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THE COMPETITIVE ADVANTAGE OF CCC IN INTEGRATED SERVICES OF CONSTRUCTION IN INDONESIA

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ABSTRACT

In the background of global infrastructure construction and the transformation of the construction industry to an integrated service model, this study draws on strategic management theory, especially Porter's theory of competitive advantage and the resource-based view (RBV), to explore the research questions: 1. What are the strategic factors that contribute to the competitive advantage of CCC? 2. How are the strategic factors applied/implemented to contribute to the competitive advantage of CCC. And draw the competitive advantages of CCC to maintain its leading position in the highly competitive integrated building services field. This study is mainly based on interviews, through qualitative research and literature analysis, to explore the factors that CCC uses to build differentiated competitive advantages. The development of CCC in Indonesia shows that Chinese enterprises should pay attention to the comprehensive balance of technical capabilities, quality control, social responsibility and employee development in the process of "going out" to achieve a high-quality and responsible international development path. The researchers hope that this study can provide some reference for peer companies to enhance their competitive advantages, and at the same time provide strategic inspiration for international customers and other researchers to understand how Chinese integrated building service providers can gain competitive advantages in the evolving global infrastructure ecosystem.

Keywords: Integrated Construction Services; Strategic Management; Competitive Advantages; Differentiated Competitive Advantages

INTRODUCTION

The global construction industry has experienced significant shifts from 2020 to the present. The COVID-19 pandemic had a profound impact on the industry, causing delays in projects, supply chain disruptions, and increased material costs. However, post-pandemic recovery efforts, government infrastructure investments, and technological advancements have fueled growth in key regions, including Asia-Pacific, North America, and Europe, especially in the Asia-Pacific region construction growth rates were particularly strong (Ogunnusi et al., 2021; Hossain et al., 2022).

Indonesia, as one of the largest economies in Southeast Asia, has shown unique resilience and potential in its construction market. Indonesia has a large population and a low urbanization rate. After the pandemic, Indonesia's economy is gradually recovering, and the government will increase infrastructure investment to boost employment and GDP, and there will be more opportunities for international contractors (Zhu & He, 2022; World Bank, 2020).

In recent years, China-Indonesia bilateral economic and trade cooperation has developed comprehensively, especially in the fields of trade, investment and engineering contracting. As far as the construction industry is concerned, Indonesia has long been one of the top ten overseas markets for Chinese companies to carry out engineering contracting.

CCC is a leading global comprehensive service provider of ultra-large infrastructure, mainly engaged in investment, construction and operation of transportation infrastructure, equipment manufacturing, real estate and urban comprehensive development. In 2024，CCC ranked 63rd in Fortune global 500. As the Chinese enterprise with the best overseas market business, CCC has been operating in Indonesia for nearly 30 years, and CCC has established a strong presence in the Indonesian market, undertaking key projects such as the Sura-Madu Bridge and various port developments. The research problem in this research emerges from the need to understand how CCC gains and sustains its competitive advantage in Indonesia’s construction industry amid increasing competition from local firms and other international players.

While significant research has been conducted on competitive advantage in the construction industry, existing literature has primarily focused on Western firms and large multinational construction companies from the US and Europe (Martek, 2022; Zhao et al., 2016). Studies analyzing Chinese state-owned enterprises (SOEs), particularly in Southeast Asian markets, remain relatively limited. Additionally, prior research has largely examined traditional construction services (Siman & Nugraha, 2023; Rehman et al., 2023) but has not adequately addressed the growing trend of integrated construction services, which encompass design, engineering, financing, construction, and operation (such as EPC+F model and PPP model). However, this research on CCC leverages its vertical integration capabilities and strong financial backing to gain a competitive edge that the researcher is investigating (Tan et al., 2011; Rehman et al., 2023).

CCC is a leading global comprehensive service provider of ultra-large infrastructure, and CCC has been operating in Indonesia for nearly 30 years. Many of its subsidiaries have set up branches in Indonesia, with business covering port dredging, roads and bridges, housing construction, rail transit, clean energy and other fields. Over the years, CCC has undertaken a number of landmark infrastructure projects in Indonesia, playing a positive role in local connectivity, improving people's livelihood and economic development.

Affected by the pandemic, CCC's annual revenue in Indonesia showed a significant downward trend from 2019 to 2021. After reaching a low point in 2021, it began to steadily recover from 2022. The annual revenue in 2019 was US$1.2 billion, the highest point in the

past five years; while the annual revenue in 2020 fell to US$1 billion, a decrease of about 16.7% from 2019, the revenue in 2021 further fell to US$600 million, a sharp drop of 50% from 2019. As the global economy gradually recovered, the revenue in 2022 rebounded to US$900 million and continued to grow to US$1.1 billion in 2023, close to the 2019 level. CCC's rapid recovery after the impact of the epidemic, reflecting its resilience and competitive advantages as a leading global infrastructure company.

This article aims to comprehensively explore the core competitive advantages of CCC in the Indonesian integrated construction services market in the post-epidemic era. The study seeks to reveal how CCC maintains its leading position amid intensifying international competition and shifting market demands.

Based on the research problems above, below are the research questions:

1. What are the strategic factors that contribute to the competitive advantage of CCC?
2. How are the strategic factors applied/implemented to contribute to the competitive advantage of CCC?

LITERATURE REVIEW

TCS and ICS

Traditional Construction Services (TCS) mainly focus on the construction phase of the project, undertaking specific construction tasks assigned by the owner or general contractor through contracts (such as civil engineering, installation, decoration, etc.). Integrated Construction Services (ICS), provides full life cycle services, covering the entire process of the project from preliminary planning, design, construction to operation and maintenance (Liu et al., 2021). Through the CCC five businesses strategy, CCC has successfully transformed from a Traditional Construction Services (TCS) provider to an Integrated Construction Services (ICS) provider (Zhang et al., 2014).

Competitive Advantage

Jurevicius (2025) explained the competitive advantage of an enterprise that comes from the combined effect of many aspects. The following are two basic factors: 1. Differentiation strategy: An enterprise stands out in the market by providing unique products or services that meet the specific needs or preferences of consumers. 2. Cost leadership strategy: Through effective cost control and economies of scale, enterprises provide the same or similar products or services at a lower price than competitors, thereby attracting price-sensitive consumers (Olanrewaju & Abdul-Aziz, 2021).

Porter’s 5 Forces

The five forces model analysis was proposed by Michael Porter in the early 1980s. He believed that there are five forces in the industry that determine the scale and degree of competition. These five forces combined affect the attractiveness of the industry. The five forces are threat of new entrants, threat of substitutes, buyer bargaining power, seller bargaining power, and competition between existing competitors.

Pangarkar & Prabhudesai (2024) believes porter's five forces model provides a comprehensive framework for analyzing industry competition. If the threat of potential entrants is small, the threat of substitutes is small, the bargaining power of suppliers is weak, the bargaining power of buyers is weak, and the competition among existing competitors in the industry is relatively mild, then the company is in a relatively favorable competitive environment and can consider adopting expansion strategies, such as expanding production

scale and opening up new markets. On the contrary, if all five forces are unfavorable to the company, the company needs to make cautious decisions, find new competitive advantages or consider transformation.

Porter's Generic Strategy

Porter's generic strategy Islami et al. (2020) believes that in the struggle against the five competitive forces, there are three types of successful strategic ideas, which are: total cost leadership strategy; differentiation strategy; specialization strategy. Porter believes that the goal of these strategic types is to make the company's operations superior in industry competition: in some industries, this means that the company can achieve higher returns; while in other industries, the success of a strategy may only be a necessary condition for the company to obtain a small profit in an absolute sense.

Resource-Based View, RBV (Liu & Liang, 2023)

The publication of Wernerfelt's "Resource-Based Theory of the Firm" in 1984 marked the birth of resource-based view. RBV focuses on how the resources within an enterprise affect its strategic decisions and competitive advantages. The RBV holds that the key to a company's success in market competition is to identify, develop and utilize its unique resources. Knott (2022) believed these resources must have certain characteristics, such as Value（V, which means they can help companies meet market demand, improve efficiency or create value; Rareness（R, which means that not all companies can easily obtain these resources; Inimitability（I, which means that other companies find it difficult to copy or imitate these resources; and Organization（O, which means that there are no other resources that can completely replace their performance.

RESEARCH METHOD

This study adopts positivism and interpretivism paradigms to understand how construction companies develop competitive advantages in the Indonesian market. Through in-depth case analysis and interviews, this study aims to explore the competitive advantages of CCC in the field of integrated construction services in Indonesia, facing various competitions and challenges (Saunders et al., 2019; Wang & Li, 2024; Financial Times, 2023).

In the research strategy of integrating positivism and interpretivism, this study adopts a mixed methods strategy. This study first obtains the data characteristics of CCC in Indonesian integrated construction services by consulting the company's financial statements and industry data, and then explains the organizational mechanisms, cultural factors or strategic considerations behind these data through in-depth interviews. This "quantification first, then qualitative" or "parallel design" method helps to obtain more comprehensive insights (Creswell & Clark, 2018).

CCC is the case chosen to analysis the competitive advantage of a company in ICS industry. The data comes from employees, managers, and customers. Researchers use an semi-structured interviews, observation, and field notes to collect data on this research. Interviews are conducted face-to-face or via WeChat call. A qualitative research method was used to get in-depth information from the informants (Zhao et al., 2016).

Analyzing data will be started by thematizing the collected data. Afterward, classifying those several topics through topic analysis. Next, pattern analysis will be done to create latent variables. The researchers will closely check to ensure the elements can be used as the competitive advantage of CCC.

Table 1. Respondent Data

Name	Position	Age	Detail
Chai XZ (1–1)	Supervisor	50–55	The GM of the CCC technical center, He has extensive experience in engineering survey and design and strong technical R&D capabilities.
Wei W (1–2)	Supervisor	45–50	Deputy GM of CCC Overseas Business Department. He has extensive experience in overseas integrated construction services and served as GM of CCC Indonesian subsidiary in Indonesia for 10 years.
Wang Z (1–3)	Supervisor	40–45	Project manager of a large-scale integrated project of CCC in Indonesia, which includes mining, EPC of supporting wharf and coal transport road, coal transportation and sales and other services.
Pi QL (2–1)	Employee	35–40	He is an RD leader with rich R&D experience and is based in Indonesia.
Li XT (2–2)	Employee	25–30	Indonesia market specialist, responsible for the development of Indonesian market and maintaining relationships with customers.
Wilson (2–3)	Employee	30–35	An Indonesian employee with comprehensive management experience, he was once named one of CCC's top ten foreign employees.
Junanto (3–1)	Customer	50–55	Senior project leader, Junanto's company is the owner of the large-scale integrated project in Indonesia mentioned above. They have high requirements for project quality and construction technology.
Roza (3–2)	Customer	40–45	Special attention is paid to the quality issues of construction projects.
Sapri (3–3)	Customer	35–40	The company Sapri belongs to plans to build a premium office building in Jakarta CBD and is investigating potential integrated construction service providers.

RESULTH AND DISCUSSION

This research will use the latent variables obtained from interviews with CCC supervisors, employees, and customers. The latent variables will then be used to construct the proposition of the mini model theory of the research.

Construct Propositions

In this section, the researcher will construct propositions using these latent variables. Through these propositions, the researcher will examine and explain how these latent variables contribute to CCC's competitive advantage in the field of ICS.

Proposition 1 (P1): Integrated Service Capabilities Across the Entire Industry Chain (V1) Contributes to the Competitive Advantage (V9).

In the Indonesian market, CCC has effectively achieved differentiated competition with local and international competitors by building integrated service capabilities across the entire industry chain, thereby gaining significant competitive advantages. This integrated service capability across the entire industry chain not only improves the overall execution efficiency of the project and the added value of services, but also enhances customer stickiness, forms a solid government relationship network and good brand recognition, and thus builds a sustainable competitive barrier in the complex infrastructure market environment in Indonesia. In the interviews with supervisors, employees and customers, they said: *"In the supporting infrastructure project of Sulawesi Industrial Park in Indonesia, CCC not only undertook the construction tasks of roads and ports but also provided early investment planning and later maintenance and operation support, greatly improving the overall life cycle efficiency of the project."- Chai XZ (1-1). "We can cover the entire process from design, investment and financing, construction, procurement, operation and maintenance, etc., which greatly reduces the cost of multi-party coordination for customers and makes the project more efficient. In*

addition, in bidding, we are often directly selected as the preferred candidate because of our integrated capabilities."- Wei W (1-2). "We are no longer just a construction party but are also extending into comprehensive fields such as urban development, industrial park construction, and integrated port log party but rations. In the future, Indonesia will become one of our most important strategic fulcrums in Southeast Asia."- Wang Z (1-3).

Through the above interviews with supervisors, employees and customers, the proposition that integrated service capabilities across the entire industry chain contributes to competitive advantage is confirmed. At the same time, it also confirms the importance of differentiation strategy for CCC to build a competitive advantage in the field of ICS.

Proposition 2 (P2): Strong Technical R&D Capabilities (V2) Contributes to the Competitive Advantage（V9)

With its strong technical R&D capabilities, CCC has established a clear technical competitive advantage in international engineering projects in the Indonesian market, especially in complex geological conditions and large-scale infrastructure projects. By fully integrating advanced design concepts, BIM digital modeling systems and green and low-carbon concepts into engineering practice, CCC has won high recognition from the government and owners in project bidding and implementation. This differentiated technology strategy with scientific research and innovation as the core driving force has not only greatly improved the quality of project delivery but also consolidated its technological leadership in the Indonesian engineering market, becoming an important support for its continued expansion of overseas markets.

In interviews with supervisors, employees and customers, they said: *"Indonesia has relatively advanced technologies in municipal roads and building construction, but China has more advanced technologies in ports, highways, railways, large bridges, etc., and CCC is one of the few large state-owned companies that possess these core technologies."- Wei W(1-2)."Overseas environment is indeed more complicated, with different geology, climate and specifications. But we have our own mature overseas design system, such as earthquake-resistant structure design, rainfall drainage optimization, etc. We have formed a set of design capabilities that combine "localization + standardization"."- Pi QL (2-1).*

Therefore, it can be seen that CCC attaches great importance to the improvement of technical R&D capabilities, and has invested a lot of funds, manpower and other resources. Its strong technical R&D capabilities have brought it unstoppable competitive advantages.

Proposition 3 (P3): Localized Operation Capabilities (V3) Contributes to the Competitive Advantage（V9).

By continuously strengthening its local operation capabilities in the Indonesian market, CCC has effectively improved the local adaptability and social integration capabilities of project execution and built a core competitive advantage that is different from other international contractors. Localized operations are not only reflected in the localization of labor use but also include the deep embedding of multiple dimensions such as management system, supply chain system, legal compliance, and cultural integration.

In interviews with supervisors, employees and customers, they said: *"In terms of government relations and community management, CCC has established a local affairs team led by Indonesian employees, actively maintaining communication with local governments, village committees, and religious organizations, promoting social responsibility projects such as environmental compliance, resettlement compensation, and festival co-construction, and effectively resolving external risks in project implementation."-Wilson(2-3). "CCC actively*

cooperate with local companies, introduce local subcontractors, employ a large number of Indonesian workers, and set up a local employee training center to help improve skills, thereby enhancing the social acceptability of the project and the local economic driving effect. They also select the top ten foreign employees every year, which is already a very successful practice in their localization of employees."- Junanto (3-1).

It can be seen that through its local operation capabilities, CCC has not only achieved the above-mentioned results, but also enhanced and consolidated its competitive advantages in the Indonesian market.

Proposition 4 (P4): Integrated Centralized Management Systems (V4) Contributes to the Competitive Advantage（V9).

By building and implementing an integrated centralized management system in the Indonesian market, CCC has significantly improved the organizational efficiency and risk control capabilities of overseas projects, thus forming a solid competitive advantage. Faced with Indonesia's diverse geographical environment, complex administrative procedures and cultural differences, CCC relies on its independently developed engineering project management platform to integrate multiple key modules such as progress control, cost control, quality and safety, contract management, and local compliance, and realizes dynamic management and real-time monitoring of the entire process, all elements, and all participants of the project. In the interviews with supervisors, employees and customers, they said: *"We rely on our self-developed integrated centralized management systems (such as overseas project collaboration platforms, financial audit systems, and compliance tracking systems) to achieve unified scheduling and dynamic management and control across countries, regions, and businesses. These systems support multiple languages, different laws, and exchange rate environments, improving operational efficiency and project control."- Wei W (1-2). "CCC's integrated centralized management system is very advanced. Through ERP, progress control platform and budget system, we can grasp project data and risk warning in real time, which greatly improves our work efficiency and reduces errors and duplication of work."- Wilson (2-3).*

Through an integrated management system, CCC has achieved cross-border data integration and remote supervision and established unified standards and process specifications for the company in overseas projects. Through the integrated management system, management efficiency and quality have been improved, consolidating CCC's competitive advantage in Indonesia's ICS market.

Proposition 5 (P5): Infrastructure Quality Control (V5) Contributes to the Competitive Advantage（V9).

By building a systematic and standardized infrastructure quality control system in the Indonesian market, CCC has won high recognition from project owners and government regulators in the fierce international engineering competition, thereby gaining significant competitive advantages. Through the infrastructure quality control system measures, CCC has significantly reduced the rework rate and project quality complaints, improved overall construction efficiency and customer satisfaction, and formed a good brand image of "CCC= High Quality". In interviews with supervisors, employees and customers, they said: *"Taking a port expansion project in Jakarta as an example, CCC set up a special infrastructure quality management department at the project site, equipped with Chinese and Indonesian quality inspection engineers, third-party testing agencies and laboratory real-time monitoring mechanisms to ensure that key indicators such as concrete strength, steel structure welding,*

and anti-corrosion technology meet international standards."-Wei W (1-2). "First, CCC has a complete infrastructure quality management organizational structure, including full-time quality engineers and third-party testing agencies. They organize technical briefings before each key process to clarify standards and acceptance procedures. Secondly, they use intelligent testing equipment, such as wireless sampling and automatic upload systems for concrete strength, to improve quality traceability. We participate in joint inspection meetings every month, and the data is open and transparent, which truly makes the whole process controllable."- Roza (3-2).

This infrastructure quality control capability is not only the core guarantee for it to win the trust of Indonesian owners, but also a key competitive resource for it to consolidate its market share and expand high-end projects in the international market.

Proposition 6 (P6): Aggressive Exploration of the Market Segments of ICS (V6) Contributes to the Competitive Advantage（V9).

CCC has successfully achieved a strategic transformation from a traditional construction contractor to a diversified integrated service provider by actively exploring the construction comprehensive service market segment in the Indonesian market, thereby establishing a unique competitive advantage in the fierce international competition. Through precise layout in the market segment, CCC can better meet the diversified and complex needs of owners and rely on its integrated service capabilities and resource integration advantages to improve project bargaining power and profit margins.

In interviews with supervisors, employees and customers, they said: *"CCC is good at combining Indonesia's local development policies, such as "National Strategic Projects" and "Indonesia Vision 2045", to seize opportunities in infrastructure upgrades and regional integration projects, thereby increasing its project acquisition rate and brand influence."-Chai XZ (1-1). "In projects such as the Jakarta CBD office building project and the Central Java Industrial Corridor supporting project, CCC not only provides design and construction services, but also is involved in early consultation, investment and financing integration, project operation and maintenance, etc., demonstrating its full-chain service capabilities."-Wei W (1-2). "Of course, for example, last year we participated in the development of an industrial park on the island of Java. We not only built roads and factories, but also provided overall planning, investment and financing advice, and post-operation plans. This "packaged" service has won high recognition from the park management."-Li XT (2-2).*

Actively exploring niche markets has not only broadened CCC's business boundaries in Indonesia but also enhanced its ability to withstand risks in a single market. It is an important strategic path for it to build differentiated competitive advantages and achieve sustainable development.

Proposition 7 (P7): Focus on the Realization of Employee Welfare and Employee Value (V7) Contributes to the Competitive Advantage（V9).

By paying close attention to employee welfare and employee value realization in the Indonesian market, CCC has effectively enhanced organizational cohesion and the level of local talent, thereby forming a unique competitive advantage in the international engineering competition. As a representative of state-owned enterprises that "go global", CCC not only pays attention to project benefits and engineering quality but also pays more attention to the career development and life security of overseas project employees, especially local employees. By creating a corporate culture of "people-oriented and common growth", CCC has built a stable and efficient localized management team, significantly reduced labor costs

and staff turnover, and also improved its cooperative relationship with the government and the community.

In the interviews with supervisors, employees and customers, they said: *"In many key projects in Indonesia, CCC has established a systematic local employee training mechanism to help employees improve their professional capabilities and achieve career advancement through job skills training, production safety education, engineering technology guidance, etc. At the same time, CCC provides Indonesian employees with salary packages that are better than the industry average, regular physical examinations, holiday condolences, labor protection measures, and special care for religious festivals such as Eid al-Fitr, winning high recognition and loyalty from employees."-Wei W (1-2). "High employee satisfaction means high site stability, and naturally low construction risks and uncertainties. We treat our employees as partners, and they will treat projects as their own careers and the company as their home. When employees have a sense of belonging, the company's cohesion will be strong, which in turn enhances its competitive advantage over other companies."-Wang Z (1-3). "CCC's employees in Indonesia, whether Chinese or local, enjoy good accommodation, medical care, social security and holiday benefits. We also have annual physical examinations, family days and cultural exchange activities, which make us feel truly valued."-Wilson (2-3).*

The employee-centric management model of CCC not only optimizes the efficiency of project execution but also establishes a responsible and trustworthy image of Chinese enterprises in Indonesian society, becoming an important soft power support for CCC's continued expansion in overseas markets.

Proposition 8 (P8): State-Owned Enterprise (SOE) Reputation Guarantee (V8) Contributes to the Competitive Advantage（V9).

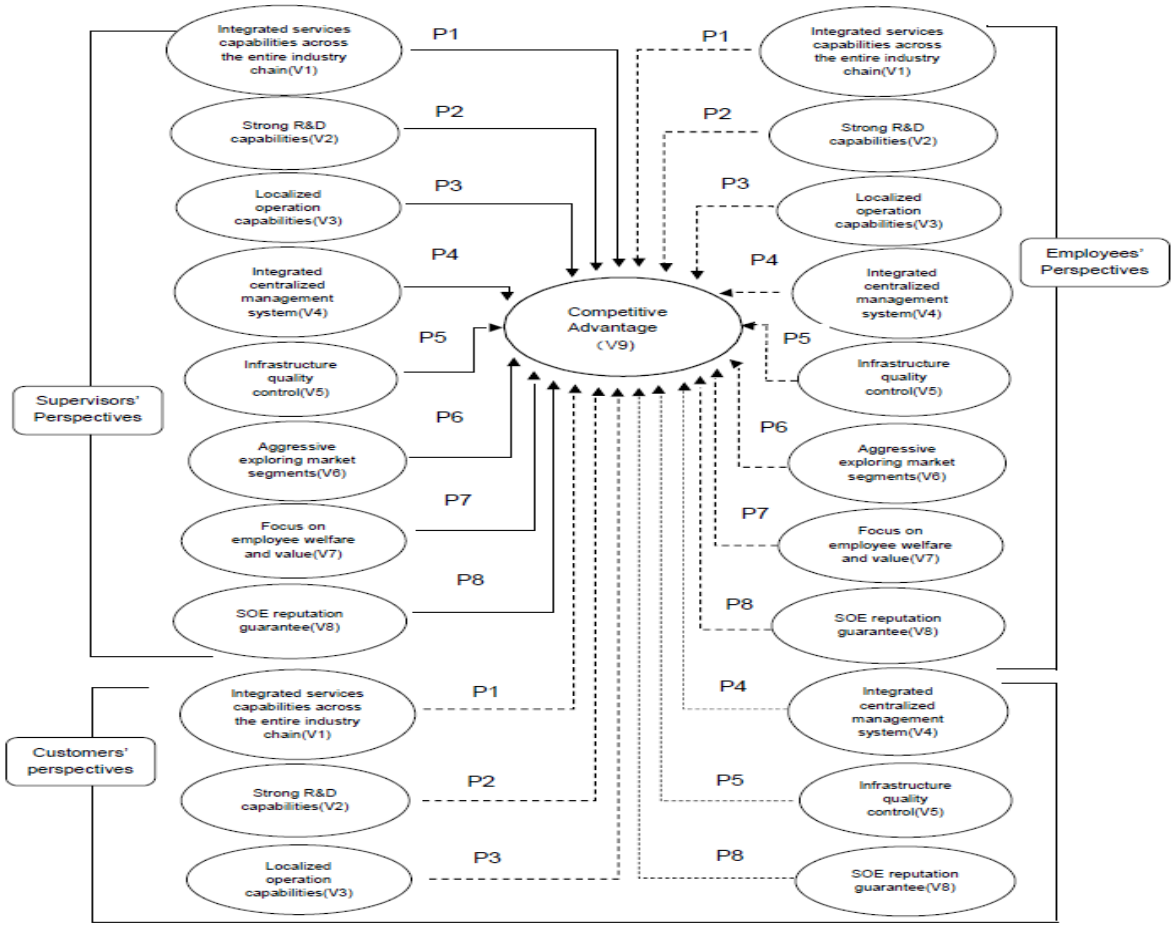
As a key state-owned enterprise in China, CCC has benefited from the Chinese government's policy promotion, diplomatic coordination and financial support under the framework of the "Belt and Road" initiative and has strong international endorsement capabilities. This ability to combine government resources with corporate operations makes it significantly superior to other international contractors that rely on market mechanisms in terms of project acquisition and financing convenience. In addition, as a state-owned enterprise, CCC has a good international reputation and strong contract performance capabilities, and represents the image of "high standards, high efficiency and low risks" in the minds of the Indonesian government and owners. This reputation not only helps it win bids for large public engineering projects but also establishes a reliable brand recognition for it among local governments and social groups in Indonesia, significantly improving the efficiency and social acceptance of project implementation.

In interviews with supervisors, employees and customers, they said: *"CCC's state-owned enterprise background is very advantageous. Many countries along the "Belt and Road Initiative" have a high degree of trust in Chinese companies, and as a central enterprise, our credibility and policy execution are more important in project negotiations. Customers believe that we are "controllable", trustworthy, and cooperative. "We maintain long-term institutionalized cooperation with relevant Chinese government departments, embassies abroad, and financial institutions (such as China Development Bank and Export-Import Bank), which can help projects quickly land financing and obtain policy endorsements. This policy resource integration capability is unmatched by private enterprises."-Wei W (1-2). "Being a state-owned enterprise is a plus in Indonesia. The government and major owners will feel that we are more stable, supported by the state, and have lower risks, especially in large-scale infrastructure and strategic projects, where we have obvious advantages."*

The policy resource advantages and state-owned enterprise brand effect that CCC relies on have become an important source of its differentiated competition, enabling it to stand out in Indonesia's complex political and economic environment, win more high-quality project resources and establish a solid market position.

CONCLUSION

Through the data collected in the previous analysis, we obtained 8 latent variables and 8 propositions and created the mini-model theory shown in Figure below. CCC has successfully built a multi-dimensional and differentiated competitive advantage in the Indonesian market by relying on these advantages. These advantages make CCC stand out among many international contractors. In the context of the high degree of fit between the "Belt and Road" initiative and Indonesia's national infrastructure development strategy, CCC's competitive advantages not only support its continued expansion in the Indonesian market but also provide useful experience for other Chinese companies to "go global".



The dotted lines refer to the latent variables and propositions that appear in more than one perspective.

RECOMMENDATIONS AND IMPLICATIONS

Limitations and Recommendations

This study investigated CCC from the whole projects in Indonesia, rather than focusing on one specific location. Therefore, further study can be applied to specific location or project in Indonesia, for comparative analysis.

Implications

This research analyzes the competitive advantages of CCC in the Indonesian market, which provides many useful inspirations for the "going out" strategy of Chinese enterprises. First, building integrated service capabilities across the entire industry chain has become an important trend in the competition of the international infrastructure market. Enterprises should transform from single contractors to integrated service providers of "investment, construction and operation" to enhance customer stickiness and project added value. Second, localization strategy and local operation capabilities are the key to enterprises' deep cultivation of overseas markets. CCC has successfully established a sustainable social relationship network through local management, local talent training and cultural integration, which is worth learning from other enterprises. In addition, giving play to the advantages of national policy resources and the brand reputation of central enterprises will not only help improve the ability to obtain projects in the international market, but also enhance cross-cultural trust and cooperation efficiency. More importantly, the development of CCC in Indonesia shows that Chinese enterprises should pay attention to the comprehensive balance of technical capabilities, quality control, social responsibility and employee development in the process of "going out" to achieve a high-quality and responsible international development path. Overall, the practical experience of CCC provides a replicable and polarizable strategic paradigm for Chinese engineering enterprises to expand markets and create differentiated competitive advantages in countries along the "Belt and Road".

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