

STRATEGIC FEATURES OF THE DEVELOPMENT OF THE
WORLD TELECOMMUNICATION NETWORK

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Annotation. Is the biggest communication problem. Communication is a fundamental part of human interaction. This allows us to Share our thoughts, ideas and feelings with others. However, the biggest problem in communication is that we do not listen to understand, but rather hear the answer. The Internet is the next step in the evolution of human knowledge. The Internet is a Modern Library of Alexandria, but with more information. As one of the most popular technological advances, the Internet has become widespread around the world. Let's take a look at the importance of the Internet and mobile devices in the world in the following article and consider in the course of the analysis how common the internet is in reality mobile devices, whether there are continents completely covered by internet mobile devices and in which countries they are not.

Keywords. Telecommunications, infrastructure, broadband, high-speed internet, economic growth, communication, information, publishing service, mobile service, infocommunication.

Telecommunications revolutionized the world by providing distance communication, online education, ending remote business, and creating new opportunities to communicate with people anywhere. So what is telecommunications? In the simplest definition, telecommunications, or telecom, refers to sending information over important distances through electronic devices. The most common devices include telephones, radio, satellites, computer networks, and the general Internet, among others.

Through this article, we will mention some resources in your sidebook. Anashu "Telecommunications", which you are analyzing with, comes from the Greek prefix tele, which means "long" and, together with the Latin term "communicative", means "to share". The telecommunications industry developed with the invention of the Telegraph in the early 19th century. We will remember the main dates in the field of telecommunications with you. That is, on March 7, 1876, Alexander Graham Bell invented the first telephone. Broadcasting came into being at the beginning of the 20th century. On April 3, 1973, Martin Cooper created the first cell phone by his Motorola company. Mobile communication took place in the 1980s due to the development of cellular technology. And in 1983, January 1 is the official birthday of the Internet. It is noteworthy that the World Wide Web emerged in the 1990s, achieving a dramatic transformation of the telecommunications industry. This is with you the stages of development of the telecommunication landscape from the present.

The annual growth rate shows that it reached its peak in the late 1960s, when it was around 2%. Since then, the growth rate has almost doubled and continues to decline in the coming years. Thus, in the 21st century, the world's population continues

to grow, but in a much slower way compared to the recent past. The world's population doubled (100 percent increase) in 40 years from 1959 (3 billion) to 1999 (6 billion). It is now estimated that over the next 40 years it will increase by 50 percent and reach 9 billion by 2037. According to the latest forecasts of the world population, the world population will reach 10 billion people in 2057, and 10.4 billion in 2100. It is a fact that the rapid development of the world's population, in turn, makes them each other appear in the extensions of telecommunication. In order for broadcasters to be able to adapt to the rapid changes in the industry, they must follow the best trends in the telecommunications industry. I will introduce you to some of these trends. Note that 5G technology, internet of Things (IoT), artificial intelligence (AI), cloud computing as well as 6G technology (TBA).

The world population has grown around 0.88% per year in 2023, and in the current year the population has reached 8.1 MLD as of 20.08.2023. Currently, the population growth is observed to increase by 70 million people per year, and this year, as of 20.08.2023, the population has increased by 46.7 million people during studies. The annual growth rate shows that it reached its peak in the late 1960s, when it was around 2%. Since then, the growth rate has almost doubled and continues to decline in the coming years. Thus, in the 21st century, the world's population continues to grow, but in a much slower way compared to the recent past. The world's population doubled (100 percent increase) in 40 years from 1959 (3 billion) to 1999 (6 billion). It is now estimated that over the next 40 years it will increase by 50 percent and reach 9 billion by 2037. According to the latest forecasts of the world population, the world population will reach 10 billion people in 2057, and 10.4 billion in 2100. It is a fact that the rapid development of the world's population, in turn, makes them each other appear in the extensions of telecommunication.

According to statistics, the number of smartphone users in the world today in 2023 is 6.92 billion, that is, 85.95% of the world's population has a smartphone. This figure increased significantly from 2016, when only 3.7 billion users made up 49.4 percent of the world's population that year.. It is noteworthy that in 2023, including smart and feature phones, the current number of cell phone users is 7.3 billion, which is 91.04% of the world's cell phone owners. Private phones are basic cell phones with applications that are more prominent in developing countries and no complex systems that keep hardware and software components of a complex computer system coordinated.

Look, the analysis of the number of mobile connections in the world shows that electronic machines than humans have officially pre-occupied it with about 3.7 billion additional mobile connections to put it into perspective, since the advent of mobile phones in 1973, mobile device connections have exceeded the number of people in the world, becoming the fastest growing phenomenon of man-made technology. In addition, currently the number of mobile connections in the world is also developing rapidly. From the analysis, it can be seen that there are now more than 11.8 billion mobile connections around the world, which according to the estimates of UN digital analysts, the current world population exceeds 8.051 billion. According to this data, we can see that this indicator has 3.745 billion more mobile communications than the number of people in the world.

Analysis of world population use of the internet and population statistics

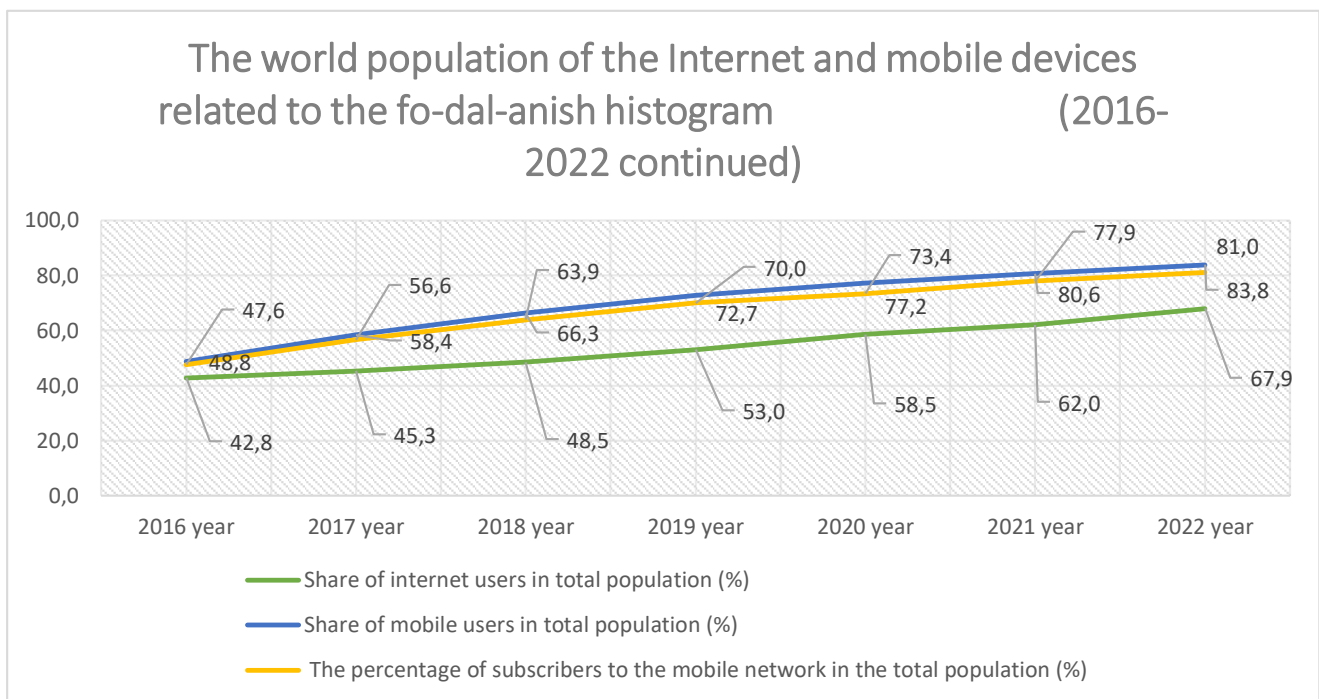
(during 2016-2022)

Table 1.

№	2016 йил	2017 йил	2018 йил	2019 йил	2020 йил	2021 йил	2022 йил

It should be noted that not every person in the world has a mobile device. We are conducting an analysis of mobile connections coming from people who have multiple devices and part of other installed devices such as two SIM cards or cars. As can be seen from the above data, the ownership of the mobile device is growing at a very fast pace, almost half of the planet has a smartphone and two-thirds has a mobile device. The following you can see how the number of smartphone users increased in 2017-2022, the number of people with smart cell phones increased by 49.89 percent.

Draw 1



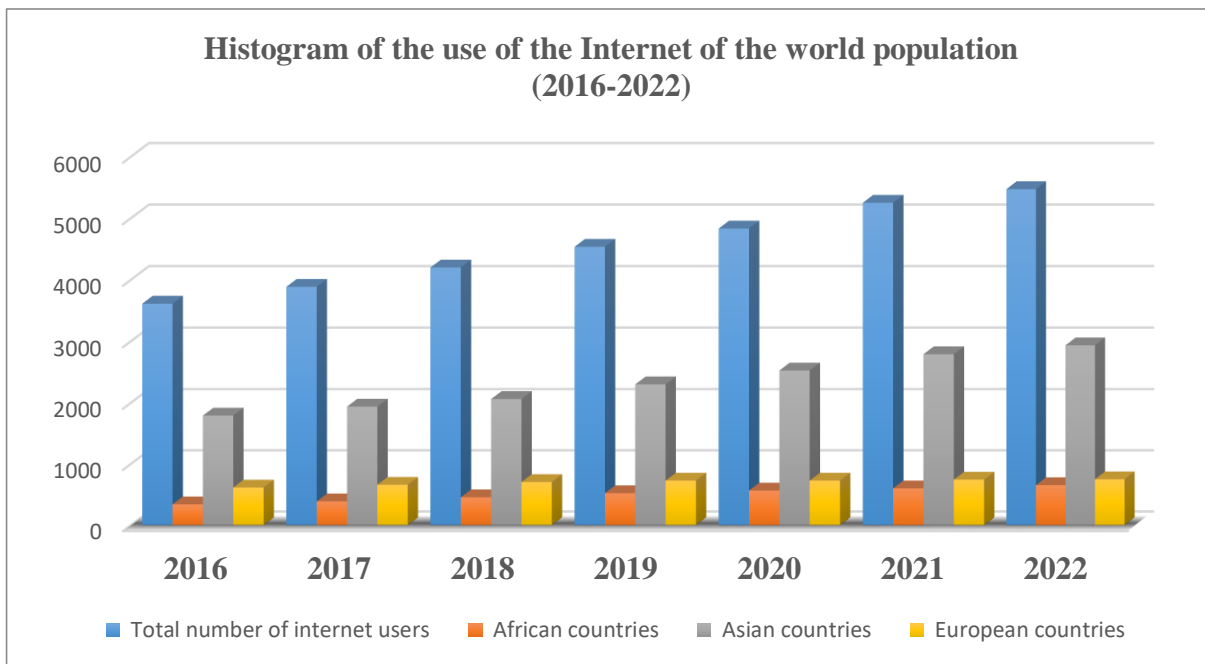
Statista predicts significant growth globally for all cell phones, tablets or IoT devices. According to the company's sources of information, the number of users of mobile devices will increase from 6.378 to 7.516 billion over the next three years. (Source <https://www.bankmycell.com/blog/how-many-phones-are-in-the-world>)

Kurt Peterhans believes that IoT solutions on the scale of millions of things are automated and require the management of zero-sensor devices. Predictive analysis and proactive care are key factors in success. In addition, IoT device management must automatically classify devices into situations that depend on the state of use. If not, they will remain like an ineffective lame duck.

A somewhat bold prediction, but the world Advertising Research Center believes that due to the growth in smartphone adoption, 72.6% of all Internet users access web pages through smartphones. To put this in perspective, 57.14% of the global smartphone user base (2 billion people) today only access the internet through their smartphones. We have found in this article that looking at the penetration of the phone according to the data of the countries of the world, there are still many countries with a large population and a low smartphone adoption rate in the processes of study.

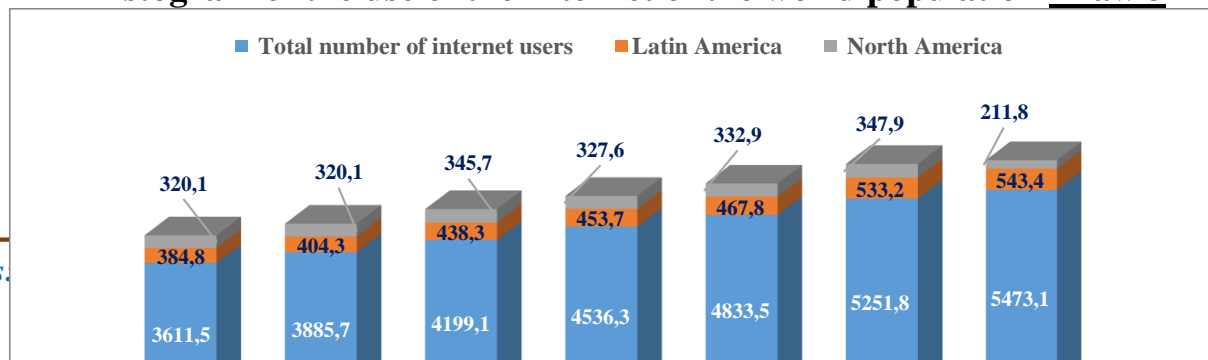
Smart cell phone adoption is not the same in every country or region around the world. Below we will show the latest information about the penetration of smartphones, which is indicated by country in relation to the number of smartphone users of the population. Let's move on to the analyzes with you. The largest number of smatrphone users is China with the largest number of physical smartphone users, leading the world in terms of population of 974.7 million, with 68.4% penetration into the market as well.

Draw 2



Minimum number of users: Bangladesh has the lowest number of smartphone users - 52.03 million, 30.40% penetration into the market: the highest entry to the market: France has the most smartphones, 82.60% of its population has a smartphone, totaling 52.63 million people.

Histogram of the use of the Internet of the world population Draw 3

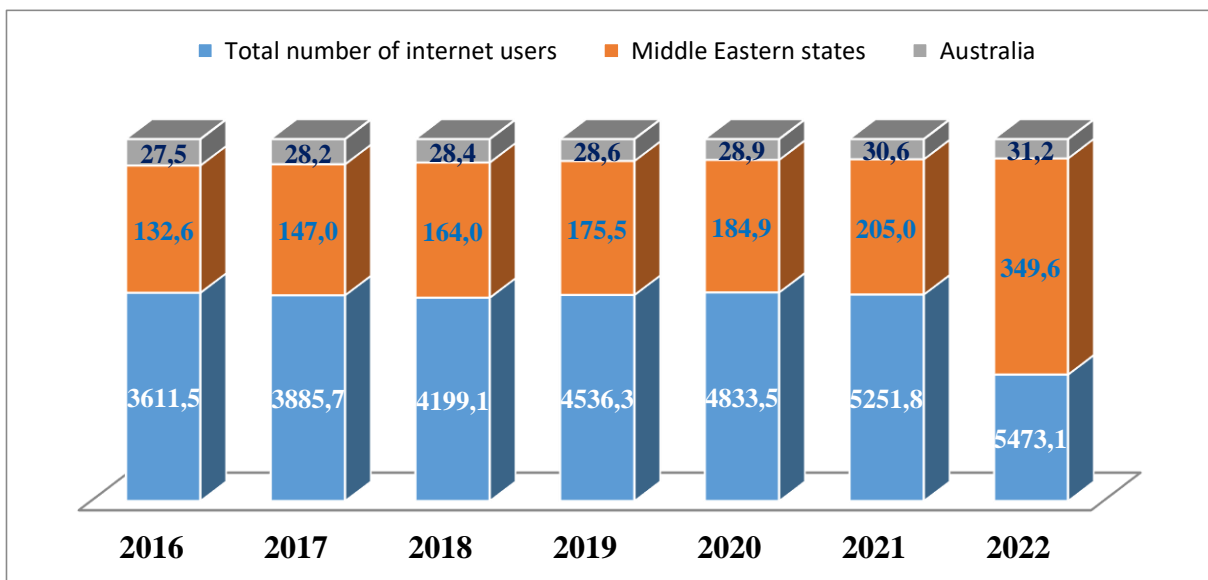


The study found that 73.47% of the population of the 10 developed countries had a smartphone, while 74.61% of the population of the 10 developing countries did not have a smartphone. The population of the world was studied in 7 parts. That is, the first part studied the countries of Africa, Asia and Europe, the second part Latin America, North America and the third part-the Middle East and Australia.

The study of the number of smartphone users in our analysis for 2016-2022 by the population of African, Asian and European countries shows that the global division of smartphone users by region, just as in the case of the above countries, the countries of the Osi region occupy the main share of active users. Leading from Asian regions can be shown the state of China.

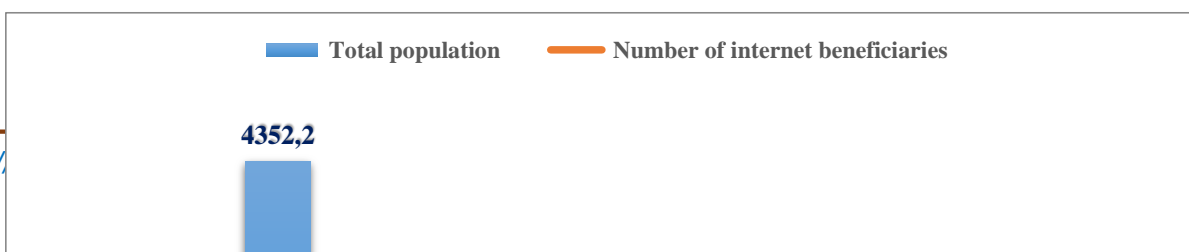
Histogram of the use of the Internet of the world population (2016-2022)

Draw 4



The study of the number of smartphone users in our analysis for the period 2016-2022 in Latin America, the population of North American countries shows that the global division of smartphone users by region, just as in the case of the above countries, the countries of the Latin American region occupy the main share of active users.

Histogram of the analysis of the use of the internet and population statistics of the world population (in the account of a million people) (2022) Draw 5



The study of the number of smartphone users in our analysis for 2016-2022 by the population of the countries of the Middle East and Australia shows that the global division of smartphone users by region, just as in the case of the countries above, the countries of the Middle East region occupy the main share of active users.

Our common assumptions are that for the period 2016-2022, the main part of the number of smartphone users is occupied by the main share of active users of Asian, European, North American countries.

Now we will study the state of internet use of the world population for 2022. As can be seen from the histogram above, the number of internet users is coming without giving the leadership from the countries of Asia (2916.9 million people), Africa (601.9 million people), Epropa (747.2 million people). From the analysis, it can be seen that while the population of Asian countries is 54.9% of the world population, but the number of internet users in the world is 67% of the total population of the giant (2916.9 million people). Economic analysis shows, however, that the total population of the state of internet use is falling from the state to the countries of North America (93.4 percent), Epropa (89.2 percent) and Latin America (80.5 percent).

In developing countries, first of all, there are still feature phones. When looking at the data of the above countries, studies were found that for many reasons, especially in developing countries, not everyone has a phone. For example, when analyzing data from India, they found that 40% of people (not smartphones) had a function phone and 35% of the population did not have a mobile device. Similar trends have been found that Nigeria has 17 percent of the population without telephones, 44 percent with function phones, and Indonesia has 29 percent with function-only phones.

Yanga one of our studies we want to pay attention to, that is, 14.28% of people in the world cannot physically own a mobile phone. Another important fact is that 14.28% (1.1 billion) of the current world's population are unable to use electricity, resulting in them being unable to power even if they own electricity.

From studies, it can be seen that countries such as China, India, the United States, Brazil and Russia are the countries with the most mobile phone subscribers in the world.

Together, these five countries have more than 1.64 billion active mobile users, which is very large for the economy. The mobile industry relies on tariff services through mobile phone subscriptions to make money for mobile operators. In China, which has 851 million smartphone users, there are more than 850 providers, that is, an intermediary organization that is engaged in connecting computers to the internet and organizing the exchange of information, which was determined during studies that China brings a much greater economic benefit to GDP.

Conclusion. It showed that the solution to the problems of Telecommunications was no longer limited to technology. The technology is ready to be adopted and there are open source solutions of all key elements. Now the question is whether telecommunications want to prosper by working with innovation partners, or do they want to continue sending open requests for proposals to complete a new project proposed by the same typical company or another organization that releases it, which has not brought any solutions to their main problems?

From these analyzes, we will introduce the top 5 telecommunications problems they are as follows: to cover the costs of the installation network, it will be necessary to reduce costs by 10 times, large income from top players, eliminate interruptions and commoditization of broadband connections, deploy telecom solutions not in a few months, but in a few hours, integrate, expand. Because this is the main requirement of consumers.

Note that operators are used to having a gang of suppliers take them to Hawaii for a "business trip", and they say that all the requirements they put on invitations have full meaning. Operators, as well as their marketing department, know best what their subscribers want. Finally, operators, like most corporations, want 100% security in the form of business business before any investment is made. In the world of destructive technologies, no one has 100% confidence anymore. Google is the best example. They have an "alphabet" of innovations that they are investing without knowing which, if any, will be their next billions of dollars in revenue stream. Android, Google Fiber, OnHub, Fi and others all seem to be going in the same direction: it was found in our studies that Google no longer needs TV companies.

Today, the broadband network is a complete commodity, so price wars lead to disruptions. The final result is the emergence of lower races in which no one wins. If you offer good service at a competitive price, you will be able to create a lockout that dramatically reduces the downtime if you allow your app network and all customer-related devices.

List of useful literature.

1. Nusipova, Zh.E. Research of trends, patterns, factors and conditions of development of the telecommunications sector in the system of sustainable functioning of the regional economy / Zh.E. Nusipova // St. Petersburg Economic Journal. – 2019. - No. 1. p. - 89 -96.- 0.6 pp.
2. Nusipova, Zh.E. Assessment of the impact of large regional telecommunications sector companies on the infrastructural development of the regions of the Republic of Kazakhstan / Zh.E. Nusipova // Economics and management.-2019.No. 3(161).- pp.32-37.- 0.6 pp.l.

3. Nusipova, Zh.E. Business model of formation of innovative development strategy of Kazakhtelecom JSC Group of Companies: horizontally integrated model /Zh.E. Nusipova // St. Petersburg Economic Journal. - 2018. - No. 1. - pp. 36-45. - 0.6 pp.l.

4. Nusipova, J.E. Forms and models of public-private partnership in the development of the segment of high-speed networks / J.E. Nusipova // St. Petersburg Economic Journal. - 2017. - No.3. - pp. 166 - 172. - 0.6 pp.l.

5. Korchivoy, S. A. Management of innovative projects in the digital economy / A.V. Ivashchenko, S. A. Korchivoy // Proceedings of the Research Institute.-2017. – No. 4. – pp. 15-22. – ISSN 0134-5583.

6. Korchevoy, S. A. The model of infrastructural return in the digital economy / A.V. Ivashchenko, S. A. Korchevoy // Scientific and Technical Bulletin of the Volga region. – 2018. – No. 5.–PP.204–207. – ISSN 2079-5920.

7. Korchevoy, S. A. Building the software infrastructure of the service sector in the digital economy / A.V. Ivashchenko, S. A. Korchivoy // Software products and systems. – 2018. – No. 4. – PP. 692-696. – ISSN 0236–35X.

8. Korchevoy, S. A. Development of digital economy infrastructure / A.V. Ivashchenko, S. A. Korchevoy // Proceedings of the Research Institute. – 2018. – No. 2. – pp. 7-11. –ISSN 0134-5583.

9. Korchivoy, S. A. Risk-crawler for the digital economy / A.V. Ivashchenko, S. A. Korchivoy // Economics and management of management systems.-2018. – № 4.2 (30). – Pp. 273-285. – ISSN 2223-0432.

10. Korchevoi, S. A. Infrastructural models of the digital economy / A.V. Ivashchenko, S. A. Korchevoi, S. A. Prokhorov // Izvestiya Samara Scientific Center of the Russian Academy of Sciences. – 2018. – Vol. 20, No. 6-2 (86). -pp. 373-378. – ISSN 1990-5378.

11. Korchevoi, S. A. Infrastructural development of digital economy projects / S. A. Korchevoi // Proceedings of the Samara Scientific Center of the Russian Academy of Sciences. – 2019. – Vol. 21, No. 5 (91). – pp. 73-82. – ISSN 1990-5378.