

The technology management path and its development trend in the field of communication engineering in the era of big data

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Abstract

In the face of the sustainable development of social economy and technical means, the current demand for communication is getting higher and higher, so improving the technical ability of the communication industry can better meet the communication needs of social justice. From the perspective of the long-term development of the communication industry, it is very important to identify the main path and development trend of technology management. Therefore, after understanding the basic characteristics of the field of communication engineering in the era of big data, this paper mainly studies the three technical management paths of cost control, talent training and cable management, and then determines the development trend of the field of communication engineering in the era of big data.

Keywords

Big data; Communication engineering; Cost management; Personnel training; Optical cable management.

Introduction

As the basic content of the development of modern information technology, communication engineering technology is mainly composed of communication system and communication network technology. Improving the management level in the field of communication engineering technology can better cope with the increasingly competitive market environment and provide high-quality communication services for social residents. Nowadays, China's communication engineering management technology is facing more and more challenges and opportunities. In order to ensure the normal operation of communication technology, it is necessary to strengthen the management of communication engineering construction and pay attention to the training and management of professional and technical personnel. Only in this way can the security of communication engineering be guaranteed.

1. Analysis of technical management path in the field of communication engineering

1.1. Cost control

In the era of big data, the field of communication engineering should strengthen construction cost control and reduce project investment costs. The cost management should be carried out according to the actual situation of the project, the construction conditions, resources and

other information of the construction route of the communication project should be comprehensively understood, and the design department should be carefully supervised to propose high-quality construction schemes, which can avoid excessive cost resources consumed during the construction of the project [1]. According to the analysis of the cost control flow chart shown in Figure 1 below, it can be seen that cost control will penetrate into the whole process of engineering construction, so it is necessary to set up a construction team with strong comprehensive ability and high professional quality to control costs in strict accordance with the schedule process, so as to improve the construction quality of communication engineering. On the one hand, it is necessary to strengthen the internal staff's technical training and external recruitment efforts, and improve the comprehensive ability of the construction team by means of expert technical lectures and employees' going out to study. On the other hand, it is necessary to put forward scientific supervision and management of safety prevention programs, effectively prevent the hidden safety accidents during the construction of the project, and fundamentally protect the life and property safety of the site construction personnel. Because the quality of security prevention schemes is in direct proportion to the cost control, the more perfect the security prevention schemes, the lower the cost consumption, and the worse the security schemes, the higher the cost consumption. In addition, communication engineering enterprises should reduce the construction cost on the basis of controlling the construction inverse power. In this process, the construction personnel should fully understand the construction technical process, organization design preparation, technical application specifications, etc., design and preparation of construction projects in strict accordance with the requirements, and it is strictly prohibited to violate the law.

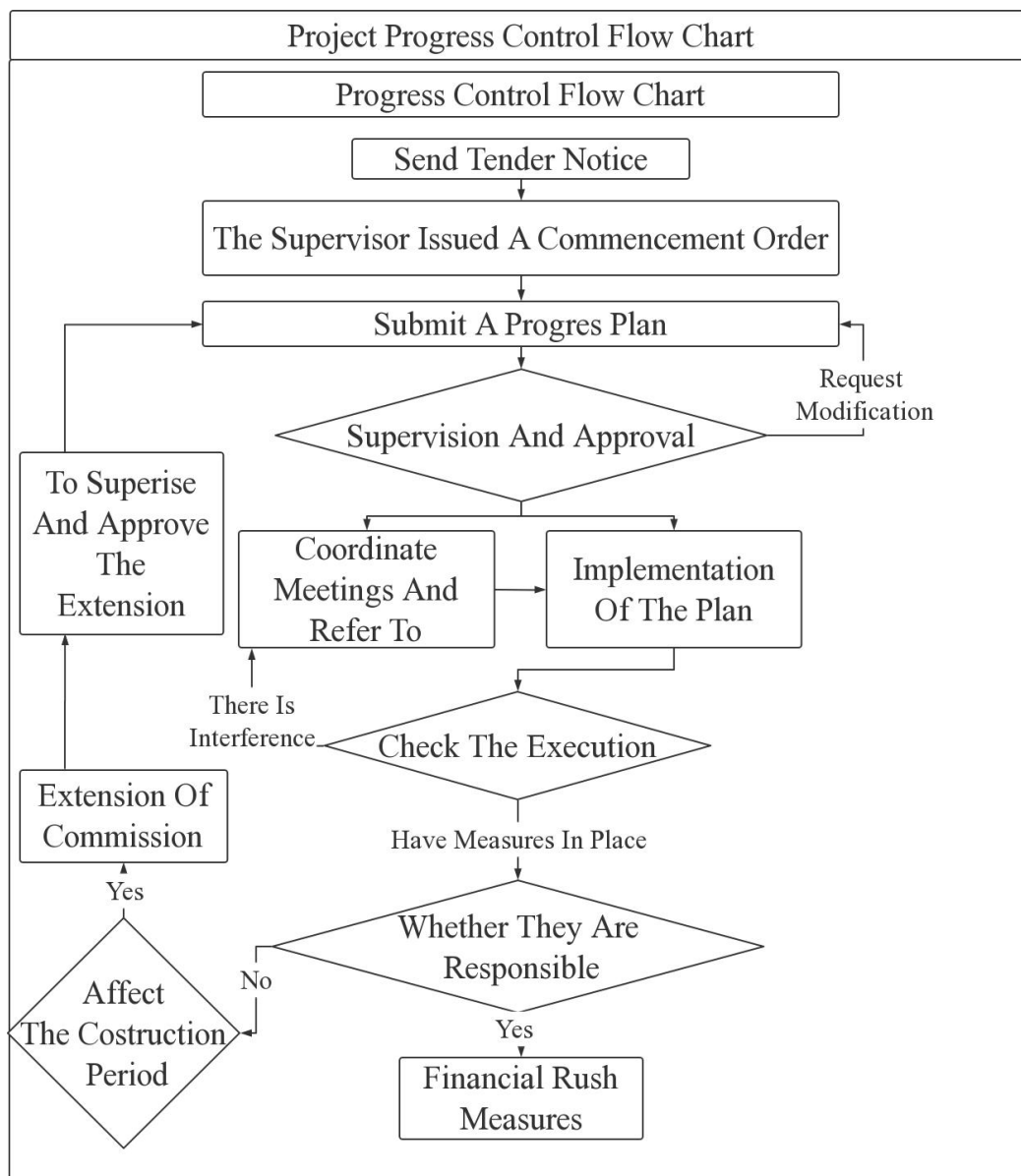


FIG. 1 Flow chart of cost control

1.2. Personnel training

In the rapid development of China's social economy, communication network is becoming more and more closely related to people's life and work. However, because there are few technical management talents in communication enterprises, they cannot meet the high standard and high requirements of communication engineering construction management [2]. Especially in the era of big data, how to train communication engineering talents and improve the innovation ability of communication enterprises is the focus of research by Chinese scholars. According to the analysis of communication engineering management knowledge system as shown in Figure 2 below, technical personnel training should start from the following aspects: On the one hand, training activities such as communication transmission technology management and communication engineering project operation management should be organized within the enterprise to ensure that employees of all departments can master the whole process of project initiation stage, implementation stage, completion stage

finally, to carefully review the contractor's construction qualifications, in strict accordance with the construction management needs to check the entry conditions.

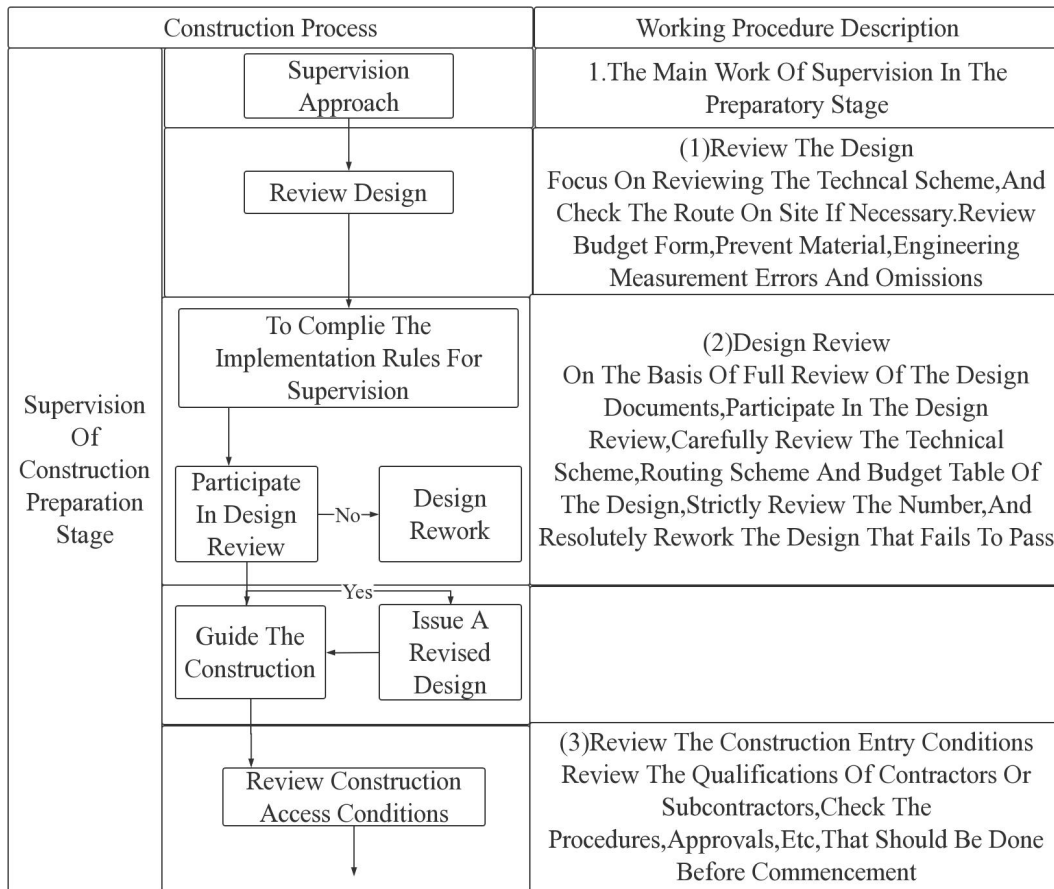


FIG. 3 Supervision process in preparation stage

2. The development trend of communication engineering analysis

Nowadays, the development of the communication industry has entered a sustainable stage, and both economic benefits and jobs have become the focus of China's economic development, and its market share is still increasing [4]. In the future, China's communication engineering should not only widely use wireless broadband technology to provide technical support for urban construction and social information modernization, but also improve the development of optical communication technology and improve the speed of communication engineering. In this process, by grasping the development opportunities provided by the era of big data, enterprises actively create higher economic benefits, understand the service needs of social residents, and provide more convenience for social development.

3. Conclusion

To sum up, the innovation and development of communication engineering has brought good communication services to people, but in China's communication engineering is an intensive production industry, and the requirements for technical personnel and technical management are getting higher and higher, so the future enterprises should increase the intensity of

communication engineering technology management on the basis of clarifying their own sustainable development goals, so as to improve their own market competition level.

References

- [1] Ji Huang. Application and development prospect of 5G mobile communication technology in the era of big data [J]. China Broadband, 2021, 000(001):11,13.
- [2] Xin Zhong. The technology management path and its development trend in the field of communication engineering [J]. Engineering and Technology (Abstract Edition), 2021(2017-2):115-115.
- [3] Shunxin Hu. Explore the application and development of transmission technology in communication engineering [J]. Leisure, 2021, 000(003):P.1-1.
- [4] Shuchao Zhang. Application and Development direction of Transmission Technology in Communication engineering [J]. China Kitchen & Bath, 2021(3):0031-0032.