Exploring Customer Satisfaction in Telecommunicati on Services: Unraveling Trends, Challenges, and Prospects

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### 1. Introduction:

We can't imagine life without talking to people far away these days. There are still telephones, but most people use cell phones. We can use them to chat, text, send pictures and videos, and even get on the internet. The opportunities that lie in the telecom market seem endless and the growing demand for mobile telephony systems is creating a worldwide market. Telecommunication is the transmission of information over significant distances to communicate. In earlier times, telecommunications involved the use of visual signals, such as beacons, smoke signals, semaphore telegraphs, signal flags, and optical heliographs, or audio messages such as coded drumbeats, lung-blown horns, and loud whistles. In modern times, telecommunications involve the use of electrical devices such as the telegraph, telephone, radio, and microwave communications. Communication channels make use of fiber optics and their associated electronics, orbiting satellites, and the Internet.

## Highlighting the key metrics and methodologies used to measure customer satisfaction:

#### Customer reviews,

While this covers all the angles, it is important to be mindful of any feedback or review you may receive via portals, websites, or social media channels. The importance of reviews cannot be overstated. According to a recent study, over 90% of buyers value product reviews over product descriptions.

#### Customer Health Score (CHS),

Customer health lets you know if your customers will stay with you or churn over time. This score, unlike other customer satisfaction metrics, identifies behavior patterns over a period. It is determined by the aspects such as:

- Product usage period
- Product type (license level free or paid)
- Number of interactions with the support team
- Money spent with your brand
- Their willingness to answer your surveys

## The key principles

- Importance of telecommunication
- Customer satisfaction
- Artificial Intelligence (AI)
- Communication company
- Challenges
- ✤ Future direction



## Current Situation Analysis:

The telecommunications industry, a vital component of the information and communication technology sector, comprises telecommunications companies and internet service providers. It plays a pivotal role in the advancement of mobile communications and the information society. Over recent years, the sector has experienced significant growth, exemplified by the surge in active mobile broadband subscriptions from 3.3 billion in 2015 to approximately 7.7 billion in 2020. This expansion was fueled by the widespread deployment of 4G LTE technology, contributing to increased connectivity and access to telecommunications services globally.



# Overview of the Telecommunication Industry:

Total Number of Telecom Towers, in Units, January 2023 - November 2023



Source: Bangladesh Telecommunication Regulatory Commission (BTRC)





4G Mobile Data Usage, Petabytes per Month, India, 2015-2021



Source: Nokia

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Local 5G solutions market size in Japan from fiscal year 2020 to 2021 with a forecast until 2030



Source: China Mobile China Unicom China Telecom MIIT CAICT



#### Impact of Customer Satisfaction on Telecommunication Industry

The telecommunications industry is undergoing significant changes due to globalization, privatization, and technological advancements, leading to increased competition and customer expectations. To stay competitive, companies are focusing on customer satisfaction as a means to gain market share and retain customers. Understanding customers' perceived value is crucial in building profitable long-term relationships, as it directly impacts revenue generation. Telecom firms recognize the importance of aligning offerings with customer needs to optimize revenue and enhance shareholder value, highlighting the correlation between customer satisfaction and financial success.

## • 1.3 Machine learning on Telecommunication:

- Machine learning approaches are beginning to emerge in the telecommunication domain to address the challenges of virtualization.
- AI-supported network-centric applications include anomaly detection for maintenance and provisioning, performance monitoring, alert suppression, automated resolution of a trouble ticket, network faults prediction, and network capacity planning or congestion prediction
- Telecom AI applications in telecom showcase tangible benefits, with 73% of companies witnessing increased revenue through AI-driven telecom services network optimization, 80% reporting reduced costs in customer service with AI-powered chatbots and virtual assistants, and a substantial 90% success rate in real-time fraud detection using AI, as reported by sources like The Fast Mode and NetGuru.



### In this table all included points are basement of Customer satisfaction

► Service Innovation	▶ Quality of Offering
▶ Reliability	Customer Demand
Service Competitiveness	Value Added Service
▶ Service Consistency	Contribution for the Society
▶ Network Coverage	▶ Brand Value
Pricing	



### Challenges in Achieving Customer Satisfaction

Good customer service is a critical success factor for companies, as it reflects the quality of their products or services. However, studies indicate that the telecommunications industry often struggles with poor customer service, leading to negative consumer experiences. Despite this, the industry is poised for significant growth, with forecasts predicting a surge in mobile phone users and global telecommunication spending by 2025 and 2026, respectively.



- 3.5 China's Telecom Market Analysis:
- :The telecommunications industry in China has experienced several transformations and has achieved remarkable growth over the past years. The business volume of telecommunication service providers almost tripled in the last decade. By the end of 2021, there were more than 1.6 billion mobile service users across China. Nevertheless, the development of the telecommunications industry in China was impeded by the enormous regional disparity. While the residents from the eastern part enjoyed high-speed internet and the 5G mobile network, many people from middle and western villages still didn't have access to fixed-lined telephones. The Chinese government has implemented a series of strategies to fill the regional gap.



## **Future Research Directions:**

Protecting consumer interests and reshaping the telecommunications industry are made possible through regulatory actions. Positive results and the creation of an atmosphere that supports customer happiness depend on policies that support competition, guarantee service quality, defend consumer rights, and encourage innovation.





### Conclusion

In the telecommunications sector, maintaining a competitive edge and fostering customer loyalty requires a deep understanding of client satisfaction. This investigation delves into the complex landscape of customer satisfaction, exploring new developments, persistent challenges, and future possibilities. As consumer preferences evolve with the introduction of technologies like 5G, IoT, and AI, there's a growing demand for enhanced user experiences and personalized services. To effectively address these changing dynamics, telecom companies must adopt cutting-edge solutions while prioritizing customer-centric strategies, technological innovation, and regulatory compliance. This comprehensive approach enables telecom providers to build enduring relationships with customers and thrive in a dynamic digital environment.

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## THANK YOU!