

Discussion on the effective application of transmission technology in information and communication engineering

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Abstract: At present, with the continuous development of social economy, information and communication engineering has also been greatly improved. In order to better meet the development needs of the information age, China's information and communication engineering should fully apply the transmission technology, so as to better promote the development of information engineering. However, there are still some problems in the application of transmission technology in information and communication engineering in China. Therefore, relevant researchers should analyze the application of transmission technology in information and communication engineering, and take effective countermeasures to solve these problems and improve the application level of transmission technology. Based on the analysis of the characteristics of transmission technology, this paper expounds the specific application of transmission technology in information and communication engineering, hoping to play some reference role for relevant staff, so as to better play the role of transmission technology.

1. Introduction

At present stage, the application of transmission technology in information and communication engineering has a very common problem, which has not fully played the actual role of transmission technology, and also hindered the development of information and communication engineering. The related personnel analyzed the defects of the transmission technology in the information engineering, took the countermeasures, and obtained the preliminary results. This also improves the application level of transmission technology in information and communication engineering. However, due to the influence of various factors, there are still some problems in the specific application process of transmission technology, and the application level needs to be further improved [1].

2. Characteristics of transmission technology

2.1. The volume of a product is smaller

With the rapid development of China's economy, people's quality of life is also improving, and ideas and the past has also undergone a certain change. In the new era, people pay more attention to the flexibility of products and put forward higher requirements for their appearance. People's communication and communication in daily life have become more frequent, and they are more dependent on products. This also brings good opportunities for the development of information and communication products, but at the same time, they have to face the relevant challenges in the new era. The information and communication industry should clarify the development trend of the new era, so as to effectively improve the appearance of products, control the volume of products, and further improve the portability of products, so as to improve its competitive advantage and promote the economic development of enterprises [2].

2.2. The product has many functions

In the new era, people have higher requirements for communication products, but now the functions of communication products can no longer meet people's relevant needs. In the past, communication products were mainly used for calling and receiving information. However, with the continuous development of science and technology and the change of people's thinking mode, the functions of related communication products have been further enriched, thus providing diversified services for people, which effectively improves people's quality of life.

2.3. Product integration

With the continuous development of The Times, the functions of products have become increasingly rich, which makes the trend of product integration more obvious, which also provides more convenience for people's life. Traditional communication products can only be used for signal transmission, so they cannot effectively change people's lifestyle. With the continuous change of market demand and the improvement of people's aesthetic level, the functions of products are also increasing, and bring a lot of fun to people's life. Product integration can bring better opportunities for the development of communication enterprises, improve their own economic interests, and play a certain role in promoting China's economic development [3].

3. Application analysis of transmission technology in information and communication engineering

3.1. Application of optical fiber transmission technology

At present, the main transmission technology used in China's information and communication engineering is optical fiber transmission technology, which has a strong advantage compared with other technologies. It can be transmitted by light, so as to ensure that users can receive signals transmitted by the other side more quickly. Fiber optic transmission technology can not only effectively match the relevant transmission content, but also meet the needs of users in many aspects. Under certain conditions, the transmission range of signals can be expanded continuously. This allows users to pick up signals even in remote areas. In addition, the application of fiber optic technology for information transmission can effectively reduce the impact of related external factors on information transmission, prevent the occurrence of signal interruption, and ensure the

communication function of users. Moreover, compared with other technologies, the transmission speed of fiber optic transmission technology is faster, which can effectively reduce the occurrence of communication jamming and has strong anti-interference ability. The application of fiber optic transmission technology can better promote the development of information and communication engineering, improve the construction quality, and provide people with high-quality services [4].

3.2. The application of wireless transmission technology

Wireless transmission technology is also one of the main transmission technologies applied in the construction of information and communication engineering. This technology mainly uses electromagnetic wave to complete the whole information transmission process, so that users can better receive information. When relevant communication enterprises apply this technology, the maintenance cost is relatively low, which can effectively save the operating cost of enterprises, improve the economic benefits of enterprises, and provide users with high-quality services, thus better promoting the development of enterprises. Besides, this technology does not need to lay a line, so it can save relevant costs, ensure the stability of information transmission, prevent relevant fault problems caused by line breakage, and avoid affecting users' experience. Wireless transmission technology can effectively realize long-distance information transmission in the specific use process, which can fully meet people's living needs, and it also conforms to the relevant concept of sustainable development in China, and plays a certain role in promoting environmental protection.

3.3. Application of long distance trunk network transmission technology

One of the most commonly used transmission technologies in information and communication engineering is the long-distance trunk network transmission technology, but the technology will have some problems in the specific use, and then affect the quality of communication engineering. In the specific transmission, the technology cannot better carry on the information transmission work for the relevant users on the basis of ensuring the cost saving, and it will also increase the operation cost of the enterprise itself. The development of the technology requires an effective combination of WDM and SDH to create an intelligent light structure that can increase the amount of information transmitted simultaneously, enhance the connectivity between WDM and other data, and thus reduce the efficiency operation cost of low projects, reduce the phenomenon of failure, and promote the long-term stable development of enterprises [5].

4. Conclusion

To sum up, in the development of information and communication engineering, transmission technology plays a very important role, is also the important foundation and key of its development, can play a certain role in promoting the development of information and communication engineering. However, there are still some problems in the application of transmission technology in information and communication engineering. Relevant units to deal with problems of transmission technology in engineering application for effective analysis, and according to the relevant requirements of the times to effectively improve the methods of application, so as to further enhance the application level of transmission technology, to be able to follow the development of the times and to better promote the development of information and communication engineering.

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