

Discussion on Present Situation and Future Development of Industrial Engineering Technology

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Abstract:

Industrial engineering technology has been widely used in the process of contemporary social construction and development in our country, which plays a large role in the development of each industry. In terms of the current status of industrial engineering technology application, there is a big difference between China and developed countries, and still has a very large room for progress, which has a huge impact on the manufacturing industry. This paper mainly analyzes the current situation of industrial engineering technology, and briefly discusses its future development trend, and is committed to accelerating the pace of industrial engineering technology application and development, laying a solid foundation for China's future industrial engineering construction.

Keywords:

Industrial engineering technology; Development status; Development trend

Introduction:

From the current economic construction point of view, many areas in the development of a certain degree of restrictions, resulting in the development of some work difficult to meet the fundamental requirements, and even in the later stage will produce more problems to be solved. In the use of industrial engineering technology, the implementation of a lot of work will be stuck in the technical level of backwardness, it is difficult to fully meet expectations. Therefore, it is necessary to clarify the problems existing in the development of industrial engineering technology, solve the current specific situation, take targeted measures to promote the improvement of the technical level, and provide impetus for the development of the industry in the market economy.

1 Overview of industrial engineering technology

Industrial engineering technology is not a pure form of technology, it involves more subject content. In the use of this technology, technical personnel need to have a strong economic analysis and management ability, in order to fully reflect the utility of the technology. When using industrial engineering technology in different fields, it is necessary to master the key points of technology application. In particular, it is necessary to ensure that the function of technology is reflected in the actual production application through the use of scientific management systems, and reduce production costs while improving production efficiency. In the practical application of industrial engineering technology at this stage, practitioners are required to combine natural and social science, science and technology and management technology to reflect strong composite ability and have high comprehensive literacy, so as to cope with the problems generated in the application of technology. Industrial engineering technology is a subject with engineering attributes. In operation, it is necessary to apply engineering design principles and corresponding analysis methods to actual construction, and it is also necessary to formulate scientific and reasonable technical implementation plans to ensure that the final industrial production quality meets the relevant standards. In the process of the development of modern industrial engineering, it has gradually become the core of technological development, which needs to be based on the optimization of human thinking organization and design to meet the complete work needs.

2 Development status of industrial engineering technology

2.1 Development of foreign industrial engineering technology

Many developed countries have caught up with China in the research and development and application of industrial engineering technology, not only in terms of production quality and efficiency, but also to a large extent to reduce production costs, so that the technology is in continuous optimization and improvement. At the end of the 19th century, foreign countries put forward the relevant theoretical research directions of industrial engineering technology, divided the production methods in labor production according to their specialties, and also determined the corresponding production standards, forming a standardized production mode. During this period, the scope of application of industrial engineering technology was relatively small, but it soon became the main direction of the development of industrial engineering technology. By the 30s of the 20th century, the application scope of industrial engineering technology continued to expand, providing a technical foundation for the development of related industries. Even many colleges and universities have opened special industrial engineering technology disciplines and implemented professional definitions for them, so far, it has entered a period of rapid development.

2.2 Development of domestic industrial engineering technology

Compared with the development of industrial engineering technology abroad, the speed of technological development in China is relatively slow, mainly due to the problem of economic system transformation in the 20th century. It is difficult for many industrial enterprises to fully utilize industrial engineering technology to achieve rapid development in the production development, and many enterprises lack attention to it, resulting in domestic industrial engineering technology in the research and development stage. Since the reform and opening up, more and more enterprises have begun to attach importance to industrial production and development, and have made significant changes to industrial engineering technology. Some enterprises have made certain achievements through the application of industrial engineering technology, which has promoted the comprehensive development of this technology in China. In addition, some researchers in relevant majors have proposed to introduce foreign-owned joint ventures and build good cooperative relations, which has also improved China's competitiveness in coping with global economic integration and reduced the pressure on development. However, China's industrial engineering technology has not yet formed a perfect application system, but under the influence of global economic development, the discipline of industrial engineering is constantly adjusting. Therefore, in the future development, it is still necessary to pay attention to the research of industrial engineering technology to provide a reliable impetus for the construction and development of related fields in China.

3 Future development trend of industrial engineering technology

3.1 Enhance the capacity for independent innovation

From the perspective of the development situation of industrial engineering technology in recent years, in the process of strengthening the development of industrial production in China, it is necessary to strengthen the independent innovation ability to provide a sound driving force for the future development of industrial engineering technology. In the current period of rapid development of the industrial industry, the development of industrial engineering technology is unstoppable, and many enterprises have begun to use industrial engineering technology to improve their competitiveness and occupy a higher market share. Under the background of the development of great times, the future development of industrial engineering technology needs to meet the current development needs of our country, mainly reflect the innovation ability, to achieve the purpose of keeping pace with the times. At present, the embodiment of independent innovation ability has become an important standard to measure the comprehensive strength of the country. In the development of industrial engineering technology, enterprises need to improve the independent innovation ability of technical personnel to lay a good foundation for the improvement of the comprehensive benefit level of enterprises. At the same time, establish a good corporate image, realize the vigorous development of enterprises, and provide excellent technical support for the development of China's industrial engineering technology.

3.2 Focus on practical application training

The development of any technology needs to be based on practical application, and the purpose of research and development of different technologies is to reflect the technical effectiveness in practical applications. Therefore, in the development of industrial engineering technology, it is necessary to pay attention to practical application training, get rid of the limitations of industrial engineering manufacturing, and promote the industrialization of engineering projects. In the process of developing the industrial industry in recent years, many enterprises are reforming the development model of enterprises. The mode is mainly based on the construction of industrial engineering technology in line with the development trend of The Times, which provides fundamental guarantee for the development and progress of society. Therefore, in the future development, it is necessary to pay attention to the training of practical application of industrial engineering technology. In particular, enterprises need to reflect strong technical ability

in production and operation, and take the embodiment of practical application ability as the core to provide necessary guarantee for the application and development of industrial engineering technology.

3.3 Cultivate the professional ability of personnel

In the process of development in the new era, some enterprises have the problem that the technical ability of the staff does not meet the actual needs, resulting in the lag of enterprise development and the difficulty of occupying the expected market position. In the future development of industrial engineering technology, it is necessary to pay attention to the training of professional ability of personnel, so that they can reflect their professional ability in practical operation and lay a good foundation for industrial production. Enterprises need to carry out technical training for professionals and pay attention to the cultivation of professional ability of personnel. It can combine professional skills with daily life, so that technicians can realize the importance of the application and development of industrial engineering technology for personal and enterprise development. Enterprises can build a sound reward and punishment system to assess their professional ability after organizing personnel training; punishing those who fail to meet the assessment standards; rewarding those who perform well and thus increase the motivation of technicians. Enterprises also need to consider their future development situation, clarify the direct impact of professional training on the development of industrial engineering technology, and promote the long-term application of technology.

3.4 Improve the discipline system

Industrial engineering technology contains a variety of disciplinary systems. In the future development, it is necessary to improve the discipline system and strengthen the combination of industrial engineering management and information system combined with the development needs and forms of contemporary information technology. In the process of improving the discipline system, enterprises need to pay attention to the important influence of people in the development of technology, also need to use contemporary information technology system to optimise the integrated facilities, to achieve the best state of man-machine integration. Industrial engineering technology in the continuous development can also be introduced into a number of professional disciplines, human factors engineering, e-commerce, etc. and industrial engineering disciplines combined with each other. Expanding the scope of technology research can also help enterprises solve comprehensive problems and reflect the flexibility of technology.

Conclusion

In the process of future development, industrial engineering technology can not be confined to a single traditional manufacturing industry, but needs to be extended to other industries to meet the development needs of the times. Enterprises need to improve the professional ability of technical personnel, so that they have a strong ability of independent innovation. Combined with the engineering-related content and the current state of technological development of the application of technology to optimise the effect, so as to provide a reliable guarantee for the comprehensive development of industrial engineering technology.

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