

## **Investigating the Strategy of internationalization Architectural Design in Taiwan within the Conceptual Design International Competition**

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### **Abstract**

Internationalization of enterprise is a obvious phenomeno and common strategy for business that want to expand their boundary worldwide. Scholars propose some models that can explain the success well, however, there are no studies on these models applied on the profession of architectural design, even though this profession was internationalized maturely. This study focus on one of the popular mode of architectural competition : Conceptual Design, by the cases in taiwan, and find the Uppsala model is better, followed by the explanatory power of the RBV and OLI.

**Keywords:** *Conceptual Design, internationalization, architectural design, Uppsala RBV OLI*



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### **INTRODUCTION**

Regarding the process and strategy of internationalization of enterprises, many scholars have studied it in recent years. International enterprises have gradually flourished since the World War II, so that many large international enterprises are now operating successfully. However, compared with these large enterprises, which are mostly manufacturing or service industries, the model of internationalization of the construction industry is not necessarily the same, and the strategies adopted are also different, and the relevant research is rare. Therefore, it is necessary to invest in continued research on the process and strategy of the internationalization of the construction industry.

In the construction industry (AEC: Architecture, Engineering, Construction) industry, the architectural design industry in easier for internationalization, therefore, it should be discussed and studied first. In addition to Foreign Direct Investment (FDI), new models such as franchising, or alliances have also developed. Limited by the research time and energy, it is impossible to conduct case studies and discussions on various processes and strategies, so this study focuses on the new trend of the architectural design industry in recent years: Conceptual Design International Competition as the main research object for the explanatory of existing model.

The opportunities for the internationalization of the architectural design industry usually are the followings:

1. Overseas project come with the internationalization of the original owner/client.
2. Participate in international competitions. The cost is not very high, and success rate is about 1/10.

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3.Particular know-how for particular projects, the projects are rare but worldwide.

The opportunities above, international competitions adopt by many architects as the main method for internationalization for lower cost and risk.

In Taiwan, international competition plans have been gradually adopted on public construction in recent years, especially the “conceptual design” method. This method has indeed attracted many famous foreign architects to participate in the competition. For example, Taiwan Tower Concept Design International Competition, international competition for conceptual design of New Taipei City Art Museum, etc.

### **LITERATURE REVIEW**

In addition to the widely accepted transaction cost theory (TCE), for the discussion of enterprise internationalization, this research will adopt a brief review of the three theoretical models engaged in:

1. Uppsala Model. Proposed by Johanson in 1997 (Johanson,1997).
2. Eclectic (OLI) paradigm. Proposed by Dunning in 2001 (Dunning:2001).
- 3.Resource Base Perspective.

From the above table, the international competitions that can be held in China, in recent years, a large number of conceptual design methods have been adopted for international competitions.

Mode. Therefore, the international competition for conceptual design in recent years has become the scope of this research.

### **SCOPE OF RESEARCH**

Citing the research results of (Lin, 2009) , and adding the finishing of this research, the following table shows the domestic international competition map in recent years. Table 1 Arrangement of domestic and international competitions in recent years

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Table 1 Arrangement of domestic and international competitions in recent years

year	Competition name	Type	Competitioncontent
1995	Taichung New Municipal Center	Architectural Design	Design supervision
2001	Presidential Palace Plaza Renovation Project	Plaza	
2002	Taitung National Taiwan Museum of Prehistoric Culture	Architectural Design	
2002	Tainan Museum of Taiwan History	Architectural Design	
2003	Tourist Multiplier Program National Landscape Series		
	Suntan Lake	landscape,architecture	
	Alishan	Landscape	
	north coast	Hengchun Peninsula	
2004	Tourist Multiplication Program Country Series		
	Zhongzheng International Airport Terminal 1	architecture	
	Kaohsiung Ocean Center Ocean City	port	
	Tainan Anping Port National Historic Scenic Area Pier	port	
	Keelung Ocean Plaza	port	
2004	Nantou 921 International Competition to Rebuild Thanksgiving Memorial Park	park	
2005	National Palace Museum Chiayi Palace Museum South	architecture	Design supervision, concept design
2006	Taichung Metropolitan Opera House	architecture	
2006	Kaohsiung Stadium	architecture	turnkey
2006	Chiayi 228 Park	park	
	Tainan Eternal Golden City Park	park	
2007	Kaohsiung Dadong Culture and Arts Center	architecture	Design supervision
2007	Kaohsiung Weiwuying National Art Center	architecture	Design supervision

From table 1, the international competitions that can be held in China, in recent years, a large number of conceptual design methods have been adopted for international competitions.

Therefore, the international competition for conceptual design in recent years has become the scope of this research.

## FINDINGS AND DISCUSSION

### *Internationalization of the architectural design industry*

#### 1. How to define the international architectural design industry?

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Generally speaking, whether an enterprise is internationalized depends on whether the enterprise conducts Value Added Activities in more than two countries. However, whether this value-added activity is defined by the traditional so-called export, or engaging in foreign direct investment (FDI), it seems difficult to apply directly to the architectural design industry. For example, the architectural design industry is unlikely to be sold through agents. In addition, it does not mean that having business in a certain country all the time means more commitment to that country. Because some large-scale index cases (such as Olympic venues), etc., can exert a great influence and influence in the country.

Marketing effect. Therefore, this study proposes to judge whether the source of income belongs to the country or not. If the source of overseas income exceeds 20%, it can be regarded as internationalized. Therefore, participating in the concept design international competition and winning the prize can be regarded as an international competition.

*Difficulties to be overcome in the internationalization of the architectural design industry*

(1). Familiar with the local system (including obtaining qualifications): Before the architectural design industry conducts business overseas, it is usually necessary to meet or obtain local qualifications, and when the design work is completed, it is usually necessary to obtain some kind of license or license before it can be carried out. construction.

(2). Obtaining own materials: To be able to carry out the design work smoothly in the local area, it is necessary to obtain the local original materials. For example, the unit price of material wages, the materials and equipment that the supplier can supply, the annual direction, the amount of fall, the temperature, etc.

(3). Familiar with the local system: such as the usual way of issuing contracts, the usual way of lending, the relationship between the general contractor and the subcontractor and suppliers, etc.

(4). Familiar with industry conditions: such as local construction methods and technologies, credit status of various manufacturers, etc.

*Clients' expectations for the internationalization of the architectural design industry*

The client adopts the international competition plan, which means that the client has different expectations for the international architectural design industry to participate in the project.

(1). Better ideas: Usually this is the main purpose of the client to hold an international competition. It is hoped that by holding international competitions, better ideas can be obtained from all over the world, so that their buildings can create more added value.

(2). Better design services: The international architectural design industry usually has a well-developed design process, design management process, etc., so that customers can expect better design services.

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(3). Better supervision service: The international architectural design industry usually has a well-developed supervision system, supervision management process, etc., so that customers can expect better design services.

(4). Design costs may not be lower: Because the architectural design industry performs business across borders, there will be higher costs. In addition, the architectural design remuneration of foreign advanced countries is usually higher than that of our country, so the design cost may not be lower.

(5). May be faster: some special buildings with complex functions and high requirements for design quality (such as museums, high-end laboratories, etc.). It may be possible to shorten the design time by engaging in the design of the architectural design industry with rich experience abroad.

*The current situation of my country's international competition*

(1). The design fee is too low. The current design cost is about 7% to 9%. There is still a gap of 10% to 15% with foreign advanced countries. Therefore, unless the case is very large, it will not be attractive enough for the overseas architectural design industry.

(2). Often due to institutional or other factors, it cannot be successfully completed. In the case of the famous South Court of the Palace Museum and Taoyuan International Airport, there are great differences between the agencies and the architectural design industry regarding the process, contract content, and the degree of respect for the design unit. As a result, the original winning bidder for the Palace Museum's South Court was reluctant to proceed, and the design unit of the Taoyuan International Airport had to publish an open letter to the Minister of Transportation in the first half of the newspaper.

(3). The implementation is relatively smooth with the local firm JV. At the beginning, those who worked with the local firm JV have a high degree of understanding of the rigid domestic system and the difficulty of operation, and the local firm will also assist in this part of the affairs. In contrast, the process is relatively smooth.

2. Why adopt/invest in conceptual design for international competition?

*The perspective of architectural design industry*

(1). The competition will end when it is completed. Therefore, the investment time is shortened, and there is no need to invest in overseas Value Added Activities for a long time.

(2). Can be used as a touchstone. Acceptability in the local market can be tested by entering a conceptual design competition. Due to the low input cost of conceptual design competition and a certain degree of discrimination, it is a simple and effective way.

(3). Low risk after winning the competition. There is no need to face long-term detailed design, supervision and other work. Design review has always been a high-risk project that has been

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complained about by the overseas architectural design industry. Project delay after the contract is issued is also a common risk for large-scale projects. The winning bidders of the conceptual design international competition do not have a lot of follow-up work.

(4). No specific qualifications are required. Concept designers are not responsible for obtaining a license, so the eligibility requirements are relatively relaxed. It is common to open competition plans to non-architects.

(5). Concept can make money! Concepts are invaluable to the architectural design industry. It may be possible to rely on this for business marketing behavior, but it is also possible to obtain it at a very low cost. Therefore, when the concept design can be profitable, the architectural design industry is willing to try it.

*The customer's perspective*

(1). The need for innovative design concepts. When holding international competitions, innovative design concepts are often a priority for the principals. After the international competition is held, the principals usually think that they have done their part to obtain a world-class innovative design concept for the project.

(2). Can be used as a touchstone. Through the simpler conceptual design international competition, we can test the overseas architectural design industry's interest in investing in the domestic market, and test the mode of cooperation with the overseas architectural design industry.

(3). Reduce the risk that foreign manufacturers cannot complete the design supervision work. The domestic procurement system and the foreign architectural design industry have just begun to run-in, so there have been many failed cases of international competition in China recently. The use of conceptual design competition can greatly reduce this risk.

(4). The cost of communicating with local manufacturers is low. Communicate with local manufacturers, the number of manpower/quality of manpower required is usually low. Can reduce the cost of the owner itself.

(5). Reduce the cost of design supervision costs. my country's design supervision fee rate is still lower than that of advanced countries. Therefore, the use of conceptual design competition can reduce the cost of design supervision costs.

*The explanatory power of the OLI model*

1. Why does the architectural design industry participate in the international competition for conceptual design

(1). Follow the customers. Follow the original customers to develop business overseas. If you are already familiar with a certain country, participating in an international competition for conceptual design is a good way to continue to expand your business in that country.

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(2).Market seeking. Purely to open up the market, participating in the conceptual design competition may be the cheapest and most effective means for the architectural design industry to market itself. If you can win an award (not necessarily selected), you can have a certain degree of exposure and popularity, and the bonus can also cover the cost of the work at the same time.

2. Analysis of the advantages of the architectural design industry participating in the international competition for conceptual design

(1).Ownership Advantage

A. Experience in similar cases. Many cases of international competition for concept design are usually rare. Such as museums, art galleries, large stadiums, etc. The architectural design industry with sufficient ability and experience is usually rare in China. Large firms will also accumulate the same type of international case design experience as their ownership advantage.

B. Creativity. In the architectural design industry, creativity is the most prominent part of the ownership advantage.

C. Personal charm (brand). Certain architectural professions are clearly suggested by charisma. Such firms are usually named after the architect.

D. Cumulative design method. Some large-scale architectural design industries have accumulated very perfect architectural design pre-planning and management methods. Therefore, a perfect conceptual design can be made efficiently in a short time.

(2). Location Advantage

The effect of the monks who came from afar will recite the scriptures. Because the architectural design industry comes across the sea, non-domestic units are its most important location advantage.

(3). Internalization Advantage

The internalization advantage does not seem to have any explanatory power for participating in international competitions or conceptual design international competitions.

*The explanatory power of the Uppsala model*

Psychic Distance :

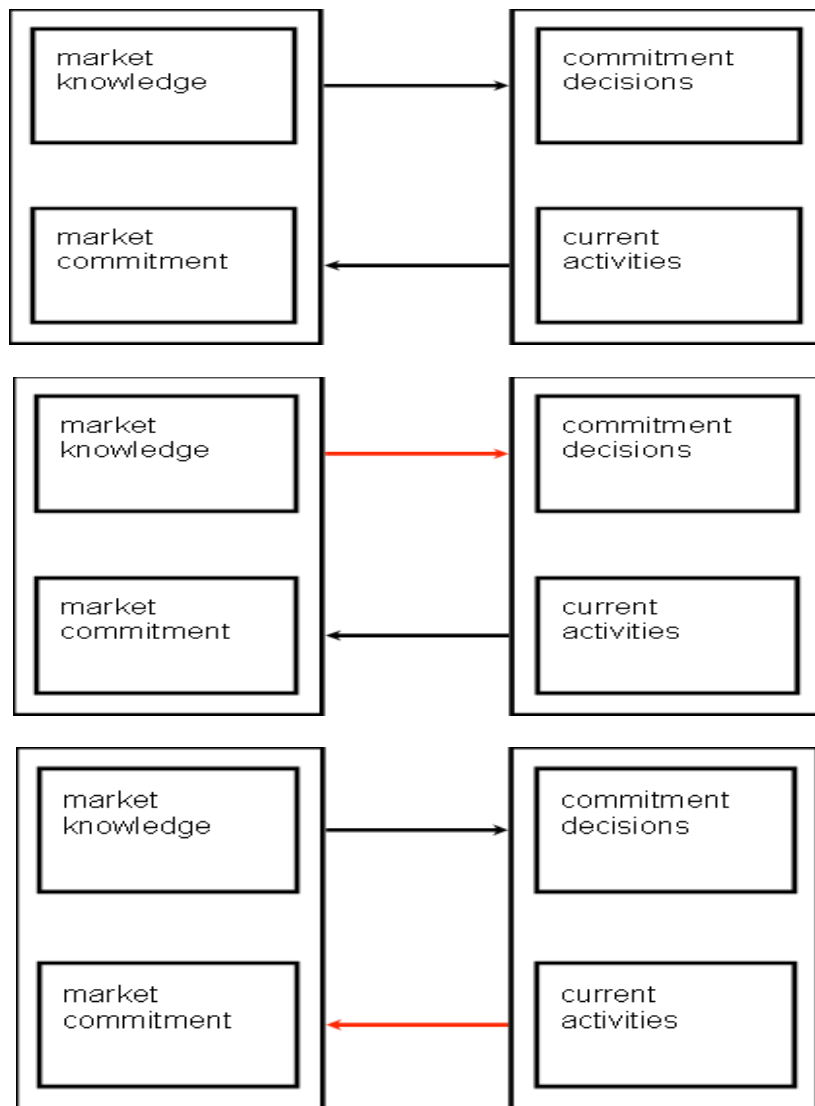
In the same case, the psychological distance between overseas execution of conceptual design international competition and execution of design supervision business is smaller. Therefore, the concept of psychological distance in the Uppsala model can explain why the architectural design industry is willing to participate in international competitions for conceptual design, not just international competitions.

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State and change model:

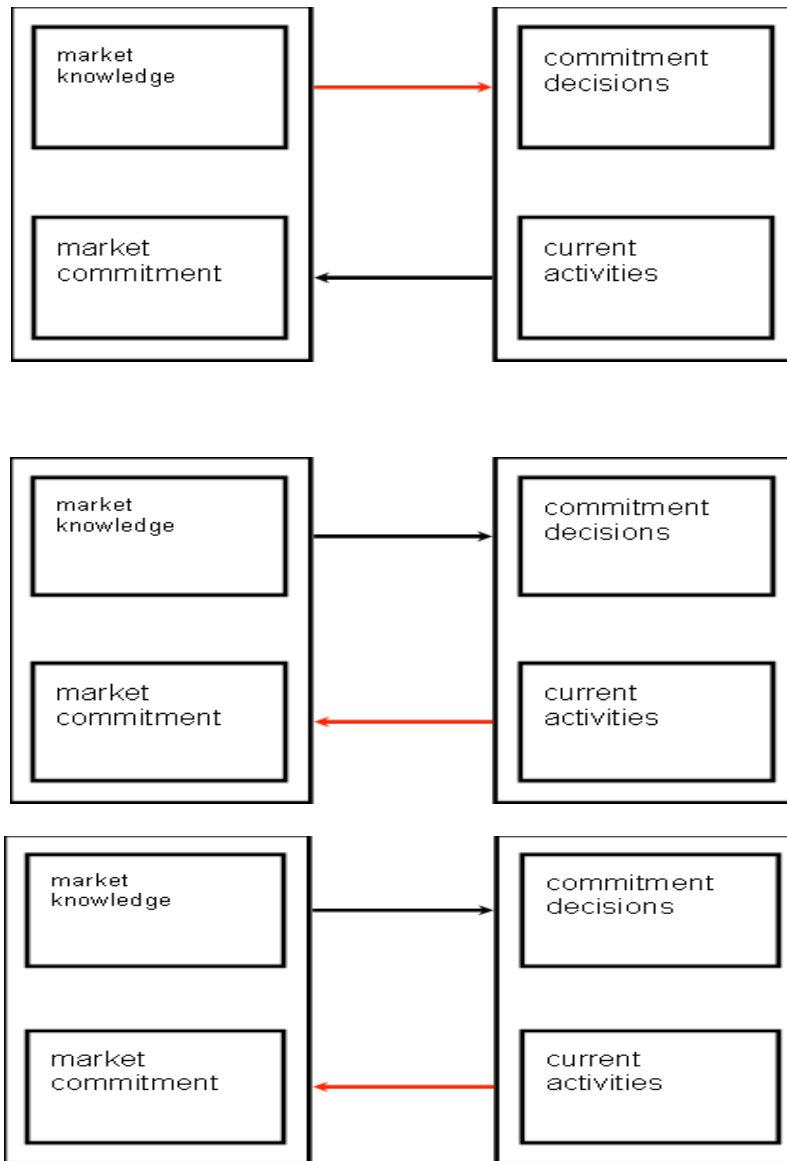
State and change model as follows:





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3. Amendments to the architectural design industry at different stages

(1). Original model

- A. no regular export activity
- B. denotes selling via agent
- C. denotes sales subsidiary
- D. denotes production subsidiary

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(2). Suggested model

A. no regular export activity - Follow Customs

B. denotes selling via agent - Joint Venture

C. denotes sales subsidiary - Alliance

D. denotes production subsidiary – Affiliate

(V). Interpretation of the RBV model

1. Resources of the architectural design industry

The resources of the architectural design industry are usually intangible and difficult to transfer. Such as creativity, personal branding, accumulated design experience, etc. Therefore, the architectural design industry with resources can obtain a favorable position in participating in the international competition (internationalization). Such resources are difficult to generate or transfer, and difficult to imitate, so they can indeed be defined as unique resources

How to use unique resources to obtain benefits?

Obtaining a project with a large enough amount or an indicative project can bring great benefits to the enterprise itself. Therefore, international competition with such resources is usually an important means to obtain benefits. Even many architectural design industries have work departments or groups that specialize in competition. Its importance and uniqueness are evident.

How to use unique resources to obtain maximum benefits?

The design and supervision of the building can be regarded as the two parts of the creative idea and the creative execution. The 80/20 rule can be applied in the process of acquiring business (eg participating in international competitions). That is, intangible resources such as creativity and personal brand account for 80% of the success factors of the competition, and other parts account for 20%. However, creativity and personal branding account for less than 20% of the cost, while the execution of other parts (such as design supervision) accounts for more than 80% of the total cost. Therefore, if only intangible resources such as creativity and personal brand can have certain income and marketing effects, the architectural design industry will consider investing in international competition for conceptual design.

**CONCLUSION AND FURTHER RESEARCH**

1. Research conclusions

(1). This study believes that the architectural design industry is willing to participate in the international competition of conceptual design, and the explanatory of the Uppsala model is better, followed by the explanatory power of the RBV and OLI models.

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(2). International competition for conceptual design can avoid risks for both clients and the architectural design industry and create a win-win situation. Therefore, in the next few years, it should be the trend of domestic and international competitions.

2. Research recommendations

(1). This study is limited in time and domestic cases, and there are no on-the-spot interviews and a large number of cases to corroborate, which should be supplemented in follow-up research.

(2). There are still many fields and contents to be studied in the internationalization model of the architectural design industry, which is different from the internationalization of general enterprises. Its adoption strategy also deserves further exploration.

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**REFERENCES**

Dunning, J. H., Ohlin, B., Hesselborn, P. O., & Wijkman, P. M. (1977). The international allocation of economic activity. by BO et al. London: Macmillan. Chap. Trade, location of economic activity and the MNE: A search for an eclectic approach, 395-431.

Dunning, J. H. (2001). The eclectic (OLI) paradigm of international production: past, present and future. *International journal of the economics of business*, 8(2), 173-190.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, 5(2), 171-180.

Lin, Dao. (2009). An Exploration of Architectural Design Concepts in International Competitions in Taiwan. Master's Thesis, Institute of Architecture, School of Design, National Taiwan University of Science and Technology, 1-138.