

Comprehensive Engineering Consulting Company to Carry out Whole-process Consulting Research

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Abstract: Whole-process engineering consulting is a very challenging field, which needs to provide professional consulting services at all stages of the project. By carrying out whole-process consulting services, comprehensive engineering consulting companies can effectively solve the problems of separating some links in the preliminary work project and providing important support for the project construction. However, there are still many problems in the specific whole-process consulting work. In this regard, the paper carries on the comprehensive consulting research to the engineering consulting company.

In recent years, China's construction industry has developed rapidly, but the scale of the construction industry is getting bigger and bigger, and the difficulty of the construction industry is also increasing. In order to meet the needs of the modern construction industry, the engineering consulting industry of the construction industry is constantly emerging. Driven by the continuous influence of market demand, the construction requirements of large-scale construction projects have become more modern, and the requirements for engineering quality have gradually improved. In the case of increasing industrial competition, all investors have begun to take efficiency and service as the focus to improve their core competitiveness. When it comes to the improvement of construction efficiency, it is necessary to mention the construction planning and design. To be more precise, it is the consultation work of the whole process of the project. Now, many cost consulting companies have begun to change to the whole process of the project, which also shows the needs of the whole industry for the whole process of consultation from the supply side. However, because the whole process of consultation of the specific project is not improved in time, and the problems are more complex, in-depth research is needed to ensure the effective development of the whole process of consultation and improve the efficiency of the project.

1. Overall process engineering consultation overview

1.1 Importance

In general, investment enterprises for most of the construction process have a clear understanding, however, they are based on their existing experience in project costs and construction details, it is difficult to form in the whole process of the project targeted environmental investigation and resource optimization service system, which will bring huge economic losses to the construction of the project, is very easy to lose the competitive advantage in the industry^[1]. So,

for project investment company, and the whole process of the project consulting firm firm cooperation is critical, through professional construction engineering consulting company, the specific process and cost of information such as comprehensive and planning, can maximize the project investment company to provide effective information, ensure the safety of the project and maximum improve the economic benefits of the project^[2].

In addition, in the construction process of multiple links, in order to obtain better construction and construction results, it is also necessary to evaluate and guide the resource allocation scheme of the project through engineering consultation, so as to obtain the optimal construction scheme, so as to increase the profit of the company. In the project bidding, the investor must also cooperate with the professional whole-process consulting company to implement the risk management and the comprehensive evaluation of the project funds, so as to provide a more reliable guarantee for the bidding of the construction enterprises. The whole process of engineering consulting involves a wide range of business areas, which covers all aspects of the whole project, which is of great help to the whole process of engineering consultants to the overall situation of the project. Therefore, can be targeted to each link strict control, and the construction control, for the project construction enterprise to provide a more effective and more feasible project management scheme, it also shows the whole process of consulting in the construction of modern project has irreplaceable professional advantages, can be targeted to make up for the project^[3].

1.2 Differences from the traditional consultation

The difference between the whole process consulting and the traditional consulting is mainly manifested in two aspects: on the one hand, the difference in the thinking mode. The biggest difference between the whole process engineering consulting and the consulting services provided by the traditional consulting companies is its thinking management mode, which is not only reflected in its management mode, but also in its overall structure. Traditional consulting enterprises, its work structure is the engineering construction company of the project budget and construction process analysis and research, and give the corresponding opinions, service idea is still in the scattered level of bias, which makes the service is greatly limited, the current solve the best solution to the execution of other processes, thus overall have a certain impact on the company's earnings. The whole process consulting is centered on the whole process of construction, which can work from the overall aspect. Therefore, the solutions provided are generally more feasible, which can better meet the needs of the company's consulting services. On the other hand, there is the difference between the service work center. The traditional consulting service companies all focus on one aspect. All the work logic and the focus of providing consultation are to meet the project needs of a certain stage in the preliminary work, but this service is more targeted. However, in real life, this service attitude with the local link of the project as the service center has some degree of overall insufficiency, and its service system is relatively stiff, which can not give full play to the advantages of the consulting company. At present, the whole-process consulting service is started from the central perspective of the service, focusing on the overall focus of the project. It can continue to give full play to the advantages of consulting enterprises, which is of great help to improve the quality of service decision-making and the research on service innovation. This will help to improve the quality of consulting services, ensure stronger creativity in the management system and design system, can constantly implement the new concept of engineering consulting service industry, and use a variety of advanced technologies, so that the service management work to achieve information and standardization^[4].

2. The whole process of engineering consulting work has problems

2.1 Insufficient market demand

Although the project construction enterprise is familiar with the traditional construction process, it does not fully understand its characteristics and advantages, and lack the enthusiasm to actively promote the whole process of construction. In addition, after the use of the whole process engineering consultation, there may be a problem of unclear responsibility and authority between the construction unit and the consulting agency, which has a negative impact on the enthusiasm of the construction unit to promote the whole process consultation^[5].

2.2 Lack of technical reserves

At present, China's comprehensive engineering consulting enterprises in the whole process of development, is still in the stage of exploration and accumulation of experience. For example, there is a lack of standardization and perfection in consulting products and operation procedures, and the lack of standardization in the contract text, which may affect the development of consulting business. In addition, the enterprise shall, in accordance with the relevant provisions of the State, administer the relevant state departments. At present, comprehensive engineering consulting companies generally conduct business organizations with clear division of labor according to different business categories, and it is difficult to cultivate project managers who are very proficient in the whole process of project consulting business. Lack of professional talent^[6].

3. Application strategy of whole-process engineering consulting service

3.1 Improve the business chain

There are three modes for the implementation of the whole process consulting, namely design-led, project management-led and investment-led. At present, the whole process engineering consulting focuses on project management, because project management services are easy to expand to the whole process. Design enterprises do not have much enthusiasm for the expansion of process management, and there are few business activities led by design. The investment-oriented business model still needs to be discussed and summarized. In the future development trend, three types of service modes, led by management, design and investment, will form a comprehensive whole-process consulting mode^[7]. The integrated engineering consulting firm has significant shortcomings in its design business and needs to strengthen its design business in key areas of expertise. It can be done through mergers and acquisitions or through close alliances^[8].

3.2 Optimize the organizational structure

In order to meet the requirements of the current market for the whole-process consulting service, the comprehensive engineering consulting companies must carry out the necessary institutional reform in time. On this basis, with the whole process of engineering consulting as the main body, the relevant business is integrated into an operating main body. At the present stage, in order to meet the development of comprehensive decision consulting services in the previous stage, the related service requirements of decision consulting services are integrated; in order to meet the development needs of project management-oriented engineering consulting services, the relevant consulting services in project management must be integrated. In the future, the work, in order to be able to match with a complete sense of the whole process of engineering consulting business,

comprehensive engineering consulting company need to discuss the matrix organization, build a set of scientific incentive and assessment system, to stimulate the business department in the whole process of engineering consulting business.

3.3 Apply BIM technology to build a whole-process consulting service platform

In order to ensure the smooth development of the whole process of consultation work, it is necessary to apply advanced technology and strengthen the technical reserve. BIM is an advanced technology, which is gradually widely used in the whole process of consultation. How to do a good job in the design of BIM whole process consulting platform and the management of BIM whole process consulting platform, in order to truly realize the integrated management of the whole process of enterprise construction projects. The BIM-based management platform is designed to realize the efficient collaborative office in the network environment; integrating the quantity, price and cost of molds for each stage. In the design stage, BIM is a digital modeling and management tool that can help consultancies to achieve the following management applications in the design stage: First, the refined design of building structures and components. BIM technology can realize the fine design of building components and structures, helping the consulting companies to improve the accuracy and quality of building structures, and reduce the engineering risk. At the same time, BIM technology can also find potential design problems and risks through simulation and simulation analysis, and solve them in the design stage, so as to avoid problems in the later construction and operation. Second, the simulation and evaluation of building energy consumption. BIM technology can simulate and evaluate the energy consumption of buildings, helping consulting companies optimize the energy efficiency of buildings and reduce building energy consumption and carbon emissions. At the same time, BIM technology can also simulate and evaluate the indoor environment of the building, helping designers and customers to better understand the use experience and comfort of the building. Third, it is the planning and management of construction technology and schedule. BIM technology can plan and manage the construction process and schedule at the design stage, and help the consulting companies to optimize the construction scheme, improve the construction efficiency and quality, and reduce the construction risk. At the same time, BIM technology can also realize the digital management of the construction site, and improve the efficiency of information sharing and collaboration in the construction process. Fourth, maintenance and management support. BIM technology can provide support for the maintenance and management of buildings. Relevant personnel can establish a digital building information model to help maintenance personnel better understand the structure and equipment of the building, and achieve more efficient maintenance and management.

3.4 Strengthen personnel training

In order to ensure that the whole process consulting business can meet the needs of current construction projects, it is necessary to pay attention to talent training and inject fresh vitality into the implementation and development of future business. First of all, it is necessary to establish the concept of "whole-process thinking", change from the original project thinking mode to the customer thinking mode, based on the cost value maximization of the whole process, and consider how to carry out the work in the related business areas of each construction stage. Secondly, we should strengthen theoretical and methodological training. The whole process engineering consulting has its own business rules. Through continuous experience and lessons, strengthen the training of work objectives, working processes and working methods of relevant employees. Finally, the enterprise should strengthen the training of the project manager or management personnel, excellent project manager is the key to the success of the project, therefore, in the comprehensive

project consulting work, it is necessary to use job rotation, project exercise, centralized training and other methods to select people with rich project manager ability in the whole project construction process.

3.5 Strengthen the practice of engineering consulting services

The projects faced by the comprehensive consulting company are often some difficult and large-scale construction projects, and the consulting results will be tested in the implementation process of the whole project. Therefore, the operability of the suggestions of the comprehensive consulting company is very critical. Only practice is an important standard to test the truth, only in the actual construction, the consulting service concept of enterprises is tested, in order to ensure the rationality and effectiveness of the consultation suggestions. In the specific engineering consulting work, it is necessary to strengthen the transfer of staff and cross-department management communication, and strive to correctly apply the consulting opinions to the project, and put forward effective opinions and plans in the whole construction implementation stage, so as to improve the practicality of consulting services.

3.6 Application of scientific and reasonable evaluation means

In the specific consultation work, the project will involve more details, which requires us not only to simulate and guide them through human resources, but also to use advanced evaluation means to drill and calculate them, so as to achieve a scientific construction effect. Therefore, we must develop a set of scientific and reasonable evaluation method for the project cost enterprise to improve the feasibility of the project cost. In the actual work, the operation parameters and operating conditions are used to predict and control the project construction cost and related costs, so as to ensure the smooth progress of the building construction.

In the whole process of the implementation process, because the time and stage involved are relatively long, it is necessary to take targeted means and mechanisms to dynamically monitor and control them, so as to put forward effective suggestions for the project construction. A comprehensive consulting company must have a dynamic project monitoring mechanism. In the early stage of project construction, it should timely track the project approval and equipment installation, and give relevant opinions according to the final calculation results. In the next specific construction stage, it is also necessary to carry out targeted monitoring, according to the needs of the construction, to develop a set of reasonable construction procedures, and the material preparation and use of the corresponding tracking and implementation, to ensure the smooth progress of the construction procedures. In addition, when the sudden problems appear in the construction process, the comprehensive consulting company should also be prepared for emergency treatment, avoid the possible problems as far as possible, and do the relevant review and data sorting work well, in the case of emergencies, but also for reasonable control and problem evaluation.

4. Conclusion

To sum up, at present, the construction of the project is generally need to undertake the whole process of consulting and strict management, including a lot of details, need to entrust different consultants to investigate and planning, the investors coordinate difficulties, the data arrangement, construction of simulation design, each link coordination to spend a lot of time and energy, and the final results may not be able to achieve the desired effect. In this case, more and more comprehensive consulting companies begin to try the whole-process engineering consulting

services, and achieve good results in practice. In order to improve the whole process of consulting service, it is necessary to clarify the key points of each consulting service, improve the consulting management mode, strengthen the personnel training and the application of advanced technology, and do a good job in practical inspection, so as to ensure the scientific and rational consulting suggestions and improve the expected economic benefits.

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