

Analysis of Business Implementation Strategy and Construction Management Techniques in Spearheading Overseas Expansion

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Abstract: The purpose of this study is to fully understand the present state of the domestic construction companies, and to analyze phased business types and construction management techniques in order to initiate overseas expansion. Because of the recession in the domestic construction market, a thorough and strategic perspective to constantly develop inroads into overseas market is required. So we carried out a questionnaire survey targeting the experts of the overseas construction and researcher, and consulted them in depth. The questionnaire survey was divided into three sections. The first section is the necessity of overseas construction and the reason. The second is the overseas business types classified into the way of advance in short-term and long-term phase possibility of expansion. Lastly, the importance of the phased construction management techniques and the current capacity of the domestic and the foreign business trends were scrutinized. On the basis of the consultation and surveys, we analyzed the overseas business types and the construction management types in the short-term and long-term phase.

Keywords: Overseas construction, construction management techniques, business implementation strategy, competency

I. INTRODUCTION

A. Background and purpose of research

The recession in domestic construction industry, which began in 2008 due to housing market decline and global financial crisis, has extended over a period of time. As a result, the domestic construction industry focused on overseas businesses expansion to recover from the market decline and profit loss last 2013.

In the meantime, the UN report estimated that the global population will increase to 9.6 billion by 2050, among which 2.3 billion will come from developing countries. So it is predicted that the demand for overseas construction market focused on developing countries will increase rapidly. The offshore expansion of construction market in developing countries will become a growth opportunity if various concerns about the former are addressed. These issues include unequal distribution to Middle East and plant business, interference between domestic companies, low cost competition, expansion plan for area advancement and diversification of profit source.

This study aims to prepare domestic construction companies for mid to long term overseas expansion advancement of domestic construction companies, and equip them for survival in an era of unlimited competition. Also analyses on type of short, mid to long term advancement and construction business management are performed through in-depth interview and surveys on overseas construction specialists about securing a consistent market share in developing countries.

B. Methodology and procedure of research

To diagnose and analyze the types of advancement business of construction market and construction business management for developing countries, this study performed in-depth advisory and survey on overseas hands on workers of construction related companies.

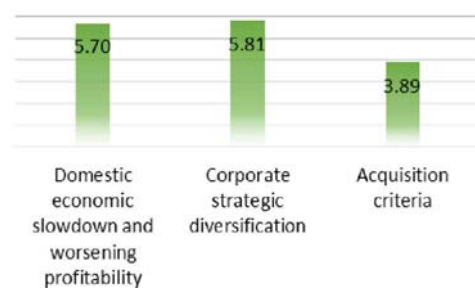


Figure 1 Cause of the Overseas Construction

In-depth advisory meetings were held five times for hands on workers in charge of major duties of construction businesses. Based on the result of in-depth advisory meetings and analysis on related advanced research, the survey was performed. The survey aimed to find out the possibility of advancement in phases (short/mid to long term) for business types into developing countries of South Eastern Asia, and the competency in and out of Korea and the possibility of advancement in phases of major sectors by classification of construction business management type.

II. SUMMARY OF SURVEY AND IN-DEPTH ADVISORY

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After analysis, survey targets of specialists in overseas construction were classified into 10 personnel of overseas business department of construction companies, 11 personnel of CM and ENG companies, 2 personnel of development and investment companies, and 4 personnel of researchers with average career experience of approximately 19 years and overseas business experience of approximately 7 years.

From the basic question of the survey, the need to advance into overseas construction market was surveyed as 5.96 out of total scale of 7 score and the intention of overseas advancement was 5.63. It is understood that the intention was somewhat lower than the need due to the business risk as a result of consulting in the in-depth advisory. The greatest cause of overseas advancement is viewed as the strategic business diversification (5.81) and domestic recession and profit deterioration (5.70), and little weight was put on company assessing criteria.

III. ANALYSIS OF BUSINESS TYPE WITH POTENTIAL OF ADVANCEMENT

The business types with potential of advancing into overseas markets were classified into advancement type, business type and financial type, and analyzed under scale of 7 scores of potential for short term advancement and potential for mid to long term advancement.

A. Business advancement type

Business advancement types were questioned by classifying into total seven types including independent branch, independent local corporation, consortium, and joint venture with domestic/overseas companies in the same/different industry.

When looking into the potential of short term advancement, the types of consortium or joint venture with local company of the same or different industry were high. This result indicates that independent branch, independent local corporation or joint venture with domestic company can face difficulty of risk management in the state of not sufficiently understanding the economic or political status and infrastructure of the target country may present low potential.

As for the potential for mid to long term advancement, in the form of independent local corporation, consortium or joint venture were considered high. The advancement potential for independent local corporation increased compared to short term because sufficient establishment of localization strategy may present chance of success as an independent local corporation.

B. Business type

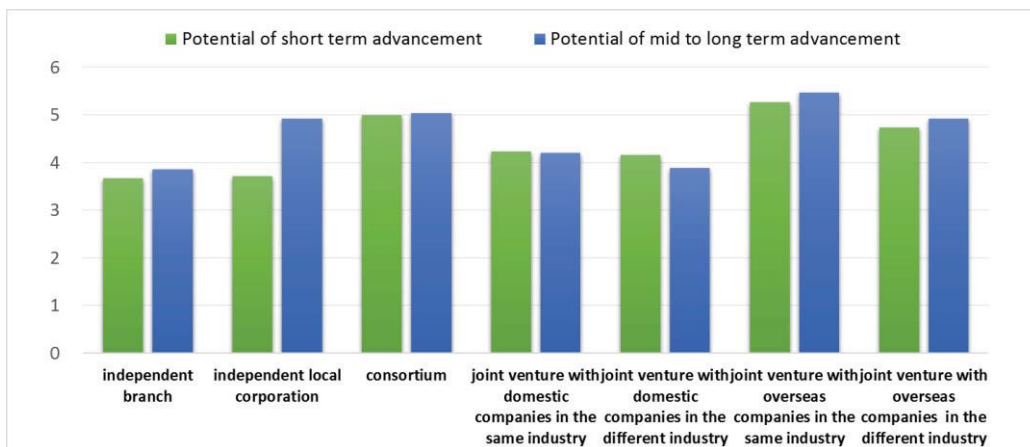


Figure 2 Potential of short/mid to long term advancement of Business corp. type

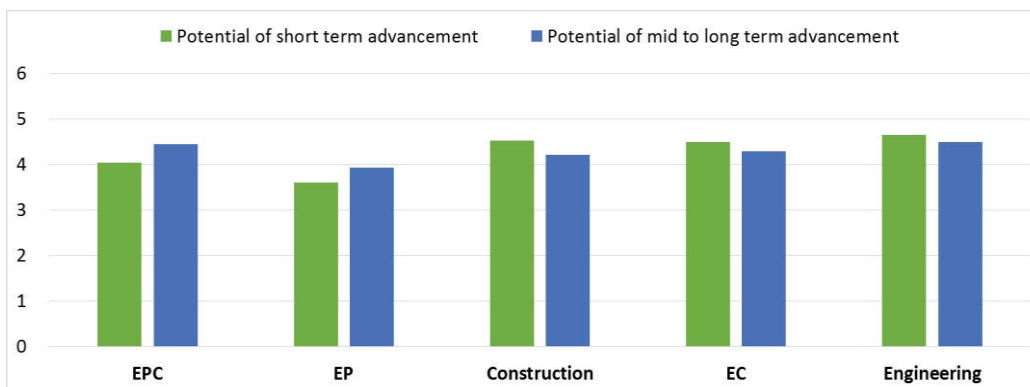


Figure 2 Potential of short/mid to long term advancement of Business type

As for the business type, based on EPC by business unit, the potentials for short term and mid to long term advancement were questioned according to the scope of business advancement on EPC, EP, Construction, EC, and Engineering.

As for the short term advancement potential, the potentials were higher in the order of engineering, construction and design and construction (EC). This indicates that these areas were high in the short term as domestic companies are recognized for sufficient experience and technology in the overseas construction area with high business capability.

When looking at the mid to long term advancement potential, the scores for PC and EP increased by a small margin. This shows the limitation of technology and experience of domestic construction companies. Also, the three areas with high potential for short term advancement could have potential for advancement continuously.

C. Financial type

Financial types were categorized into public business, private business and public and private cooperative business. Public business as official development assistance (ODA) can be classified into public grant and public loan. For private business, the potential was questioned in five questions including PPP business as PF business as investment development business and private cooperative business.

As for the potential for short term advancement, the potential was shown in the order of public grant and public loan, investment development business and PPP. This can be interpreted as having low risk as the business requested by the target country can be implemented without separate investment.

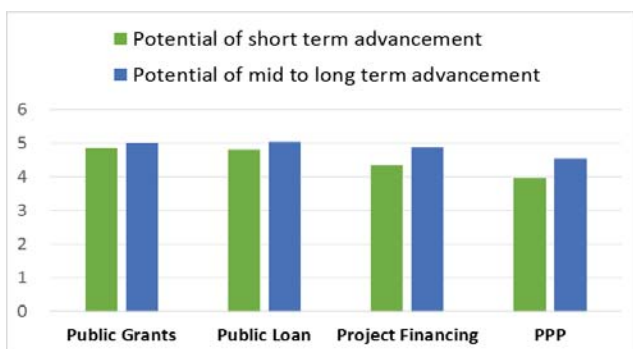


Figure 4 Potential of short/mid to long term advancement of financial type

As for the mid to long term advancement, high result on the potential for public business was shown, however, the ratio of private business, and public and private cooperative business increased compared to short term. This can mean that based on the failure of previous private business as the learned strategy, the future private business, and public and private cooperative businesses need to expand on the aspect of strategic diversification and focusing on profit that cannot be satisfied by public business.

IV. ANALYSIS OF MAJOR AREA ACCORDING TO CLASSIFICATION OF BUSINESS MANAGEMENT TYPE

A. Classification of business management project type

For successful business management at the time of advancement in overseas construction market, the domestic and overseas competency according to business management type were discovered and the potentials for short and mid to long term advancement decided to have capability of overseas advancement as surveyed in multi response analysis type.

Table 1 Classification of construction business management type

Classification of type	Priority stage	Content
MP1. Planning management type	Planning stage	· Over 70% of input effort focus on planning stage or planning work · Focus on large scale business in the form of top company of developed country
MG1. Construction responsibility type	Overall stage	· In the form of CM at Risk including construction function
MG2. Divided order type	Overall stage	· Multi-prime contract, provision of material, including common makeshift
MM1. Comprehensive management type	Design stage	· Focus on overseas business, many go side by side with design · Under 70% of input effort distributed to one stage
MM2. Design management type	Construction stage	· Expand CM function at MS2 · Over 70% of input effort in design stage
MM3. Construction management type	Construction stage	· Expand CM function at MS3 · Over 70% of input effort in construction stage
MS1. Comprehensive supervision type	Overall stage	· Focus on supervision in design and construction stages · Under 70% of input effort distributed to one stage
MS2. Design supervision type	Design stage	· In the form of focusing on design supervision of current law · Over 70% of input effort in design stage
MS3. Construction supervision type	Construction stage	· In the form of focusing on construction supervision of current law · Over 70% of input effort in construction stage
MO1. Maintenance type	Operation stage	· Cases of private business and plant business · Over 30% of input effort in maintenance stage

In this study, the survey for analyzing competency and advancement potential for each business management type was designed based on the "CM company's strategic development model by stage (Young-su Jung, 2014) and classification of construction management project type of research result (table 1) among the advancement research.

B. Domestic and overseas business management competency

The result of business management types survey with domestic competency and overseas competency is as in Figure 5 below.

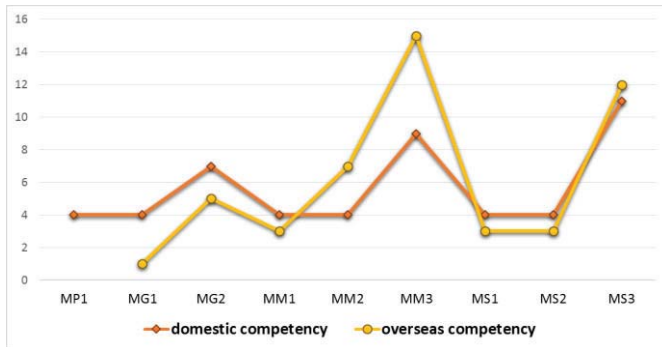


Figure 5 Domestic and overseas business management competency

When looking at the overall distribution, domestic and overseas cases both show somewhat higher competency in supervision (MS type) type and management (MM type) type. Also, in the individual result, the top three types were construction management type (MM3), construction supervision type (MS3), and divided order type (MS2). The construction management and construction supervision types have all input efforts focused mainly on construction stage, and show the limit of management of current domestic construction business biased toward construction stage. It is interpreted that divided order type showed high result as it is the most similar to the role implementation type of comprehensive construction company, which is the present construction company.

Currently, the competency of domestic business management can be seen as in the development stage as construction supervision type and construction management type. Institutionally focusing on the supervision work in the construction stage in the domestic public business management area where the most number of companies (33 among total 43 companies) are participating can be an obstacle to development; development from construction management type into comprehensive management type is possible only with flexible rearrangement of business territory.

Also, as a result of analysis, the difference between overseas construction management type and comprehensive management type was greater than the difference between domestic construction management and comprehensive management type, indicating the great shortage of competency in comprehensive management for overseas advancement. This presents that the reinforcement of flexibility of policies and competencies of companies in the public business area in Korea need to be settled in advance for consistent advancement into overseas market.

C. Business management with advancement potential by stage

The result of survey on the business management type with the potential for advancement on the short term and mid to long term aspect is as in Figure 6.

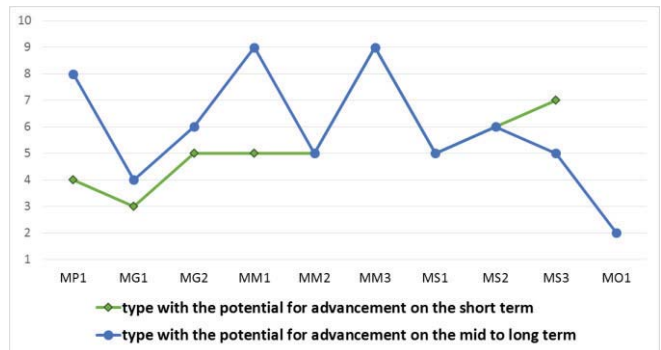


Figure 6 Potential of short/mid to long term advancement of CM type

Construction management type and construction supervision type show the highest ratio in the competency of domestic and overseas business management type with short term advancement potential. The planning management type and construction responsibility type of the form of CM at Risk show the smallest ratio indicating that they are premature for advancement. As for the divided order type, which is the most similar to the current construction company responsibility, had the same ratio as comprehensive management type, design management type and comprehensive supervision type.

When combining the total of management type (MM) and supervision type (MS), they all show similar results, but management type shows twice the potential for construction management type compared to comprehensive management type and design management type, and as for supervision type, the potentials are higher by smaller margin in the order of construction supervision type, design supervision type and comprehensive supervision type.

The business management type with the potential on the aspect of mid to long term showed different result from short term advancement potential from ratio per type and diversity. First, when comparing the total ratio of management type (MM) and supervision type (MS) with short term advancement potential type, it can be seen that the gap has increased on the mid to long term advancement potential. Supervision type, which is the most popular form in the current domestic and overseas construction sites, decreased by 27.5% on the overall ratio, and the highest ratio was construction management type and comprehensive management type. Next was followed by planning management type, which showed the smallest ratio among the short term advancement potential, indicating the need for reinforcement of technology of advanced business management. Apart from this, although the construction responsibility type and divided order type showed the smallest ratio, as the maintenance type, which is the business management type of the operating stage, was indicated, it shall be implemented in the direction of improving construction business management technology of domestic companies in various fields.

V. CONCLUSION

This study analyzed the type of construction business with advancement potential and business management type for responding to weakening of domestic market of construction industry in Korea and for expansion of overseas market advancement of domestic construction industry.

On the short term, it was found that advancing in the public financial type including ODA or MDB into design, construction, designing and building businesses by organizing as consortium or joint venture, is the most appropriate. This type is more stable than investment business; In the future, for more proactive and consistent advancement on the mid to long term, the form of investment such as PPP or PF in the financial type is needed, and this can be only possible by improving the competency of responding by thoroughly understanding the local situation for risk management. Also, the companies advancing can expand as various businesses through independent local corporations as well as consortiums and joint ventures.

Following the diversification of business advancement type, the business management type needs to change. Currently, when looking at the overseas competency according to business management type, the overall competency focused on construction stage is shown. As this obstructs the consistent advancement of business management area, the management competency throughout the planning stage, designing stage and operating and maintaining stage needs to be improved.

In order to prepare for the expansion of construction market in developing countries following the increased global population focused on developing countries, the issues including the weight in favor of Middle Eastern region, and plant business, and the competition between domestic companies, need to be overcome. Furthermore, in order for expansion of business area and consistent advancement, the business models can be built by establishing strategy based on the business type with potential by stage and management type by project as in the result of this study.

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