misuse AI systems to create realistic phishing attempts, harmful scripts, or fraudulent content that infiltrates networks. Data poisoning can alter model behavior, leading to false predictions or system malfunctions. Because telecom companies operate essential communication infrastructure, a successful breach could trigger major service disruptions or expose millions of customer records. GenAI models may also store valuable data, making them attractive hacking targets. As AI-powered attacks evolve faster than traditional security controls, organizations face heightened cyber risks, forcing companies to strengthen defenses before expanding GenAI adoption.

Covid-19 Impact:

The COVID-19 crisis significantly boosted GenAI usage in Telecom and IT Services as organizations transitioned to remote operations and online service delivery. With sudden spikes in data usage, telecom companies relied on AI to optimize network performance, control congestion, and respond to customer requests automatically. IT firms integrated GenAI into remote support systems, automated development pipelines, and cloud security to manage distributed teams. Demand for cloud adoption grew, increasing the need for AI-powered migration tools and performance monitoring. Although some investments slowed due to financial pressures, GenAI demonstrated strong value by cutting costs, maintaining service uptime, and enabling remote workforce efficiency, accelerating long-term digital modernization.

The GenAI platforms segment is expected to be the largest during the forecast period

The GenAI platforms segment is expected to account for the largest market share during the forecast period because they serve as the primary technology layer that powers all AI-driven operations in telecom and IT environments. Companies depend on these platforms to build models, process data, automate services, and embed

intelligence into customer support, network management, and software development. They enable easy integration with existing systems, allowing operators to create tailored solutions without major infrastructure changes. Since platforms can support multiple use cases—from chatbots to predictive maintenance—organizations gain long-term scalability and innovation potential. With digital transformation expanding rapidly, GenAI platforms remain the most important segment for enabling AI adoption across telecom and IT service ecosystems.

The cloud-based segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the cloud-based segment is predicted to witness the highest growth rate because it offers high flexibility, scalability, and lower infrastructure costs for GenAI rollout in telecom and IT environments. Companies can build, test, and update models quickly using cloud resources instead of maintaining physical hardware. It enables real-time processing, automated upgrades, and smooth integration with digital platforms that handle billing, analytics, and customer management. Cloud-based GenAI also supports remote workforces and global service delivery, making it suitable for modern, decentralized operations. With increasing demand for AI-powered automation and network intelligence, cloud solutions become the most attractive option, driving stronger adoption and higher CAGR compared to edge, on-premises, or hybrid deployments.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share. This is due to its well-established digital infrastructure, substantial funding in AI innovation and the strong footprint of key telecom and IT service providers. Generative AI is already being used extensively here for automating customer support, optimizing networks, and advancing software delivery, positioning the region at the forefront of adoption. Organizations in North America are more prepared to deploy AI at scale, owing to mature ecosystems and institutional readiness.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR. This is driven by digitalization in nations like China, India, Japan and Australia, plus the widespread deployment of 5G, smart infrastructure and IoT systems. Telecom companies and IT firms in the region are rapidly integrating GenAI for automating

networks, enhancing customer service and optimizing operations. Strong government backing of AI strategies and growing cloud and data centre investment further fuel this momentum. Thus, Asia-Pacific is expected to register a higher growth rate than more established markets, presenting major opportunities for GenAI expansion in the sector.

### Key players in the market

Some of the key players in GenAI in Telecom & IT Services Market include Accenture, IBM, NTT DATA, Tredence, Startek, LeewayHertz, Talentica Software, Softlabs Group, GlobalLogic, Hexaware Technologies, Persistent Systems, Virtusa, Birlasoft, Ericsson and Microsoft.

### Key Developments:

In November 2025, NTT DATA and ServiceNow announced an expanded strategic partnership to accelerate AI-led transformation for enterprises. The companies will execute joint go-to-market and delivery commitments, including co-developing and co-selling AI-powered solutions to help organizations to transform the way work gets done.

In August 2025, Accenture has agreed to acquire CyberCX, a leading privately-owned cybersecurity services provider serving both private and public sector organizations across Australia, New Zealand and internationally. The move represents Accenture's largest cybersecurity acquisition to date and will significantly bolster Accenture's cybersecurity services in Asia Pacific.

In April 2025, IBM announced its plans to establish a state-of-the-art Software Lab in Lucknow, Uttar Pradesh focused on advancing Generative AI and Agentic AI technologies. The Lab will be located at Platinum Mall, Sushant Golf City, Lucknow. IBM India Software Labs, one of the largest software development centers for IBM, plays a crucial role in the development of generative AI, data & AI, automation, cybersecurity and sustainability solutions.

### Components Covered:

GenAI Platforms

GenAI Services

GenAI Infrastructure

### Deployment Models Covered:

On-premises

Cloud-based

Edge Computing

Hybrid

### Telecom Functions Covered:

Core Network Operations

OSS/BSS Automation

RAN & Open RAN Intelligence

Subscriber Lifecycle Management

Billing & Revenue Optimization

### IT Services Functions Covered:

ITSM & AIOps

DevOps & CI/CD Automation

Digital Workplace Enablement

Enterprise Data Intelligence

### Organization Sizes Covered:

Large Enterprises

Small & Medium Enterprises (SMEs)

Applications Covered:

Network Performance Optimization

Equipment Predictive Maintenance

Virtual Agents for Support

Threat Detection & Cyber Defense

Campaign Personalization

Service Provisioning Automation

SLA Monitoring & Enforcement

Recommendation Systems

End Users Covered:

Telecom Operators

Managed Service Providers

IT Consulting Firms

Cloud Infrastructure Providers

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

**What our report offers:**

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

**Free Customization Offerings:**

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

#### Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

#### Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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