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Applying SWOT analysis to Egyptian Construction Companies As A Basis of Strategic Planning

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الاداره الاستراتيجيه تعنى باتخاذ القرارات الاداريه و الاجرائات التى من شانها العمل على تحقيق النمو و التقدم للمؤسسه على المدى البعيد. لذا فان المؤسسه تكون معنيه ببذل الجهد من اجل تحديد اهدافها الاستراتيجه و من ثم العمل على تحقيقها و تنفيذها. و ذلك فى حدود الموارد الخاصه بها و فى اطار الظروف المحيطه و التى ترتبط بمناخ العمل الذى تتواجد فيه هذه المؤسه.

لعمل تخطيط استراتيجى لشركه من الضرورى التعرف على اهم عوامل القوه و الضعف المحتمله و من جانب اخر التعرف على اهم الفرص و المخاطر التى توجد فى الدوله التى تعمل بها الشركه. و ذلك بغرض الاستفاده من عوامل القوه و تحسين عوامل الضعف و العمل على تلافيها و كذلك الاستفاده من الفرص المتاحه و تفادى المخاطر.

Abstract

Facing the challenges of globalization and global financial crisis the Egyptian companies faced competition not only from domestic competitors but also from foreign construction companies. As most Egyptian construction companies are used to operating under a protected setting, they may face difficulties competing in the globalized environment. This research involves a strengths, weaknesses, opportunities, and threats (SWOT) analysis of Egyptian construction companies grade A; investigates how they respond to opportunities and threats; and recommends how foreign construction companies can respond to Egyptian construction companies' SWOT. The case stud research design is adopted. Using semi structured interview questions, face-to-face interviews were conducted with 31 Egyptian construction companies grade A.. The SWOT analysis reveals that Egyptian construction companies are lagging behind foreign companies in technical capability; experience in international projects; general and project management ability; and financial capacity. Industry practitioners from outside Egypt who are contemplating entering the Egyptian market can leverage on Egyptian construction companies' strengths by forming joint ventures with them Foreign industry practitioners can take advantage of Egyptian construction companies' weaknesses by offering superior products and services which would improve their competitive advantage.

Introduction

The Egyptian government planned to build far more mega projects such as airports, subways and seaports meanwhile, the capability of Egyptian construction companies to provide mega projects on their own is being questioned reassessed at various levels and in different forms. Accordingly, the introduction of private companies into the development of construction companies formulates an appropriate strategy to develop construction industry in a complex political, financial, legal and regulatory environment.
Egyptian construction companies now face intense competition from foreign entrants, when most of them are only used to operating in a protected environment. They lack the competitiveness as compared to foreign companies that have operated in a free and open market environment for a long period of time Helms (1999).

Objectives

The aim of this study is to investigate the strengths (S) and weaknesses (W) of domestic construction companies in Egypt's construction industry, the opportunities (O) and threats (T) that they face, and how foreign construction companies that are or will be operating in Egypt should respond. The specific objectives are to: (1) undertake a SWOT analysis of Egyptian construction companies; (2) investigate how Egyptian construction companies respond to the opportunities and threats; and (3) recommend how foreign construction companies can respond to Egyptian construction companies' SWOT. The first purpose of this study is to let Egyptian construction companies ponder how their strengths may be leveraged to realize opportunities and how their weaknesses, which exacerbate threats, may be overcome. The second purpose is to inform foreign construction companies that are considering setting up operations in Egypt on how they can adjust their practices in order to respond to Egyptian construction companies' strategies, so that they can be more competitive in Egypt. The findings may be helpful to foreign construction companies competing or cooperating with Egyptian construction companies in the Egyptian domestic market.

Literature review

SWOT Analysis

The SWOT analysis is a tool to evaluate the strengths (S), weaknesses (W), opportunities (O), and threats (T) of enterprises. An enterprise's strengths and weaknesses demonstrate its internal characteristics and are controllable; and its opportunities and threats are determined by external factors on which it has no direct control but can react to its own advantage (Pearce 1992). A marketing opportunity is an area of need in which a company can perform profitably, whereas an environmental threat is a challenge posed by an unfavorable trend or development that would lead, in the absence of defensive marketing action, to sales or profit deterioration (Kotler and Keller 2006). SWOT analysis is a methodology that allows enterprises to understand and plan to use their strengths to exploit opportunities, to recognize and avoid their weaknesses, and to defend against or sidestep any known threats (Pearce 1992).

Strategies to Overcome Weaknesses and Threats

With the influx of foreign construction companies, Egyptian construction companies are expected to face fierce competition. To succeed, Egyptian construction companies need to have effective competitive positioning to achieve competitive advantage Male (1991). Competitive advantage is attained from the companies' ability to control its internal subsystems, exploit opportunities, and lessen or avoid threats from its external environment. A firm is said to have competitive advantage when it has superiority over its competitors Langford and Male (2001).

Porter (1980) proposed three main competitive strategies: differentiation; cost leadership; and focus. To gain competitive advantage, a firm must either provide comparable buyer value but perform activities more efficiently than its competitors (i.e., a low cost strategy), or perform activities in a unique way that creates greater buyer value and commands a premium price (i.e., a strategy of differentiation) Porter (1999). In the generic strategy of focus, the focuser selects a segment in the industry and tailors his/her strategy to serving it to the exclusion of others. Cost focus exploits differences in cost behavior in some segments, whereas differentiation focus exploits the special needs of buyers in certain segments.

Oster (1999) pointed out that companies could outperform competitors either by having lower costs or by offering a superior product that can be sold at a price premium. He also concluded that to form a successful basis for competitive advantage, a product must be important in the market, an improvement over the competition, and defensible against imitation. Seymour (1987) argued that international contractors face a complex situation in which success is only partially dependent on price competition, and other factors which differentiate a contractor's product from that of competitors are more crucial.

Research methodology

In this study, face-to-face interviews were conducted with 31 Egyptian construction company known to the researchers. At the end of the interviews, the interviewees were asked to recommend others whom they know who also meet the criteria for inclusion in this study. The selected ones were then contacted.

The data collection instruments were specially designed questionnaires which comprised mostly open-ended questions to analyze Egyptian construction companies' SWOT and other related questions. Open-ended questions allowed interviewees to have greater freedom in sharing their experience and knowledge. Data were collected through face to face interviews because probing questions were involved, respondents were required to provide in-depth answers and particularly interesting aspects of the responses could be delved into.

For the first case study, the sampling method adopted was snowball sampling, in which one subject gives the researcher the name of another subject, who in turn provides the name of a third, and so on (Vogt 1999). Snowball sampling has been used by other researchers such as El-Tayeh and Gil (2007) and Fong and Lung (2007). This method was chosen because data collection in Egypt is difficult as there is reticence of Egyptian professionals and managers in providing information to strangers and their unwillingness

to respond to academic inquiries (Wright et al. 2002). Meaningful data are unlikely to be gathered without connections in the Egyptian construction industry. As such, the snowball sampling method allowed the writers to inform the potential interviewee that he had been recommended to the writers by his/her friend or business associate.

Research Survey

In order to find the importance and relative importance of the identified SWOT factors, a research survey was conducted face-to-face .The survey targets officials with experience or interest in construction industry. The final questionnaire comprises two parts. The first part deals with the opinions of respondents on SWOT factors about construction companies in Egypt. The second part aims at investigating the relative significance for SWOT factors within each SWOT group. All 31 respondents are from Egyptian construction companies grade A. In the first part, Likert-style rating questions, using a nine-point scale, are used to elicit respondents' opinions about each SWOT factors from −4 to 4. For the strength factors, 4 means extremely large strength, 3 means comparatively large strength, 2 means large strength, 1 means normal strength, and 0 means no strength. For the weakness factors, −4 means extremely large weakness, −3 means comparatively large weakness, −2 means large weakness, −1 means normal weakness, and 0 means no weakness. For the opportunity factors, 4 means extremely large opportunity, 3 means comparatively large opportunity, 2 means large opportunity, 1 means normal opportunity, and 0 means no opportunity. For the threat factors, −4 means extremely large threat, −3 means comparatively large threat, −2 means large threat, −1 means normal threat, and 0 means no threat.

In the second part, the respondents were asked to conduct a pairwise comparison of relative significance between SWOT factors within each SWOT group. According to Kurttila et al. (2000) and Pesonen et al. (2001), the questions in making the comparisons at stake are: (1) which of the two factors compared is a greater strength (opportunity, weakness, or threat), and (2) how much greater. With these comparisons as the input, the relative local priorities of the factors are computed using the eigenvalue method (described subsequently). These priorities reflect the decision maker's perception of the relative importance of the factors. The matrix of pairwise comparisons will be constructed as shown by equation 1

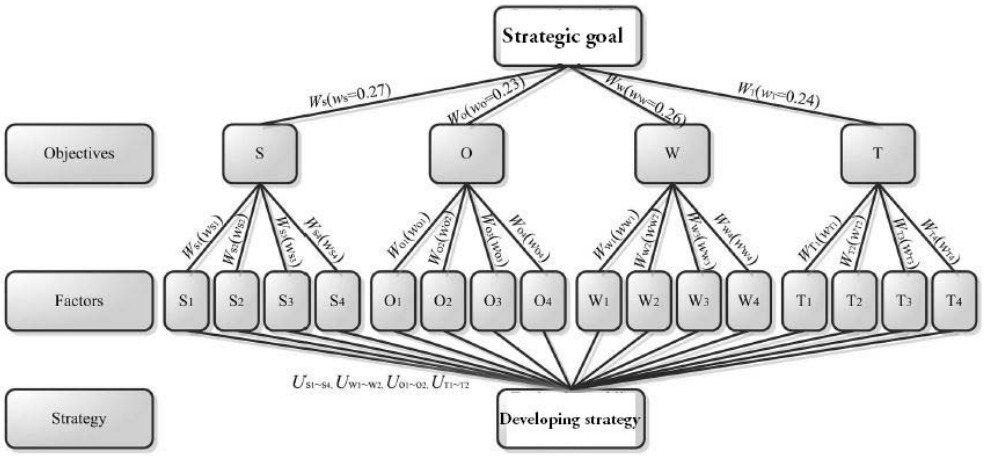
$$\mathbf{A} = (a_{ij}) = \begin{bmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{n1} & a_{n2} & \cdots & a_{nn} \end{bmatrix} = \begin{bmatrix} 1 & w_1/w_2 & \cdots & w_1/w_n \\ w_2/w_1 & 1 & \cdots & w_2/w_n \\ \vdots & \vdots & \ddots & \vdots \\ w_n/w_1 & w_n/w_2 & \cdots & 1 \end{bmatrix}$$

Equation (1)

where aij = local relative importance for i to j in each SWOT group; and aij ¼ 1=aji. Thus, when i ¼ j, aij ¼ 1. The value of wi may vary from 1 to 9, and 1=1 indicates equal importance, while 9=1 indicates extreme or absolute importance (Taleai et al. 2009).
The integration of investigation on the opinions on SWOT factors and factor weights based on the pair-wise comparison will be used to calculate the intensity of each SWOT group for each respondent. Further integration on the opinions of each respondent will obtain the intensity of the strategic goal. Therefore, the strategy formulation can be explored according to the results.

Data analysis

An AHP hierarchy is constructed by using the factors derived from the SWOT analysis. For each respondent, where value of the strategy V is obtained from one questionnaire based on the opinion of one respondent. The importance for SWOT groups can be obtained based on the all respondents'−4 to 4 scores on each SWOT factor in the survey by using a simplified method, where the strategy herein is to develop Egyptian Construction Companies, where US1–US4, UW1–UW4, UO1–UO4, and UT1–UT4 are the scores of each SWOT factor from questionnaire survey. In the level of factors, there are 16 SWOT factors, where wS1–wS4, wW1–wW4, wO1–wO4, and wT1–wT4 are the local importance for each SWOT factor within their groups, and WS1–WS4, WW1–WW4, WO1–WO4, and WT1–WT4 are the global importance for SWOT factors. In the level of objectives, there are four SWOT groups, where wS, wW, wO, and wT are only the importance for each SWOT group because there are no other levels above the objective level.



The AHP hierarchies for SWOT factors

Fig 1. Pesonen et al. (2011)

The strategy herein is to develop construction companies, where US1–US4, UW1–UW4, UO1–UO4, and UT1–UT4 are the scores of each SWOT factor from questionnaire survey. In the level of factors, there are 16 SWOT factors, where wS1–wS4, wW1–wW4, wO1–wO4, and wT1–wT4 are the local importance for each SWOT factor within their groups, and WS1–WS4, WW1–WW4, WO1–WO4, and WT1–WT4 are the global

importance for SWOT factors. In the level of objectives, there are four SWOT groups, where wS, wW, wO, and wT are only the importance for each SWOT group because there are no other levels above the objective level.
V is defined as the global (relative) value of the strategy; thus, V can be obtained from Eq. (2)

$$V = w_S \sum_{i=1}^{4} w_{Si} U_{Si} + w_W \sum_{i=1}^{4} w_{Wi} U_{Wi} + w_O \sum_{i=1}^{4} w_{Oi} U_{Oi}$$

$$+ w_T \sum_{i=1}^{4} w_{Ti} U_{Ti} \qquad (2)$$

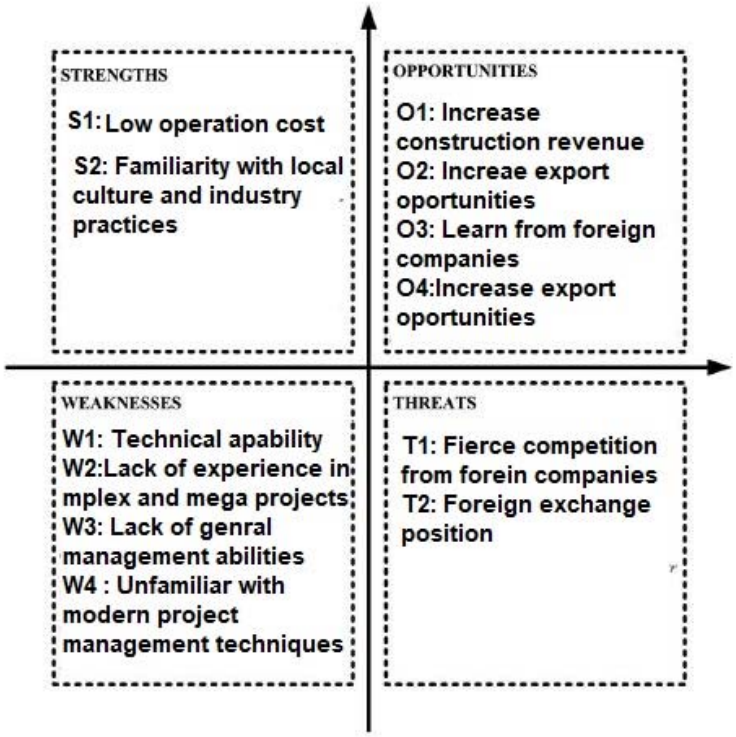


Table (1) the SWOT Matrix

The cornerstone of AHP is the logic of pairwise comparison. The pairwise comparisons allow for the production of the relative importance value, which is called weight (Kurttila et al. 2000). According to Eq. (1), some inconsistencies can be expected and accepted in the comparisons matrix. When matrix A contains inconsistencies, the estimated priorities or weights can be obtained by using the eigenvalue technique as shown in Eq. (3):

$$(\mathbf{A} - \lambda_{\max}\mathbf{I})w = 0 \tag{3}$$

which can be transformed to Eq. (4):

$$\lambda_{\max} = \frac{1}{w}\sum_{j=1}^{n} a_{ij}w_j, \qquad \sum_{i=1}^{n} w_i = 1 \tag{4}$$

where $\lambda_{\max}$ = largest eigenvalue of matrix $\mathbf{A}$; w = vector of weights; and $\mathbf{I}$ = identity matrix. The detailed calculation of w and $\lambda_{\max}$ can be found in Saaty (1980) in Saaty and Vargas (1990).

The data from one respondent in the survey will be used as an example to calculate local importance (wS1–wS4, wW1–wW4, wO1–wO4, and wT1–wT4) for each SWOT factors within their groups. Table 1 shows the compassion matrix from one respondent.

To calculate the local importance of w_{Si}, it is shown in Eq. (5) based on Saaty (1980) and Saaty and Vargas (1990):

$$w_{si} = \frac{\bar{W}_i}{\sum_{i=1}^{4} \bar{W}_i} \tag{5}$$

where

$$\bar{W} = \sqrt[4]{\prod_{j=1}^{4} s_{ij}}\ (i = 1, 2, 3, 4)$$

Therefore, w_{Si} can be obtained as $w_{S1} = 0.650$, $w_{S2} = 0.046$, $w_{S3} = 0.233$, and $w_{S4} = 0.071$.
The largest eigenvalue $\lambda_{\max}$ of matrix $\mathbf{S}$ can be obtained by Eq. (6):

$$\lambda_{\max} = \sum_{i=1}^{4} \frac{\sum_{j=1}^{4} S_{ij} \cdot w_{Si'}(i' = 1, 2, 3, 4)}{4 \cdot w_{Si}} \tag{6}$$

Using the PASW statistics package for SPSS Inc., the scale value data were entered to estimate the descriptive statistics for all internal factors. Table 2 represent the mean of each factor, the group of factors with positive means represent the strengths factors. And, the group of factors with negative means represent weaknesses factors.

Table 2 (the descriptive analysis of internal factors)

Code	Mean	Std. deviation	Effective Factors	Objectives
I 1	-1.06	0.99		Company's marketing image
I 2	0.61	0.66		Company's market share
I 3	1.03	1.27		Pricing strategy
I 4	0.61	0.80		Market size
I 5	-1.03	1.27		Marketing research
I 6	-2.32	1.19		Ability to introduce new product
I7	2.51	1.17		Ability to introduce competitive prices
I 8	-2.35	1.60		Company's leadership
I 9	-1.06	1.09		Definitive strategy of plan
I 10	-2.35	1.14		Skills of employment
I 11	-1.70	1.29		Flexibility and adaptability
I 12	-1.25	1.09		Ability to respond to change
I 13	4.25	0.92	Strength 2	Familiarity with local culture and industry
I 14	1.35	1.94		Profitability
I 15	1.06	1.23		Degree of capital utilization
I 16	4.38	1.02	Strength 1	Operation cost
I 17	2.03	2.10		Ability of borrowing
I 18	-4.77	0.56	Weakness 1	Technical capability
I 19	-2.12	1.23		Company's productivity
I 20	-4.42	1.08	Weakness 2	Experience in complex and mega projects
I 21	-1.09	1.13		Flexibility and adaptability
I 22	-1.48	2.15		Company's equipment and tools
I 23	-4.38	0.98	Weakness 4	General management abilities
I 24	-2.77	1.28		Innovation of new design
I 25	-1.77	1.23		Research and development
I 26	-1.61	1.05		Ability to respond to change
I 27	-4.41	0.80	Weakness 3	Modern project management techniques
I 28	-2.54	1.09		Technical qualification
I 29	0.96	1.95		Comp ability with new trends

Strengths

The strengths can be described as variables associated with factors in which the organization shows certain strength; variables that should take advantage of in the growth and development of the organization (Kangas et al. 2001). The interviewees identified their firms' strengths as low operation costs and familiarity with the market. Several interviewees said that Egyptian construction companies low operation costs enable them to adopt the low cost strategy and be cost competitive against foreign. When compared to foreign construction companies, the largest perceived weakness is Egyptian construction companies' technical ability. Egyptian construction companies do not possess many advantages over their Western counterparts. According, to one owner presentative:

"Egyptian Construction Company's knowledge is not up-to-date. Foreign construction companies produce better design proposals. Greater professionalism and innovation are manifested in their projects. As clients, we are prepared to adopt these projects even if their fees are twice as high as that of Egyptian construction companies' fees."

Table 3 (the descriptive analysis of strengths factors)

Code	Mean	Std. deviation	Effective Factors	Objectives
I 2	0.61	0.66		Company's market share
I 3	1.03	1.27		Pricing strategy
I 4	0.61	0.80		Market size
I7	2.51	1.17		Ability to introduce competitive prices
I 13	4.25	0.92	Strength 2	Familiarity with local culture and industry
I 14	1.35	1.94		Profitability
I 15	1.06	1.23		Degree of capital utilization
I 16	4.38	1.02	Strength 1	Operation cost
I 17	2.03	2.10		Ability of borrowing
I 29	0.96	1.95		Comp ability with new trends

Weaknesses

The weaknesses can be described as variables associated with factors in which the organization shows certain weakness; variables that could impede or make difficult the growth and development of the organization (Kangas et al. 2001). The interviewees perceived Egyptian construction companies' weaknesses as follows: technical ability; lack of experience in international projects; unfamiliar with modern project management techniques; lack of general management abilities; and poor financial capacity. This finding suggests that foreign construction companies that enter Egypt should offer superior design and technical expertise. This recommendation is supported by theory and the case study. The eclectic paradigm (Dunning 1988) provides that firms that wish to internationalize need to have ownership advantage. Foreign firms should make use of their ownership advantage (i.e., superior capability in design and technical knowledge) to succeed in their internationalization efforts in Egypt.

The second most serious perceived weakness is Egyptian construction companies' lack of experience in complex and megaprojects. This finding indicates that foreign construction companies have a head-start in handling complex and megaprojects and should continue to hone their skills. This recommendation is supported by Porter's (1988) competitive strategy of differentiation, and Dunning's (1988) ownership advantage in the eclectic paradigm. Foreign construction companies should focus on projects that are large and complex, instead of competing head-on with Egyptian construction companies in run-of-the mill projects.

The next perceived weakness is Egyptian construction companies' inability and unwillingness to practice modern project management techniques. The first reason for this is that project management is a young and underdeveloped discipline in Egypt. According to the interviewees, clients practice a centralized management control system, and they control the design, budget, and schedule. As such, the project managers' role is limited to controlling quality of works in the construction stage. Project managers are seldom involved in the early development stage. The second reason is that the consultancy fee of a project manager is low. The low fee translates into less experienced, less competent, or less qualified Kasma (1987) staff being engaged. According to the

interviewees, the third reason is that some clients do not trust project managers. Hence, they are not willing to empower project managers, and would not allow them to approve variations or value variations. Project managers obey and carry out clients' instructions rather than work professionally and independently. As foreign-owned construction enterprises have good project management skills Shen et al. (2006), this finding indicates that foreign project managers who want to offer their services in Egypt would need to convince Egyptian clients of the value that they can add to projects. Firms need to have strong and capable project management Gunhan and Arditi (2005). In addition, foreign project managers need to establish trust with Chinese clients. Otherwise, their roles may be relegated to that of construction site supervisors.

The fourth weakness is the lack of general management abilities in Egyptian construction companies. The interviewees shared that there is a shortage of experienced managerial staff, and some Egyptian managers do not adopt a good attitude and lack customer orientation. Egyptian construction companies are disadvantaged by their lack of management expertise Low and Jiang (2006). Lan and Jackson (2001) reported improper and sometimes illegal management practices such as "under the table deals," pervasive corruption, and asking for kickbacks.

Table 4 (the descriptive analysis of weaknesses factors)

Code	Mean	Std. deviation	Effective Factors	Objectives
I 1	-1.06	0.99		Company's marketing image
I 5	-1.03	1.27		Marketing research
I 6	-2.32	1.19		Ability to introduce new product
I 8	-2.35	1.60		Company's leadership
I 9	-1.06	1.09		Definitive strategy of plan
I 10	-2.35	1.14		Skills of employment
I 11	-1.70	1.29		Flexibility and adaptability
I 12	-1.25	1.09		Ability to respond to change
I 18	-4.77	0.56	Weakness 1	Technical capability
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I 27	-4.41	0.80	Weakness 3	Modern project management techniques
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I 29	0.96	1.95		Comp ability with new trends

Opportunities

The opportunities can be described as variables associated with aspects that can be seen as opportunities that the organization could take advantage of for its growth and development (Kangas et al. 2001). The interviewees identified Egypt construction industry and Egypt geographic location as providing opportunities for Egyptian

construction companies to: increase revenue; learn from foreigners; improve service standards; and increase export opportunities. This therefore provides Egyptian construction companies opportunities to earn higher revenues and work with foreign firms. Working with foreign construction companies provides Egyptian construction companies with opportunities to learn advanced construction management from them. One of the interviews commented that:

"Through the cooperation with our foreign partners, we have learnt new design concepts and deepen our technical knowledge. Meanwhile, our traditional Egyptian style can also be promoted to foreigners. The cross-fertilization of ideas enables learning to take place."

Threats

The threats can be described as variables that could represent a threat to the growth and development of the organization, variables whose effects look advisable to prevent or neutralize. The interviewees acknowledged that their firms face strong competition from other Egyptian construction companies and foreign construction companies, confirming the finding of Shen et al. (2006). According to the interviewees, competition from fellow Egyptian construction companies is fierce because there are many firms in the construction industry chasing after the same projects, with little differentiation between these domestic firms. The interviewees revealed that currency rapidly changes make more risk in working in international projects and mega project.

Recommendations

Strategies to Respond to SWOT

After conducting the SWOT analysis, interviewees were asked how their firms would respond to the weaknesses, opportunities, and threats. The three most frequently cited strategies are now discussed.

Forming International Joint Ventures

The results show that all the interviewees would be willing to form joint ventures with foreign companies. Interviewees suggested that this is one of the best ways to overcome some of the weaknesses of Egyptian construction companies because they can learn from foreign construction companies

By forming partnerships with foreign construction companies, the threat of competition from them is also reduced. Studies have shown that developing countries see international joint ventures as one of the best instruments for meeting the competing interests of national development and preventing foreign investors from dominating the economy (Sornarajah 1992).

The most important criteria are possessing: experience in international projects; superior design and technical ability; and good reputations. Foreign companies could evaluate

themselves against these criteria, and if necessary acquire the necessary experience and expertise to make themselves more likely to be selected by Egyptian construction companies for business ventures in China.

As Egyptian construction companies have identified that they lack exposure to complex projects, they would select foreign partners who have experience in international projects that are generally large and complex. The foreign partners would then be able to impart to Egyptian construction companies their know-how in managing international projects. These international projects would also incorporate innovative design and construction methods, which Egyptian construction companies are eager to learn from. This is consistent with Yoshino and Rangan's (1995) finding that companies from developing countries can have fast access to up-to-date technology through their joint venture partners. Although Egyptian construction companies are eager to form international joint ventures, it is also necessary to find out if this would benefit foreign firms entering Egypt. Ling et al. (2005) found forming no equity project joint ventures between foreign and Egyptian construction companies bring about project success. The advantages of joint ventures to foreign firms are: better adaptation to the local environment; and easy access to licenses, human resources, and other expertise through the Egyptian partners Xu et al. (2005).

Joint venturing is thus a win–win situation for both foreign and Egyptian construction companies. Egyptian construction companies benefit by learning from foreign companies that have superior design and technical ability and management practices. Foreign construction companies benefit from joint ventures because with a local partner, they can overcome their no familiarity with the new market, and penetrate the market directly without being encumbered by the problem of licensing Badger and Mulligan(1995). Chinese consulting firms can assist them in understanding and complying with the complex planning and building approval process.

Forming international joint ventures minimizes transaction costs. According to transaction cost theory (Coase 1937), the costs to be minimized include search costs, contracting costs, monitoring costs, and enforcement costs. Further, joint ventures support Hennart's (1991) transaction costs theory of joint ventures, in which foreign firms joint venture when they need to combine with other firms' intermediate inputs which are subject to high market transaction costs. The theory also states that joint ventures occur under these situations. First, when foreign companies venture outside their main industry, and thus need complementary inputs from companies active in that industry. Second, when foreign companies enter a new market for the first time and need to acquire the tacit knowledge on how to operate and sell in the new market. Finally, foreign company's joint venture local companies when they seek access to resources held by local companies.

The implication for foreign AEC firms is that to make themselves desirable joint ventures partners, they must have prior experience in international projects, and not use Egypt as a test bed for their internationalization efforts. Foreign companies must also possess niche

products or services to offer to Egyptian construction companies Ling et al.(2006), in the form of superior design and technical ability. Notwithstanding the recommendation to form joint ventures, there are also pitfalls which foreign construction companies should be aware of. There may be cross cultural clashes, and major differences in technology and management between the joint venture partners. In addition, foreign construction companies also need to control the opportunism of their Egyptian partners in a joint venture, which is not an easy task. Foreign firms should carefully weigh joint venture against "internalization" as provided for in Dunning's 1988eclectic paradigm.

Provide Better Service

The results show 83% interviewees expressed their willingness to improve competitiveness by providing better service. They propose to do this by sending their staff for training to change their traditional mindset of doing business. A company's primary asset is its people because they are the source of competitive advantage and key to its success Gunhan and Arditi (2005). Organizations considering international expansion should plan for long-term human resource strategies such as making a significant investment in training Maloney (1997). With Egyptian construction companies aiming to provide better service, foreign companies could respond by offering even better service.

Reform construction companies

Sixty-five percent of the interviewees stated that they would reform their companies to improve competitiveness. Hitherto, some state owned enterprises are known to make losses that can be written off totally or partially Lan and Jackson(2001). The interviewees recognized the need to restructure their firms from those that are pure production units (part of state owned enterprises) to being independent market players that are responsible for their own profits and losses.

To compete with foreign companies, it is important for Egyptian construction companies to be restructured such that they are conscious of environmental control, quality control, and the bottom line.

Conclusion

This research undertook a SWOT analysis of Egyptian construction companies grade A in the construction industry. Data were collected from 31 Egyptian construction companies grade A, via face-to- face interviews. Another 20 interviews with clients, contractors, and suppliers were conducted to cross check the responses and to obtain a 360° perspective. The results show that Egyptian construction companies grade A have many strengths such as low operation costs and familiarity with the market. They have several weaknesses, when compared to foreign construction companies. The more severe weaknesses are their technical ability and lack of experience in complex and

megaprojects. The major threat is competition from foreign construction companies that are now allowed to operate in Egypt.

To reduce the threat, and mitigate the weaknesses, Egyptian construction companies would form joint ventures and partnerships with foreign construction companies so as to lessen the number of competitors, but more important, to learn from them. Egyptian construction companies would also adopt other strategies such as offer high quality service, and restructure their firms.

Based on the findings, several recommendations are made to industry practitioners, particularly foreign construction companies that have plans to enter Egypt construction industry. These include forming joint ventures with Egyptian construction companies which are familiar with local culture and industry practices; and producing superior design proposals. The study revealed the criteria that Egyptian construction companies consider when they evaluate potential foreign partners. The important criteria include having extensive international experience and good reputation. These findings may be used by foreign industry practitioners to help them to succeed in Egypt's construction industry. The findings of this research may serve as a guide to Chinese consulting practitioners on the weaknesses they possess and challenges they face, and how these may be overcome.

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