

RATIONALE AND BENEFITS ASSOCIATED WITH INTERNATIONAL ALLIANCES

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ABSTRACT: The concept of a global economy is changing the traditional perceptions of national borders. As national borders become more flexible, competition for construction projects will continue to increase. In addition, dwindling resources have caused governments to evaluate many nontraditional approaches to generate the needed revenue and expertise to undertake public construction projects. The construction industry, faced with the continuing move toward a global marketplace, must examine the possible competitive advantages offered by forming international alliances. Alliances will play an important role in determining the future growth of many companies. It is imperative to begin planning now for something we consider inevitable. The writers were the primary participants in a Construction Industry Institute sponsored research project to study the impact of forming alliances as a way to enhance the competitiveness of U.S. construction firms. Using data collected from interviews with 30 international construction industry executives during that study, this paper discusses why alliances are formed and the benefits that can be gained from them.

INTRODUCTION

The concept of a global economy is changing the traditional perceptions of national borders. The ratification of the European Community agreement, the ratification of the North American Free Trade Agreement, and current discussions on the Asian-Pacific Economic Cooperation (APEC) are evidence of these changes. In total, there are 30 countries involved in these cooperative agreements and they represent over \$18 trillion in gross domestic products. As national borders become more flexible, competition for construction projects will continue to increase. It will become increasingly impossible for U.S. construction firms to ignore the global "order."

Therefore, faced with the continuing move toward a global marketplace, we must examine the possible competitive advantages offered by alliances. The term "international alliance" is one which is heard with increasing frequency. The number of alliances among U.S., Japanese, and European firms (in all industries) grew thirtyfold during the previous decade. This trend will likely continue well into the 21st century. The level and intensity of competition is growing dramatically throughout the world, raising the standards for competitive success. In addition, dwindling resources have caused governments to evaluate many nontraditional approaches to generate the needed revenue and expertise to undertake public construction projects. As public funds diminish, more public projects will be built under the concepts of privatization and build-operate-transfer (BOT) type agreements.

Unfortunately, international competition in which alliances are used tends to reduce U.S. participation in the global market because U.S. companies are seen as being too competitive to share profits and markets with each other. To remain competitive and retain their share of the international market, U.S. construction companies may want to perform a comprehensive self-analysis. This could then be compared to the company's overall goals and objectives, based on its desired position in future markets. Because it appears that alliances will play an important role in determining the future growth of many companies, it is imperative to begin planning now for something we consider inevitable. One necessary prerequisite, crucial to prospering in the international construction arena, will be an awareness of the implications and ramifications of alliances. Alliances provide unique opportunities to develop and build strength with a variety of partners: customers, governments, clients, suppliers, engineers, financial institutions, and other constructors. The essence of an alliance is based on trust and a mutual respect for each participant's business needs. The alliance concept includes an understanding that one party will not try to take advantage of the other to satisfy short-term gains. Within an alliance, firms agree to share resources, technology, profits, and supplement each others' needs for a long period of time.

For purposes of the present project, an alliance is defined as "a *long-term* association with a nonaffiliated organization, used to further the common interests of the members."

There are no simple guidelines to follow concerning how two or more firms, with different

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objectives and cultures, can work together to form alliances. Their mutual objective should be clear: to strengthen the competitiveness of all parties while remaining independent and unique. Also, alliances can be formed solely for the purpose of preserving the status quo instead of broadening into new markets.

Using data collected from interviews with international construction executives, the present paper discusses why alliances are formed and the benefits that can be gained from them. It also addresses some of the factors that may influence the formation of alliances in the future.

RESEARCH METHODOLOGY

The writers were the primary investigators in a research project sponsored by the Construction Industry Institute (CII) to study the impact of forming alliances as a way to enhance the competitiveness of U.S. construction firms. Two of the research goals were to address the issues of why alliances are formed and the benefits that can be gained from them. The data collected revealed that there are numerous criteria and rationale used by companies in making their decision to enter into an alliance and various benefits gained.

The CII task force consisted of 14 members, equally divided between owner and constructor firms that had been involved in international projects. In addition, two academicians were assigned to analyze the data collected, arrive at conclusions, and prepare the reports. The task force was divided into two subgroups: one studied the future needs of the international construction industry, while the other investigated the alliance concept. The present paper covers the results from the latter group only.

The industry members conducted the interviews and provided advice and direction during the research analysis. They conducted 30 interviews with senior-level international-construction executives. This collection of experiences, lessons learned, and visions is summarized from more than 70 hr of interview tapes.

In analyzing the interviewee responses, the total number of like responses on a particular subject were divided by the number of interviews, that is, 30. For example, if six of the 30 respondents listed "access technology" as a criterion for "why form an alliance," the percentage expressed would be 20% or one-fifth of the respondents, who felt that "access technology" was an important factor in forming an alliance.

After this analysis phase, the task force members attempted to determine which of the criteria used by the various international companies were of greatest importance, which were of average importance, and which were of lesser importance. A list was developed to statistically summarize the responses.

As with any survey information, there are certain characteristics that may bias the data collected and skew the results in one direction or another. The questions used, together with the respondent's background and the atmosphere in which the interview or survey was conducted, likely created inherent biases. Also, the use of a second language during the interviews may have caused some of the information to be misinterpreted: it is not known how much of the meaning was lost or changed due to the translation. The selection of the individuals to be interviewed, and the size and type of firm might also have created biases. Finally, some respondents may have felt compelled to restrict their responses in the interests of protecting their firm's proprietary information and position in a highly competitive environment. It is important to understand that these biases exist, but it is just as important to accept the validity of the research analysis and the survey techniques used.

INTERVIEW RESPONSES—RAW DATA

The first two questions asked were, "Why (does your company) form alliances?" and "What (do you see as the) benefits from forming alliances?" We have listed these responses below and prioritized them according to their importance from the interviewee perspective.

Why Form Alliances?

The eight criteria that dominated the interview and survey discussions as rationale for forming alliances with international firms are (see Fig. 1)

1. Access technology
2. Share risks
3. Secure financing
4. Enter new markets
5. Serve core customers
6. Improve competitive position
7. Meet foreign government requirements
8. Learn local markets

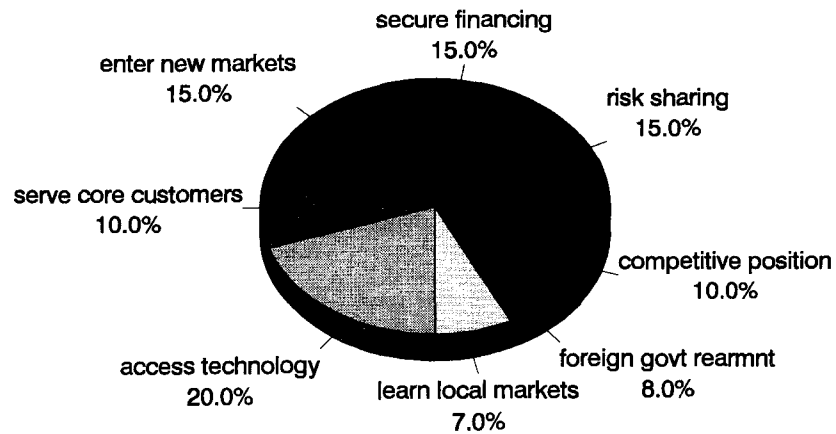


FIG. 1. Why Form Alliances? Percentage of Responses

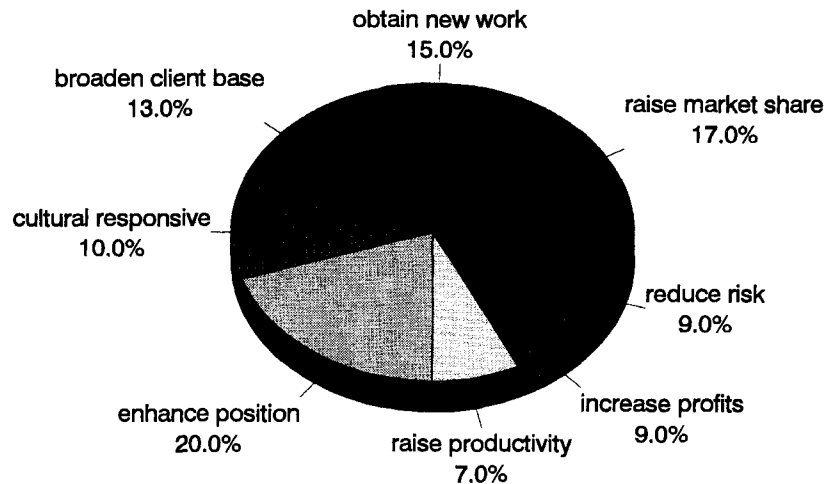


FIG. 2. Benefits Gained from Forming Alliances, Percentage of Responses

Benefits Gained from Forming Alliances

There are numerous benefits that are closely aligned with the rationale for forming alliances. Eight of those most often mentioned by the respondents are (see Fig. 2)

1. Enhance competitive position
2. Increase market share
3. Obtain new work
4. Broaden client base
5. Increase cultural responsiveness
6. Reduce risk
7. Increase profits
8. Increase labor productivity

RESEARCH ANALYSIS

At this point, the responses to the two questions were grouped and consolidated by the researchers into seven major areas for purposes of organization and discussion. It was decided that the analysis of the data would be better served if we could consolidate the information. This was a relatively simple task due to the similarity of both the rationale and benefits questions, and the responses to these questions. The grouping into seven areas was based on the rationale that these are the elements that adequately define all construction processes:

- Marketing
- Finance
- Operations
- Technical elements
- Management/personnel

- Labor
- Government

These areas were further subdivided and coded within the context of alliances by the participants or groups they most *directly* impact (limited to two only). Obviously, other participants or groups might also be affected, but to a lesser extent than the two “key” participants. These affected participants and/or groups include

- Constructors
- Owners
- Subcontractors and specialty contractors
- Suppliers and vendors
- Financial institutions
- Designers

Once the data were organized, an analysis of the responses to the rationale and benefits questions could be consolidated and discussed for any merit that it might have to those contemplating forming an alliance. In addition to the simplification of the research process, this procedure also eliminated redundancy and allowed for discussion of opposing viewpoints.

The summary tables and the text that follows address *all* of the responses to the two questions (not just the 16 given in the preceding). Similar responses were merged and restated for simplicity. The comments that follow each response give a general description of what the interviewees felt were important considerations in their choice to either form an alliance or decline to participate in an alliance. It should be pointed out that most of the verbiage that follows has been paraphrased directly from the responses on the interview tapes. In other words, the flavor of the interviews has been preserved to the largest extent possible.

Marketing Area

Table 1 gives a summary of reasons given for forming alliances, and the benefits gained from them, in the area of marketing. The table also lists the two participants who are most directly affected by a particular item. Each response is discussed in detail following the table.

Increased Competitive Position

Constructors must find alternative ways to improve their position in the increasingly competitive international marketplace. To remain competitive, construction firms must have expertise in financing, engineering, procurement, and construction. Even the largest construction firms may not have expertise in each of these areas. Firms that form alliances to share another firm’s expertise ultimately become more competitive.

Many firms feel that forming alliances with the right firm in a country can give the advantage needed to enhance the competitive position. For example, an alliance partner can improve a construction firm’s competitive position by providing services, such as labor pools, when required. The ability to rely on a partner to augment one’s firm, when needed, lowers operating expenses. A decrease in the bidding proposal costs can be realized through the reduction in overhead, which ultimately makes a firm more competitive than costly, full-service firms.

An opposing, negatively based strategy that some firms mistakenly use is the *elimination* of competition through what they perceive to be an alliance. They believe that the number of competitors is automatically reduced by forming an alliance with a firm that is ordinarily classified as “the competition.” Other firms formed what they perceived to be alliances with no intention of ever actually working with their partner. Firms who formed an “alliance” for this reason contractually tied up their partner so that they could not do business in that market without them, and, consequently, eliminated them as a competitor. However, true alliances will not restrict the operability of partners.

TABLE 1. Reasons for Forming Alliances—Marketing Area

Why form alliances/benefits gained (1)	Key participants (2)
Broaden client base	Constructor, supplier
New geographical markets	Constructor, owner
Increase competitive position	Constructor, owner
Maintain and increase market share	Constructor, owner
Future project information and networking	Constructor, owner
Sharing long-range plans	Constructor, owner
Recognition as international contractor	Constructor, owner

Increase Market Share/Obtain New Work

During the last several years, some firms have felt it necessary to form alliances just to maintain their current market share. Some construction firms believe that they are receiving, and will continue to receive, more bidding opportunities because of alliances that they have formed. For example, one construction firm has earned an outstanding reputation throughout the world as a constructor for automobile manufacturing facilities. They partially attribute their reputation to alliances that they have formed with U.S. automakers in the past. The work resulting from these alliances provides them with the visibility they need to be offered work on overseas automaker's facilities.

To increase their market share and obtain new work, many firms form alliances with the firms that they already have good working relationships with. In many cases, this is the only way to penetrate new and foreign markets. In addition, this type of work often turns out to be more profitable than work acquired through competitive bidding. Forming an alliance with a local firm may lead to projects in a new market or increase a firm's competitiveness in a current market. Both cases should increase the firm's market share.

The combined skills, such as increased technological capability or operational expertise, generated within an alliance may lead to new projects for the alliance. In addition, work is generated through increased technological capability or operations expertise in a particular region or country. New contacts are contributed by both members, and new "networking" paths are established.

New Geographical Markets

Many construction firms think that it is almost impossible to penetrate new geographical markets without forming alliances. Forming alliances with the right firm can open the door to these markets. It also makes the transition into new markets much easier.

In addition, benefits can also be gained from capitalizing on the contacts that an alliance partner, most likely a local company, has already established in the country. A local alliance partner can be expected to assist in the construction permit process and the adherence to the local construction codes, as well as provide valuable insight into the local market, including the availability of labor and information about other construction companies.

Future Project Information and Networking

Frequently, other alliance partners can provide more information about future projects than a single firm can. This information may assist a firm in acquiring more work or becoming more competitive. Also, many employees from both partners in an alliance are introduced to each other throughout the relationship. These introductions can lead to networking and often stimulate interest in the teaming of other business units within both firms. The full effects of networking are far-reaching and can never be fully measured.

Sharing Long-Range Goals

Owners in an alliance will often share their long-range plans. Therefore, the contractor can more accurately forecast the future workload. Using this forecast, the contractor can determine the market ups and downs and, in effect, increase the chances of doing well in a depressed economy.

Recognition as International Contractor

Work completed through alliances has increased many construction firms' exposure in the international market, helping them gain recognition as international construction firms. The impact of this improved reputation is immeasurable.

Financial Area

Table 2 summarizes the financial reasons given for forming alliances and the benefits derived from them. The table also lists the two participants who are most directly affected by the particular item. Each response is discussed in detail in the following.

Access Financing

A construction firm's ability to secure financing for prospective clients is enhanced by its alliances with financial institutions and other construction firms. This may be the most significant benefit that any international firm can gain, due to the increased emphasis placed on financing in recent years.

In today's marketplace, due to diminishing revenues, owners often expect contractors to come up with a creative financing package that will help them implement their project. This is most

TABLE 2. Reasons for Forming Alliances—Financial Area

Why form alliances/benefits gained (1)	Key participants (2)
Access financing	Constructor, financial institution
Share and lower risk	Owner, constructor
Enhance profitability	Owner, constructor
Survival and financial security	Owner, constructor
Bonding requirements	Constructor, financial institution
Lower overhead costs	Owner, constructor

apparent when the owner is a developing or third-world country. The contractor who cannot provide this very valuable and complicated service to owners will lose his competitive edge in the future international marketplace. As a result, contractors feel that it is very important to form relationships or alliances with banks and other firms who can assist them in providing financing packages to prospective customers.

Many alliances are formed to guarantee a line of credit for three to four years at a time. They are also formed to assist clients in securing financing in overseas financial institutions. While this may not be an alliance in the purest form, it is a necessary long-term relationship. For example, in one case, where the scope of the project was financially too large for a general contracting firm to handle, the constructor formed an alliance with three prime contractors involved in the project. All of the constructors were from different countries and each was responsible for a different sector of the project. Each of the contractors' governments was willing to underwrite their firm's portion of the project, enabling all four to participate in the project.

Share/Lower Risk

Entering new markets is a much riskier business than it was several years ago. In the past, a construction company could enter a new market, open a regional office, and conduct business with virtually no competition. Today, few firms can afford to take the kind of risk involved in entering a new market on their own. Alliances allow construction firms to introduce their operations into markets while sharing risks with other firms. This is especially true when entering a new country. Alliances also help to alleviate the uncertainty of changes inherent in new geographic locations, for instance, applying new technologies, increasing project sizes, and coexisting in culturally sensitive areas. By forming an alliance with a firm from that country, an alliance partner with local expertise will minimize the other partner's risk by working through the local bureaucracy, assisting in customs clearance, certifying work, obtaining payment, and accessing the local labor market. The local partner may also negotiate for lower labor costs and benefits because it is already established and understands the local labor market. The ability to reduce risk can also lessen the impact of litigation as well as reduce the requirement for additional insurance and bonding.

Alliances between constructors and owners eliminate some of the riskier elements inherent to the construction industry. For example, many projects are no longer competitively bid. Contracts may be awarded on a cost-plus basis, rather than on a lump sum. These types of differences help to eliminate the unknown, which helps reduce risk. Less risk normally translates into a smaller profit margin; however, in the long run, an alliance is typically a "win/win" situation in which both parties ultimately profit.

Enhance Profitability

Every construction firm seeks the "bottom line" in virtually everything that it does. Forming alliances is no exception. Alliances are formed in hopes of making a stronger and more profitable company. Improving short-term profits seldom justifies the formation of an international alliance. The benefits are seen in an increase in long-term profits and future projects. Although profits may be lower initially, most firms report that their existing alliances have proven to be consistently profitable over the long term.

Survival/Financial Security

Construction firms, particularly U.S. construction firms, are most likely going to have to change in order to be able to survive in the future. For some firms, the key to survival may be to become an international company. A proven method of becoming international is to form international alliances. One U.S. firm claims that alliance arrangements have made its construction firm the most financially secure firm in the world.

In another context of survival, many owners have been satisfied in the past with modest gains in growth. This type of growth will challenge these owners to keep corporations competitive in the future. Forming alliances with constructors has the potential for total capital effectiveness:

better quality, higher yield, increased reliability, lower unit cost. The end result would be to give owners the edge that they need to stay competitive.

Bonding Requirements

Some projects are so large in scope that even the largest construction firms run out of bonding capacity. Having a long-term alliance relationship with a bonding company helps to prevent or alleviate bonding-capacity problems.

Lower Overhead Costs

The key administrative structure, created to serve the needs of an alliance partner, is usually contained within a pre-agreed on lowest-cost aspect. The fact is that an alliance partner will be concerned about the other participant's profitability and competitiveness just as much as about its own.

The key to a successful relationship is built on trust and performance where one member will not try to take advantage of the other. In addition, alliances with owners or vendors normally do away with bidding expenses and the heavy costs connected with marketing. The reduction of these types of operation costs can translate into increased profits for the constructor and the owner. Owners do not have to maintain a complete engineering staff when aligned with an engineering or construction firm. The owner simply requests a team, tailored to service his or her engineering or construction needs, when the time arises. This type of work is usually done on a cost-plus basis, which is much less expensive than maintaining the same in-house capability.

Operational Area

Table 3 shows a summary of the reasons given for forming alliances, and the benefits from them, in the area of operations. The table also lists the two participants who are most directly affected by the particular item. Each response is discussed in detail following the table.

Service Core Clients

Core clients are those clients whose repetitive business is vital to the survival of the construction firm, and with which the firm has established a competitive advantage. Many companies preferred to diversify into other markets only when a real need arose.

However, other construction firms stated that their number one reason for forming an alliance was to serve their core business clients. They are not interested in the short-term profit of a particular job, believing that their first responsibility is to the customer. This belief is apparent in that several firms boast a 50–75% rate of repeat business.

Other construction firms feel the need to form alliances because their clients are more demanding than they have been in the past. Owners or clients want a single point of contact who is totally responsible for the delivery of a facility. The objective is to eliminate oversights and duplication of efforts through constant surveillance.

Some construction firms believe that they are in a better position to service clients when they have formed an alliance with them. In an alliance, construction firms learn to understand the needs of their partners/clients through their constant contact with them. Ultimately, in a successful alliance, this yields higher profits for both firms.

Major firms with long-term, working, core-client relationships will sometimes form alliances overseas to service those clients in other parts of the world. They want to continue providing a service to their core business clients as they move to Europe or other areas. Many U.S. owners have become accustomed to the style in which U.S. constructors manage their projects. U.S. owners, who form alliances with U.S. constructors in order to manage overseas construction, continue to benefit from this relationship. Although construction techniques may not be the same in foreign countries as in the United States, and may even be of inferior quality, the owner can count on the U.S. firm to handle all phases of the construction process, including consulting, assisting in securing financing, and locating qualified contractors and subcontractors.

Many construction firms establish a presence in foreign countries with the help of alliance partners who are members of local firms. By forming alliances with local construction firms, they make themselves available to service their clients' needs more effectively.

TABLE 3. Reasons for Forming Alliances—Operational Area

Why form alliances/benefits gained (1)	Key participants (2)
Service core clients	Constructor, supplier
Project and administrative diversity, enlargement, experience and knowledge	Constructor, owner
Access supply lines	Constructor, supplier
Increase company flexibility	Constructor, owner

Project and Administrative Diversity, Enlargement, Experience, and Knowledge

Many projects require that a construction company possess additional or different resources than it has internally. To be able to work on larger projects or projects outside of their specialty, construction firms form alliances with subcontractors or general contractors who specialize in those areas. Through alliances, a team capable of qualifying for larger and more complex projects can be formed. Such an alliance produces a better product than each firm can produce working on its own.

Different types of firms bring different qualities and experiences to an alliance. For example, one partner may bring managing experience to a particular market while the other brings technology. For other firms, the most important aspect of an alliance is being in a position to learn the needs of a new country, which only a local alliance partner can provide. Alliances generate additional business opportunities because firms can qualify for more projects when they have an experienced and reputable alliance partner.

Access Supply Lines

Forming an alliance with a material supplier is sometimes the only way to ensure consistently receiving quality materials. Suppliers can also provide guidance in their area of expertise and can often offer a financing package with their product. The vendor/alliance partner can also provide products at a reduced cost compared to the cost of materials and equipment obtained through the competitive bidding process.

For example, one firm's most successful project was based on the alliance they formed to access another firm's expertise in procurement administration. It had the ability to do the engineering work required for the proposed project, a gas compression platform in Kuwait, but did not have the necessary expertise or experience required to carry out the procurement process. It found a partner to do the materials acquisition portions; and they were therefore able to successfully complete the technical tasks using their internal expertise.

Another example outside of the construction process, yet closely related, can be found in the manufacturing industry. Owners of manufacturing firms form alliances with suppliers so that they do not have to continually update their suppliers on material standards each time they build a new manufacturing facility. Because the suppliers use the same design, the owner's facilities are standardized and are therefore easier and less expensive to maintain.

Nevertheless, there are some problems with forming alliances with suppliers. Construction companies often depend on obtaining supplies at the absolute lowest cost. It is difficult for the two firms to work together as partners when one partner may have to apply financial pressure on the other. In addition, a contractor's vendor/alliance partner cannot be used on certain projects if the owner has standardized with a different equipment manufacturer.

Increase Company Flexibility

Constructors may be more flexible and less affected by changes, such as job cancellations, when working in alliance relationships. This flexibility is caused by the increased base workload from alliance partners. Additionally, very large projects can require substantial resources of a single contractor. By working with an alliance partner on a project, a construction company does not have to dedicate all of its resources to a single project, leaving the company more room to pursue other opportunities.

Technical Area

Table 4 shows a summary of the reasons given for forming alliances, and the benefits from them, in the technical area. The table also lists the two participants who are most directly affected by the particular item. Each response is discussed in detail following the table.

Access Technology/New Technical Areas

Many of today's projects are highly technical in nature and require the participation of many special disciplines. The range of disciplines required to construct these sophisticated facilities are seldom found in one construction firm. Therefore, those who desire to execute highly

TABLE 4. Reasons for Forming Alliances—Technical Area

Why form alliances/benefits gained (1)	Key participants (2)
Access technology/new technical areas	Constructor, supplier
Access lower cost design/build services	Constructor, designer
Possible source of research and development	Constructor, owner

technical projects in today's market, and lack the internal technical expertise, must form alliances with firms that can provide the expertise that is desired.

Many construction firms, especially in some lesser developed countries, pursue alliances with international construction companies to access their technology. Some technically advanced construction firms acknowledge that they are, in effect, training their future competitors. Some resent this fact, but many feel that both firms will benefit because of the alliance relationship. Other firms consider the relationship advantageous to both parties because they can export their technology and exploit the market without establishing permanent operations in foreign geographic locations. Still other firms invite this increase in technical competition with the idea that it will ultimately improve the entire construction industry. Other construction firms, who might possess adequate technological expertise, form alliances because they have not gained the recognition, or reputation, within their area of emerging expertise. An alliance with an international partner who has an excellent and established reputation for technological or engineering capability may give a firm the recognition needed in its home market.

Additionally, the formation of alliances with different types of firms from around the world broadens each participant's technical awareness. Many firms would not have been exposed to new technologies and construction methods without their association with alliance partners.

Access Lower Cost Design/Build Services

To remain competitive in the international construction marketplace, one firm felt that it needed to obtain high-quality engineering services at a lower price. To satisfy this need, they formed a relationship, based on a small equity ownership, with a Philippine engineering firm. This relationship, which is not a true alliance, has been very successful because employees of this Philippine firm speak English, do quality work, and are willing to travel worldwide to serve the company. An engineering firm could look for the same type of relationship with a construction company to solidify its competitiveness in a design/build project.

Possible Source of Research and Development

There is a combined interest by owners and contractors to improve productivity, lower costs, and increase profits. Through alliances, the funding of research and development to improve the state of the art of the construction industry becomes a more affordable prospect.

Management and Personnel Area

Table 5 shows a summary of the reasons given for forming alliances, and the benefits from them, in the areas of management and personnel. The table also lists the two participants who are most directly affected by the particular item. Each response is discussed in detail following the table.

Enhance Company Culture and Local Expertise

For firms to be cost effective, they must recognize the need to adapt to local environments and situations in order to avoid unnecessary delays, losses, or litigation. This knowledge is quickly introduced by an alliance with a company that has operated for a long time in a particular foreign country. Forming alliances with other firms introduces new experiences to construction companies, allowing them to grow in areas that they would not have otherwise. With the formation of an alliance, each partner is forced to think about and develop its mission statement and set of principles on which its firm and alliance should abide by. The experiences gained from forming alliances has also helped some firms facilitate the formation of new alliances and improve existing alliance relationships. While the payoff for broadening company cultural maturity is not always readily apparent, the individual employees and the firm as a whole will ultimately prosper as a result of the experience.

Construction firms must become knowledgeable in the language, customs, and culture of an unfamiliar area to be competitive. However, becoming "local" is more than speaking the language or stimulating the financial state of the local economy; it is being an integral part of the community. One way to develop this cultural diversity is to form alliances with locally established firms. The result may be to eventually "think" like the local firm, or even become an established,

TABLE 5. Reasons for Forming Alliances—Management and Personnel Area

Why form alliances/benefits gained (1)	Key participants (2)
Enhance company culture and local expertise	Constructor, owner
Increase/streamline management capability	Constructor, owner
Level base workload	Constructor, owner
Employee relationships	Constructor, owner

independent constructor in this foreign country. While this is a valid reason to form an alliance, most agree that each partner should still have other qualities to offer the alliance in order to ensure that a properly functional team is formed. Alliances allow firms without cultural experience in a country to gain partners who know the intricacies and sensitivities of working in a society unlike their own.

Increase/Streamline Management Capability

A few construction firms feel that they are less qualified to manage larger projects than other experienced construction firms. To strengthen themselves, they attempt to form alliances with experienced firms in order to access their partner's construction management capabilities.

Some interviewees believe that companies who do not embrace total quality management (TQM) before the year 2000 will have tremendous difficulty in the construction marketplace. Long-term alliances, which are formed on the principle of continuous improvement, are destined to be the future leaders in quality.

Each time a different owner and constructor enter into an agreement, "interface inefficiencies" exist. Normally, these inefficiencies are eliminated, or at least partially corrected, by going through an often lengthy learning period. The formation of a long-term alliance eliminates these repetitive interface inefficiencies, because the participants in the alliance will become familiar with each other and know how business is conducted between them. A major side benefit from this is to shorten project lengths, a primary goal in the new global order.

Level Base Workload

Constructors who form long-term international alliances with owners, requiring considerable and consistent construction work, usually have a good base workload, which is very desirable in an uncertain world economy. In fact, involvement in the international construction market provides an alternative to compensate for downturns in the domestic industry.

Employee Relationships

For some firms, the biggest side benefits in forming alliances are the technical, social, and personal experience gained by individual employees. If employees can learn how other nations conduct their construction process, they will enhance their value as skilled professionals. Employees who are involved in alliance relationships usually have a great deal of job satisfaction. They begin to act more as team players with common goals, which is unlike how they act in traditional adversarial owner-constructor relationships.

Labor Area

Table 6 shows a summary of the reasons given for forming alliances, and the benefits from them, when considering labor. The table also lists the two participants who are most directly affected by the particular item. Each response is discussed in detail following the table.

Access Local Labor

Employing local workers to construct projects is normally less expensive than relocating and training company employees to work in a foreign environment. Alliance partners already established in foreign countries can provide the labor pool necessary to construct projects at a lower cost.

Some countries have more construction work than their labor force can handle. Without forming alliances with firms in these countries, it is virtually impossible to obtain pools of labor to construct the clients' projects. Forming an alliance with a firm that has the necessary available labor pool is a good way of overcoming this type of situation.

Increase Quality of Work and Productivity

Some construction firms claim that properly selected alliance partners help to improve and maintain quality in selected areas of construction. As previously mentioned, employees who are actively involved in an alliance relationship are generally very satisfied with their work. Their

TABLE 6. Reasons for Forming Alliances—Labor Area

Why form alliances/benefits gained (1)	Key participants (2)
Access local labor	Constructor, subcontractor
Increase quality of work and productivity	Constructor, subcontractor

TABLE 7. Reasons for Forming Alliances—Government Area

Why form alliances/benefits gained (1)	Key participants (2)
Required by foreign governments	Constructor, subcontractor
Political reasons	Owner, constructor
Meet bidding criteria	Constructor, subcontractor

higher level of job satisfaction and increased morale are the keys to improving overall quality. Fewer mistakes are made as the incentives to “do it right the first time” are prevalent.

Productivity in international projects can be improved by integrating local facilities and staff, who then contribute their understanding of regional codes and cultural issues. Alliances with technological firms reduce overhead, and research and development costs. Projects that are constructed as a product of true alliances are often completed in less time than would be required under normal circumstances. The alliance partners have learned and adapted to each other's systems. This allows day-to-day problems, as well as major problems, to be corrected in a more expedient manner. Streamlining the problem-solving process on a project normally results in adherence to the schedule and time savings. Owners claim that they can get large jobs completed in 10–20% less time than it would take for nonalliance projects. This time savings translates into considerable financial savings for the owner and into a larger profit for the constructor.

Government Area

Table 7 shows a summary of the reasons given for forming alliances, and the benefits from them, in the area of government. The table also lists the two participants who are most directly affected by the particular item. Each response is discussed in detail following the table.

Required by Foreign Governments

Some governments, particularly those in the Middle East, Southeast Asia, and Australia, require some form of local company involvement in construction projects. This requirement is often imposed (many times indirectly) by developing countries that lack the technology, financing, and capabilities to complete projects. Forming alliances with firms from the host nation often provides the means to legally conduct business and meet licensing requirements in these countries.

In addition, “unofficial” relationships with foreign government officials are commonplace. In fact, payment to government officials to secure contracts is often tax deductible in the countries that allow such payments. Although this is certainly not an alliance as defined in this study, it is a socially acceptable method of conducting business within many cultures.

Political Reasons

Learning and understanding the political structure in a foreign country is essential to the success of a venture in that country. Potential alliance partners in foreign countries should be asked to provide assistance in this educational process. Also, a knowledge of local contracting procedures and policies, language requirements, governmental codes and regulations, and local customs is needed. During the last several years, Japanese firms have been forming alliances in the United States for just these reasons.

Meet Bidding Criteria

Alliances are also formed to ensure that the bidding criteria for specific projects are met. For example, owners may require a certain type of expertise to be present in firms that intend to bid their projects. In addition, governments may require that corporations meet their minority or small-business requirements. Forming an alliance with the right firm might satisfy bidding criteria that a firm would ordinarily not be able to meet alone.

CONCLUSION

Undoubtedly, market share is influenced by international alliances: The U.S. share of the international market has been increasing for the past few years as a result of a better understanding of alliances by U.S. construction firms. Implementation of alliance concepts has enhanced their position in the global construction market. Varying degrees of impact are being felt by firms throughout the world. The degree of influence seems to be dependent on a combination of the firm's area of construction expertise, geographical market, and market analysis.

The percentage of work accomplished in alliance relationships is approximately 30% for most firms interviewed. The percentage ranged between 5% and 80% for all firms interviewed.

Additionally, one firm stated that 100% of its "turnkey" projects are being completed as a result of alliance or joint venture relationships.

As an added note, it may be possible that many firms in the construction industry do not realize that they are participants in an alliance. First, the word "alliance" is so new to the industry that many people do not yet understand its meaning. Second, many U.S. firms have agreed to conduct business with each other on a long-term basis, but do not consider the relationship to be an alliance because it has not been "formalized."

Strategic alliances were considered by the interviewees as a necessity for U.S. construction firms if they wish to compete in the global marketplace. It was further theorized that U.S. companies who tried to penetrate this marketplace without the benefit of an alliance relationship would find achieving success to be extremely difficult in this highly competitive environment. As more construction firms adopt the "global concept" of doing business, team efforts, through alliance relationships, will become more common. The future holds an opportunity to conduct our affairs on a much higher level of sophistication than is done presently. Agreements will likely become less oriented in legal documents and relationships less adversarial. The 21st century will most likely usher in a whole new era of cooperation through alliances within the construction industry as it moves from domestic to foreign ventures. Every U.S. construction firm contemplating a "global strategy" should be ready to accept the new "rules."

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