Improve Responsibility Cost Management Level of Construction Enterprise by Information System

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Abstract. In order to survive in the fierce market competition, construction enterprise must be able to provide high quality and low cost building products. The cost management level of enterprise determines its ability to obtain economic benefits. The responsibility cost management mode that involves everyone participation could enhance management level of enterprises. To eliminate internal information island and information asymmetry, information should communicate between each cost management department. The responsibility cost management model of internal information circulation covers the whole process of project, the cost of project could be reflected timely and accurately, the sufficient information could provide support for every manager decision, then the effectiveness and overall level of responsibility cost management could be enhanced. Thus, with the help of information system, construction enterprise could form a scientific and standardized management model.

Introduction

Facing the severe competition environment, in order to achieve sustainable development and enhance competitiveness, construction enterprise should promote and improve the internal management. For construction enterprise, to provide low cost and high quality building products is an important magic weapon for enterprise survival and development. How to increase profits, to win in the competition and expand market share, it depends more on the enterprise's cost control ability. Especially for construction industry, construction costs account for the vast majority of operating costs, cost control has fatal influence on the profitability of enterprises [1]. Therefore, to improve cost management level of enterprise is to improve the enterprise's profit margins, and it is an important means to improve enterprise economic benefit ^[2]. Relying on low cost to build the price advantage is the strategic choice for the construction of core competence.

Responsibility cost management is the cost management mode that emphasizes on involvement of everyone in enterprise ^[3]. It set up the "responsibility" concept of cost management, which helps to improve the lean management level of enterprises, to build the core competitiveness. Because of the rapid development of information technology, information management has effectively improved the management ability of construction enterprise ^[4]. The responsibility cost management mode of internal information circulation is constructed by information system, and covers throughout early, middle and later phase of project, enhance the responsibility cost management and the overall level of effectiveness. Thus, with the help of information circulation, construction enterprise could enhance the effectiveness and overall level of responsibility cost management, to win the market competition advantage.

The Framework of Responsibility Cost Management.

The Importance of Responsibility Cost Management. The purpose of an enterprise is profit and the benefit is in the center. The effective way of enterprise development is "low cost" strategy, and the "effective way of low cost" strategy is responsibility cost management. As construction enterprise, the main body of responsibility cost management is project, it runs through the whole process of project

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from contracting to completion and settlement. In the process of project management, construction enterprise must take responsibility cost management as the center.

Responsibility cost is the cost that each responsibility unit can control and adjust. Responsibility cost management is the management method through the formulation of cost budget for each responsibility unit, and then adopt the way of grading contract implementation and examination cost control management step by step. Responsibility cost management fully reflects the rights and responsibility of unity and the management thought of hierarchical cost control. It is the organic combination of everyone-involved, whole process and comprehensive management.

Construction enterprise is a typical project-driving enterprise, project should be in the core of cost management ^[4]. Responsibility cost management of project is a full, comprehensive, whole process management, seize the various links affect the cost incurred, and take responsibility decomposition, target control, accounting examination and a series of measures, in order to truly implement cost management.

The Responsibility Cost Management System of Construction Enterprise. Construction enterprise should establish responsibility cost management system, should be under principle of the unified leadership, graded management, step-by-step responsibility and strict examination. Responsibility cost management system of construction enterprise is shown in Fig. 1.

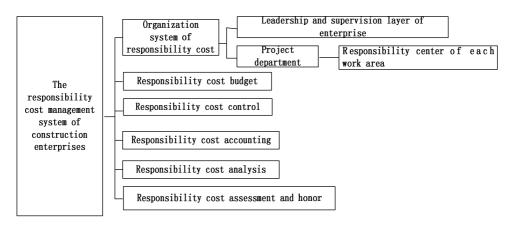


Fig. 1. Responsibility cost management system of construction enterprise

Construction enterprise should set up leadership, supervision agency of responsibility cost management, and determine cost management responsibilities and authority of different management layer and department. The leadership, supervision agency customize the responsibility cost goal of each project, supervision and inspection of responsibility cost management of the project, analysis of cost tracking and control, and evaluation timely in accordance with responsibility cost contract. The project department is implementation and supervision layer of responsibility cost management. The main task is reasonable division of responsibility center. And it is mainly responsible for open source and effective guiding work area to carry out cost management system and supervision work. Each work area as the executive layer, is responsible for implementation of responsibility cost budget, organize and implement the specific assessment and honor. The soul of responsibility cost management is the responsibility. For each unit, the first manager of each manage layer is the first responsible person for responsibility cost management, primarily responsible for the responsibility cost management.

Responsibility cost of construction project is usually identified with the responsibility of the signing of contracts, to strictly implement the responsibility contract check and honor system, establishing the mechanism of dynamic adjustment project responsibility cost budget, and fully mobilize the enthusiasm of all staff of project cost control, project management and to achieve full participation cost control. A responsibility center is the main body of responsibility cost accounting. Each responsibility unit should have clear responsibility cost indicators, these indicators are

determined according to the enterprise's goal. Enterprises need carry out dynamic process control of responsibility cost, real-time grasp the actual situation of each responsibility unit, analysis of responsibility cost, strict examination and timely fulfill economic responsibilities.

Embed Information System in Responsibility Cost Manangement.

The Existing Problems in Cost Management and the Necessity of Information System. In recent years, the income of construction enterprise increase, but the cost is difficult to control and the profit ability of construction enterprise drops. The understanding of cost management is limited to traditional concept that cost management is construction cost accounting. The cost management lacks the whole process of construction. The project cost control is lax, the responsibility and right relationship between enterprise and project, project and work area, is not clear, not easy to effectively arouse the enthusiasm of managers at all layers, project benefit erosion is serious. And with rapid development of enterprise, the organization management chain becomes longer, so the information communication is not smooth. The phenomena affect healthy development of enterprise. The project cost management problems seriously restrict the healthy development of the enterprise.

Because project management involves different departments of construction enterprise, without information system of enterprise, each department has its own information, information sharing could not be achieved, could not form a scientific, standardized, institutionalized management mode. Thus, the question existing in the project management could not be found, the cost of project could not be reflected timely and accurately, the insufficient information could not provide support for every manager decision.

Introducing information system in responsibility cost management is to standardize enterprise management, is to help enterprises improve the level of cost management. By information system, the deficiency of internal control and management could be improved, data statistics and management process could be standardized. Information system could provide accurate, real-time cost accounting, could reflect dynamic situation of project, so as to provide a more scientific data support for leadership decision ^[5]. Therefore, it is necessary to implement information system for responsibility cost management.

The Information System Model of Responsibility Cost Management. At present, the information system level of responsibility cost management for construction enterprise is not high, most of the units remain in certain areas of responsibility cost management, for example only responsibility budget (including enterprise quota) or material management or labor pricing module, there is no the systematic responsibility cost management. The biggest drawback of these systems is single, only one department in use, only control some aspect of cost. In order to improve accuracy and speed of information transmission, ensuring the accuracy cost decision-making, it is urgent to speed up the process of information system for responsibility cost management. The information system model of responsibility cost management, as shown in Fig. 2.

In order to simplify responsibility cost accounting, reduce the burden of work of staff, to standardize personnel's daily business operations of cost management, to eliminate internal information island and information asymmetry, each cost management department should cooperate by information communication. In addition, construction enterprise must strengthen the dynamic control of cost, insisting on the overall consideration, includes cost assessment, cost control during construction and cost evaluation afterwards. At every stage of responsibility cost management, the problems of project cost management are tracked, to timely discover and eliminate the risk of project. The information system model of responsibility cost management includes the whole process of project and supports the use of internal quota. The management modules includes including quota management, responsibility budget, construction plan, cost decomposition, contract management, labor management, material and equipment management, direct and indirect cost management, responsibility cost analysis, etc.

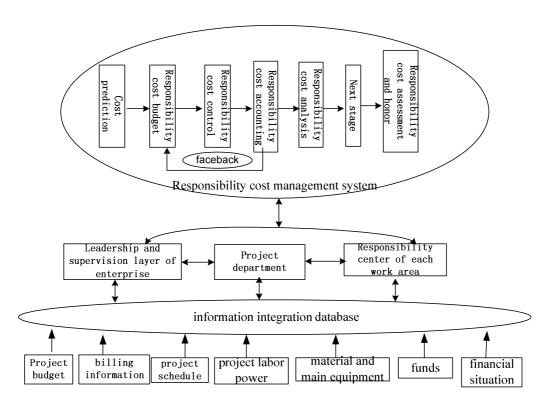


Fig. 2. Information system model of responsibility cost management

Summary

The information system of responsibility cost management is a new subject and the development of information management for cost is system engineering. The information communication for responsibility cost management should be actively promoted, and the work should be unified planning in enterprise. With the aid of network platform, the responsibility cost management procedures will be standardized, to achieve the responsibility cost management informatization step by step. Responsibility cost management is an inevitable trend of the development of enterprise, the implementation of information management is to promote systematic, scientific management, to ensure the rapid development of enterprise.

References

- [1] G.A. Yusuf, S.F. Mohamed, Z.M. Yusof, M.S. Misnan, Framework for Enhancing Cost Management of Building Services, Procedia-Soc. Behav. Sci. 65 (2012) 697-703.
- [2] D. Grahovac, V. Devedzic, COMEX: A cost management expert system, Expert Sys. with Appl. 37 (2010) 7684-7695.
- [3] Z.J. Lin, Z.Yu, Responsibility cost control system in China: a case of management accounting application, Management Account. Res. 13 (2002) 447-467.
- [4] N.Cao, B. Du, G.J. Zhu, Y. Zhu, The management mode of construction enterprise from information flow perspective, Appl. Mech. Mater. 438-439 (2013) 1766-1769.
- [5] E.Berghout, M.Nijland, P. Powell, Management of lifecycle costs and benefits: Lessons from information systems practice, Comput. Ind. 62(2011) 755-764.



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