INNOVATION RESEARCH CENTRE

LEARNING, POSITIONING AND ALLIANCE PARTNER SELECTION

by

John W. Medcof

Innovation Research Working Group
WORKING PAPER NO. 54

June, 1996

McMASTER
UNIVERSITY

MICHAEL G. DeGROOTE
SCHOOL OF BUSINESS

LEARNING, POSITIONING AND ALLIANCE PARTNER SELECTION

John W. Medcof

The Michael G. DeGroote School of Business

McMaster University

Hamilton ON Canada

L8S 4M4

phone: (905) 525-9140 X27434

fax: (905) 521-8995

email: medcof@mcmaster.ca

NTWKSLCT.003

LEARNING, POSITIONING AND ALLIANCE PARTNER SELECTION

by

John W. Medcof

Innovation Research Working Group
WORKING PAPER NO. 54

June, 1996

ABSTRACT

Participation in multi-firm alliances is increasingly essential for business success. Careful selection of alliance partners is a key to alliance effectiveness. Current advice on partner selection tends to focus upon one prospective alliance partner at a time, upon how well prospective partners fit the business strategy of the proposed alliance, and upon the operational workability of the alliance. This paper extends that advice by giving greater attention to issues involving multiple prospective partners and issues arising from the long term alliance strategy of the firm. With multiple prospective partners, selection issues are much more complex than with just one prospective partner. The long term alliance strategy of the firm focuses primarily upon organizational learning of new technical, managerial and partnering skills, and upon improving organizational positioning in the evolving landscape of alliance activity. The logical connections between current advice and the extensions developed here are drawn. Learning and positioning opportunities, if seized, can contribute significantly to the long term prosperity of the organization.

LEARNING, POSITIONING AND ALLIANCE PARTNER SELECTION

What do General Motors, Norsk Hydro, Matsushita Electric Industries, AT&T, Rhone-Poulenc Rorer, Rubbermaid Inc., Olivetti, Syntex, Daewoo Motors and Coors Brewing Company all have in common? They have all participated in international strategic alliances that ended in divorce[1]. Such divorces are not uncommon[2] but they have failed to dampen the enthusiasm of corporations for alliances as a mode of doing business. Between 1988 and 1992 over 20,000 business alliances were formed in the US alone, contributing to the 25% annual rate of increase in alliances since 1985[3]. In surveys of its members over the last several years the Industrial Research Institute has found that, in each year surveyed, between 45% and 49% of respondents have projected increasing their alliance participation[4]. The enthusiasm for alliances is partly driven by numbers which show, for instance, that alliances outperform more traditional forms of business activity by over 50%[5]. Despite the enthusiasm and despite the favourable numbers, though, the incidence of expensive and messy alliance failures is surprisingly high, and a reality that alliance "players" must consider seriously.

Although there are many reasons for alliance failures, many writers agree that poor selection of alliance partners is among the most important[6]. A poorly chosen partner can make cooperation very difficult and, in the worst case, doom an alliance from its inception, eating up immense resources in salvage activities before finally bringing it down. In contrast, a well chosen partner enables a synergy between partners which blossoms into outcomes far beyond initial expectations.

Despite the importance of partner selection, CEO's are not very positive about their firms' capabilities in this area. A recent survey[7] of 750 American CEO's with alliance experience found that partner assessment was the area of alliance expertise in which they felt their firms were the weakest. On average, CEO's rated their firm's performance to be merely adequate and not improved since a similar survey in 1987. In contrast, skills in strategy development, control, implementation and contract negotiation were all perceived to have improved since 1987 and were more highly rated than partner assessment skills. This pessimism about partner assessment skills is seen despite a considerable literature proffering advice on that subject[6]. The abundant advice on partner selection could bear examination.

It is the contention of this paper that most of the available advice on partner selection is good as far as it goes, but that it should be extended in two areas. First, it typically focuses upon the selection of a single partner for an alliance, often after a cursory initial discussion of multi-partner alliances. Given the prevalence of multi-partner alliances, multi-partner selection issues demand more attention than they are currently receiving. Second, currently available advice typically gives almost no attention to the long term alliance strategy of the firm (if it has one). The business strategy (eg. manufacturing, marketing) of the firm is usually given some attention, but it is clearly focused upon this particular alliance, which is to be implemented in the near future. In contrast, the long term alliance strategy of the firm attempts to use each alliance to improve the firm's position for participation in future alliances, for example, by developing closer relationships with certain firms. The differences between business strategy and alliance strategy will be more fully described later in this paper. If alliance partner selection is actually being practised within the confines of this framework (single partner, no long term alliance strategy), it is not surprising that CEO's are so pessimistic about it and that there are many alliance failures.

This paper will go beyond the currently available advice on alliance partner selection. It will briefly summarize that advice as a starting point, but will not attempt to treat it comprehensively or in detail. Such treatments are readily available in the literature in the references provided above[6] and are not the primary focus here. Because the available advice is valid, this paper will build out from it showing how it can be extended to the multiple partner context and to consideration of long term alliance strategy. Because this paper is organized around the selection criteria articulated in the current literature, there will be a basis for showing the relationship between the conventional advice and the newer advice that will be developed here. It is important to show that relationship because the new advice is not intended to replace the traditional. Both are essential for effective alliance partner selection and understanding their relationship to each other will improve the application of both.

The traditional criteria for selecting alliance partners, shown in Figure 1, are five in number. The first criterion asks if the alliance has a good business strategy rationale and if the prospective partner is a good fit with it. Here, the conventional advice does take a medium to long term perspective. If the prospective partner is a good strategic fit for the business, the next four criteria are considered. These criteria consider the operational workability of the proposed alliance. These criteria, which can be called the "Four C's", ask[8]: Is the prospective partner **capable** of carrying out its role in the alliance? Is the prospective partner **compatible** enough to work effectively in day to day collaboration? Is the prospective partner **committed** to the alliance and its strategic aims? Are the **control** arrangements for the coordination of the alliance appropriate? For each of these five criteria, this paper will briefly summarize the conventional advice on partner selection, then move on to the issues that are more unique to this paper, those concerning multiple partners and long term alliance strategy. We now turn to the first of the five criteria applied in alliance partner selection, strategic business fit.

Insert Figure 1 about here

STRATEGIC BUSINESS FIT

The fundamental objective of any alliance is to further the strategic business objectives of the firms involved. Given this, a prime consideration in partner selection is whether prospective partners fit together well in a strategic sense.

The assessment of good strategic fit should be based upon a shared understanding of the business rationale for the alliance. Partners should understand each other's strategic reasons for forming the alliance and the consequent strategic rationale of the alliance itself. They do not have to have the same strategic reasons, but all the reasons should be clear to all concerned. Thorough discussions of these issues should take place before the alliance is formed so that fact finding and the development of a shared understanding can take place. The establishment of good strategic fit requires as much self-examination as it does examination of prospective partners.

The usual advice on assessing strategic business fit posits complementarity of strengths and weaknesses as the basis for good fit. For example, Volvo and Renault were said to make a good fit because Volvo's strengths in larger cars, gasoline technology, and northern European and North American Markets complemented Renault's strengths in small cars, diesel technology and southern European and South American markets. When a two partner alliance is being considered, complementarity can be determined by a bilateral comparison of the characteristics of the firms, as shown in Figure 2. The Volvo/Renault example shows the limitations of the usual advice on alliance partner selection. First, there are only two partners. Second, there is no discussion of the long term alliance strategies for the firms, although business strategy is considered. Single partner and business strategy issues certainly need to be addressed if prospective alliances are to be properly evaluated, but focusing only upon them limits the value of the analysis, as we will now see.

Insert Figure 2 about here

Multiple Partner Selection

The question of strategic fit becomes much more complex when an organization is considering joining an alliance which includes more than two partners. Such multiple partner alliances are often called networks. The strategic strengths and weaknesses of the several partners, and their interdynamics, must be considered.

At a first level, it must be determined if each prospective partner brings something of strategic value to the network, and whether that value justifies the associated costs. Associated costs include such things as increases in coordination time that occur with each additional member. The evaluation of strategic value will be complicated because each prospective partner will usually have more than one strategic strength. Some of these will be related to network strategy and some will not. The strengths of the prospective partners will overlap and be complementary in various ways. They will relate to the overall network strategy in different ways. The larger the number of prospective partners, the more difficult it will be to sort out these strategic issues.

A second level of question concerns the network as an entity. Does the network have a clearly articulated strategic purpose which is rationally linked to the strategic goals of all the individual partners? Does the network have its strategic bases covered? For example, does its membership include the markets, technologies, capital and degree of industry leadership necessary to achieve its strategic goals? Again, the more prospective members, the more complex the issues.

These questions take on different nuances if the situation involves a firm being considered as an additional partner of a network that is already in existence. These nuances differ depending upon whether the perspective is that of the prospective new member or of firms which are already members of the network.

When a firm is being considered as an additional partner of an extant network, it is important to consider the ways in which the new member could disturb the current strategic balance within that network. For example, a prospective partner may bring a strength which will be unique and strategically important to the network but, in addition, have another strength which is very similar to a strength of an extant partner. In such a case, the entry of the new member would weaken the extant partner's strategic role in the network and, therefore, its ability to influence the network in ways which further its strategic interests. The strategic interests put at risk by the new partner may be the very ones which motivated the extant partner to join the network in the first place. An extant partner put at risk in this way must seriously consider the entry of the new member. Extant partners who are not directly at risk need also to give this matter serious consideration. Although they are not put at risk directly, if the new partner disrupts the current balance too greatly, the effectiveness of the network as a whole will be compromised. It is, therefore, in the interests of all members to consider carefully the entry of a new partner who jeopardizes the position of an individual extant member. It is also important to consider that the entry of a new partner may enhance the strategic positions of some extant members as this can also prove disruptive.

The prospective new member has further strategic questions to ask. The joining firm should consider whether network membership will further its own strategic objectives. The question should be asked, not of the network as it now stands, but of the network as it will be after it has joined. From this perspective, the prospective joiner should ask not only if the network is effective now, but also whether its own presence will enhance the network's effectiveness or, at least, not disrupt it. The prospective new member should consider that even if the strategic fit with the network as a whole seems good, conflicting strategic relationships with even one individual member could jeopardize the venture.

This discussion of strategic fit makes it clear that questions of partner selection are more complex with multiple partner networks than with two-partner networks. First, the fundamental questions of fit are made more complex by the fact that a larger number of firms, and their interdynamics, must be evaluated. Second, when a prospective partner is being considered for an extant network, the potentially disruptive effects of the new member must also be considered.

Long Term Alliance Strategy

Prospective partners should be evaluated in light of the long term alliance strategy of the firm. The long term alliance strategy of the firm needs to be distinguished from the business strategy discussed above in the Volvo/Renault example. In that example, the strategy under consideration was relatively concrete and business focused. It involved clearly defined markets, manufacturing capabilities and product technologies. It had a time frame set primarily by consideration of the particular alliance. In contrast, the long term alliance strategy of the firm has to do with the need for an organization to strategically position itself in the evolving field of networks and alliances[9]. This strategy concerns the networking potential of the firm. In this strategic context, firms must consider such issues as whether prospective partners will be influential in the evolution of the networks of the future. Will they be at the centre of important economic activity five or ten years from now? Will entering this collaboration lead to the organization being perceived as part of a winning "team" with good prospects for the future? What long term doors will be opened by participation in this network? Will association with this alliance preclude the organization from consideration for certain other collaborations? How damaging will such exclusions be?

The long term alliance strategy of the firm involves the management of relationships with other firms. Part of the strategy involves establishing on-going, "friendly" relationships with a number of other firms which may be alliance partners from time to time and with whom there is an on-going, mutually beneficial, informal association. Long term alliance strategy involves the politics of interorganizational relations and the consideration of the needs of "friendly" firms.

This long term alliance strategy will be described more fully in the discussions of the Four C's which are to follow, and in the final sections of this paper. The discussions of capability, compatibility, commitment and control will show that they all have strategic implications far beyond those usually addressed in past discussions of network partner selection, far beyond the direct costs and benefits of any particular alliance.

In summary, when alliance partners are being selected, whether for two partner or multiple partner ventures, strategic issues at two levels must be considered. At the first level, it must be established that the alliance makes good sense as business strategy for all the individual partners, and that the alliance itself is solid strategically. At the second level, the alliance must be found to be an effective vehicle for the pursuit of the long term alliance strategy of the firm, and its "friends". We now move on to the next criterion applied in alliance partner selection, capability.

CAPABILITY

Capability is the first of the Four C's, those criteria which ask whether an alliance is workable operationally. The Four C's are normally considered after it is founds that a proposed alliance makes strategic sense and that prospective partners are a good strategic fit. The capability criterion asks if the prospective partners have the ability to carry out their roles in the alliance. An organization should apply the capability criterion to prospective partners and to itself.

Some of the capabilities sought in a prospective partner are "generic", in that they should be present regardless of the nature of the proposed alliance. For example, the management team of the prospective partner should be good and the firm should have a reputation for delivering what it promises It is also important to evaluate how well the prospective partner has done its homework. Has it taken the time to really understand what its role in the partnership will be, its costs and benefits, and whether it is capable of doing its part in what is proposed?

However, most strengths and weaknesses should be evaluated in light of the specifics of the proposed alliance, since alliances are often predicated upon the partners compensating for each other's weaknesses. Even the importance of something as fundamental as financial health depends upon the nature of the proposed relationship. For example, an alliance may be attractive because one partner controls a crucial technology but is in poor financial health, while the other partner is solid financially but needs the technology. Some minimum level of capability is needed in all areas, but what that minimum level is depends upon the nature of the proposed alliance.

The capability question is closely related to the question of strategic business fit, which asks if the prospective partners have profiles of capabilities which will make them good, complementary alliance partners. The Volvo/Renault example can be used to illustrate the difference between the strategy and capability questions. The strategic question asks, for instance, if the prospective partners have complementary product lines, such as small and large cars. The capability question asks if they make those cars competently. There is little point in forming an alliance with a maker of small cars if those small cars are going to cause you significant servicing difficulties in the marketplace. Put another way, the strategy question asks if the prospective partner is in the right sports league, the capability question asks if the prospective partner is good at playing its sport.

Multiple Partner Selection

Evaluating the capabilities of multiple prospective partners is more complex than evaluating those of one. The ability of each individual firm to play its role must be established. In addition, the interaction of capabilities must be considered. For example, a weakness in one member, which might prohibit taking on that firm as a single partner, might be more than compensated for by other members in a multi-partner alliance. In addition to asking these questions about each individual partner, it must be asked if the network as an entity is capable. For example, "Will members of the network meet frequently enough?", "Will they communicate effectively?" In short, "Will they operate effectively as a team?" When a firm is being considered for possible membership in an already extant network the same kinds of questions about disruptions, as were asked above for business strategy, must be asked. For example, will the new member disrupt established relationships, perhaps by possessing a secondary capability usually considered the province of one of the extant members.

Long Term Alliance Strategy

In the context of long term alliance strategy, the capability criterion has a somewhat different focus than that just described. In the previous section, the question was whether prospective partners, and the proposed network itself, had the capabilities necessary to work at the operational level. In the context of long term alliance strategy, the capability question asks whether this particular alliance presents an opportunity for the organization to acquire and/or improve capabilities that will be useful in its networking activities of the future. In addition, the firm should ask if this alliance might also be a learning opportunity for its friendly, associate firms. If so, they might be asked to join as well.

There is considerable literature on the learning organization[10] which is relevant here but which is beyond the scope of this paper to discuss in detail. A common theme in that literature is that there are two major categories of learning to be considered, technical. and managerial. The organization should ask if the proposed alliance will provide an opportunity to acquire knowledge of commercially valuable technologies and how to use them. Technologies with important long-term strategy implications are of particular interest here. The second type of learning is of business and management skills. Of particular interest here will be the skills necessary for working effectively in alliances, which are discussed more fully below. Such skills will enable the organization to participate simultaneously, successively and effectively in a number of different alliances for a number of strategic purposes.

In summary, before a firm enters alliances it should establish that the potential partners, including itself, have the capabilities necessary to carry out their roles in the alliance. It should be established that the alliance, as an entity over and above its individual members, is capable of its mission. In addition, it should be established that the alliance is an opportunity for the firm, and perhaps its "friendly" associates, to acquire new capabilities which will be valuable in the long term. We now turn to the next criterion for alliance partner selection, compatibility.

COMPATIBILITY

Compatibility is the second of the Four C's and, like the others, it has to do with whether the proposed alliance is workable on the operational level. If an alliance is to succeed, the partners must be able to work effectively together, over and above possessing the capabilities necessary to play their individual alliance roles. Given that relationships are the essence of compatibility, self-examination is as important as the examination of prospective partners.

There is broad consensus that compatibility among people is the most important type[6]. There must be "positive chemistry" among the people involved, particularly those at the top who initiate the alliance and must see that it stays on track. However, effective working relationships among all parts of the organizations which interface in the alliance are necessary if an alliance is to work well. Organizational culture plays a crucial role here[11]. Culture includes underlying attitudes towards such fundamentals as the external vs internal focus of the organization, task vs social focus, conformity vs individuality, safety vs risk and ad hockery vs planning[12]. Differences in unstated attitudes on these dimensions can seriously undermine an alliance.

In addition to compatibility among people, there should also be compatibility among the operating procedures of the partners. Operating procedures include the standard methods for carrying out activities in functions such as R&D, marketing, manufacturing and human resource management. Incompatible operations can be sources of disruption which may sully a relationship or even make it unworkable. Such difficulties can usually be overcome if the people work well together and there is sufficient cultural compatibility. However, smoothing operational disharmonies can be frustrating and time consuming work which detracts from more productive kinds of cooperative activity. The obvious and hidden costs of incompatibility can be high.

Multiple Partner Selection

When a multi-partner network is being considered, the question of compatibility is more complex. With even a few prospective partners, the odds of getting high compatibility among all of them are remote. It is unrealistic to expect a level of compatibility among all which would be as high as might be found between two partners in a two-partner relationship. Given this, it is useful to consider how closely the prospective partners will have to work with each other. The closer the expected working relationship, the more crucial is compatibility. The degree of compatibility in each case must be high enough to sustain the type of working relationship expected between the two partners. For some pairs, high compatibility will not be essential. For others, high compatibility will be absolutely necessary for the alliance to succeed. For a network, then, there must be some minimum level of compatibility among all the partners. In addition, there must be higher levels of compatibility among partners who will be working closely together.

In the case of a new member being considered for an extant network, there is the issue of the disruption of established patterns of compatibility. A prospective partner may be compatible with most network members and be acceptable them on that basis. But if that prospective partner has low compatibility with a particular network member or two, they may be put at some risk, even if they will not be working closely with the new partner. If there is high incompatibility, the network positions of the current members could be put at risk since they will no longer be capable of working cooperatively with virtually anyone else in the network. This compromises the position of the new member as well. Members of the network should consider how the network as a whole could be weakened by serious incompatibilities between or among the new member and particular extant members of the network.

Exceptionally high compatibility between a newcomer and an extant member can also disrupt an alliance. Just as high incompatibility between two members weakens their influence positions, high compatibility can strengthen them. If a new member has very high compatibility with some extant members, the resulting shift in influence positions can be disruptive to the network, and lower its effectiveness. The role of influence positions in alliances will be discussed below.

Long Term Alliance Strategy

As part of their long term alliance strategies, organizations should strive for the achievement of universal compatibility, the ability to collaborate effectively with any and all alliance partners. The importance of universal compatibility can be seen by considering the alliance partner selection process. When evaluating prospective partners, organizations must consider a number of criteria, including strategic business fit and the Four C's. Firms are rarely ideal on all of these criteria, so decision makers make tradeoffs. For example, they might consider whether the high capability of a prospective partner is sufficient to compensate for low compatibility. They might consider whether a prospective partner who is a good strategic fit should be taken on despite very low operational compatibility. Such an alliance might be highly desirable but entirely unworkable. In such situations, a strategic opportunity might be foregone for operational reasons. This shows the high value of being very flexible operationally, of being able to work with just about any partner. In the ideal case, a firm should be so efficiently flexible that it could work effectively with any partner that provides a good strategic opportunity. The firm should be universally compatible.

Given the strategic goal of achieving universal compatibility, any proposed alliance should be evaluated as an opportunity to improve the firm's partnering skills[13]. Such considerations may cause direct conflicts between long-term and short-term alliance selection criteria. A particular alliance may not make much sense to a firm on a short-term basis because of low operating compatibility. The extra time and effort needed to work around the incompatibilities may not seem worth the benefits which will accrue from the alliance. However, for the long-term, this alliance may present an excellent opportunity for the firm to enhance its partnering skills. In addition, a proven track record of having worked effectively with a variety of firms will almost certainly strengthen the reputation of the firm as a networker, particularly if some of those firms are generally believed to be difficult to work with. Firms should also evaluate each proposed alliance as an opportunity for friendly associate firms to work towards universal compatibility.

In summary, the operational compatibilities of prospective alliance partners need to be evaluated. Even when the prospective alliance partners are generally skilled at partnering, they need to be evaluated for the particular set of partners in this particular alliance. As part of long term alliance strategy, each proposed alliance needs to be evaluated as an opportunity to work towards universal compatibility, for both the firm itself and its friendly associates. We now turn to the next criterion applied in alliance partner selection, commitment.

COMMITMENT

Commitment is the third of the Four C's and has two primary aspects. One has to do with commitment of resources and effort to the alliance on an ongoing basis. In the worst case, a partner without this aspect of commitment might expend only the minimum effort necessary to keep the alliance alive, opportunistically leaving it to the other partner to bear the brunt of the work necessary to make the alliance function. The second aspect of commitment has to do with how readily the partner will leave the alliance when unexpected difficulties arise. In the worst case, a partner without this aspect might abandon the alliance at a crucial time, leaving its partner with significant liabilities and frustrated strategic expectations. Organizations should evaluate their own commitment as well as that of prospective partners. Self examination should reveal whether they are truly able and prepared to commit the necessary resources and time. If they are not, they should terminate consideration of the alliance, for the benefit of themselves as well as prospective partners. When contemplating an alliance, a firm should consider both pragmatic and psychological commitment. Psychological commitment is more abstract and more difficult to evaluate than pragmatic commitment, but it is just as important.

Pragmatic commitment has to do with how badly the prospective partners need the alliance. Will dissolution of the alliance, or even its under performance, create significant difficulties for the firm? If the answer is "yes", the firm is much more likely to make its contribution to the alliance on an ongoing basis, and much more likely to commit extra effort and resources to sustain the alliance if it runs into difficulties. Pragmatic commitment involves the selection criteria discussed above; strategic fit, capability and compatibility. A firm will be pragmatically committed to an alliance if it has a significant strategic stake in it. Further, a firm's pragmatic commitment to an alliance will be weakened if it lacks the capabilities to play its role. For example, a partner who is weak financially might be forced to quit an alliance in order to put its own affairs in order. Finally, lack of compatibility among partners weakens commitment. Dealing with aggravations caused by incompatibility can cause such a drain on organizational resources, and such a psychological drain on its people, that withdrawal is the only rational choice.

Psychological commitment has to do with how strongly people believe in the alliance. Psychological commitment is intangible but it can strongly influence perceptions of pragmatic commitment. Decision makers with low psychological commitment will be more likely to conclude that the "facts" dictate abandonment of an alliance than those with a high level of psychological commitment. Reputation is an important consideration in psychological commitment. A firm trying to persuade another firm to make a greater contribution to an ongoing alliance or to stay with an imperiled alliance, will have much greater success if it is respected by that other firm. In addition, a firm contemplating a reduced commitment to an alliance must seriously consider the possible damage to its own reputation. This is an especially serious consideration if its partner is generally well respected.

Multiple Partner Selection

When a multiple partner alliance is being considered, issues of commitment are more complex than they are for two partner alliances. Not only are there more prospective partners to be evaluated, their interdynamics must also be considered. It is unlikely that all prospective partners will have high levels of commitment to a particular proposed alliance. This makes it necessary to consider the strength of the commitment of each in light of the importance of their proposed roles in the alliance. Those who are to have key roles in the alliance must have high commitment. Those with decreasingly important roles can be tolerated with decreasingly lower levels of commitment. Tolerance of low commitment could increase if there were other firms available who could easily replace a low commitment defector.

Nuances are added to these complexities if a new partner is being considered for an already extant network. A single firm joining a network must determine how strongly extant members are committed to its joining. Pragmatically, how badly does the network need the new partner? In addition to asking this question for the network as a whole, the joining member must consider each individual extant member. Are there any individual members who have low psychological and pragmatic commitment to its membership? In the worst case, are any seriously opposed? It would be unwise to commit to a network, no matter how strategically valuable, if some network members see the newcomer as undesirable or easily expendable. Current network members must consider how committed the prospective member will be to the network as a whole and to each of them individually. Extreme lack of commitment to even a single current member must be of concern to that particular partner, and to all members of the network, since even narrowly focused lack of commitment weakens the network as a whole.

Long Term Alliance Strategy

In the context of long term alliance strategy, the consideration of commitment is somewhat different from that in the discussion above. In long term alliance strategy, the focus is upon building commitment that will endure well beyond the alliance currently under consideration. It is commitment for future alliances and other kinds of cooperation. It is commitment which will make it easier in the future for the firm to persuade other firms to enter into alliances with it, to make their fair contribution to it and to stick with it in difficult times.. Reputation plays an important role in commitment. A firm can enhance future commitments to itself if it can use an alliance to improve its reputation among other networking firms, both those involved in the alliance and those not involved.

A firm joining a network must ask itself if working with these partners in this context will enhance its reputation. Some of the considerations involve self-examination. A firm must ask itself if it will be able to perform its alliance role well and be seen as a strong partner which delivers its share. It must ask if partners will say good things about it in other contexts. If the answer is “yes”, this alliance is a good strategic move for the long term development of reputation and commitment. A firm must also consider other reputational aspects of its association with the network partners. Will association with them enhance the perception that the firm is an important network "player" which is involved with leading edge activity? Will association with these partners stigmatize the firm as being "in" with a certain group of firms. Will this stigmatization close doors to some future opportunities?

These questions should be asked for friendly associate firms. A firm which finds a good opportunity for reputation enhancement in a particular alliance should explore the possibility of having friendly associates join the alliance as well. Strategic fit and the Four C's would have to be considered, but should be weighed in light of the long term benefits of strengthening friends.

In summary, a firm should try to position itself and its friends in the evolving landscape of on-going alliance activity so that future commitment and respect are strengthened. This will open the door for ever more favourable strategic opportunities in the future. This is the long term strategy of commitment. We now turn to the next partner selection criterion, control.

Control

For control, the last of the Four C's, the fundamental issue is whether the pattern of control which is likely to occur in an alliance will contribute to its effectiveness. For example, is it likely that one partner will be able to dominate the alliance? If so, will this be good or bad for effectiveness? In some cases, when strong, focused leadership is needed, and the interests of all members are closely related to those of the leading firm, dominance by one firm might be desirable. In other cases, if the lead firm is likely to be opportunistic, for example, dominance by that firm may be undesirable. The ultimate question when considering control is whether the system of control which is likely to occur will allow one's own firm to achieve its strategic objectives in the alliance. It should also be borne in mind that the control arrangements formally specified on paper may not be those which are actually in effect.

Most advice on two-partner alliances suggests that neither party should dominate[14]. There are two reasons for this, one pragmatic, one psychological. Pragmatically, if one partner dominates, it may force a course of action which is much more in its interest than its partner's. This suggests that an organization should not join a partnership in which it will clearly be the junior partner. Junior partnership will prevent it from asserting its interests in order to get its full value from the alliance. In the worst case, a firm could become locked into an alliance in which it is clearly the weaker partner and a net loser, to the benefit of the dominant partner. Turning to the justification for equality based upon psychology, it has to do with the atmosphere that pervades an alliance. If it is assumed that alliances will be most effective when there is an atmosphere of cooperation among equals, then the maintenance of equality is very important for maintaining that atmosphere. A power imbalance opens the door for the conflict and competitiveness that naturally arises when one partner strives to compensate for its lesser power.

This advice goes even further. It suggests that if a firm is in a situation in which it could assume a dominant role, it should step back from that role and, as much as is possible, arrange for equality between partners. It is assumed that the benefits of cooperation and positive contribution will outweigh those that might have been gained through assertion of dominance. One of the possible costs of dominance is the bad reputation as an opportunist which a firm will acquire if it appears to unduly exploit a weaker alliance partner.

The provision of equality in an alliance may be more difficult in some cases than in others. If two firms are very discrepant in *de facto* power, it may be virtually impossible to create an artificial equality within the alliance. If the firms have naturally occurring equality, there will be no need for artificiality. The usual advice for alliance partner selection states that firms should insist that the affairs of an alliance be conducted on an equal partnership basis, and the greater the degree that this is made difficult by differences in *de facto* power, the less desirable the alliance.

Multiple Partner Selection

Despite the difficulty of achieving control balance in multi-partner situations, some writers recommend it. Hausler[15] and his colleagues, after extensive experience in high technology alliances, say that, "Equality among partners is usually considered essential for efficient interfirm cooperation". Mason[16] says that, "Partners in an alliance must be equal in terms of risk and contribution to the alliance". Eugene Eidenberg[17], Executive Vice-president of MCI, states, "If people come to feel that they are junior partners at the table, it can be absolutely devastating to the sense of partnership and mutual commitment and mutual risk being taken".

Contrary to this viewpoint, are a number of writers who say equality is neither necessary nor desirable in many cases. Lorenzoni[18] believes that a web of partners should have a strategic centre in the form of one of the partners taking a leading or dominant role. Such a centre is necessary, in his view, to coordinate the activities of the web partners and to keep the web on strategic course. Without such a centre, the web can degenerate into an ill coordinated entity drifting this way and that as individual firms or groups of firms successively take the upper hand. Gomes-Cassares[19] also suggests that one form of effective network alliance is to have a dominant partner. However, even those advocating the useful role of a dominant partner stress the need for cooperative working relationships among all partners. There is no place for negative atmosphere in alliances.

A way to resolve this apparently conflicting advice may be to differentiate among different network types. There are two general forms of network, the modular type and the virtual type[20]. In the modular type, one organization is a central hub around which the others are clustered. In this type, the hub organization has usually out sourced its non-vital functions to the other network members, while retaining strategic control. In this kind of alliance it is clear that non-equality of control is desirable. In the virtual type of network, the alliance is made up of independent companies; which may be suppliers, customers and even competitors of each other, who have come together to share skills, costs and access to one another's markets. In this type of network, equality of power is clearly more appropriate. In multiple partner alliances, then, each firm must decide upon the control issue depending upon whether it is entering a modular type, virtual type, or some hybrid of the two.

Long Term Alliance Strategy

In the long term, as well as the short, most firms are interested in increasing the control they have of their own destinies. In the context of a particular alliance, this interest takes the form of asking if the control mechanism of the alliance will allow the firm to protect and advance its own interests, during the term of this particular alliance. When this concern is translated into the context of the long term alliance strategy, the question is whether participation in this particular alliance will enable the firm to increase its control over its affairs in the long term.

When considering whether an alliance provides an opportunity for the firm to increase its control of its own destiny, and perhaps those of other firms as well, a number of the ideas presented above should be considered. First, a firm's degree of control in almost all situations will be increased if it has a good reputation. Above, the relationship between commitment and reputation was discussed, and it was concluded that increasing respect increases future commitment from other firms. One source of respect is capability. Another source of respect is compatibility, the ability to work smoothly with alliance partners. In short, the first three C's, capability, compatibility and commitment are important contributors to the fourth C, control, particularly when the long term perspective is being considered.

Long term control and influence enhancement for friendly associate firms needs also to be considered when evaluating an alliance. If an alliance offers control enhancement opportunities, finding roles for friends may enable them to help your firm more effectively in the future.

In summary, the mechanism of control in any proposed alliance should be evaluated to determine if it will allow the firm to attain its strategic objectives. In addition, the alliance as a vehicle for advancing the firm's position of influence in the long term, on the evolving field of alliance relationships, should be evaluated. We now turn to some general consideration which arise from the above discussions of long term alliance strategies.

THE STRATEGIC PERSPECTIVE

Now that the Four C's and their long term strategic implications have been explored, it is appropriate to summarize some of the main points. Most of the currently available advice on selecting alliance partners can be summarized under the headings strategic business fit, capability, compatibility, commitment and control. That advice can be improved by greater attention to multiple partner alliances and to the long term alliance strategy of the firm. The advice on strategic fit usually focuses upon concrete business strategy and its role in the alliance currently being considered. That advice can be extended to consider the long term alliance strategy of a firm, with a time frame that goes beyond the current alliance. The advice based upon the Four C's usually focuses upon whether a proposed alliance will be workable operationally. That advice can also be extended to include implications for the long term alliance strategy of the firm. There are further strategic implications arising from the Four C's which can now be considered.

The long term alliance strategy issues arising from the first two of the Four C's, capability and compatibility, can be brought together under a common theme. For capability, the long term strategic question is whether the alliance under consideration presents an opportunity for the organization to improve its capabilities, both technical and managerial. Such improvements enable the firm to conduct its business more effectively. For compatibility, the question is whether the alliance under consideration presents an opportunity for the organization to move itself closer to universal compatibility. This improved compatibility will allow the firm to participate in more alliances which are strategically desirable. So the first two of the Four C's have to do with the firm acquiring new skills. In the context of long term alliance strategy, then, both capability and compatibility have to do with organizational learning.

The long term alliance strategy issues arising from the last two of the Four C's, commitment and control, also have a common theme. For commitment, the long term strategy question is whether the alliance presents an opportunity for the organization to enhance the commitment it will receive from other firms, in the long term. For control, the question is whether the alliance isan opportunity for the firm to enhance its control of its own destiny. As earlier discussions implied, both of these concern the opportunity for the organization to improve its position in the evolving field of network relationships, over the long run. In the context of long term alliance strategy, then, both commitment and control have to do with organizational positioning.

These two fundamental strategic themes, learning and positioning, which arise from the Four C's, must be differentiated from the concrete business strategies which are normally considered under the heading, “strategic fit”, in discussions of alliance partner selection. The identification of these two strategic themes leads to further insights into the limitations of traditional advice on alliance partner selection, which will now be discussed.

A REFRAMING OF SELECTION ISSUES

It will now be shown that the analysis presented above can be extended to make an important shift in the cognitive framework applied to issues of partner selection. This shift can be explained by contrasting the Select and Bridge Strategy to the Select and Build Strategy.

The Select and Bridge Strategy

Traditional advice on the selection of alliance partners is framed in what can be called a Select and Bridge Strategy. It begins with the identification of prospective partners with appropriate strategic business fit. Then the Four C’s are applied to evaluate working relationships. The ideal is a partner with minimal operational difficulties. This approach recognizes, however, that perfect matches will never be found and that trade-offs among selection criteria will be made. The compromises involved in the selection of partners lead to the need to make up for discrepancies in fit during the implementation of the alliance. Working with a partner who has badly needed technology but a poor cultural fit will require hard work to bridge the cultural gap. This could include selecting good communicators to work with that partner and spending extra time on communication. If a partner has weak management, it may be necessary to watch it very carefully and to give some diplomatic but pointed advice from time to time. One fundamental tradeoff is that between strategic opportunity and operational workability. An excellent strategic opportunity may be foregone because the alliance is not workable operationally. In summary, the Select and Bridge Strategy says that when selecting a partner, evaluate with the available criteria, knowing that a perfect partner will never be found. When working with the inevitably imperfect partner, work hard to bridge the gaps in the fit. The more effective the selection of the partner, the less will be the bridging work which needs to be done.

There is a danger, though, in the Select and Bridge Strategy. The approach focuses upon the immediate alliance and whether the partner(s) will be able to work smoothly together. Such advice places a premium on operational harmony. A firm driven by this mind set may find itself choosing successive alliances with a narrowing set of partners, with whom it is developing increasingly smooth operational interactions. Over the long term, the push for harmonious working capabilities engendered in the Select and Bridge Strategy may not be healthy.

The Select and Build Strategy

The above discussions make it clear that alliances should be seen as opportunities for learning and positioning, for the long term benefit of the firm. Assuming that networking will increasingly play a vital role in business activity, an organization should be seeking a widening set of alliance partners, a widening set of networking capabilities and an enlarging set of influence relationships. Such a strategy will view disharmonies in some alliances as a sign of learning and strategic progress, rather than just a sign of poor selection.

Carrying the logic of the Select and Build Strategy further, it may be desirable to seek out some disharmonious relationships because of their long term value. For example, the chance to work with a firm whose R&D operations are quite different from one's own might be a good opportunity to learn the strengths and weaknesses of those operations and to adopt what works. The chance to work with a large firm which will dominate in a particular alliance might be an opportunity to increase one's influence among other firms, who are in awe of the larger firm.

Decisions which must weigh the long term benefits of learning and positioning against the short term benefits of the Four C's are never easy. As discussed earlier, decision makers who are deciding whether or not to enter a particular alliance must consider the tradeoff between strategic business opportunity and operational workability. We now see a similar tradeoff, between long term alliance strategy and operational workability. This tradeoff must be dealt with on the basis of the complexities apparent at the time and sometimes pragmatic short-term considerations prevail. Nevertheless, a firm that increases its networking capabilities through learning and positioning in successive alliances will improve its long term strategic position as a networker.

INTEGRATED STRATEGY FOR ALLIANCE PARTNER SELECTION

There are now two sets of alliance partner selection criteria available. First there are the five that are available in the literature. They focus upon the business strategy of the firm and upon the operational workability of the alliance, tending to consider only one prospective partner and only one alliance at a time. Second, there are the criteria developed in this paper. They focus more upon the long term alliance strategy of the firm (positioning and learning) and upon issues that arise when there are multiple prospective partners. As stated earlier, both of these sets of criteria are valid and should be applied by firms considering participation in an alliance. The use of both sets will be expedited if the relationship between them is clarified.

Insert Figure 3 about here

Figure 3 shows the relationship in diagrammatic form. When considering any alliance, and any set of alliance partners, it is usual to turn to strategic considerations first. Figure 3 shows two sets of strategic questions. First, there is business strategy. Would this alliance, with these partners, contribute to such business goals as expanding markets geographically, getting access to certain technologies or out sourcing manufacturing? Second, there is long term alliance strategy. Is the alliance an opportunity to improve the firm's prospects for alliance participation, with a variety of alliance partners, in the long term? Improved prospects come from organizational learning and from improved positioning in the field of alliance-making firms. When analysing learning and positioning opportunities, the Four C's, as extended to long term alliance strategy in this paper, can be useful. The essential questions under each of the Four C's are shown in Figure 3. If this initial evaluation of the two sets of strategy issues yields a positive answer, the firm can move on to consider the operational feasibility of the alliance. Here, the Four C's as articulated in past literature are applicable. The essential questions for these are also shown in Figure 3.

Figure 3, then, shows the essence of the ideas presented in this paper. The Four C's were extended to include learning and positioning in alliance strategy without destroying their validity as criteria as described in the literature. Given that learning and positioning are already being discussed in the literature it is now apparent that one of the benefits of the analysis presented here is that it shows the conceptual relationship between the traditional Four C's and the literature on learning and positioning. These various literatures which have been mainly independent until now, are seen to have definite conceptual links.

CONCLUSIONS

Alliances can be an effective way of doing business and the current blossoming of alliance activity is a precursor to the networked world of the future[21]. Selecting appropriate alliance partners is essential for alliance success. Most of the advice in the current literature on the selection of alliance partners focuses upon five criteria: strategic business fit, capability, compatibility, commitment and control. This advice is invaluable in helping firms meet their business objectives through alliances. These traditional criteria for alliance partner selection can usefully be extended to give fuller consideration to multiple partner alliances and to the long term alliance strategies of the firm. When there are multiple prospective partners for an alliance, the sheer increase in the number of partners to be considered adds complexity to the selection decision. More complexity is added by the need to consider the interaction patterns of prospective partners and associated questions about the functioning of the alliance as an entity, over and above the characteristics of its individual members. The long term alliance strategy of the firm adds further complications to the partner selection decision. Firms must weigh the learning and positioning opportunities provided by an alliance. Decision makers must weigh the tradeoffs among this complex set of criteria which concern long term alliance strategy, business strategy and operational feasibility. This paper emphasises that selecting alliance partners on the basis of the learning and positioning opportunities they provide can help organizations prepare for the long term, for the networked world of the future.

REFERENCES

(1) M. G. Serapio and W. F. Cascio, End-Games in International Alliances, The Academy of Management Executive, X(1), Feb. 1996, 62-73.

(2) E. Garnsey and M. Wilkinson, Global Alliance in High Technologu: A Trap for the Unwary, Long Range Planning, 27(6), 1994, 137-146; E. R. Stafford, Using Co-operative Strategies to Make Alliances Work, Long Range Planning, 27 (3), 64-74 (1994).

(3) P. Pekar Jr. and R. Allie, Making Alliances Work - Guidelines for Success, Long Range Planning, 27 (4), 54-65 (1994).

(4) ____________ Industrial Research Institute's Annual R&D Trends Forecast, Research-Technology Management, Jan. -Feb., 1995, 14-15.

(5) P. Pekar Jr. and R. Allie, op. cit.

(6) C. Bronder and R. Pritzl, Developing Strategic Alliances, European Management Journal, 10 (4), 412-421 (1992); ______, Managing a Successful Global Alliance, Research Report No. I-109, Business International Corporation, New York (1992); J. E. Forrest and M. J. C. Martin, Strategic Alliances between Large and Small Research Intensive Organizations, R&D Management, 22 (1), 41-53 (1992); S. Gates, Strategic Alliances: Guidelines for Successful Management. The Conference Board, Inc., New York, (1993); J. Hausler, H. Hohn and S. Lutz, Contingencies of Innovative Networks, Research Policy, 23, 47-66 (1994); R. M. Kanter, Collaborative Advantage, Harvard Business Review, July-August, 96-108 (1994); D. Lei, Offensive and Defensive Uses of Alliances, Long Range Planning, 26(4), 32-41 (1993); J. C. Mason, Strategic Alliances: Partnering for Success, Management Review, May, 10-15 (1993). E. R. Stafford, op. Cit. Troy, 1994).

(7) P. Pekar Jr. and R. Allie, op. cit.

(8) The Four C's proposed here are not the same as those proposed by K. D. Brouthers, L. E. Brouthers and T. J. Wilkinson, Strategic Alliances: Choose Your Partners, Long Range Planning, 28(3), 18-25. The Four C's of Brouther's et al discuss the same themes as those proposed here, albeit in a somewhat different conceptual packaging. The advantage of those presented here is that their conceptual organization allows them to be extended, in a parsimonious way, to the consideration of long term strategic alliance issues. This parsimonious theoretical integration is a distinct advantage.

(9) For discussions of long term alliance strategy and evolving landscapes of alliances see: H. G. Gemunden and P. Heydebreck, The Influence of Business Strategies on Technological Network Activities, Research Policy, 24, 1995, 831-849; B. Gomes-Casseres, Group versus group: How alliance networks compete, Harvard Business Review, July-August, 62-74 (1994); T. Khanna, Racing Behaviour: Technological Evolution in the High-End Computer Industry, Research Policy, 24, 1995, 933-958; J. W. Medcof, Challenges in Managing Technology in Transnational Multi partner Networks, Business Horizons, Jan.-Feb. 1996, 47-54.

(10) M. Dodgson, Learning, Trust, and Inter-Firm Technological Linkages: Some Theoretical Associations, in R. Coombs and A. Richards, Technological Collaboration: The Dynamics of Cooperation in Industrial Innovation, Edward Elgar, Crittenham, 1996; N. S. Levinson and M. Asahi, Cross-National Alliances and Interorganizational Learning, Organizational Dynamics, Aut., 1995, 50-59; E. D. Nevis, A. J. DiBella and J. M. Gould, Understanding Organizations as Learning Systems, Sloan Management Review, Winter, 1995, 73-85.

(11) K. J. Fedor and W. B. Werther, Jr., Making Sense of Cultural Factors in International Alliances, Organizational Dynamics, Spring, 1995, 33-45.

(12) S. H. Kale and J. W. Barnes, Understanding the domain of cross-national buyer-seller interactions, Journal of International Business Studies, 23 (1), 101-132 (1993).

(13) B. B. Tyler, Cooperative Advantage: A Source of Successful Innovation, Paper presented at the National Business Conference, McMaster University, Hamilton, January, 1996.

(14) M. F. Wolff, Building Trust in Alliances, Research-Technology Management, May-June, 1994, 12-15; K. K. Reardon and R. E. Spekeman, Starting Out Right: Negotiation Lessons for Domestic and Cross-Cultural Business Alliances, Business Horizons, 37(1), 1194, 71-79.

(15) J. Hausler, H. Hohn and S. Lutz, op. cit., page 49.

(16) J. C. Mason, Strategic Alliances, Management Review, May, 1993, 10-15.

(17) Quoted in C. J. Mason, op. cit., page 13.

(18) G. Lorenzoni and C. Baden-Fuller, Creating a Strategic Center to Manage a Web of Partners, California Management Review, 37(3), 1995, 146-163.

(19) B. Gomes-Casseres, op. cit.

(20) G. G. Dess, A. M. A. Rasheed, K. J. McLaughlin and R. L. Priem, The New Corporate Architecture, The Academy of Management Executive, 9(3), 1995, 7-20.

(21) H. H. Hinterhuber and B. M. Levin, Strategic Networks - The Organization of the Future, Long Range Planning, 27 (3), 43-53 (1994).

Figure 1

Traditional Alliance Partner Selection Criteria

STRATEGIC FIT

Does the alliance have a good business strategy rationale?

Is the prospective partner a good strategic fit?

THE FOUR C'S

Is the prospective partner **CAPABLE** of carrying out its role in the alliance?

Is the prospective partner **COMPATIBLE** operationally?

Is the prospective partner **COMMITED** to the alliance and its strategic aims?

Are the **CONTROL** arrangements for the coordination of the alliance appropriate?

Box 2

Complementarity in Strategic Fit

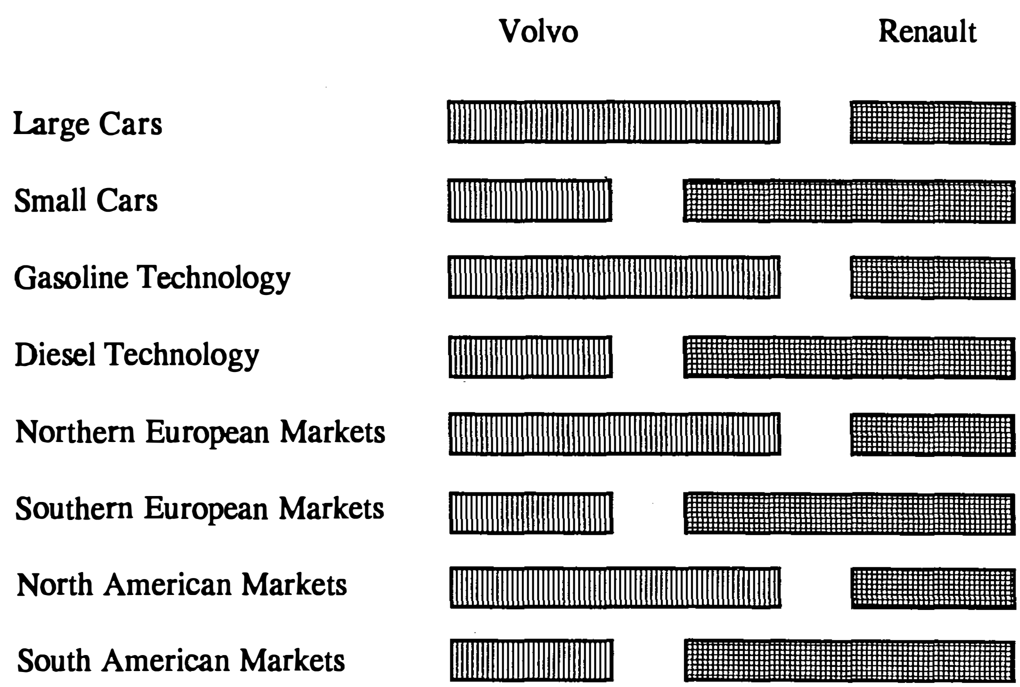
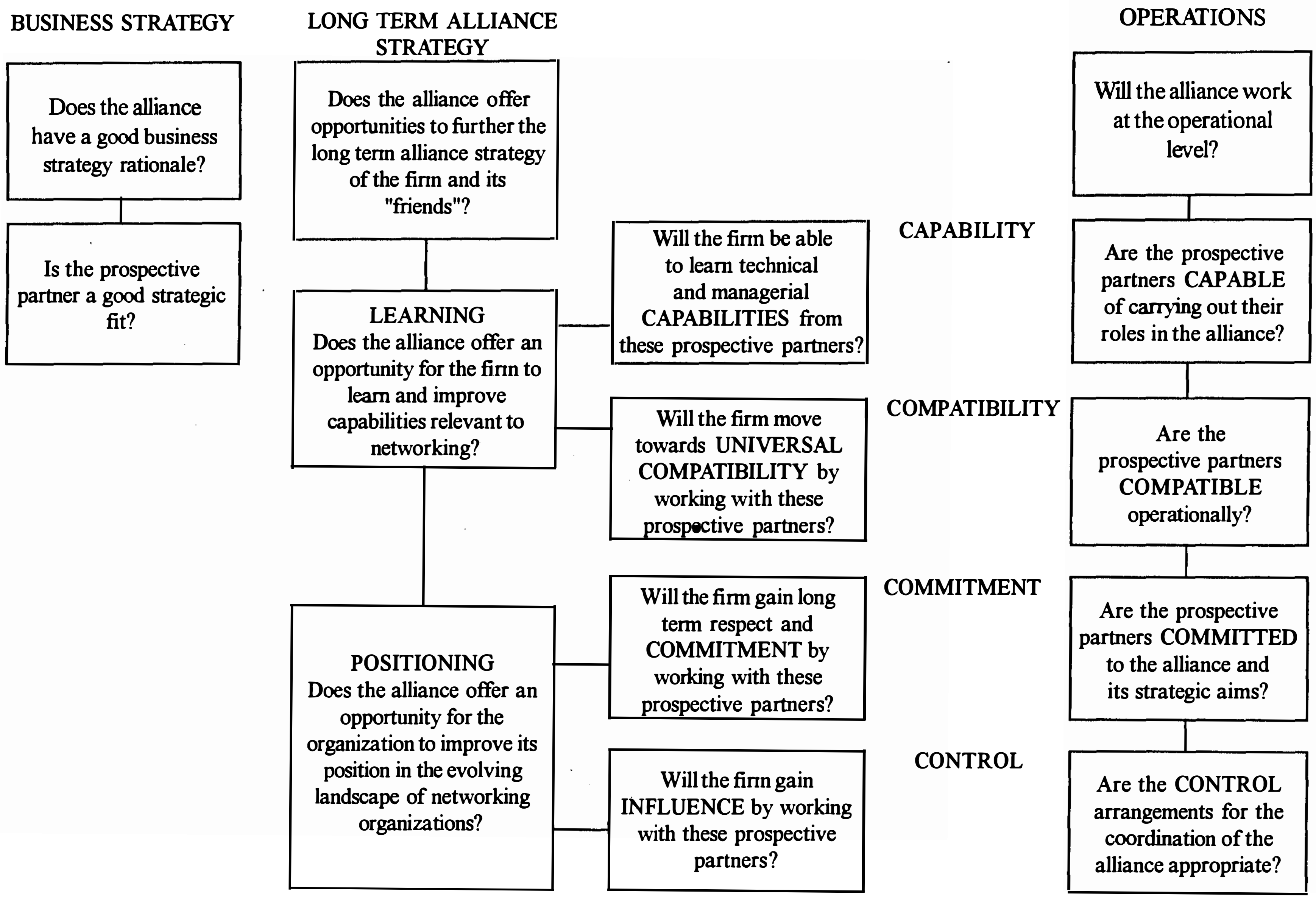


Figure 3
Integrated Criteria for Alliance Partner Selection



INNOVATION RESEARCH WORKING GROUP
WORKING PAPER SERIES

1. R.G. Cooper and E.J. Kleinschmidt, "How the New Product Impacts on Success and Failure in the Chemical Industry", February, 1992.

2. R.G. Cooper and E.J. Kleinschmidt, "Major New Products: What Distinguishes the Winners in the Chemical Industry", February, 1992.

3. J. Miltenburg, "On the Equivalence of JIT and MRP as Technologies for Reducing Wastes in Manufacturing, March, 1992.

4. J.B. Kim, I. Krinsky and J. Lee, "Valuation of Initial Public Offerings: Evidence from Korea", February, 1992.

5. M. Basadur and S. Robinson, "The New Creative Thinking Skills Needed for Total Quality Management to Become Fact, Not Just Philosophy", April, 1992.

6. S. Edgett and S. Parkinson, "The Development of New Services Distinguishing Between Success and Failure", April, 1992.

7. A.R. Montazemi and K.M. Gupta, "Planning and Development of Information Systems Towards Strategic Advantage of a Firm", April, 1992.

8. A.R. Montazemi, "Reducing the Complexity of MIS Innovation Through Hypermedia and Expert Systems", May, 1992.

9. M. Basadur and Bruce Paton, "Creativity Boosts Profits in Recessionary Times - Broadening the Playing Field", June, 1992.

10. Robert G. Cooper and Elko Kleinschmidt, "Stage-Gate Systems for Product Innovation: Rationale and Results", June, 1992.

11. S.A.W. Drew, "The Strategic Management of Innovation in the Financial Services Industry: An Empirical Study", July, 1992.

12. M. Shehata and M.E. Ibrahim, "The Impact of Tax Policies on Firms' R & D Spending Behavior: The Case of R & D Tax Credit", July, 1992.

13. Willi H. Wiesner, "Development Interview Technology: Implications for Innovative Organizations", July, 1992.

14. Isik U. Zeytinoglu, "Technological Innovation and the Creation of a New Type of Employment: Telework", August, 1992.

15. John W. Medcof, "An Integrated Model for Teaching the Management of Innovation in the Introduction to Organizational Behaviour Course", October, 1992.

16. Min Basadur, "The Why-What's Stopping Analysis: A New Methodology for Formulating Ill-Structured Problems", October, 1992.

17. Stephen A.W. Drew, "Strategy, Innovation and Organizational Learning an Integrative Framework, Case Histories and Directions for Research", November, 1992.

18. Stephen A.W. Drew, "Innovation and Strategy in Financial Services", November, 1992.

19. Scott Edgett, "New Product Development Practices for Retail Financial Services", November, 1992.

20. Robert G. Cooper and Elko J. Kleinschmidt, "New Product Winners and Losers: The Relative Importance of Success Factors - Perception vs. Reality", November, 1992.

21. Robert G. Cooper and Elko J. Kleinschmidt, "A New Product Success Factors Model: An Empirical Validation", November, 1992.

22. Robert G. Cooper & Elko J. Kleinschmidt, "Stage Gate Systems: A Game Plan for New Product Success", November, 1992.

23. Min Basadur, "Optimal Ideation-Evaluation Ratios", March, 1993.

24. Christopher K. Bart, "Gagging on Chaos", March, 1993.

25. Yufei Yuan, "The Role of Information Technology in Business Innovation", July, 1993.

26. Isik Urla Zeytinoglu, "Innovation in Employment: A Telework Experiment in Ontario", July, 1993.

27. John Miltenburg and David Sparling, "Managing and Reducing Total Cycle Time: Moles and Analysis", August, 1993.

28. R.G. Cooper, C.J. Easingwood, S. Edgett, E.J. Kleinschmidt and C. Storey, "What Distinguishes the Top Performers in Financial Services", September, 1993.

29. B.E. Lynn, "Innovation and Accounting Research", September, 1993.

30. Min Basadur and Peter Hausdorf, "Measuring Additional Divergent Thinking Attitudes Related to Creative Problem Solving and Innovation Management", November, 1993.

31. R.G. Cooper and E.J. Kleinschmidt, "Determinants of Time Efficiency in Product Development", December, 1993.

32. Christopher K. Bart, "Back to the Future: Timeless Lessons for Organizational Success", February, 1994.

33. Ken R. Deal and Scott J. Edgett, "Determining Success Criteria for New Financial Products; A Comparative Analysis of CART, Logit and Discriminant Analysis", February, 1995.

34. Christopher K. Bart and Mark C. Baetz, "Does Mission Matter?", February, 1995.

35. Christopher K. Bart, "Controlling New Products: A Contingency Approach", February, 1995.

36. Christopher K. Bart, "Is Fortune Magazine Right? An Investigation into the Application of Deutschman's 16 High-Tech Management Practices", February, 1995.

37. Christopher K. Bart, "The Impact of Mission on Firm Innovativeness", February, 1995.

38. John W. Medcof, "Transnational Technology Networks", April, 1995.

39. R.G. Cooper and E.J. Kleinschmidt, "Benchmarking the Critical Success Factors of Firms' New Product Development Programs", April, 1995.

40. John W. Medcof, "Trends in Selected High Technology Industries", July, 1995.

41. Robert C. Cooper & E.J. Kleinschmidt, "Benchmarking Firms' New Product Performance & Practices", September, 1995.

42. Min Basadur and Darryl Kirkland, "Training Effects on the Divergent Thinking Attitudes of South American Managers", November, 1995.

43. Min Basadur, "Organizational Development Interventions for Enhancing Creativity in the Workplace", November, 1995.

44. Min Basadur, "Training Managerial Evaluative and Ideational Skills in Creative Problem Solving: A Causal Model", December, 1995.

45. Min Basadur, Pam Pringle and Simon Taggar, "Improving the Reliability of Three New Scales Which Measure Three New Divergent Thinking Attitudes Related to Organizational Creativity", December, 1995.

46. N. P. Archer and F. Ghasemzadeh, "Project Portfolio Selection Techniques: A Review and a Suggested Integrated Approach", February, 1996.

47. Elko J. Kleinschmidt, "Successful new product development in Australia: An empirical analysis", February, 1996.

48. Christopher K. Bart, "Industrial Firms & the Power of Mission," April, 1996.

49. N. P. Archer and F. Ghasemzadeh, "Project Portfolio Selection Management through Decision Support: A System Prototype," April, 1996.

50. John W. Medcof, "Challenges in Collaboration Management in Overseas Technology Units," April, 1996.

51. Susan L. Kichuk and Willi H. Wiesner, "Personality and Team Performance: Implications for Selecting Successful Product Design Teams," May, 1996.

52. Susan L. Kichuk and Willi H. Wiesner, "Selection Measures for a Team Environment: The Relationships among the Wonderlic Personnel Test, The Neo-FFI, and the Teamwork KSA Test, " May, 1996.

53. Susan L. Kichuk and Willi H. Wiesner, "Personality, Performance, Satisfaction, and Potential Longevity in Product Design Teams," June, 1996.