Application and Research of Electronic Information Technology in Internet of Things

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Abstract: In recent years, China's science and technology have been rapidly developed, making Internet of Things technology widely used in various fields. As an important guarantee for the normal operation of the Internet of Things, electronic information technology is also very important for the stable operation and subsequent development of the Internet of Things. This paper mainly analyzes the application status of electronic information technology in the field of Internet of Things.

1. Introduction
As a major change in the development of China's information field, the Internet of Things can also have a certain driving force for the development of various industries. In the process of IoT operation, through the application of power information technology, each link in the IoT system can be further strengthened, thus providing sufficient technical support for the development of the Internet of Things. Therefore, relevant technicians also need to explore the application of power information technology in the Internet of Things, and continuously strengthen the integration of the two technologies to promote the further improvement of China's Internet of Things technology.

2. Electronic Information Technology Overview
Information mainly refers to the general form of describing the state of things, mostly through the form of words, signals, images and data to convey the state of things. Through the application of electronic information technology, various information can be effectively obtained, processed, utilized and transmitted. As an important feature of the current development of China's computer industry, power information technology has the following three characteristics in the specific application process: 1. Intelligence and integration. In recent years, China's computer industry has developed rapidly. Intelligentization is an important direction for the development of computer technology. Through the application of power information technology, human perception and behavior can be imitated to a certain extent. Integrated logic analysis and information processing. 2. Network and digital. In recent years, China's computer industry has developed rapidly. As a fusion product of computer technology and information technology, the network can further improve the rapid exchange and sharing of information resources, and promote the effectiveness of electronic information technology. 3. Efficient and fast. Through the application of electronic information technology, it is possible to directly integrate, store and manage various information resources, so as to effectively improve the efficiency and efficiency of the use of information resources. In recent years, China's electronic information technology has developed rapidly and has gradually become a key technology in the normal operation of the market. The current electronic information technology includes sensors, computer networks, computer platforms and electronic applications. The daily life is also closely related. Therefore, China needs to further strengthen the research on electronic information technology.
to promote the continuous development of society [1].

3. IoT Technology Overview

At present, there is no clear definition of the Internet of Things. The technology mainly uses various technologies such as intelligent sensing, recognition technology and computer communication technology to realize the effective connection between people and objects, thereby a key technology is the control between one person and object. Therefore, IoT technology can be regarded as an extension of Internet applications, which not only covers all the contents of the Internet, but also enables effective control of various objects. However, the Internet has the characteristics of openness, and its content is mostly popular and open, while the Internet of Things is mostly set up by private companies, and the content contained therein is also characterized by privatization. The Internet of Things technology is mainly composed of the three aspects shown in Figure 1. The information sensing aspect mainly refers to the related sensor or controller, and the function is to make the effective connection between the terminal information and the device; the information data function is transmitted to the network terminal for storage and processing through a series of advanced technologies such as cloud computing platform, the data generated during the operation of the Internet of Things. In this process, the security and reliability of various data information transmission must be fully guaranteed; In terms of application, the relevant information of the operation of the Internet of Things is recorded, and then the data is transmitted to the terminal by means of some controllable measures [2].

![Figure 1: IoT structure framework](image)

Analysis of the application characteristics of the Internet of Things, with the continuous development of China's network technology, making communication between people more convenient, people in different places can also communicate and work remotely via the Internet. In the application process of the Internet of Things technology, in addition to the communication between people, it is also possible to exchange and communicate information between people and goods, items and articles. In order to maximize the performance of the IoT control system, it is first necessary to sense the items. In the process of controlling items, people also generate a large amount of data and information. Through the mode of information flow, the Internet of Things system can accurately grasp the circulation of goods, and on this basis, to control the items effectively. In addition, the items under the Internet of Things system are mostly private items, which requires the privacy of these data in the process of information transmission, and puts higher requirements on the operational security of the Internet of Things.
4. Application of Electronic Information Technology in Internet of Things System

4.1 Electronic Ordering System
In recent years, China's Internet of Things technology has developed rapidly and is widely used in the field of electronic commerce. As an important application mode of power information technology in the Internet of Things, the electronic ordering system can view and process the goods source information by means of the enterprise network terminal, and remotely order the goods. Through the application of the new ordering method of electronic ordering system, on the one hand, it can expand the sales channels of suppliers, on the other hand, it can effectively save the operating costs of dealers, and it also has certain positive significance for the development of China's economic market.

In order to ensure the operation effect of the electronic ordering system, it is first necessary to construct a safe and reliable network environment, and then transfer the data that needs to be traded to the relevant area. In the process, various security protection measures are needed to carry out the transaction data. Protection, and then refine the transaction standards to ensure the smooth progress of the entire electronic transaction. As an important guarantee for the smooth operation of the electronic ordering system, the power data exchange system can effectively transmit the transaction information, so that the suppliers can timely deliver according to the requirements of the order, and promote and further improve the convenience of the electronic ordering system[3].

4.2 Bar Code Technology
With the continuous development of China's science and technology level, electronic identification technology has also achieved good application results in the process of product identification. Through the application of the barcode, the merchant can directly transmit the product information to the customer network, and then quickly obtain the information of the product by scanning the barcode mode. As a data transmission technology, barcode technology can record commodity information through the barcode mode. Dealers can only scan the barcode on the product through the relevant instruments during the sales process of the product. Mastering the basic information such as the price of the product, and it will give consumers a more convenient and quality shopping experience [4].

Analysis of the current state of application of electronic systems, bar code technology terminology coding technology can quickly identify the corresponding symbols, and then transmit them to the relevant terminal systems. The bar code in the product is mainly composed of lines of different widths, wherein the frequency of the line reflection and the space between the lines form a new data symbol, so the bar code technology can also be used as a mechanical digital combination. In addition, the barcode of each product is unique and can effectively reflect the information of the product. When the barcode recognizer is used to identify the barcode, the data and information of the product can be quickly obtained. In addition to recording the price and code of the product in the barcode, part of the information of the product is also included to some extent, so that the product information can be effectively obtained by identifying the barcode mode.

4.3 Communication Technology
In recent years, China's communication technology has been rapidly developed. It can not only carry out voice calls, but also transmit data such as pictures, texts and audio. In the Internet of Things system, it can also carry out goods through the reasonable application of communication technology. The rapid and accurate transmission of information to ensure that goods and personnel can communicate smoothly. In addition, people can also view the transportation information of goods through the Internet of Things, thereby ensuring the safety and reliability of cargo transportation. Through the application of communication technology, it is only necessary to issue relevant instructions in the relevant software system to realize the transformation of cargo data information and transportation conditions, so as to realize timely and effective control of cargo transportation. In the language navigation, the application of communication technology not only has a very high precision, but also has a certain degree of cost reduction compared with GPS technology. Therefore, in the
current IoT system, communication technology has become a common management technology, and can realize real-time finishing and control of goods.

4.4 Satellite Positioning Technology
Through the application of satellite systems, it is possible to effectively control the location on the surface and provide accurate navigation. Through the application of satellite transportation technology, managers can accurately grasp the overall transportation of goods, or directly search for the quantity, weight and location of the goods on the computer network. In this way, a reasonable choice of transportation mode can be made on the basis of combining the actual needs of the customer. In addition, through satellite transportation technology, the goods can be tracked in real time, and the operation line can be effectively grasped. This can provide sufficient technical support for the improvement and optimization of the Internet of Things, thus further improving the performance of the Internet of Things. However, in the application process of satellite positioning technology, there are still problems of high application cost, which leads to its application in the Internet system [5].

4.5 Intelligent Transportation System
In the intelligent information system, various electronic products can be used to effectively monitor the whole process of goods transportation, optimize the communication between goods and management personnel, and promote the punctuality of cargo transportation to be further improved. The existing intelligent transportation system is mainly composed of roads, vehicles and navigation parts. It needs to collect the real-time running status of the vehicle first, and then make reasonable adjustment of the transportation route based on the combined road data and meteorological conditions. In order to ensure the smooth transportation of goods. In addition, through the application of the intelligent transportation system, it is also possible to optimize and perfect the driving route of the vehicle, and also realize effective monitoring of vehicle articles. It can be said that in the intelligent transportation system, the overall transportation status of the goods is in the state of comprehensive monitoring, so that the problems existing in the transportation process can also be timely responded, and can be effectively solved in the first time after the transportation accident occurs to ensure the safe operation of the goods.

4.6 Warehouse Management Technology
As an important component of the Internet of Things system, the warehouse management system is also an important guarantee for the full play of the Internet of Things function. With the continuous development of China's electronic information technology, it provides sufficient technical support and software support for the optimization and improvement of the warehouse management system. Through the application of electronic information technology, the warehouse service system, the other shore call system and the internal and external docking system in the warehouse management system can be effectively optimized, and all the management data in the warehouse management process can be optimized and organized, at the same time the space of the warehouse can be obtained and maximize configuration to increase warehouse efficiency and storage capacity.

5. Brief Analysis of the Development Trend of Electric Power Information Technology in Internet of Things

5.1 Accelerate the Development of Information Technology in the Internet of Things
Through the application of electronic information technology, the speed of information integration in the Internet of Things system can be further accelerated. By constructing a special business system website model, the customer group can be effectively classified on the basis of combining customer data and needs. On this basis, a perfect customer information system is formed, so that the items can be reasonably refined and classified, so that the operational rationality of the Internet of Things system can be effectively improved. In addition, by establishing a network operation point mode, it is also
possible to improve the understanding of the overall situation of the article, and then realize the full integration of the Internet of Things and electronic information technology, and can also promote the development of the Internet of Things.

5.2 Optimize the Operation of the Internet of Things Through Power Information Technology
In recent years, China's Internet technology has developed rapidly, and the application of electronic information technology has a very important role in speeding up the speed of the Internet of Things. Therefore, the relevant technical personnel also need to actively apply electronic information technology to optimize and improve the operation status of the Internet of Things, and need to actively construct the intelligent management system of the Internet of Things. Only in this way can each of the articles exist in the transportation process and effectively grasp the situation and promote the further improvement of the operation level of the Internet of Things in China.

6. Conclusion:
As an important development direction of the Internet, the Internet of Things also has a very broad development prospect. In the Internet of Things technology, through the application of electronic information technology, it is also possible to monitor and manage the item information in real time, thereby promoting the continuous and stable development of the Internet of Things.

References:
[1] Yang Ning. Application of Electronic Information Technology in Internet of Things [J]. Communication World, 2018, (4): 99-100.
[2] Wu Xuchu. Analysis of the practice of electronic information technology in the Internet of Things [J]. Science and Informatization, 2018, (10): 1, 4.
[3] Li Ronglin. Application of Electronic Information Technology in Internet of Things [J]. Digital World, 2018, (1): 96.
[4] Ye Yanzhuo. Application of Electronic Information Technology in Internet of Things [J]. China New Communications, 2017, (23): 106.
[5] Xue Yitong. Application Research of Electronic Information Technology in Internet of Things [J]. Technology and Innovation, 2017, (23): 148-149.