

Embeddedness, Emergent Uncertainty and Strategies for Foreign Markets¹

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Abstract

This inductive study investigates the challenges that entrant firms face on large global development projects — e.g., airports, oil refineries, resorts, etc. — in foreign market environments, and the strategies that they evolve to cope with these challenges. It uses a multi-case research design with interview data from four types of firms—Systems Contractors who sell, test and deliver integrated technical systems; Project Consultants who plan, manage and control large projects on behalf of a client; General Contractors who undertake responsibility for overall project delivery; and Developers who finance, acquire land and develop a facility for commercial use. The research design invokes two logics: a theoretical replication logic, i.e. the level of embeddedness varies across the four types of firms; and a two-way literal replication logic, i.e. there are two firms of each type. The findings indicate that with increasing embeddedness in a new market, firms face greater emergent uncertainty. This affects strategic decisions such as entry mode, staffing and centralization. The findings also articulate three general strategies of entrant firms: increasing the supply of local knowledge, decreasing the demand for local knowledge, and reducing the impact of a local knowledge deficit. These strategies refute the myth that entrant performance is tied to climbing a “country learning curve”, but, instead imply that dodging the need to learn and avoiding the costs of not learning can be equally effective.

Introduction

In this article, we begin the empirical analysis of the link between level of embeddedness in an unfamiliar market context, level of need for local knowledge and strategies to cope with a local knowledge deficit. In doing so, we seek to develop a grounded theory by integrating the experiences of managers engaged in the planning, design and management of large engineering projects situated in overseas markets.

Despite differing aims and the use of a variety of terms and nuanced definitions, scholars who write about entering foreign markets repeatedly employ key terms that are conceptually similar. The terms “liability of foreignness” (Hymer, 1976), “cultural distance” (Kogut & Singh, 1989), “institutional distance” (Kostova, 1999), “psychic distance” (Johanson & Vahlne, 1977) and “political risk” (Kobrin,

¹ This article summarizes a 50 page manuscript; please contact the authors to request the manuscript.

1979) each have a long and rich history in the international business literature. Yet all imply a common assumption: that foreign firms face challenges and, perhaps, even outsider disadvantages, when they enter new or unfamiliar markets.

Although there are many variances in these views, none deals with a key reality. As noted by Melin (1992), they entirely ignore the entrant’s embeddedness in the local context. Most studies suggest, albeit implicitly, that two firms from Country A who enter Country B will suffer equally from “liabilities of foreignness”, “cultural distance”, “psychic distance”, “institutional distance” and other forms of “risk”. For example, many scholars have discussed the concept of “foreignness” in a language that implies an amorphous disadvantage or liability that trickles down and touches all entrants evenly (eg. Luo & Peng, 1999). Likewise, many discussions of “country risk” or “political risk” imply a halo of misfortune that floats down to plague every venture within the boundary of a given nation-state uniformly (eg. Kobrin, 1979). But is it really true that all entrants face the same outsider disadvantage?

Methods

Table 1 portrays the eight firms studied. All eight are involved in some aspect of the business of planning, engineering or constructing large infrastructure projects.

Firm ID	Firm Name	Firm Type	Employees	Revenue (mil.) ^a	Home Country	Firm Age	Global Diversity ^b	Number of Interviews
1	Kelso	Systems Contractor	33,000	6,800	Finland	90+	36/110	7
2	Archer	Systems Contractor	76,000	21,000	France	100+	55/150	4
3	Duke	Developer	1,800	400	US	50+	5/5	5
4	Heroic	Developer	2,800	750	US	40+	12/16	13
5	Marengo	Project Consultant	7,000	800	UK	100+	35/120	5
6	Phantom	Project Consultant	1,300	200	Japan	50+	17/120	11
7	Boomerang	General Contractor	44,000	16,000	US	100+	26/140	8
8	Forester	General Contractor	35,000	9000	US	80+	25/95	7

^a The revenue and employee figures aggregate international operations, across several corporate divisions, for the calendar year 2003.

^b Number of countries with corporate headquarters as of May 2005. / Number of countries with project site offices, both past and present.

Table 1. Firm descriptions.

Case Study Design. The study invokes a multiple case study design. The logic underlying the use of multiple cases is replication. As Yin (2001) explains, “Each case must be carefully selected so that it either...predicts similar results to enhance reliability of the findings (a literal replication) or...produces contrasting results but for predictable reasons (a theoretical replication).” The eight-firm sample was designed to create four instances of theoretical replication (i.e., four types of firm each with different embeddedness); and to generate several literal replications (i.e., two instances of each firm type, each with two or more projects).

Research Setting. Large global projects provide a setting where many international firms congregate, each with different roles, responsibilities and home country affiliations. Literature related to large engineering projects includes studies of

temporary organizations that undergo simultaneous structuring and operations (eg. Thompson, 1967); the quasi-firm (eg. Eccles, 1981); construction projects as hierarchies of contracts (eg. Stinchcombe, 1990); and projects as high-stakes, real-options games (eg. Miller & Lessard, 2000).

Project ID	Project Description	Firms Present	Region	Project Duration	Project Value	Site Visit by 1 st Author
1	Mass Transit System	Kelso, Archer, Boomerang, Phantom	Asia	61 mo.	\$700M	yes
2	International Airport	Kelso, Phantom	SE. Asia	36 mo.	\$1.1B	yes
3	Water Treatment Plant	Archer, Marengo	Asia	54 mo.	\$160M	yes
4	Rail Transit System	Marengo, Boomerang	Asia	78 mo.	\$13B	yes
5	Resort Complex	Duke	Asia	36 mo.	\$1.7B	no
6	High End Housing Development	Heroic	E. Europe	24 mo.	\$30M	no
7	High End Housing Development	Heroic	E. Europe	40 mo.	\$45M	no
8	Commercial Office Development	Heroic	W. Europe	28 mo.	\$100M	no
9	Commercial Office Development	Heroic	E. Europe	48 mo.	\$50M	no
10	Motor Way	Boomerang	E. Europe	42 mo.	\$260M	no
11	Petro Chemical Refinery	Forester	Asia	48 mo.	\$1.2B	no
12	Petro Chemical Refinery	Forester	Middle East	48 mo.	\$900M	no

Table 2. Project descriptions.

Data Sources & Analysis. Data collection involved project visits and interviews: open-ended interviews in the early stages, and structured interviews towards the end of the study (Spradly, 1979). As is typical in building a grounded theory, data analysis followed three distinct, yet iterative phases. As Glaser and Strauss explain (1967: 105): “first, coding each incident in the data into as many categories of analysis as possible and comparing incidents [in] each category; second, integrating categories and their properties...resulting in a unified ... theory; and third, delimiting the theory...and reformulating it with a smaller set of high level concepts.”

Challenges in Foreign Markets

Many studies in international business suggest a link between the performance of foreign entrants and measures of “cultural distance” (Kogut & Singh, 1989), “institutional distance” (Kostova, 1999) and “psychic distance” (Johanson & Vahlne, 1977). Studies that take this perspective make the implicit assumption that cultural, institutional and psychic distance encumber all foreign entrants *equally*.

Embeddedness. The data from this research suggests that this assumption is mistaken. Certainly, as extant theories well predict, firms that enter foreign markets face unexpected conditions and incur unforeseen costs when they misjudge and misunderstand local cultures and institutions. However, these conditions and costs are not *uniformly* distributed across all entrants, as previously had been assumed. Instead, our findings suggest that each type of firm faces a distinct level of *embeddedness* in

the host country context. Our evidence reveals that the level of embeddedness is different for every entrant, because every type of entrant has specialized objectives, resource needs, activities, regulatory requirements, levels of exposure to civil society and industry affiliations. Our results are suggestive of the fact that as entrants become more heavily embedded in the local context, they need more local knowledge in order to anticipate, assess and adapt to the locally determined ideas, interests and institutions. Consequently, when they fail to acquire this local knowledge, they face a greater likelihood of unanticipated relational friction. More formally,

Proposition 1: The more deeply an entrant is embedded in an unfamiliar market setting, the more local knowledge is needed to achieve objectives and avoid unforeseen costs.

Table 3 displays evidence to show that embeddedness varies significantly for different types of global project entrants. *Embeddedness* is defined as a measure of the total number of relations between a global project entrant and local organizations. Relations with local organizations are grouped into four categories: formal regulatory, formal market, informal community and informal project.²

Table 3 reveals that, as a class, General Contractors face by far the greatest level of embeddedness, with a low of 669, a high of 1680 and a mean of 1172 total relations with local entities. On the other end of the spectrum, Table 3 shows that the Systems Contractors face the lowest level of embeddedness, with a low of 18, a high of 78 and a mean of 52 relations with local entities. Thus, the level of embeddedness is not uniform, although past studies have assumed uniformity of embeddedness or have ignored its effects. Rather, different types of firms, with different kinds of work and activities, face dramatically different levels of engagement with organizations and institutions in the host environment.

Consequences of embeddedness. The consequence of embeddedness is that for every activity associated with local actors or institutions, an entrant requires a certain basic level of local knowledge about those elements. If the relevant elements are well understood prior to performing the task, much of the activity can be planned in advance and the task is accomplished in the most efficient fashion at a minimum level of effort to the responsible manager (Galbraith, 1973). If these elements are not well understood, then institutional exceptions—misjudgments, misunderstandings and conflict—arise that lead to changes in priorities, plans and strategies. Our evidence, which is presented in our longer article, suggests that all of these changes require sense-making, trial-and-error learning, adaptation and a high likelihood of relational

² *Formal regulatory relations* include interfaces with local arms and agencies of government that grant approvals, permits and licenses (e.g., Transport, Fire Department, Police, Building Department). *Formal market relations* include transactions with local firms in the marketplace that provide products and services (e.g., tool suppliers, materials vendors, sub-contractors). *Informal community relations* include interactions with community groups and stakeholders that provide legitimacy to a project (e.g., NGOs, school board, shopkeeper's guild). *Informal project relations* include non-contractual dealings with other firms on a project that arise by virtue of working side-by-side and sharing limited project resources and physical workspace (e.g., foundation, electrical or elevator subcontractors).

Type of Relation	Project Consultants			Systems Contractors			Developers			General Contractors		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
Formal Regulatory Relations	9	24	17	3	5	4	8	29	14	12	21	16.75
Formal Market Relations	12	220	78	9	55	36	50	95	64	640	1600	1123
Informal Community Relations	3	55	22	0	0	0	5	15	10	5	28	12
Informal Project Relations	12	380	166	6	18	12	0	5	2	12	31	20.75
Total Number of Relations	36	679	282	18	78	52	63	144	90	669	1680	1172

^aN = 17. Project details are described in Table 2.

Table 3. Overall embeddedness^a

friction (Orr, 2005). Therefore, the greater an entrant’s knowledge deficit at the outset of a task, the greater the likelihood that sense-making, trial-and-error learning, and adaptation will be necessary during task execution. Thus, the central effect of an actor’s local knowledge deficit is a limited ability to anticipate issues, set priorities, develop strategies or make decisions about activities in advance of their execution.

Emergent Uncertainty. Recently, a number of authors (eg. Han & Diekmann, 2001; Chua, Wang & Tan, 2003; Chan & Tse, 2003; Wade, 2005) have written about political, cultural and social “risks” in foreign markets in tones that imply *a priori* predictability. Similarly, many software vendors and consultants³ suggest in their marketing materials that political instabilities, cultural conflicts and social uprisings can be assessed and predicted with probabilistic tools and techniques.

Our findings contradict this view. We find that these approaches, which rely on subjective probability assessments, are largely unreliable without recent and relevant in-country experience. We also find that relational interactions with host entities often lead to critical incident scenarios that are extremely difficult to predict *a priori*, and, can only be managed as they occur. Thus, we conclude that as entrants face greater levels of embeddedness, they also face more frequent situations of emergent uncertainty, where unexpected factors and dynamics arise. Thus,

Proposition 2: The more an entrant is embedded in an unfamiliar market setting: 2a) the less likely that a priori risk analysis approaches will help to prevent unforeseen costs; and 2b) the more likely that emergent relational dynamics will generate unforeseen costs.

Firm-Specific Strategies

Many studies have examined the process of organizations learning to succeed in foreign markets (Johanson & Vahlne, 1977; Eriksson et. al., 1997). Other related studies have emphasized one or another specific aspect of this process, such as, mode or sequence of foreign market entry (eg. Brouthers, 2002; Pan, Li & Tse, 1999).

These studies tend to have two key limitations. First, in empirical analyses, there is typically a high degree of aggregation of data across industry sub-groups (eg. Erramilli, 1991; Brouthers, 2002), usually to ensure a statistically significant sample

³ For example: Control Risks Group (<http://www.crg.com/>), Pegasus Consulting Inc. (<http://www.pegasusconsultinginc.com/>), and Pertmaster Project Risk (<http://www.pertmaster.com/>).

size, but at the cost of ignoring unique drivers and dynamics that characterize each sub-group. Second, embeddedness has not been seriously considered as a determinant of the level of need for organizational learning or strategic decisions.

In contrast, our study explores the effects of variance along the embeddedness dimension and finds that it plays an important role in how different types of organizations perceive and learn about the challenges in foreign markets. Moreover, our data confirm that embeddedness is a primary determinant of entry strategy, staffing policy and organization structure. This confirms Melin's (1992) observation, that "when studying internationalization within a strategy process framework, it is crucial to focus on 'organizations in their sectors (Child, 1988).'" Our evidence, which is discussed in depth in our longer article, suggests several propositions,

Proposition 3: The more an entrant is embedded in an unfamiliar market setting, the more it needs local knowledge and hence: 3a) the greater the unforeseen costs associated with a start-up or "green field" entry strategy; 3b) the greater the benefit of an acquisition strategy or partnering entry strategy; 3c) the greater the advantages of local staff over expatriate staff; and 3d) the greater the benefit of decentralizing control to the project office.

General Strategies

There have been many fruitful efforts to investigate the linkage between international experience and performance in foreign markets (eg. Luo & Peng, 1999). Yet, despite these advances, there has been little effort to describe what firms actually learn as they accumulate global experience or to unpack the black box of "general internationalization knowledge" that has been alluded to by prior scholars (eg. Petersen & Pedersen, 2002). Specifically, what types of general strategies do firms devise in order to combat the challenges of embeddedness and emergent uncertainty?

In response to this question, our evidence suggests that firms evolve multiple variants of three general strategies: *learning, avoiding learning, and avoiding the costs of not learning*. Instances of these general strategies are explained in detail in our longer manuscript and were observed repeatedly across all eight firms, across all observed market and project settings. In formal terms,

Proposition 4: When firms face a knowledge deficit in a foreign market, they can improve performance by: 4a) increasing the supply of local knowledge; 4b) decreasing the need for local knowledge; and 4c) reducing the consequence of a local knowledge deficit.

Figure 1 illustrates the general strategies. The figure also depicts an array of tactical strategies, each of which converge on one of the general strategies, representing different pathways for an entrant can to minimize unforeseen costs and maximize project performance. We hypothesize that these three general strategies are exhaustive from a knowledge-based perspective. Yet, while each offers a theoretically distinct means to cost minimization, they are not always separable when observed in the field, nor do they come for free. On the contrary, they often come bundled together, and firms select them in order of decreasing cost-effectiveness until diminishing marginal returns discount further strategic action (North, 1990).

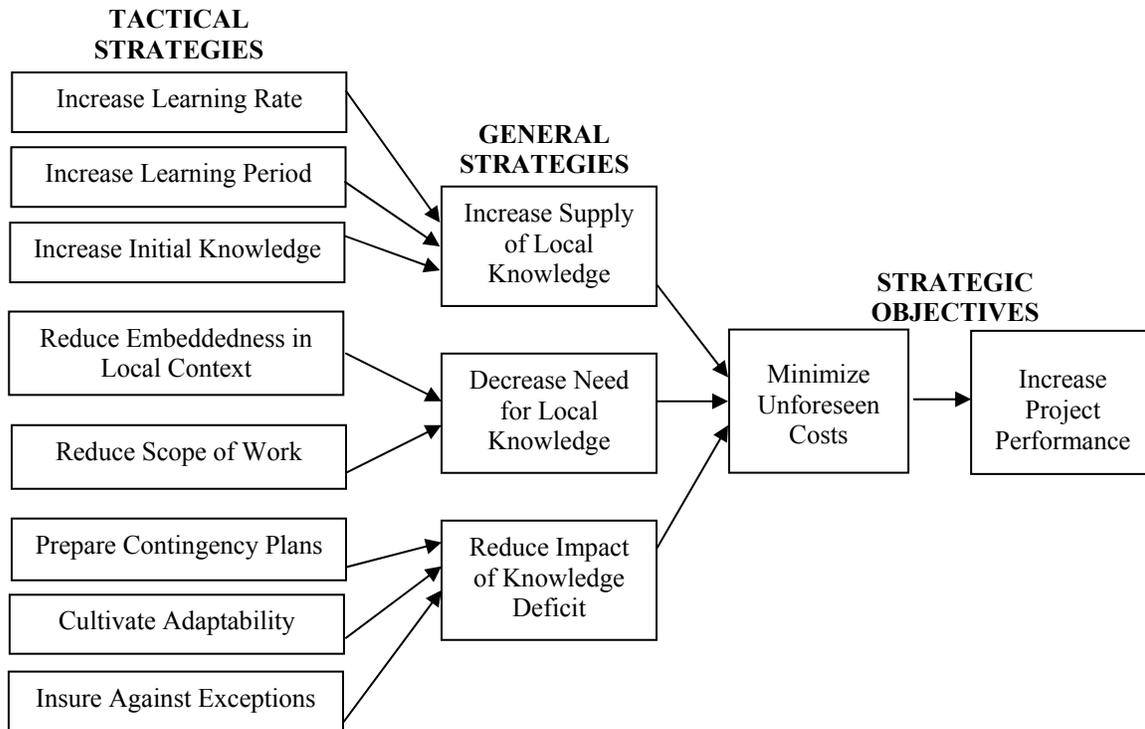


Figure 1. Strategies to succeed in foreign environments.

Learning How to Circumvent the “Country Learning Curve”

A number of studies have presented theoretical arguments to suggest a “learning-curve” or “experience curve” relationship between the time spent in a given host country and operational performance (Luo & Peng, 1999).

Our evidence contradicts this view. What we find, in our sample of highly experienced international firms, is a deft ability to circumvent the learning curve. That is, entrants are able to succeed with only minimal learning about the local business and institutional environment in a new host country. More formally,

Proposition 5: As firms internationalize, they learn to circumvent the country learning curve, by “ingesting” locals, reducing the need to learn about local institutions, and reducing the consequences of not learning.

Three main “circumvention strategies” were observed. First, strategies to avoid learning—e.g., hiring locals, partnering, and acquiring local firms. Second, strategies to decrease exposure to local actors and institutions—e.g., off-shoring and outsourcing. Finally, strategies to reduce the severity of unforeseen conditions or events—e.g., planning for contingencies and designing adaptive organizations.

Conclusion

This article has explored the link between an entrant’s embeddedness in an unfamiliar market environment, level of need for germane local knowledge, and

strategies to cope with a local knowledge deficit. Overall, this research proposes a new, grounded-theoretic view of the strategies firms actually develop as they learn to cope with embeddedness and emergent uncertainty in foreign markets and it identifies a clear link between these strategies and firm performance. For international business managers, this article offers a “toolkit” of strategic options to improve overseas performance. For a more complete discussion of contributions and areas for future research, please request a copy of our longer manuscript.

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