

Effectively Implement Project Cost Control and Cost Management

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Abstract: *In the scope of a project, in order to complete the project construction task and all the expenditure, called the project cost, for the project itself, the level of the project cost, directly affects the economic benefits of the project, for the relevant enterprises, the implementation of project cost control is an important component of the project management content, To a large extent, it reflects the management level of the enterprise itself and affects the core competitiveness of the enterprise. In the case of increasingly fierce market competition in the engineering industry, how to effectively implement the project cost control and cost management has gradually become an important part of the relevant enterprises' attention and research content. It is of practical significance to analyze and discuss the effective measures of the project cost control.*

Keywords: Effective implementation; Engineering cost control; Cost management.

As an important part of the engineering project management content, cost management is extremely critical. As the basic conditions for the continuous development of enterprises, it is necessary to implement the relevant responsibilities to the departments and relevant personnel, refine the engineering project cost management content, all kinds of costs generated in the construction process of the engineering project, organized and systematic, Conduct the corresponding investigation, forecast, accounting, control and analysis, in order to better reduce the construction cost of the project, improve the enterprise management situation, further strengthen the enterprise management level, improve the core competitiveness of modern enterprises. The security and privacy have more and more attention with the wide application of wireless communication technology. The purpose of secure communication is that legitimate receivers can successfully receive the source information and the eavesdropper fail to intercept the information. The physical layer security makes full use of the various communication characteristics of the wireless channel to solve the communication process information security issues from the information theory point of view.

The traditional information security problem is solved by the higher layers protocol and encryption algorithm based on the key system. However, it is hard to overcome the negative effects due to broadcast characteristics of wireless channels and the rapidly increase for computing power on information security. The theoretical basis of the physical layer security is Shannon's perfect secrecy theory. Wyner proposed the concept of the physical layer security(A. D.Wyner, 1975) . It is found that a new security mechanism can achieve "Absolute security" which do not depend on traditional encryption algorithm rather than using the natural physical characteristics of the wireless channel.the physical layer security is extended to the Gaussian Wiretap Channel(S. Leung-Yan-Cheong, 1978). The confidential signal transmission in the wireless broadcast channel is further studied(I. Csiszar, 1978).

The rapid development of e-commerce is inseparable from the logistics, logistics transformation and upgrading is also inseparable from e-commerce, the two aspects are closely related, complement each other. In the electronic commerce logistics as an important hub for trade between the two sides, the service level directly affects the business enterprise market competitiveness. In the "Internet" strategy, China's logistics industry has achieved rapid development, the logistics industry to adapt to the development of electronic commerce, step by step to break the closed original, extensive development pattern. The formation of resource sharing, complementary advantages and win-win e-commerce logistics service mode. In this paper, rookie logistics as an example analysis, obtained in the "Internet" strategy, relying on the importance of big data cloud computing technology to change the development of e-commerce logistics and urgency. And further research on the "Internet" strategy under the current situation of the development of electronic commerce logistics in China and future trends, identify the problems in the development of emergence, and puts forward some corresponding suggestions, we will discuss the future trend of development, to promote the transformation and upgrading of e-commerce logistics in our country.

1. OUTLINE THE PRINCIPLE AND MEANING OF PROJECT COST CONTROL AND COST MANAGEMENT

The physical layer security scheme based on cooperative interference in the energy cooperative network(Weijia Lei, 2015). In order to improve the secrecy rate, the relay node sends the beamforming interference signal to interfere eavesdropper. The problem of secure transmission based on cooperative interference with multiple eavesdroppers was studied(L. Tang, 2016). A physical layer hybrid transmission protocol was proposed based on cooperative interference for the security problem of full duplex relay system(Wei Zhou, 2017). The optimal relay selection is studied in secure cooperative communication with an adaptive eavesdropper(L. Yang, 2017). Joint relay and jammer select in a relay cooperative network is studied(I. Krikidis, 2009). The scheme assumes that all relay nodes can correctly decode the source signal during the broadcast phase. The channel state information of the first hop link is ignored.

On the basis of the above research, a joint relay and jammer selection based on instantaneous channel state information for all links is studied. Optimal power allocation factor is given to maximize the system secrecy capacity. Performance analysis is compared with traditional optimal relay selection scheme. The systems secrecy outage probability (SOP) is obtained after selection criteria of two schemes.

1.1 Definition and Content Overview

In order to complete the construction task of the project, construction enterprises need to take the project as the object, control the cost required for the construction of the project, meet the management requirements of the project, but also better strengthen the quality of the construction of the project and promote the achievement of the project operation objectives. From the perspective of project construction and development, the project cost involves all departments of the project and all links of the project construction operation, and it is difficult to implement the cost control and cost management on the whole. Construction enterprises need to implement the cost control work to the specific responsible departments and relevant personnel, do a good job in the project benefit distribution, and mobilize the enthusiasm of the cost management personnel. Promote project cost management to meet the requirements of project cost management.

1.2 Analysis of the content of principles

During the process of organizing and carrying out engineering cost control and cost management, in order to minimize the negative factors in cost management, promote the active and effective development of engineering project cost management, and ensure the feasibility of engineering project cost management, the relevant enterprises and departments need to follow several principles and implement the corresponding cost management. The first principle is the principle of objective decomposition. In order to reduce the difficulty of cost management and implement the principle of objective decomposition, the cost management objectives are refined according to the project indicators and the application requirements of cost criteria, and the cost management responsibilities are implemented to the specific person in charge. The second principle is the principle of dynamic management, cost management work needs. It should run through different operational links of engineering projects, do a good job of real-time dynamic cost management, and timely adjust the cost management objectives and control plan direction according to the actual situation of the project. The third principle is the principle of the combination of rights and responsibilities. For engineering projects, whether cost control can achieve the expected effect is largely related to the working attitude and ability of managers. The effective combination of rights and obligations can to a large extent better mobilize the enthusiasm of personnel and provide important support for the development of cost management.

2. EXPLORE THE EFFECTIVE IMPLEMENTATION OF PROJECT COST CONTROL AND COST MANAGEMENT STRATEGIES

In order to effectively implement the project cost control and cost management, in addition to following the principles and carrying out the cost management work, we also need to do the following aspects of operational activities. According to the main business of the distribution center and function, it is set to 9 functional areas, respectively: purchase area, storage area, circulation processing area, picking area, delivery area, reverse logistics operation area, office area, auxiliary operation area and service area. Each function area is a unit of work. For convenience, The 9 units are represented in number 1-9 in turn. It can be found that table 2 and table 3 are not consistent. so it need for further comprehensive analysis, taccording to the situation set the logistics relationship: non-logistics relationship = 3: 1, obtained Operating units to calculate the relationship between the table and the operating unit to calculate the relationship between the table, and according to the results can be produced by the operating units of the comprehensive relationship between the table as shown in Table 1.

Table 1: Comprehensive proximity ranking table

Operation unit	Score	Rank
storage area	13	1
picking area	12	2
circulation processing area	12	3
delivery area	11	4
purchase area	10	5
reverse logistics operation area	8	6
office area	7	7
auxiliary operation area	3	8
service area	0	9

2.1 Strengthen the cost control of the design link

For engineering projects, design is the source of cost control and plays a key role in the cost control of the whole project. Relevant research shows that the overall quality of the design scheme will have a direct impact on the construction cost of the project and the length of the construction operation cycle, which will greatly affect the financial, material and human input. In order to actively strengthen the effectiveness of project cost control and cost management, strengthen the awareness of source control, do a good job in the design of the cost control work, through improving the scientific rationality of engineering design, to reduce the project cost to provide important support. Based on this, during the process of organizing the design work, the designers not only need to formulate the construction design scheme of the project from the design standards and technical level, but also need to analyze the feasibility and rationality of the construction scheme of the project from the economic perspective, to formulate a set of economic and technical construction design scheme, to provide important support for achieving good project cost control. When the overall engineering design scheme is highly scientific and rational, it can not only reduce the consumption of resources during the construction process, but also reduce the subsequent design changes and expand the possibility of initial design.

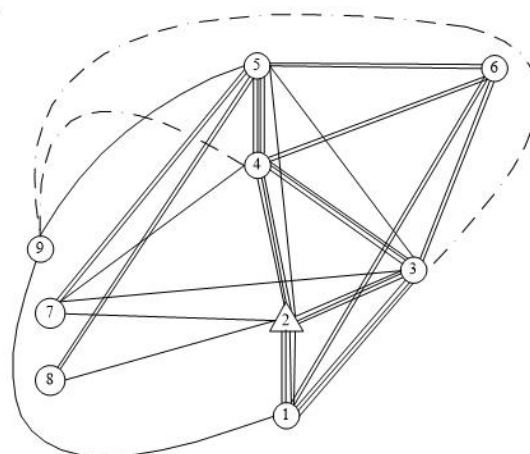


Figure 1: position correlation diagram

2.2 Strengthen the cost control in the bidding process

During the operation and development of engineering projects, the bidding work involves the procurement of equipment and materials, which directly affects the selection and cooperation of construction enterprises. The qualification quality of suppliers and subcontractors will have a great impact on the overall operation quality, progress and benefit of the project. In order to implement effective project cost control and cost management, strengthen the effectiveness of cost control in the bidding process, and do a good job in the corresponding cost management work, we mainly need to do the following work: First, the principle of fair, fair, open and honest bidding should be implemented to reduce the possibility of adverse phenomena and maximize the optimal selection of partners. Based on this, enterprises need to strictly examine the qualifications, integrity files, office space and other aspects of the bidders to ensure that all aspects of the bidders meet the bidding requirements. To provide a strong guarantee for cost control. Generally speaking, units with qualified qualifications and good

integrity will rarely have violations, which is conducive to the implementation of cost control work; Second, do a good job in the preparation of bidding documents and tender price. In order to lay a good foundation for cost control, enterprises need to strengthen the collection and arrangement of various valuable data. Through the screening, analysis and utilization of these data information contents, predict and analyze various factors that will have an impact on the project cost, and then do a good job in the preparation of bidding documents and tender price. Strengthen the enterprise's cognition of the bidding situation to be comprehensive, and provide an important basic guarantee for the later cost control.

2.3 Control the construction contract well

The signing of the construction contract defines the responsibilities and obligations of both parties to a large extent, and promotes the development of the project cost. From the perspective of the content of the construction contract, it can be seen that the scientific and perfect content of the contract can reasonably maintain the legitimate interests of both parties and reduce the chances of contract disputes. The construction contract signed on the basis of the agreement of both parties has a legal effect. The control work of the construction contract can greatly promote the achievement of the project cost control goal. In order to achieve strong control of engineering construction contracts, on the one hand, the two sides sign the project. During the process of construction contract, it is necessary to standardize the signing behavior and process. On the other hand, it is necessary to improve the clarity of the relevant clauses of the construction contract as much as possible, and make clear the contract price, calculation method, acceptance standard and other relevant contents. The preparation and description of the clauses should be well written. The enterprise also needs to review the relevant contents of the supplementary clauses of the engineering construction contract to ensure that the clauses are strictly agreed and reduce the relevant risks.

2.4 Control the project cost in the construction stage

In order to do a good job in the construction phase of the project cost control work, we need to do the following aspects of work: First, the enterprise needs to according to the construction contract, the corresponding analysis of all the contents of the engineering construction project, the development of scientific and reasonable standard cost, including labor standard cost, material standard cost, for the construction of the project to provide important reference content; Secondly, the enterprise can also implement the cost difference assessment method, carry out the corresponding assessment of the difference between the actual cost and the budget cost, implement the corresponding reward and punishment system, find the difference in time, and urge the relevant responsible person to adjust accordingly, reduce the cost difference as far as possible, and promote the achievement of the project cost control goal.

Table 2: discrete estimation of Lotka-Volterra model parameters

parameter	Estimated value	p
λ_{P_1}	1.456	0
β_{P_1}	0.0347	0.03
γ_{P_1}	-0.023	0.04
R2	0.998111	
SSR	3.348932	

3. WITH ROOKIE LOGISTICS AS THE REPRESENTATIVE OF THE PLATFORM TYPE ELECTRICITY SUPPLIER LOGISTICS DEVELOPMENT SITUATION

The characteristics of China's retail online shopping market in line with the Lotka-Volterra model setting conditions, in the B2C business platform domain, there are two major competitors are JD.COM and Tmall. There are a number of B2C e-commerce sites in the retail market occupies a small part of the online shopping share, not because of them as the main object of study: JD.COM and Tmall species competition interaction parameter, which indicates the presence of , the diffusion process is the interaction of the . According to the actual situation of the survey data, most of them are based on discrete time series, and the data required by the Lotka-Volterra model must conform to the characteristics of continuity. The model is transformed into a model that conforms to the discrete data as follows:

3.1 The policy support of the uncertain future

The rookie logistics backbone consists of two components: Sky-net and the ground-net. Sky-net, as its data analysis and tracking. The "ground network" refers to the warehousing, express delivery, transportation, landing and other links to establish the logistics infrastructure equipment and related links in general. The rookie logistics has internet background, Skynet establishment does not exist any technical difficulties, however, to establish a set of perfect and efficient network platform is not between morning and evening can easily be completed, it needs a large number of negotiations with the government, get to build storage. Once Rookie logistics accumulated a large amount of land, reasonable development and it is difficult to system, is likely to be blamed for all sorts of excuses, involved in real estate development business logistics real. At this point a series of policy support may be suspended or suspended may be. The Ministry of Commerce has been targeted for individual electricity business logistics companies deviate from their own direction, hoarding a large number of land behavior criticized. Therefore, the ability to clear their own development direction, to avoid some problems on the deviation, with the government departments to communicate well will determine whether the enterprise can obtain sustained policy support.

3.2 Electric business logistics platform within the enterprise's business is difficult to allocate

As the social logistics enterprise platform type, its goal is to use 5 to 8 years, the mainland together all the logistics network, through self construction, cooperation, transformation, and a variety of modes, the construction of nationwide open social network storage, and the use of big data cloud computing technology to establish an open, transparent, data application platform sharing, do 24 hours of delivery will arrive in the country (Changyun Wan,2014). In the composition of the rookie network, including Alibaba Group, Fuxing Group, Yintai Department Store, Fuchun Logistics, Shentong Logistics, Yuantong Logistics, Zhongtong Logistics, Yunda Logistics and SF. Among them, Yintai Group as a veteran of the department store chain, the supply chain management ability is very strong, rookie network supply chain system and a large staff from the Yintai Group management. Fuxing Group as a professional real estate company, from the purchase, construction, property management are very professional, responsible for the construction of the warehouse. Fuchun Logistics is responsible for the rookie network in the trunk logistics, regional feeder logistics and the last mile distribution is the "three links one" and SF, while the Alibaba Group is focused on information technology organization control, capital settlement (Wenbo Hu,2015). These enterprises seem to be clear division of labor, but in fact the interests of their respective businesses and future development goals difficult to coordinate. In addition to the current distribution of benefits of cooperation between enterprises, the more important is that Alibaba mastered the information of the organizational control and capital settlement, the rest of the cooperative enterprises will have two aspects of the impact. First, Alibaba strong financial settlement capacity makes other enterprises to receive payment, financial financing capacity greatly reduced, seriously affected the cooperative enterprises to participate in the enthusiasm. Second, the business information of the enterprise belongs to the business secrets of the enterprise, it reflects the real operation ability, solvency, customer information and so on a series of relevant information, if by other enterprises, for the long-term development of the enterprise may produce Extremely negative impact.

3.3 The development of pre-service and the balance between the cost

The level of service is inversely proportional to the cost. As early as in previous years, the home delivery is too much emphasis on service speed and ignoring the operating costs, resulting in rapid response to customers in the process of increasing the cost pressure. At that time the society consumption level is not high, the rapid response logistics to enhance the customer experience, will bring the negative impact of the cost increase, and this effect after passed on to customers, resulting in contrary to expectations of the market reaction. Another example comes from the United States as a representative of the developed countries, the US logistics industry is not as much as the current China, too much emphasis on the timeliness of logistics, but still able to meet the normal needs of the vast number of consumers in the United States, it is because the combination of efficiency and cost Between the "antinomy" principle. It is questionable to rely on uplifting costs to achieve a high quality service experience.

There is no doubt that the level of efficient service response will be the future development trend of commercial logistics. But at this stage obtained by lifting the cost of service response capability does not fully meet the needs of the society. Rookie logistics backbone network to achieve the central and western regions such as 24-hour delivery will reach the goal, which means that the current level of consumption in the context of the need to rely on large data technology, fully integrated and efficient use of social resources to achieve Logistics efficiency in the country to enhance the revolutionary. People have reason to believe that the future development level of electricity business logistics will reach this level, but from the present, rookie logistics can achieve the goal, but also must answer the following questions: First, whether the level of purchasing power of consumers in the western and

western regions of the current stage is compatible with the overall operational capacity of the enterprises? Second, the rural logistics in the future development of rookie logistics occupy what kind of position? Third, whether the current large data, cloud computing can accurately provide effective data support for the national logistics backbone?

If you do not raise the cost of the case, to solve these problems, to achieve the revolutionary level of logistics services to enhance the future of China's electricity business logistics development can not avoid the important issue. If you can not upgrade the cost of the case to solve the above problems, to improve the logistics service level will be revolutionary, is an inevitable subject of future road electricity supplier logistics development in China.

3.4 The formation of electric power logistics alliance body monopoly situation

The construction of a large data platform based electricity supplier logistics technology support, determines the future development cannot do without the depth of cooperation with several major logistics enterprises, such as the rookie logistics is by the Alibaba Group, Yintai Group, Fuxing Group, Fuchun holdings, SF group, one of three links (Shen Tong, tact, in the pass, rhyme), and the relevant financial institutions to jointly build a joint company. These undoubtedly in technology, combination of channel network and other aspects of the formation of oligopoly. So we need to look at the dialectical analysis.

3.4.1 The harm of joint monopoly by commercial giants

Invite the courier company, strategic alliance open platform is an important choice for rookie logistics, but to a certain extent, will form an oligopoly structure, is not conducive to the sound development of small enterprises, but also hindered the development of innovation of logistics.

3.4.2 The rationality and inevitability of deep enterprise cooperation

The economies of scale and market rules between enterprises from each other, complementary interests alliance determines the depth of cooperation between enterprises, this is one of the most effective mode of commercial operation. This kind of social platform cooperation, not only reduces the operating costs, to help consumers, while improving the quality of service and response level, more importantly, it has a more extensive and far-reaching social benefits. This socialized logistics platform is the effective integration of social transport resources, China's total GDP 18% from the logistics, but in developed countries is 12%. If these 6 percentage points can be reduced, it will have a huge impact on the economic benefits of the country as a whole. According to the characteristics of the Lotka-Volterra model to estimate the demand function Chinese B2C market, the first equation (1) and estimate equation (2) by the number of relationships. The final demand function. According to the features of the data using nonlinear least squares estimation in Eviews3.0 equation (1) and (2) equation parameters in the convergence of standard value is set to 0.001, if the highest percentage of its variation coefficient is less than 0.1%, then the iteration stops. Cumulative demand estimates for JD.COM and Tmall from the first quarter of 2013 to the second quarter of 2016. The demand function that is S growth in this period of time the JD.COM and Tmall two company development, meet the initial requirements of the Lotka-Volterra model, by calculating the parameter estimation results are shown in table 1 and table 2 are as follows.

3.5 The attractiveness of the platform remains to be verified

An important work of rookie logistics at this stage is that the expansion of infrastructure construction in the construction of logistics throughout the country a large number of rookie logistics operation center, the goal is to rely on big data technology, capacity to provide service support for the whole society in the future gradually. So start planning a rookie logistics construction is to build, open logistics network sharing platform, grasp the opportunity of the rapid development of electronic commerce, in the country, and gradually increase the level of intelligent logistics, in order for the logistics system of the whole society to provide service support. However, in fact, at this stage into the rookie logistics backbone of the business is still relatively limited, it is difficult to achieve the basic expectations of rookie logistics, and Jingdong Mall, Suning Tesco as the representative of the self-electric business logistics enterprises, After the rapid response to the progressive realization of its logistics system of socialization. Therefore, for the commitment to modern logistics enterprises to realize the whole society, rookie logistics not only has a high competitiveness in the industry, but also has great appeal for franchisees, only properly deal with these two problems, can be the platform to promote to the whole society.

4. CONCLUSION

In general, with the continuous development of modern society, the implementation of project cost management has gradually developed into an important component of engineering project management. How to effectively implement project cost control and cost management has gradually developed into an important component of enterprise concern and research content. In strict accordance with the standards and specifications, the project cost control and cost management are organized, and the project cost control of each link is well done, so as to effectively guarantee the strength of the project cost control. In this paper, the SLP method is used to analyze the facilities planning of a city's distribution center. Based on the analysis of the main business of the distribution center for small batch and multi-batch distribution, the operation unit is divided and the logistics and non-logistics relationship between the operating units are analyzed, the logistics strength and non-logistics strength between the operating units are obtained. Finally, the comprehensive relationship between the operating units and the degree of comprehensive proximity are obtained, and a reasonable arrangement scheme is found, which is important to find out the optimal layout of distribution center significance.

Of course, the layout design of distribution center is a comprehensive technology, it involves many subjects, and there are many regulations in the design to follow. Therefore, the layout method of distribution center based on SLP still has many aspects to be further studied, such as a single operating area to determine how to take into account the logistics, safety, health and related laws and regulations, the layout of the design of how to take into account the design of the handling system.

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