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Application and development prospect of transmission technology in communication engineering

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Abstract

In recent years, with the continuous development of technology means, transmission technology in electronic technology communication engineering is gradually improved, and has been widely used and popularized, transmission technology can not only rapidly develop information expansion transmission functions, but also can be beneficial to meet people's needs on information access, transmission, understanding and so on. However, at present, the communication engineering application process still has some shortcomings in our transmission technology. In order to ensure that the communication engineering industry can develop scientifically, statically and for a long time, technical researchers make full use of the advantages of the transmission technology to solve the shortcomings in the application process and improve the shortcomings to fully optimize the value of the communication engineering technology. The transmission technology and communication engineering are really integrated.

Keywords

Transmission technology; Communication engineering; Application; Development prospect.

1. Commonly used transmission technology

1.1. Optical Fiber Transmission Technology

Optical fiber transmission technology is mainly through the use of the original basic equipment own light emitting diode, when the diode signal, the light signal will be propagated along with the light itself medium. When the optical signal is transmitted to the electro-optic diode, the electro-optic diode will monitor and receive the signal source in real time. At present, the common optical carrier regulation method is mainly controlled by using tiny motion amplitude keys. Optical fiber transmission technology is not only suitable for light-emitting diode, but also suitable for laser diode, which is convenient to adjust the brightness of the communication signal lamp with the detector in real time.[1]

1.2. Wireless mobile communication technology

Mobile wireless communication technology mainly transmits information through the use of antenna electromagnetic wave. The specific working principle is similar to the principle of TV station signal generator. It mainly uses satellites to set up electromagnetic wave and receive it at the same time, so as to realize the transmission and switching of lines. However, due to the small area covered by mobile wireless communication technology, the transmission power of technical communication is generally low. In order to solve this problem, transmission technicians connect each base station through optical fiber technology with the help of base

stations, and use the base station to transmit information to the wireless interface.[2]

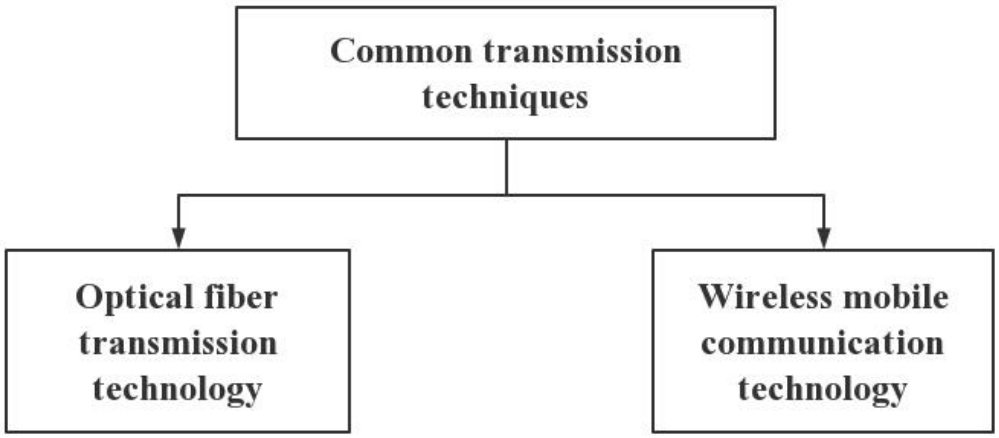

Figure 1 Common transmission techniques

2. Transmission characteristics of transmission technology in communication engineering

2.1. Smart Activation

Because the overall volume of the transmission equipment used in communication engineering technology is generally small, it is easy for the operator to use and move. Moreover, with the continuous development and progress of transmission technology, the volume of the transmission equipment used is gradually updated and improved, especially the transmission equipment related to network signals, and the flexibility is gradually improved. The overall capacity of the transmission equipment is greatly increased, providing certain flexibility and convenience for the use and storage of the transmission equipment.[3]

2.2. Diversification

In many communication engineering transmission equipment, function diversification is the key of communication equipment. When developing communication engineering equipment, technical personnel mainly give full play to the diversified functions of communication engineering on the basis of small volume and high flexibility of transmission equipment. Usually, an ordinary communication transmission equipment, with a variety of transmission functions, so that you can greatly reduce the required size and number of fiber optic cable core, so that the capacity and efficiency of the transmission route has been significantly improved, enhance the value of communication equipment transmission technology and technical content.

2.3. Integration

This paper mainly through the communication equipment with flexibility, diversity characteristics, but also the communication engineering equipment transmission system has the characteristics of integration analysis. The integration of communication engineering equipment transmission system will make the transmission speed of communication engineering equipment more convenient and efficient. At the same time, it also provides

convenient conditions for the supervision of transmission equipment. By using the system integration, the transmission equipment management personnel can replace the original transmission equipment, so as to complete the signal transmission in advance according to the regulations, and improve the flexibility and efficiency of communication engineering signal transmission.[4]

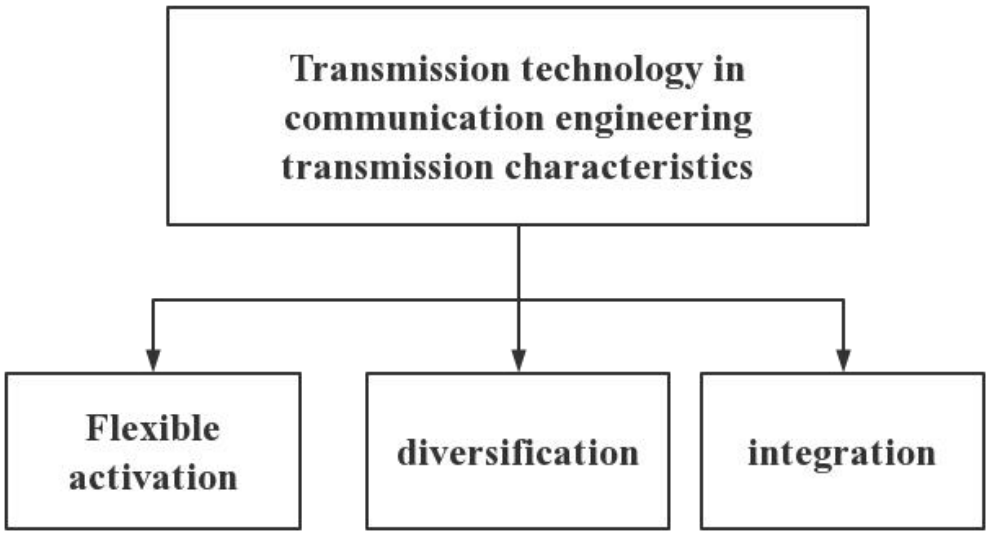

Figure 2 Transmission characteristics of transmission technology in communication engineering

3. Analysis of the application of transmission technology in communication engineering

3.1. Application of transmission technology in long-distance trunk network

In the process of the application of information transmission technology in long-distance trunk network, it mainly uses synchronous digital technology and corresponds to the information content of relevant levels according to different network speeds. In recent years, with continuous development and progress of our national economy, the users of long-distance network increase greatly, which causes the spacing of information exchange center to increase gradually, and greatly increases the route cost. Therefore, in order to effectively solve the cost problem, technicians use intensive optical wave multiplexing system and intelligent optical network, so as to maximize the transmission of data information through communication technology.[5]

3.2. Application of transmission technology in the local trunk network

Transmission technology plays an important role in the application of local trunk network. At present, the common transmission technology of local trunk network has been applied synchronous digital system, intelligent optical network, etc., and provides remarkable effects for the operation and development of local trunk network, and at the same time, the communication resources have been rationally utilized to the maximum extent. However, due to the low information capacity of the local trunk network, it is easy for the signal transmission process of the local trunk network to be poor and unable to transmit

large-capacity signals.

3.3. Application of transmission technology in wireless transmission

Wireless transmission technology is mainly used to complete information transmission related work by adjusting electromagnetic wave. Compared with other network transmission technologies, wireless transmission technology has reasonable cost and certain stability. Transmission technicians combine wireless transmission technology and monitoring technology, so as to establish a complete wireless monitoring system, to ensure that supervisors can timely understand the situation of the scene through the monitoring system. In addition, enterprises can also use wireless transmission technology to build enterprise database, which has a certain convenience.

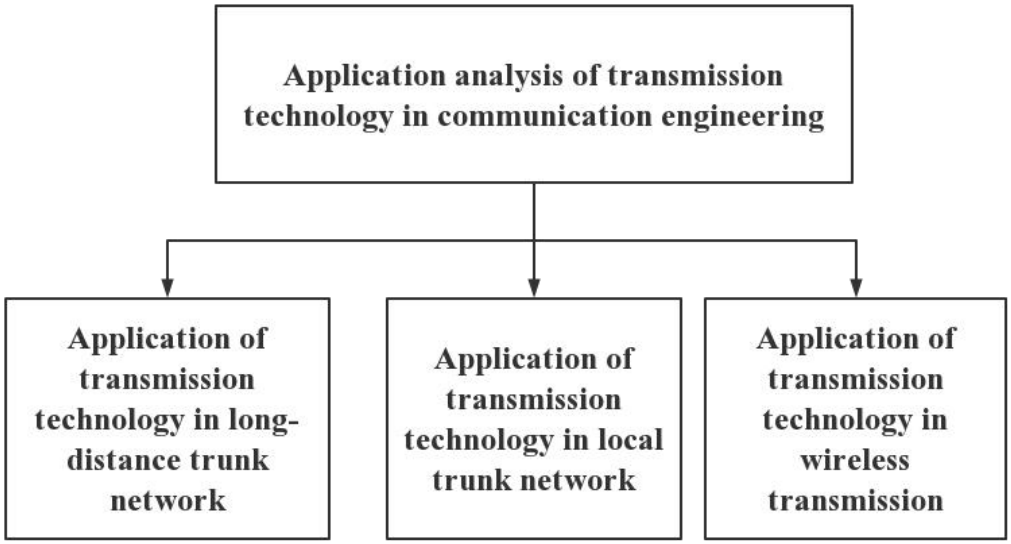

FIG. 3 Analysis of the application of transmission technology in communication engineering

4. Conclusion

To sum up, this paper mainly analyzes the application and development trend of transmission technology in communication engineering, mainly through the understanding of common transmission technology, transmission characteristics and specific applications and other related content for a simple discussion, we can find that each technology is unique, different transmission technology is applied in different ranges. With the continuous development and progress of transmission technology, it will be better applied in all social classes and enterprises to promote and promote our country's technology development to make contributions.

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