

Generative AI for Telecom

Accelerate time to market
and competitive advantage
with Generative AI curated
for telecom industry needs

brillio





\$60 - \$100 Billion impact of Generative AI on Telecom Industry

The telecom industry is experiencing a transformative wave, driven by the proliferation of generative AI technologies, most notably exemplified by ChatGPT. This surge of interest and investment has swiftly catalyzed innovation within the sector, presenting telecom companies with an array of new possibilities. As generative AI applications continue to expand their reach, their utility spans across various facets of the telecom landscape, including product & service offerings, customer engagement, network optimization, and service delivery. This dynamic evolution necessitates careful investment strategies by Communication Service Providers (CSPs), aimed at prioritizing the integration and enhancement of the most valuable use cases. In doing so, CSPs can not only expedite their time to market but also secure a coveted competitive edge in this rapidly evolving landscape.

Nonetheless, the incorporation of generative AI, such as ChatGPT, comes with its own set of challenges and risks. Concerns encompass issues like the propagation of biases, the emergence of deepfakes, copyright complexities, regulatory ambiguities, and the potential for misuse, all compounded by the concentration of power among a few tech giants. Addressing these limitations and risks requires a concerted effort from the telecom industry, involving close collaboration between technology leaders, security experts, legal professionals, and risk management authorities. Together, they must establish ethical and security guardrails that promote innovation while safeguarding against potential pitfalls, thereby charting a responsible and sustainable course for the future of generative AI in telecom.

The making of a Generative Telecom Enterprise

GenAI has the potential to offer a wide range of use cases and applications in the telecom industry.

Product & Service Offering

In the ever-evolving telecom industry, determining signal propagation through diverse terrains is a formidable challenge. With Generative AI, you can generate realistic simulations of signal propagation using large datasets of terrain, building structures, and environmental factors to assess and optimize signal propagation, enabling telecom providers to offer enhanced network coverage and reliability.

Creating service offerings with optimal pricing structures is another critical area where generative AI can play a pivotal role. By analyzing vast datasets, AI can dynamically adjust pricing models, ensuring competitive yet profitable service plans that are personalized based on past data, a task that has historically been complex and labor-intensive.

Data segmentation and redundancy issues have long plagued telecom infrastructure operations, leading to high costs. Generative AI-driven data analytics can streamline data management, make recommendations on data engineering & architecture designs thereby reducing redundancy and optimizing resource allocation, ultimately resulting in cost savings and more efficient operations.

The legacy code architecture and the absence of agile practices in telecom present roadblocks to innovation. Generative AI can facilitate the development of agile solutions and modernization of legacy systems, assist in code creation, convert legacy code architecture to current versions & update libraries enabling telecom companies to swiftly adapt to market demands and stay ahead of the competition.

- **Auto Generate Designs**
- **Personalized Packages**
- **Application Modernization**
- **Architecture & Data Design**

Sales & Billing

Effective marketing campaigns in the telecom sector demand speed and precision. Generative AI can provide data-driven insights, enabling telecom providers to execute targeted marketing strategies swiftly, reaching the right audience with the right message at the right time.

Creating personalized marketing and promotions has been a challenge, but generative AI can analyze customer preferences and behavior to tailor marketing efforts, boosting customer engagement and loyalty. Gen-AI can actively create videos, audio for brand advertisements & optimize SEO for attracting customers.

Resolving customer billing queries and providing quick resolutions is essential for maintaining customer satisfaction. Generative AI-powered chatbots can handle these inquiries efficiently, offering real-time assistance and reducing customer frustration.

In the era of social media dominance, generating inbound marketing campaigns on platforms like social media is critical. Generative AI can assist in crafting compelling social media content and campaigns, driving customer engagement and brand visibility.

Customers often struggle to place orders and understand complex service offers. Generative AI can simplify this process through intuitive interfaces and personalized recommendations, enhancing the customer experience.

- **Outbound Marketing**
- **Inbound Engagement**
- **Personalized Promotions**
- **Intelligent bot**

Delivery & Activation

Tracking the status of activation requests has traditionally been a customer pain point. Generative AI can enable real-time tracking, providing customers with transparent insights into the activation process and improving their overall experience. This can be enabled by using a chatbot which can answer queries in natural language.

Allocating suitable engineers for service delivery can be challenging. Generative AI can analyze engineer profiles and project requirements, optimizing engineer allocation to ensure efficient service delivery.

- **Service Tracker**
- **Workforce Manager**

Customer Support

Resolving customer complaint tickets can be time-consuming. Generative AI-powered ticketing systems can automate ticket resolution, reducing response times and enhancing customer satisfaction.

Assisting customers with service plan changes and network feature usage can be complex. Generative AI-driven virtual assistants can provide instant, accurate guidance, empowering customers to make informed choices.

Service downtimes and maintenance work are inevitable but can lead to decreased customer satisfaction. Generative AI can predict potential service disruptions and proactively communicate with customers, managing expectations and minimizing dissatisfaction.

Monitoring field infrastructure can be a logistical challenge. Generative AI-driven monitoring systems can provide real-time insights into network health and performance, enabling proactive maintenance and automated issue resolution.

- **Ticket Management**
- **Service Support**
- **Automated Network**
- **Monitoring & Troubleshooting**

Telecom companies have a significant opportunity in leveraging Generative AI across functions beyond sales, marketing and billing to include fraud detection, intent-driven network, compliance, digital twin to programming and low code development. We at Brillio could help you assess your readiness with our proprietary Generative AI Readiness index across various dimensions such as strategy, data quality, adoption, governance, LLMOps and CVOps and identify gaps to attain the desired state. We help bridge the gaps identified with a team of cross-skilled professionals that consists of Solution Consultants, Data Scientist, Prompt Engineer, Responsible AI Consultant, Generative AI Ethics Officer, Generative AI and Human Coordinator and Generative AI Bias Detective. Our solution has governance baked in with the principles of Justness, Transparency, Privacy, Compliance, Grounding and Evaluation coupled with domain specific cognizance & validation of Legal, Regulations, Ethics and Policies provide a full coverage. At the end of it all, you get to enjoy faster time to market with our domain-specific technology accelerators for data understanding, model exploration and management.

Connect with us for a readiness assessment.

ABOUT BRILLIO

At Brillio, our customers are at the heart of everything we do. We were founded on the philosophy that to be great at something, you need to be unreasonably focused. That's why we are relentless about delivering the technology-enabled solutions our customers need to thrive in today's digital economy. Simply put, we help our customers accelerate what matters to their business by leveraging our expertise in agile engineering to bring human-centric products to market at warp speed. Born in the digital age, we embrace the four superpowers of technology, enabling our customers to not only improve their current performance but to rethink their business in entirely new ways. Headquartered in Silicon Valley, Brillio has exceptional employees worldwide and is trusted by hundreds of Fortune 2000 organizations across the globe.



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