

HOW 5G WILL IMPACT YOU AND THE ECONOMY

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ABSTRACT

With the advancement from 2G to 3G and now 4G, what the speed has done to the internet world is mind-blowing. Once the movies used to download in 4-5 hours, now with 4G speed, you can download a movie in half an hour or less. We can easily imagine what is going to happen when the next generation of connectivity is going to bring on the table. 5G will be much faster and effective than 4G. A movie could be downloaded in a flash. How cool is that going to be?

KEYWORDS: 2G, 3G, 4G, 5G, Mind-Blowing, Connectivity, LTE (4G).

Introduction

What is 5G

It is said that 5G is unlike previous generations of mobile network, 5G is referred as to be “the network of networks” because it is going to bind together existing and future standards, including current advanced LTE (4G) networks.

In another words, 5G isn't an extension of 3G and 4G networks but rather something which combines Wi-Fi, 4G, wireless access technologies, and millimeter wave. The 5G technology also leverages various aspects like cloud infrastructure, virtualized network core and intelligent edge services.

Features of 5G

- **Ultimate Faster Speed**

It is said that 5G will be much faster than earlier networks. Some believe to say that it is going to be 100 times faster than the existing 4G networks.

- **Lower Delays**

We will see less delays and less lags when we use the phone or other devices.

- **Greater Capacity**

It will come with much better capacity. That means the network will be able to work and cope better with the heavy applications while using them all at once,

- **Reliability**

The reliability is going to be great. There will be no problems of call drops or low connectivity.

- **Improved Battery Life**

Battery life is said to be extended by up to 10 times.

However, with all good things, there would always be a flipside.

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Since a lot of investment will be required and 5G will provide very low range in the beginning, the main challenge will be that not all cities or rural areas will be able to offer 5G architecture.

Working from Home

Covid 19 has changed the world and the course of work in the most unexpected way. Work from homes will be the new workstyle post this pandemic.

Despite the expensive infrastructure, it's easy to see 5G modems finding their way into offices and homes everywhere. Fast and dependable connectivity makes a strong case for being able to work from home.

This is important to notice that first the 5G compatible devices too needs to be launched in the market. Then only the benefits of 5G and great speed will be enjoyed and utilized.

The Internet of Things

Above capacity and speed, there is a lot which 5G technology will bring and strengthen. Electronics could be connected like Refrigerator, electronics could be set that they indicate if anything is wrong or may be when service is scheduled.

Healthcare

With the advancements with 5G, the complaints of patients could be managed remotely irrespective of the distance. We couldn't help thinking that may be remote surgeries could be possible too. This advancement will overall help in making Healthcare industry strong, with better techniques, better success ratio, and saving more and more lives.

Economic Impact

How amazingly these technologies have impacted economy is not hidden. From the days of 3G,4G, everything is so easily accessible. Such a large quantity of information is available on internet and is reachable to us in seconds.

Globally everything has changed and is simplified to an extent which was once unimaginable.

5G and the Impact it will have on our Global Economy

Our Marketing Researcher in the U.S., HanifHaghshenas, PhD, took a deep dive into 5G and how it will shape our economy for years to come. By 2023, one billion users are expected to have access to 5G technology. With speeds as high as 500Mbps to 1Gbps, 5G is all set to push our data transfer capabilities to a whole new level.

According to Qualcomm, by 2035 there will be around \$12 trillion worth of 5G related services, including mission-critical services, enhanced mobile broadband and massive IoT advancements. Plus, industries such as retail, healthcare, education, transportation and entertainment.

Qualcomm predicts the 5G value chain will generate up to \$3.5 trillion in revenue in 2035, and support as many as 22 million jobs. Qualcomm also forecasts that 5G will boost global GDP growth by \$3 trillion cumulatively from 2020 to 2035.

A report from PSB Research, which surveyed over 3,500 people, including business decision leaders, analysts and tech enthusiasts, found that as a result of 5G:

- 91% expect new products and services that have yet to be invented
- 87% expect new industries to emerge
- 82% expect small business growth and more global competition
- 85% expect it to make companies more globally competitive
- 89% expect increased productivity

Notably, an economic impact study conducted by IHS Markit and validated by Dr. David Teecethe indicates that 5G will catapult mobile into the exclusive realm of General Purpose Technologies, like electricity and the automobile, that provide the foundation for massive innovation, give rise to new industries and benefit entire economies. This will happen as 5G advances mobile from a set of technologies connecting people to people and information to a unified fabric connecting people to everything. According to the study, in 2035, when 5G's full economic benefit should be realized across the globe, a broad range of industries – from retail to education, transportation to entertainment, and everything in between – could produce up to \$12.3 trillion worth of goods and services enabled by 5G.

Opportunities: How the future could be for businesses with 5G

So far we have understood what new wave this 5G will bring. A wave that will change the way we live. It will show the beauty of time saving and efficiency because of new technologies.

5G will bring unexpected and amazing opportunities for a number of industries. It is expected to see network deployments of 5G by end of 2020 and as per the Ericsson sources, it is expected that the world will start using 5G smoothly everywhere by 2024.

5G is poised to disrupt the world's biggest industries including:

- Manufacturing
- Energy & Utilities
- Agriculture
- Retail
- Financial Services
- Media & Entertainment
- Healthcare
- Transportation
- AR/VR
- Insurance
- Education
- Cloud Computing
- Gaming
- Real Estate
- Public Safety
- Supply Chain Management
- Restaurants
- Tourism
- Military
- Marketing & Advertising

Conclusion

We have been experiencing what technology can do, 5G can bring great advancements and growth in the businesses and will be a great push for the economy.

It might take time to cover each and every spot of the world, but once it does it will bring great opportunities and boost the economy.

It is said that introduction of 5G will be the foundation of fourth industrial revolution where every business will be digitalized and connected well. This will not only create new industries but will advance and transform many existing ones.

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