

Original Article

The Cutting Edge Dimension: Unlocking the Future Intelligence of the Internet

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Abstract - Have you ever wondered how life would be without the internet? Throughout the years, starting in the 1960s, the internet has truly integrated itself into our lives. We can easily observe this within our work, home and social environments. The future of the internet breathes consistent evolvement and an air of pure and exciting inspiration. This article will discuss some trending areas and provide predictions for the future of the internet.

Keywords - Internet, Technology, Artificial intelligence, 5G.

1. The Future Imagery of the Internet

As you grow, learn and integrate the expansion of technology through the internet in your life, pay keen attention to these upcoming groundbreaking future advancements in the internet.

2. The Internet of Things (IoT)

The Internet of Things (IoT) speaks to the interconnection of physical devices to the internet, particularly in the era of smartphones, smart homes, smart vehicles, and the overall collection of wearables within healthcare, agriculture, and transportation industries. The IoT makes it possible for these networks of devices to communicate and effectively share data.

Cisco has recorded that there will be an estimated 29.3 billion connected devices this year (2023) [1]. The exponential growth of the Internet of Things fully backs this development.

There is also an estimation that by 2025, there will be a total of 30 billion IoT devices [2] in use worldwide. The growth within this trend will be directly connected to the increased use of smart home-related devices like speakers and thermostats. The increased use of industrial applications through manufacturing and logistics will also be reflected in IoT devices.

3. Artificial Intelligence (AI)

Artificial Intelligence (AI) is another new and innovative internet-based technological trend that has successfully placed the online community in a frenzy. AI will undoubtedly transform the future of the internet as it seeks to

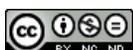
use the ability to learn from provided data and make the necessary decisions accordingly. With AI, the future internet magnifies the use of Chatbots and looks forward to self-driving cars.

McKinsey Global Institute highlights that AI has the ability to unlock \$3.5 trillion to \$5.8 trillion in value annually across nine business functions in 19 industries. With this value, you can look forward to an increase in better decisions, products and services.

AI, alongside Machine Learning (ML), are currently and efficiently powering chatbots, predictive analytics and voice assistants. In the future, you can look forward to integrating AI and smart devices. A recent report issued by MarketsandMarkets foresees the AI market growing from \$21.5 billion in 2018 to \$190.6 billion by 2025 [3].

4. 5G Technology

Another significant development related to the future of the internet is the 5G technology. 5G represents the fifth generation of wireless technology. The 5G technology will power the growth of IoT and AI. The aim is faster download and upload delivery speed, decreased latency, and improved capacity. The future of the internet with this reality means connecting at a faster and more reliable rate. GSMA Intelligence anticipates 1.2 billion 5G connections worldwide by 2025, accounting for 14% of all mobile connections [4]. The generation of 5G Networks and accessibility to 5G-enabled smartphones is what is expected to steer this growth. Ericsson reported that there will be at least 3.5 billion 5G subscriptions by 2026, thus reflecting a 40% increase in all mobile subscriptions [5]



5. Virtual and Augmented Reality (VR/AR)

Virtual and Augmented Reality (VR/AR) are technologies that enhance digital environments in an immersive manner. VR introduces headset usage to improve the digital environment, while AR seeks to place digital information in the real world; according to a report by Markets and Markets, the VR market is expected to grow from \$7.9 billion in 2018 to USD 44.7 billion by 2024 [6].

6. Decentralized Web

There are currently a few large tech companies that control the internet. However, the growth in decentralized web technologies, such as blockchain and peer-to-peer networks, will boost more individual control of data on the internet, especially with the InterPlanetary File System (IPFS), a new web protocol that is trending [7].

7. Quantum Computing

Quantum computing is an innovative type of computing that utilizes quantum bits (qubits) in place of binary bits. This makes room for faster data processing in a more efficient manner. Cryptography, drug discovery, and climate modeling are a few applications that will seek to benefit from quantum computing. According to a report by McKinsey, by the year 2030, the quantum computing market should have an estimated worth of \$15 to \$50 billion.

8. Final Thoughts

From the first email sent in 1971 to the 21st century being transformed through social media [9], the internet has proved its ability to continuously expand and will continue to do so without session with the mentioned future internet trends for the years to come

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