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Research on the conflict management of Chinese overseas

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Abstract: Chinese companies have gone abroad for nearly 40 years and have achieved great achievements in the construction results. At the same time, due to the significant differences in the political system, legal system, economic environment, cultural customs between China and the country or region where the project is located, Chinese contractors have encountered some contradictions and conflicts in overseas engineering contracting. The implementation of the "Belt and Road" strategy in the next 40 years will not only bring tremendous opportunities for development to Chinese contractors, but will also have more severe challenges. In view of this, from the perspective of Chinese overseas engineering contractors, this paper analyzes the causes of conflicts in overseas engineering contracts by sorting out a large number of overseas engineering examples, and on this basis, it proposes a conflict management model that combines modern advanced information technologies—territorial-background integration conflict management model which based on the cloud-based platform, it provides methods and paths for Chinese overseas engineering contracting companies to improve their overseas competitiveness and adaptability.

1. Introduction

With the continuous enhancement of China's strength and the proposal of "Belt and Road" strategy, more and more Chinese construction enterprises go abroad.

Among the 250 largest international contractors in the world published by ENR magazine in 2017, 65 enterprises from the mainland of China were selected, and the selected enterprises achieved a total overseas market revenue of 98.72 billion us dollars, ranking the first in total revenue [1]. However, China's international image status is not high. Some foreign media said that the "Belt and Road" is not "win-win", but that China is "in control". China has volunteered to help many poor countries build infrastructure and brought advanced technologies and boosted their growth. However, the Chinese people have been labeled as "locusts" and "neo-colonialists".

According to the Project Management Institute (hereinafter referred to as the PMI) definition of project management, Project management is the application of knowledge, skill, tools and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project. It can be concluded from the definition of PMI that the essence of project management is to balance various conflicting demands and interest demands, which is contradictions and conflicts management.

Traditional conflict management research on construction projects focuses on the conflict between internal stakeholders (such as owners, contractors and subcontractors). However, with the economic globalization and the improvement of social consciousness, conflicts between external stakeholders,



such as the state, local residents, central and local governments, non-governmental organizations, have also become the key factors affecting the viability of projects. In South Korea, these conflicts cause social costs as high as \$700 per year [2]. In view of this, this paper analyzes the causes of conflicts in overseas contracting projects of Chinese construction enterprises and studies the management mode of the whole process. The causes of the conflict of Chinese contractors' overseas project contracting and how to manage conflicts as an overseas engineering contractor will be solved through the research. This paper proposes a conflict management mode for Chinese overseas project contracting enterprises.

2. Analysis on the causes of conflicts in Chinese overseas project contracting

2.1. The unique factors of conflicts of Chinese overseas project contracting

2.1.1. International political conflict

Political factors are the major factors that lead to conflicts in Chinese overseas project contracting. According to the statistics of CCG, 25% of China's OFDI events from 2005 to 2014 failed due to political reasons, among which 8% failed due to the obstruction of political faction forces in the host country, and 17% suffered business losses due to political turbulence and leadership change in the host country [3]. The Colombo port city project in Sri Lanka is a microcosm of the international political conflict caused by the Sino-US trade war in 2018. Examples of related political conflicts are shown in table 1 below.

Table 1. Political conflict table of Chinese overseas project contracting

Conflict	Reason	Content and instances
political conflict	Great power geo-strategic game	With China as its important trade partner and largest source of investment, Sri Lanka has a strong demand of Chinese capital and technology. However, as Sri Lanka's neighbor, India, a major power in South Asia, has expressed its opposition to the China-Pakistan Economic Corridor (CPEC) plan. After the change of government in Sri Lanka, the ruling party changed from "pro-China" to "pro-India". The new Sri Lankan government suspended the Colombo port city project on the grounds of environmental impact assessment and other issues that should have been the responsibility of the Sri Lankan government, causing huge losses to the Chinese port. After the efforts and negotiations of the Chinese side, as compensation for the shutdown, the Chinese side was granted 2 hectares of additional construction land. However, the previous agreement on the permanent use of 20 hectares of land by the Chinese side became a 99-year lease [4].
	Change of government	(1)The Myitsone hydropower project in Myanmar was put on hold indefinitely after the new government of Myanmar came to power. The early investment of 7 billion yuan of China Power Investment Corporation was deposited, and the corresponding interest and personnel maintenance costs increased by 300 million yuan per year. In addition, it also faces huge claims for breach of contract from suppliers, construction units and other relevant parties. (2)The struggle between the Institutional Revolutionary Party and the National Action Party in Mexico led to the cancellation of high-speed rail project of China Railway Construction in Mexico. (3)Thailand's constitutional court has ruled that a high-speed rail project approved by parliament is unconstitutional and has been forced to halt after the military junta took power in a coup against Yingluck.

2.1.2. Social and cultural conflict

Chinese American scholar Chen Xiaoping (2016) proposed that "culture is the material and spiritual wealth created by human beings and deposited after historical examination" [5]. As an oriental country, China has its own unique culture. Therefore, in the face of cultural and knowledge asymmetry, if

Chinese enterprises and project personnel only use their own cultural and value standards as a reference to explain and judge the culture of other groups, and even try to make the local conform to these standards, methods and habits, they will have contradictions and conflicts with project stakeholders in the contracting activities and then affect the project [6]. Relevant examples of social and cultural conflicts are shown in table 2 below.

Table 2. Social and cultural conflicts in Chinese overseas project contracting

Conflict	Reason	Content and instances
Social and cultural conflict	Language differences	The engineering contract documents of the Ecuadorian project of the Chinese company are signed in Spanish, and 50 of the 50 employees who go to Ecuador are Chinese and Spanish translators. However, there are still not enough translators for the project, and a large number of local English and Spanish translators are employed in Ecuador. Multiple translations will increase the risk of misinterpreting the original meaning of the contract
	Cultural values differences	With a short-term orientation, people in Kenya focus on quality of life. Kenyans prefer to earn less money rather than work more, as long as they have enough money to eat because rest and family are more important, while Chinese are hard-working, brave, career-oriented and willing to work hard for a better life in the future. Foreigners do not understand the Chinese very much. Even in the BBC program <i>The Chinese are coming</i> , Angolan workers commented that "Chinese people work 24 hours without interruption." On some Chinese-assisted construction sites in Nairobi, Kenya, there is also a saying that "all Chinese working here are prisoners in China."
	Religious belief differences	(1)Non-Muslims of the Mecca light rail project in Saudi Arabia are not allowed to participate in the construction of the Islamic holy city Mecca, and there are no professional Muslim engineers. (2)Ramadan is the Muslim "fasting month". After the sunrise and before the sunset, people are not allowed to eat and drink water, so staff work efficiency is low. Some countries stipulate only half a day of work is allowed during Ramadan. (3)Chinese companies did not take into account relevant taboos such as beef contraindication of Hindus and pork contraindication of Muslims when catering to local politicians for the Suriname project, which caused dissatisfaction of dignitaries. The catering which should have enhanced feelings increased estrangement.

2.1.3. Labor-capital conflicts

Labor-capital conflict is the conflict between labor and capital. However, labor-capital relations are affected not only by labor and capital relations, but also by the political, economic, legal and cultural influences of various countries. Labor-capital conflicts occur frequently abroad. Construction workers are vulnerable groups in China. The problem of wage arrears for migrant rural workers have occurred and mainly depends on the government to solve. However, in foreign countries, the local labor has better law consciousness and local labor protection laws and regulations are very strict. Once labor union interests are violated, the labor union with larger power will come out to safeguard the interests of the workers. Therefore, it seems that the conflict between labor and capital has a great impact on the scope and extent of the project.

2.1.4. Conflict between the contracting parties

The conflict between the contractor and contractee during the performance of the contract is called the conflict between the contracting parties. The causes of conflict between the contractor and contractee are numerous. Taking technical standards and management differences as examples, although China has its own building standard (GB), the specification is not widely shared in the world. Even in developed countries, the construction industry standards are often mixed with the British standard (BS), American standard (ASTM), the European standard (ES) and the specification of their own

country. Because Chinese contractors are accustomed to using Chinese engineering standards and ideas at home, Chinese contractors may have conflicts with owners and subcontractors in terms of material and equipment standards, construction technology standards and HSE situation on construction site because of their own thinking inertia or lack of thorough understanding of the host country's specifications when they go abroad to contract projects.

2.2. The key factors of conflicts in Chinese overseas project contracting

Resources are the material basis and premise of the project. Our overseas projects are mainly in underdeveloped areas such as Asia and Africa. Labor, money, material, time and information resources are the main problems faced by our overseas project contractors. However, due to the constraints of external objective conditions and requirements on "money", "material" and "time" resources, contractors can hardly fully grasp these resources. However, the project's ability to use the resources of "labor" and "information" can be enhanced through the internal construction of the enterprise itself, and the control of these resources can also help contractors to further grasp them and control the resources of "money", "material" and "time".

2.2.1. The ability of conflict communication and coordination

Overseas projects are completed with the cooperation of people. As a "social person", people will have conflicts in the process of interaction. Chinese overseas project managers tend to be Chinese employees. Although there are many elites with strong communication and coordination ability in Chinese contractors team, the Chinese expatriate managers working overseas are easily to have a setback of "culture shock" because Chinese managers is on assignment to work overseas facing environmental differences and different language and culture, etc. In addition, whether the employees with high ability and quality are willing to work overseas also needs to be considered. Therefore, there is an extreme lack of people with the ability to coordinate and manage project conflicts in overseas project contracting, which is one of the key reasons why Chinese contractors face conflicts in overseas project contracting.

2.2.2. The ability to obtain conflict-related information resources

Conflict-related information resources refer to the sum of all useful information related to conflicts, including experience, knowledge, intelligence, technology and so on. As Alvin Toffler wrote in *The Third Wave*: "whoever controls information and the Internet owns the world." However, Chinese contractors lack the ability to obtain conflict-related information resources when contracting overseas projects. Due to the lack of sufficient market experience and knowledge, it is quite common to fail projects. The failure of A2 high way project in Poland is a typical case. In order to prevent and solve conflicts of overseas project contracting, Chinese contractors need to obtain sufficient information resources.

3. The territorial-background integration conflict management model

The territorial-background integration conflict management model complies with the current trend of overseas engineering project management, from the key causes of the conflict of China's overseas project contracting, which is the insufficient ability of conflict communication and coordination and the lack of the ability to obtain relevant information resources. On the one hand, communicate and coordinate with conflicting party through local personnel and business enterprise; on the other hand, obtain more information resource to manage and decide the mode of conflict coping through the information technology, especially the cloud computing platform.

3.1. The territory conflict coordination

The territory conflict coordination mode is a mode of project conflict coordination and management by local personnel and organizations. Before the conflict, the project department collects market information and situation of the host country on the one hand, by hiring local foreign affairs and

technical staff and local consultants and subcontractors; on the other hand, obtain information, monitor project potential conflicts and prepare to respond to conflicts by building normal communication mechanism with local society, tribal leaders, the police, the embassy, peacekeepers, non-governmental organizations and others. After obtaining the relevant information of the conflict, the project department sends local employees and institutions to communicate and coordinate with the conflicting parties. They will try to understand the real thoughts and attitudes on the basis of alleviating and eliminating the conflict emotions of the conflicting parties as far as possible, and then report to the project department for its decision and response.

3.2. *The background conflict management*

The background conflict management refers to the mode in which the background manages and makes decisions on how to prevent conflicts in advance, how to resolve conflicts in the event and how to summarize and disseminate the experience and knowledge of conflict management afterwards. Background includes corporate headquarters background, overseas headquarters background and project department background. Different conflicts are handled by different levels of background according to their urgency and severity. Conflict managed by the background can make that the overseas project contractor's conflict management is no longer just conflict situation response, but the whole process of conflict management through conflict identification, evaluation, disposal, decision-making and inspection.

3.3. *The construction of conflict management cloud platform*

The conflict management mode of overseas engineering contractors is a mode combining the territory conflict coordination and background conflict management, while the background and the front joint to manage conflict, it needs to be connected through information technology. Therefore, this paper proposes to build a conflict management cloud platform to support conflict management of overseas engineering projects.

The conflict management cloud platform is a comprehensive cloud computing platform that takes into account both data storage and processing, including conflict information collection and monitoring system, conflict early warning and prevention system, conflict analysis and decision support system and conflict decision evaluation system. The deployment mode of conflict management cloud platform is hybrid cloud platform. Operators share the public data of various overseas engineering projects through public cloud, and each overseas engineering contractor establishes the internal conflict information base through private cloud. To obtain relevant knowledge and information among contractors, they can conduct online negotiation and purchase from relevant enterprises through the cloud platform.

4. The empirical analysis of the territorial-background integration conflict management

4.1. *The territory conflict coordination experience of Morocco project*

When the overseas business department of the fifth bureau of water conservancy and hydropower of China contracted the project in Morocco in northwest Africa, it adopted the territory coordination mode in the whole process of the project for conflict coordination and conflict response, as shown in table 3.

Table 3. The territory conflict coordination experience of Morocco project

Engineering stage	Specific practice
Bidding preparation stage	Hire a local bidding agent to collect market and competitor information on the one hand, and communicate and coordinate with the tendering unit on the other hand.

Bidding stage	Form a joint venture with local powerful construction companies. On the one hand, expand their bidding scope and space; on the other hand, better understand the local market through local companies.
Subcontract stage	Subcontract the project to local material suppliers, equipment suppliers, design subcontractors, test external control subcontractors, construction subcontractors and collect information on material prices and trends, equipment and lease prices, local subcontract prices, etc.
Construction stage	Hire local staff with construction market development experience. Establish formal or informal communication channels with senior officials of the Moroccan government, fully understand and master the short-term and long-term plans of various local projects, and help the government plan and implement projects. Establish a regular mechanism with local chiefs and heads of administrative regions to learn about local social information and security information through local celebrities. Establish communication channels with local media.

4.2. The background conflict management experience of Bechtel corporation, USA

Bechtel, the leader of the American construction industry, is a top international contractor that integrates infrastructure, defense and nuclear safety, petroleum, natural gas and chemicals, mining and metallurgy and manages projects through the headquarters management and control model. As a world-class engineering construction company, its advanced knowledge management and information construction experience plays a very important role in conflict management of overseas engineering projects.

4.2.1. Focusing on knowledge management and employee training

Bechtel attaches great importance to the accumulation and transmission of knowledge and experience, and has the positions of "knowledge president" and "knowledge manager" within the company. The knowledge president is mainly responsible for paying attention to knowledge input in business projects, while the knowledge manager is mainly responsible for managing the company's knowledge base to ensure timely collection and dissemination of relevant knowledge [7].

On staff training and learning, Bechtel establishes Bechtel university (BU). It offers more than 1000 project management related theory and practical courses online. The offline training includes two parts. On the one hand, select employees to attend short-term professional training in professional training institutions; on the other hand, sent headquarters or local engineers or experts from headquarters or local with rich practice experiences local to impart knowledge on the scene of the project located, which has trained a large number of high-quality staff for the project department.

4.2.2. Using the cloud computing SaaS service model

In 2007, Bechtel constructed a new network, Project Services Network (PSN for short), among three new data centers. Through PSN, Bechtel provides information service of cloud computing SaaS mode for various business branches, project teams, suppliers and partners outside the enterprise, that is, users all over the world can acquire relevant application software and information within the company on demand through the Internet. This cloud computing service created by Bechtel improves its business capability. In terms of purchasing management, this model enables Bechtel to grasp the world's project process and material price information, and conduct transactions through e-commerce, which greatly

improves Bechtel's bargaining power and material purchasing ability. In terms of information acquisition, the model also encourages Bechtel to have more partners and professional think tanks to provide services for its project construction. In addition, the GIS Geographic Information Management System developed by Bechtel integrates ISO organization, ANSI, navigation, information technology system, environment, measurement, design, business, international business information and other spatial data, which further enhances the company's information analysis and processing capabilities [9]. In some projects with poor or no basic communication facilities, Bechtel can establish communication with corporate headquarters by deploying satellite network systems. This highly informationized management mode enables the project department of Bechtel to report relevant information to the headquarters of the enterprise in time when facing conflicts. On the other hand, because the headquarters has rich knowledge, experience and information technology, it can also make better and faster decisions on conflicts.

5. Conclusion

The information technology revolution has greatly improved the production efficiency of modern society. In the process of engineering construction, engineering organizations should also adopt more advanced "man-machine-network" mode for management and communication. This paper studies the conflict management of overseas project contracting of Chinese contractors, especially the causes of conflict of overseas project contracting and the conflict management mode of overseas engineering contractors, and proposes a conflict management mode based on modern advanced information technology, namely the territorial-background integration conflict management mode based on cloud computing platform. However, because of the limited knowledge and time, there are still some shortcomings: (1) in this paper, the background conflict management of the conflict management mode only mentions that "different conflicts are handled by different levels of background according to their urgency and severity". There is no in-depth analysis of how to carry out background management, which can be further studied in the follow-up. (2) Due to the limitation of expertise and knowledge, the conflict management cloud computing platform proposed in this paper only defines its functional application and does not study specific technical problems such as the technical architecture of the platform. In addition, the implementation and construction of the cloud computing platform can be further studied in the future.

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