Research on the Application of Software Engineering in the Construction of Enterprise Information Platforms

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Abstract: With the rapid development of our country's economy and science and technology, all kinds of enterprises are constantly looking for more effective technology strategies to improve their product quality. It can be said that the birth of this information system for the company to provide a good solution. In the process of building enterprise informationization, if it can be well applied, it will have a great impact on the construction results. Based on this point of view, this paper analyzes the application of software engineering technology in our country.

Keywords: Software engineering; enterprise information platform; technology application

1. Introduction

In our country, the market economy system is constantly improving, which is good for the development of the company, but also bad. On the one hand, it provides a bright future for the development of all kinds of companies, but it also has some negative effects on companies. For example, the competition between companies becomes more intense. Therefore, in this case, if the company wants to maintain healthy development, it must strengthen the use of information technology, advanced information technology will be used in the company's management system, the company's information construction is also very important. When the management level of the company is improved, the core ability of the company will be improved, at the same time, it will open up a new way of operation of the company, establish an information-based platform, enhance the competitiveness of the company, and make the operation of the company more information-based and more advanced. To strengthen the information technology standards and management norms to ensure the integration and sharing of information to achieve scientific and effective management. When participating in the formulation of standards, they shall strictly abide by national and international standards, and formulate technical standards in line with their own characteristics. Accelerate the normalization of information coding, data source, application platform and business process. Promote the standardization of informatization construction, and establish unified standards for system design, program preparation and project management. Promote the standardization of data interaction interface among various departments, and promote the integration of various departments. Build and improve the information-based management standard system, and establish management measures and implementing rules for work management, planning and planning, project bidding, project implementation, project acceptance, system operation and maintenance, security and standards. Strengthen the implementation of technical standards and management norms.

2. Basic principles and strategies for enterprise information platform development

2.1. Ensure reasonable development of enterprise information platform

Create a business profile standard that is global and extensible. In cases where the current enterprise single application system does not cover all the requirements of the business unit, it is necessary to establish an extensible, tensile and flexible infrastructure for collaboration to meet the requirements for business integration in the Internet environment and to connect the different services of the application software using the defined interfaces and contracts between these services. Enable current or future

applications to interact freely in a consistent and common way.

In order to support the informationization of the whole enterprise, it is necessary to design three platforms, namely hardware platform, software platform and application system platform. Among them, software as the support and information technology as the core is an important direction of information technology development.

Before setting up the information platform, the first thing for enterprises to do is to make a scientific and rational plan. Moreover, each enterprise should not simply plagiarize others' successful experience, but should base on the reality of the company and make it according to the current development situation and the actual situation of the company. In addition, in the actual implementation, the company's staff put forward better suggestions and opinions, the company's relevant responsible persons, leaders should actively and timely absorb, make its management platform more humanized, more conducive to improving the building objectives, so as to ensure that the program developed more appropriate.

In order to manage enterprises effectively, it is necessary to build a standardized information management platform and take the platform as an opportunity to deepen the information construction. For example, in the process of creating the information management platform, the management department should communicate with other departments, integrate the information of personnel and resources into the management platform, and then, according to the requirements of each department, carry out reasonable allocation and management of these human and material resources to improve the utilization of resources. At the same time, the purchasing department can use this information platform to understand the needs of all departments in the company, and according to these needs to focus on procurement, so as to save money. The financial department can understand the company's capital needs through information technology, so as to better allocate. The correct use of information platform can not only optimize the management process, but also reduce the time spent in the traditional management and improve work efficiency. In the establishment of an information system, we must link the various management processes and work, deal with it, deal with it, establish a scientific and systematic enterprise management environment.

2.2. The construction of enterprise information platform shall focus on the development objectives of enterprises

To strengthen the information work of central enterprises can not only play a leading role in the construction of China's enterprise information, but also improve the overall level of China's economic information development. In the past few years, the state-owned enterprises in our country have made remarkable achievements in informationization. Many state-owned enterprises have already walked ahead of the country. However, from the overall point of view, there is still a long way to go between the information level of central enterprises and the need for enterprises to grow stronger and more competitive. There are still some problems in the construction of integrated management information system and the security of information system, and there is a lack of high-level information talents. These problems to enterprise's management level enhancement, enterprise management benefit enhancement and enterprise's market competitive power enhancement has caused the very big barrier. In order to accelerate the informatization process of the central enterprises of our country, promote the growth of the central enterprises, enhance the core competitiveness of the central enterprises and guarantee the safety and stability of the state-owned enterprises, in accordance with the requirements of the National Informatization Development Strategy 2006- 2020, the following implementation plans are put forward for the central enterprises of our country

In the construction of enterprise information platform, we should find out the problems we are facing, analyze and diagnose our own enterprises comprehensively, and then learn from the successful experience of other excellent enterprises. After analyzing the current situation of the company, the company should introduce a large number of outstanding talents, and apply advanced management concepts and information technology to their work.

On this basis, the establishment of an information technology platform, its aim is to promote the company's economic benefits. Therefore, the choice of software projects should also be taken into account in practice. What the enterprise wants, this is the construction work first important matter, enterprise's management must develop toward a more standard, the platform construction must carry on the comprehensive plan and the instruction. In order to achieve the company's development goal and improve the company's economic efficiency, the company can no longer stick to the traditional concept

of the past, but to innovate and combine with modern technology to make positive contributions to the construction of an information platform.

The relevant departments shall strengthen the support for the informatization construction of enterprise management work, and have both funds and technologies to help the enterprises of our country successfully carry out the informatization construction and enhance their competitiveness in the market. Relevant government departments should establish standards and norms of information-based management, promote internal management familiarity, and train and certify employees, so as to enhance the awareness of management informationization. In addition, the company's senior executives should change their minds at the right time, have a comprehensive understanding of the company's management, and set an example to support the company's management. Lead all employees of the company, continue to deepen the reform and construction of the company, increase the input of manpower and financial resources in the information construction, and express the firm attitude of supporting the information construction to all employees in thought and behavior.

2.3. Reasonably evaluate the development of enterprises

In the construction of information platform, we must take this as the first job, and learn from the experience of other excellent enterprises to achieve their own upgrading. After a correct evaluation of the company's development, in order to achieve the desired results of the platform, the next work is to train the company's employees, establish an excellent team of employees, and set goals in a systematic and comprehensive.

First, the stability of the evaluation is guaranteed, and the new aspects and indicators of the evaluation are improved. In order to ensure the consistency, continuity and comparability of evaluation, the evaluation criteria for 2022 remain unchanged. At the same time, in contrast with the relevant decisions and arrangements of the Central Committee of the Communist Party of China and the State Council, the new requirements for promoting the development of SMEs and the new changes, new trends and new problems in the external environment faced by SMEs have been combined to further optimize a single indicator. The evaluation system includes 5 first class, 21 second class and 38 third class. Among them, "market environment", "legal environment", "financing environment", "innovation environment", "policy environment" is the focus of this article.

Second, the establishment of multi-dimensional evaluation indicators to further enrich representative cases. There are five sources of assessment data: local government departments, online business surveys, field research and third-party walk-through tests, and public statistics, as well as government websites, media and authoritative agencies. We have conducted a questionnaire survey of more than 34,000 SMEs, collected more than 400,000 data, made more than 300 phone calls, sent more than 300 e-mails, conducted surveys in 10 representative cities, and conducted face-to-face communication with more than 200 enterprises. They had an in-depth exchange with the relevant local government departments, enterprise service agencies and industry associations and chambers of commerce, and fully realized the measures, achievements and typical experiences and practices adopted by the cities participating in the assessment in improving the development environment for small and medium-sized enterprises.

Third, through the comparison and analysis of the evaluation data in the past three years, it highlights the development trend of ecological environment quality in the participating areas. After comprehensive calculation and comparative analysis of the data information obtained from multiple sources and the historical data in the recent three years, a detailed analysis is made of the data, and a detailed explanation is made of the macro-economic situation and the measures taken by various regions to optimize the development environment, so as to better reflect the achievements made by China in promoting construction, reform and excellence through evaluation.

Fourthly, in view of the new situation and new problems, the investigation and research on the implementation effect of the support measures to promote the development of private enterprises were carried out. In recent years, in order to help MSMEs tide over the difficulties, the government has launched a series of supporting policies. Cities are actively promoting the implementation of various policies and measures, focusing on the production and operation faced by MSMEs. In the course of the evaluation, the enterprises symposium and questionnaire survey are adopted to comprehensively understand the production and operation status and development will of the small and medium-sized enterprises in the cities participating in the evaluation, the understanding and implementation of the

policies on helping enterprises and the satisfaction of the enterprises are analyzed in detail, and these problems are summarized.

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3. Application of software engineering in the construction of enterprise information platform

3.1. Application of CRM Software System

The full name of CRM is the customer management system, which includes five major functional modules, namely: customer information management, sales process automation (SFA), marketing automation (MA), customer service and support (CSS) management and customer analysis (CA) system. The aim of CRM is to coordinate the interaction of sales, marketing and service between enterprises and customers, and improve their management level.

SCRM's full name is customer social relationship management, social marketing. Along with the development of social communication, the function of social media marketing and social enterprise collaboration is to realize social communication among customers, customers and employees.

CRM is a good management platform, which can track new and old customers in time. The introduction of this technology has brought many benefits to the enterprise, such as enabling independent business operations, simplifying service processes, making it faster, easier, and easier to manage. Most importantly, customers can follow their own goals, clearly and quickly docking with the company, which is a win-win situation. Although CRM software system is a basic software, it plays an important role in management mode, content, method, structure and so on. Therefore, it is the first choice of enterprise[2].

3.2. Rational use of resource planning software by enterprises

ERP as a new management concept, in today's world, it has been the most widely used information management system. The ERP system combines the characteristics of discrete production and flow production, based on the modern enterprise management concept, integrates various management functions in the system, such as planning, transaction processing and control, etc.

Resource planning system is an integration platform of integrated information, which provides enterprises with technical information and personnel information. Most enterprises use it to manage the

business process, can also use it to divide the core leadership or technical personnel, and then form a value chain, which is very important for the survival and development of enterprises. When using resource planning software to manage business process, usually, the whole business is first divided into business modules, and then associated with other business modules. This way of operation can not only ensure the accuracy of the information provided by the company, but also can make regular summary and analysis of the information provided by the company. For a company, it can be timely to recognize their own risks, and can make the corresponding response and handling. Resource planning software can do this by collecting, integrating and analyzing data, and it can avoid certain dangerous factors in the development of a company[3].

3.3. Application of network information communication technology

Although in the past five years, China's information and communications industry has made significant achievements, but there are still some weak links and weaknesses, industry development and people's needs for a better digital life there is a gap. Firstly, the informatization construction of our country is still in the state of unbalanced development in different regions, and the global layout of international submarine cable, satellite communication network, cloud computing and other network equipment is not complete enough. Secondly, the application of ICT in manufacturing industry is not enough, and the role of ICT in technology and data has not been brought into full play. Third, the industrial policy, the system and so on urgently need to perfect, the industrial supervision level and the industrial development level still need to enhance. Fourthly, the network security protection system and capacity of our country need to be innovated and strengthened. There is still a big supply gap in the network security industry of our country, which cannot fully meet the development needs of digitalization, networking and intelligence of our country.

The use of Internet communication technology, information sharing can be achieved, is to build an important part of enterprise information. In the Internet of Things, the Internet and other technologies constantly updated today, in order to enable companies to better use of network communications technology, such as GPRS, the Center website. In the process of information construction, we should take the standard proposed by the enterprise information communication as the key link. Only in this way can the information interconnection be successfully completed. We should also ensure the effective transmission of information, the safe and inerrant transmission of information, and prevent the phenomenon that information is stolen in the process of transmission. Because of information leakage, it may lead to the collapse of the whole enterprise. Therefore, in the process of informationization, enterprises should learn to use all kinds of communication technology, keep abreast of all aspects of the company's development, and can be timely changed and adjusted. The construction of this information platform is effective for enterprises, which can promote the informatization of enterprises. Only in this way, can we maximize the role of modern communication technology[4].

4. Conclusions

But in a company's long-term development process, a company's information platform construction has played a vital role. When using engineering software in the future, enterprises must pay attention to the actual situation in their own development, and make reasonable adjustments.In today's world, with the economic globalization and market diversification, the number of enterprises and companies is also increasing. Now the economic environment is a complex and volatile world, all kinds of information are complex, to the company's development caused great difficulties, but also to provide a huge opportunity for companies to stand out in other companies, to become the forefront of the industry, we must have a sound corporate information platform, as well as a group of outstanding managers, so that the company's development will be better and better, and ultimately more popular products. In today's information society environment, all types of companies have recognized the establishment of an information platform for the development of the company has great benefits. In the application of information platform, we should base on the need of construction, apply software engineering properly, and combine the two organically. Only in this way, we can carry on the management of enterprises efficiently, bring the effect of software engineering into full play, promote the stable development of the company, promote the working efficiency of the company and make the best use of the resources.

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