

Vigorously develop PMC business, speed up the transformation of the design institute

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Abstract: This paper discusses the feasibility and advantages of PMC business in the design institute and puts forward that the design institute wants to realize the transformation and upgrading successfully and promote the realization of the group benefit into maximum, enhance the PMC strength and the development of PMC business is indispensable. At the same time, according to the current problems, this paper gives some suggestions on the future development .

Keywords: project Management; PMC

1. The positioning of PMC management business in the “Five Business of China Communication”

1.1 PMC business in the “Five Business of China Communication” the importance of the strategy

The five businessmen in the emphasis on a “business” word, stressed by the “work” to “business” change, make full use of capital, policies, resources and business competition in the whole industry chain, to achieve the overall development of the group; A “business” word also implies a monopoly of competition, for the advantages and disadvantages compared with competitors through resource integration, information integration and cultural integration, to achieve the goal of “others do not have but I have”. Group to develop a set of planning, investment and financing, construction, operation as one of the integrated business, is to achieve the whole industry chain and integration rather than the chain module simple stitching, to achieve resource integration rather than physical stack, the key is to can always carry out a high degree of grasp of the project, leading the project management model, PMC business model can best meet this need. Because the PMC has the earliest intervention time and the longest intervention time, the planning stage can consider the resource integration as the input condition. The implementation stage can select the optimal scheme from the technical, economic and feasibility indicators through the technology leading role. Role, based on its completely from the owners point of view of the position and continuous optimization, it is easier to create high-quality, high-precision products to enhance the quality of construction management, thereby enhancing the company’s international competitive position.

1.2 Development of PMC business focus from the design institute

Group under the 60 wholly-owned subsidiary, of which 14 large-scale design institute and 12 engineering bureau. From the nature of business as the considerations, the development of PMC business development Institute of the most Group

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under the 60 wholly-owned subsidiary, of which 14 large-scale design institute and 12 engineering bureau. From the nature of business as the considerations, the development of PMC business development Institute of the most talented days. Design Institute of complete project categories, professional configuration comprehensive, rich historical information, and technical experience covers a wide range of management practices, the overall quality of personnel, and the overall grasp of the project strong, which in line with the basic needs of the PMC management team.

From the design institute point of view, the development of PMC business is the trend of reform to meet the reform. The value of the design in the project is greatly reduced and the PMC business from the early planning, feasibility study, project definition, planning, financing programs, as well as design, procurement, construction, trial operation of the whole stage Integrated management, consulting and design as a main line from scratch through the tail, the design value to achieve the greatest degree of expression.

2. The design institute PMC business development exploration

2.1 Design institute to develop PMC business advantages

Professional and complete. In the case of the China Aviation Park, the four airports have a comprehensive design grade A qualification, undertaking a series of projects with international influence, covering water transportation, water conservancy, construction, road and bridge municipal, rail transportation, civil airport and other industries, with urban planning, general planning, investment management, surveying, design, project management, operation and management of the project, such as project planning, investment management, surveying, design, project management, operation and management. Chain talent echelon, in line with the core elements of PMC management --- management team requirements.

More high-quality talents. Design Institute composed of professional and technical personnel, such as four airports professional and technical personnel accounted for 89% of the full number of staff, of which more than 40% of senior staff, employees long engaged in engineering and technical personnel, which are high quality staff.

Familiar with the industrial structure and government planning. At the same time, the design institute has rich database resources, familiar with the industrial equipment and industry gap, it is easier to combine the economic development situation, as suitable for the needs of the owners, in line with the needs of the owners of the city, planning the direction of development program. At the same time, the design institute through the project planning business, industrial screening, and the preferred group of high-quality industries packaged exports, thus driving the Group's overall business development. .

2.2 “Five business of China Communication” design institute positioning and PMC business fit

“Business” emphasizes the overall operational strength, overall development strategy, industrial upgrading, and high-end operation of the value chain. Become a professional management level and technical strength of the international project contractor, one of the most critical is to improve the ability of project management, project management to the international and fine development.

PMC business required project management team to meet the planning direction and taken into account the future development of service decision-making, for which PMC is the idea of the advocate and not only the implementation of the project leader is not only a module to undertake the work, with its leading role , to achieve the “lead a whole body” performance, coordination, management of different professional and technical departments, so that the project to meet the target requirements in the whole process toward the target can take into account the dynamic optimization feasibility

analysis combined with the specific situation on the details of the adjustment and improvement, thus creating a creative, flexible and feasible program. “Take the potential”, “Bright road”, the “work” to become the decision to “potential” to adapt to the effect of “road” achievement level of the key factors. On the “five business of China Communication in the” landing, the effectiveness of how, the key is to take what way to achieve. “Five business of China Communication” goal, not only “bigger” but it is “stronger”, in order to avoid “big and empty”, it is necessary to implement the project as a top priority. Popularization, promotion, do excellent of PMC is “excellent” for the best choice. PMC is in the grasp of the project life cycle function and the role of the overall point of view and management, the management effect is naturally not to achieve the construction goals, to earn the highest profits for the purpose of the “EPC” model is available, and therefore, we can see for the new era of engineering industry work and market requirements reform opportunities.

3. The international well-known engineering company PMC business development

Internationally renowned engineering companies such as Wilson and RH in the process of PMC business, from the project planning that is involved in the project to assist the owners of the project pre-planning, program development, technical feasibility studies, government relations coordination, financing planning, its function quite an extension of the functions of the internal functions of the owner.

Compared to our traditional, still not yet seen in the stage of cutting, planning mode, PMC from the planning of the project until the trial run, in a sense, as the project planners and leaders involved, it’s positioning is the owner the role of consultants enhances the integrity of project management. Compared with the “owner --- EPC” model, PMC is equivalent to the owner of a project planning ability, outsourcing ability, financing capacity, technical management capacity of the management department, its nature is equivalent to sublimation of the owners management level, to avoid the common problem of the contract interface to the participating units due to the interests of the inconsistencies arising from the motive deviation, the owners more favorable, the overall effect of the project to enhance the more favorable, more vulnerable to the owners welcome.

It should be noted that many of the world’s leading PMC company, which itself is also a contractor, the role of the two complement each other, they are competent PMC work, its strength is the source of years of experience in various types of engineering projects accumulated income. This point can be used as a reference for the development of domestic design institute.

4. The design institute to PMC business transformation in the face of the problem

4.1 Internal issues

Limited quality of talent. In the current market situation changes, the development of the Institute of the demand for talent is much higher than the social training of professional and technical personnel, because the PMC team needs a comprehensive knowledge structure, project practice experience, comprehensive high quality management talent, regrettable is that we face a problem for many years failed to be fundamentally resolved, the quality of the candidates for education and training is still lack of comprehensive quality, project training personnel need a longer period and some companies even if the formation of the PMC team, team analysis, problem-solving strength, lack of professional experience in large-scale construction of the long-term scarcity, it is difficult to deal with large and complex projects at the same time, limited by the long-term professional module hard cutting habits, professional interdisciplinary cross-portfolio, affecting the PMC team’s comprehensive ability.

Working habits restrictions. A boat sailing against the current must forge ahead or it will be driven back. However, in some cases, “transformation” is facing a certain pressure, from the simple to pay attention to technical norms to trade-off technology and economy in the process of both high optimization requirements, the designer responsibility, the need for version design, staff lack of upward and downstream development of knowledge initiative And power, it is difficult to effectively carry out technical and economic trade-offs of the design concept.

Contracting capacity and capacity constraints. Compared with the overseas PMC company, the domestic design institute project planning, construction management capacity is still relatively lacking, especially for large-scale project life cycle integrated management company is very few.

Financing capacity constraints. Financing is an important module of PMC, especially for large, international loan projects. The domestic design institute basically do not have project financing, many Class A enterprises seem to register a lot of money, but the actual liquidity is very small, there is no financing experience. At present, the international market owners in the choice of PMC contractor process, more and more attention to project management company’s financing capacity. The long-term lack of financing capacity will lead to the loss of competition opportunities in some large international PMC projects that can not be entered in the pre-project financing.

Core technical limitations. Compared to foreign PMC companies, we still have a long way to go in the engineering core technology.

Standard promotion restrictions. Domestic design institute on the application of the norms of Europe and the United States less than the local company, the audit is less than Turkey, South Korea and other companies, and the Chinese norms “going out” only in some areas such as high-speed rail have outstanding results in other sections, the Chinese norms of international recognition is still not high.

4.2 External issues:

PMC application scope restrictions. PMC in large, complex, professional difficulty of the project, its role is more prominent, and now many developing countries, project funds from international loans, the guarantee capacity to limit the amount of loans, and the amount of the project limits the size of the project, industrial parks and other integrated projects, although following the trend, but it has not yet become the mainstream of the current market, PMC business development stage is still limited.

Market low-cost competition, heavy price light quality, limiting the PMC business carried out. At present, domestic and foreign engineering market are the phenomenon of low bid, vicious bidding has also occurred, low-cost direct result is the result of PMC function shrink, become PMC business development of another heavy limit. .

5. The direction of the design institute

Forward-looking top-of-the-line design. Although the PMC business is not the main business model of the design institute, the trend of global economic integration, and the project requirements are getting higher and higher, PMC’s role is more and more prominent. Design Institute to forward-looking vision of the system design, the face of the market changes in the chess game, take a step and think for three steps, pave the way for tomorrow; at the same time, not only take the initiative to undertake PMC business, more timely creation of PMC business opportunities, with active attack market opportunities, to achieve sustainable development.

PMC management team training. In view of the characteristics of the lack of high-quality personnel, the Design Institute should focus on cultivating talents in the areas of technology management, schedule management, quality management, cost management, safety management and contract management in accordance with the international project management mode. In particular, play a system-oriented role, the law, market and business as a comprehensive

quality assessment module and not only as a professional assessment module, which prompted the talent to a complex change.

Management system of market adaptability construction. Enterprises to build and project management consistent with the organization, establish and improve the advanced project management system, assessment indicators in accordance with the overall goal of project management to break down, refinement, through the normal guide to achieve the quality of project management to improve the system to complete the market adaptive construction.

Strengthen the ability to cultivate the project. In the domestic traditional project to undertake the model, the design institute is not required to have the project to cultivate the function. But the current market transition period, the project nurturing function to become a new era of engineering reform background, the Design Institute to grasp the market, enhance the control of the key factors. Fate always prefer to the people who take the initiative. The key to project development is planning ability and project planning ability. The Design Institute should make full use of the planning business, strengthen and invest in the company and local government to contact, understand its planning requirements, and build the project from the point of view of the owners (or government) consultants. Such projects may be longer incubation period, but it is to protect the long-term development of enterprises the most secure and most reliable means of the market.

Build financing capacity. Domestic design institutes usually do not have the ability to finance, you can consider and investment companies, platform companies and other cooperation, to achieve project financing functions, so as to fight for large-scale project opportunities.

The strengthening of core technological innovation. To further promote technological innovation, to encourage technical staff on the new technology, new technology, new materials, the use of new software to encourage employees to use the project platform to participate in new technology development, will use experience to break through experience, based on standards and not limited to the standard , through the company's assessment mechanism, personnel development mechanism for policy guidance, in order to achieve the project design level, improve the management level.

Development and Perfection of Advanced Project Management System. Overseas large international engineering management company generally has advanced global electronic data management system, can achieve a reasonable set of project processes, linkage management and cash flow management of the rationalization of management. This system can be used for domestic design institute.

Market transformation, means that the engineering industry to re-shuffle. Survival of the fittest, survival of the fittest, is the eternal market rules. Design Institute in the current market situation, should seize the opportunity to use their own technological advantages, expand their business scope, update the service concept, change the way of working, through the PMC business promotion, give full play to the design function in the project life cycle role, design work added value to enhance their management level for excellent project quality, in order to achieve scientific, integrated, international development, which out of an open upgrade road.