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SUPPLY CHAIN PARTNERSHIPS: MODEL VALIDATION AND IMPLEMENTATION

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Without a foundation of effective relationships, efforts to manage the flow of materials and information across the supply chain are likely to be unsuccessful (Supply Chain Challenges 2003; Handfield and Nichols 2002). Partnering between firms is one way to find and maintain competitive advantage (Mentzer, Min, and Zacharia 2000; Mohr and Spekman 1994). The ability to effectively and efficiently build and maintain tailored business relationships may become a key competency for executives looking for competitive advantage.

The Lambert, Emmelhainz, and Gardner model (1996, 1999) was originally developed using 18 case studies and validated by fitting the model to the same case studies. The model was used in three other relationships offering some support for its validity (Lambert, Emmelhainz, and Gardner 1996). There were additional uses of the model, but the purpose was not for systematic validation of the model (Lambert, Emmelhainz, and Gardner 1999). There have been many calls in other disciplines for validation and replication as an indispensable ingredient in the scientific process (e.g., Amir and Sharon 1990; Furchtgott 1984; Lindsay and Ehrenberg 1993; Rosenthal 1979; Smith 1970). This research examines the presence of these qualities in the model.

Clarity with respect to practitioner implementation of the model was also lacking. This is evidenced by the following statement by one senior manager involved in the research: "I did not fully appreciate the difficulties associated with the process surrounding the implementation of the model until I tried to use it in my company." Another goal of this research is to provide *specific* guidelines on how to use the model.

Based on the facilitation of 20 partnership cases in a wide variety of contexts this research provides a systematic validation of the model and addresses a number of specific guidelines on how to implement the model. One difficulty when moving research from theory to practice is that researchers often ignore the complexities of implementing their models. This research provides direction for managers who want to use the model to build and maintain successful relationships.

In the next section, we review the literature on partnerships and provide a definition of partnership. Next, the research methodology is described. This is followed by the research findings. Finally, the conclusions are presented.

LITERATURE REVIEW

While the word partnership has been interpreted by some managers and educators to mean any business-to-business relationship, it is still the most descriptive term for closely integrated, mutually beneficial relationships that enhance supply chain performance. The following definition of partnership is adapted from Lambert, Emmelhainz, and Gardner (1996, 1999):

> A partnership is a <u>tailored</u> business relationship based on mutual trust, openness, shared risk and shared rewards that results in business performance greater than would be achieved by the two firms working together in the absence of partnership.

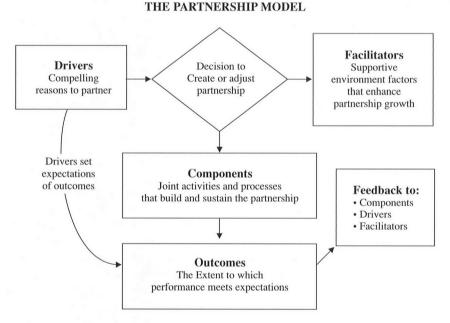
A key point of this definition is that the relationship is customized. It is not standard fare, that is, something that would be done for any customer of a particular size. Another key point is that incremental benefits must be gained from the tailoring effort. The tailoring process consumes managerial time and talent, thus it must yield incremental measurable benefits.

The literature supports the ability of partnerships to achieve cost savings and reduce duplication of efforts by the firms involved (Herbing and O'Hara 1994; Whipple, Frankel, and Frayer 1996; Zinn and Parasuraman 1997). For suppliers, partnerships with industry leaders can enhance operations and prestige (Anderson and Narus 1991; Spekman 1988), and provide stability in unstable markets (Fram and Presberg 1993). For buyers, partnerships can improve profitability, reduce purchasing costs, and increase technical cooperation (Ailawadi, Farris, and Parry 1999; Han, Wilson, and Dant 1993).

Beyond documentation of the advantages and disadvantages of partnerships, research has focused on the development of partnership models, which themselves may be part of larger models of organizational relationships (Evans and Laskin 1994; Tuten and Urban 2001). The basic goal of these models is to provide structure for the factors that influence partnership formation, management over time, and outcomes (Tuten and Urban 2001). There are several examples of models in the literature (see for example Tuten and Urban 2001; Lambert, Emmelhainz, and Gardner 1999; Mohr and Spekman 1994) that academics can use for partnership research (Knemeyer, Corsi, and Murphy 2003) and managers can use to facilitate the development of relationships that achieve favorable outcomes. For this research, we used the Lambert, Emmelhainz, and Gardner (1996, 1999) model for its high degree of specificity in terms of managerial process and its integration of many theoretical streams.

The model is comprised of four steps: examination of the drivers of partnership, examination of the facilitators of partnership, calibration of the components of partnership, and the measurement of outcomes. Drivers are the compelling reasons to partner, and must be examined first when approaching a potential partner. Facilitators are characteristics of the two firms that will help or hinder the partnership development process. It is the combination of facilitators and drivers that prescribes the appropriate type of partnership. Components are the managerially controllable elements that can be implemented at various levels depending on the amount of partnership present. How they are actually implemented will determine the ultimate type of partnership that exists. Outcomes are the extent to which each firm has achieved its expected performance (see Figure 1).

FIGURE 1



Source: Lambert, Douglas M., Margaret A. Emmelhainz, and John T. Gardner, "Developing and Implementing Supply Partnerships," *The International Journal of Logistics Management*, Vol. 7, No. 2 (1996), p. 4.



RESEARCH METHODOLOGY

A qualitative research approach was utilized to examine the use of the model (Dougherty and Hardy 1996; Calder 1977). There are many ways to validate qualitative research (Erlandson et al. 1993; Halldorsson and Aastrup 2003). An overview of quality criteria of accessing validity describes a trustworthiness approach that is appropriate (Halldorsson and Aastrup 2003). This trustworthiness approach has four major components that correspond to internal validity, reliability, external validity, and objectivity. They are respectively: credibility, dependability, transferability, and conformability.

Credibility addresses the match between the research subject's constructs and the researcher's descriptions (Erlandson et al. 1993). The confirmation of our observations with the principal participants during and after the use of the model enhanced the credibility of the findings. The respondents had a chance to correct any misinterpretations.

Dependability concerns the temporal stability of data. When the same or similar approaches are used and the results are similar, the replication helps ensure dependability (Guba and Lincoln 1989). This study utilized the original model without changes, followed a similar methodology based on cases, employed significant interaction with managers on both sides of the relationship, and covered an extended period of observation.

Transferability concerns the ability of the study results to be applied to additional contexts (Erlandson et al. 1993). In other words, can the phenomenon be applied broadly? This study used a different set of companies and examined a wide variety of supply chain contexts.

Conformability concerns the ability of the findings to be confirmed through the data. Conclusions, interpretations, and recommendations should be traceable to their origins (Erlandson, et. al. 1993). The study produced a number of traceable data records to support conformability. The respondents filled out process evaluation forms at the end of the meetings, the results of each meeting were captured in summary form, and the researchers kept notes as the meetings progressed.

The research reported here is based on an analysis of 20 partnership cases utilizing the model (representing 20 different supply chain relationships). Each associated meeting facilitated by the coauthors typically lasted a day and a half with participants at various levels and functions in both firms involved in the relationship. A comprehensive note-taking instrument was developed in order to systematically collect the observations of the meeting process facilitators (hereafter referred to as MPFs). The notes from the meeting along with an open-ended meeting evaluation form were consolidated and content analyzed to uncover findings related to the use of the model for the partnering process. Content analysis is an objective and systematic research technique suitable for replicable and valid interfaces from data to their context (Kolbe and Burnett 1991). The method is advantageous for understanding social communication and interactions and relationships (McAlister and Erffmeyer 2003). In particular, a pair of the co-authors who acted as MPFs analyzed their observations and the participant evaluations after each meeting and consulted with participants if any clarification was required.

The use of ethnographic case studies to contribute to the solution of practical problems has been defined as action research (Naslund 2002). The core idea of action research is that the researcher is involved with the subject of investigation. When undertaking action research, the researcher should actively participate in the project (Checkland 1993). Action research strives to advance both science and practice (Foote-Whyte 1991; McKernan 1991).

Our research methodology addresses a number of frequently cited criticisms of partnership research. For example, Baba (1988) complained that most partnership research was based only on a limited number of interviews, often with just one executive, from only one side of the partnership. Another weakness of previous partnership research is the over-dependence on surveys. While mail surveys allow for the collection of large amounts of data from numerous respondents, the extent and richness of the data collected are limited. They typically involve only one individual within an organization and with few exceptions only collect data from one side of the relationship (e.g., Boyson et al. 1999; Kent and Mentzer 2003; Maloni and Benton 2000; Moberg and Speh 2003). While some of these partnership surveys provide statistically significant results, they tend to provide limited amounts of information that could be used by organizations to manage their partnerships.

The cut-off point of 20 cases was determined during the course of the study based on the flow of new information out of the meetings. As has been suggested by previous research, the actual number of cases was not as important as reaching a saturation or "redundancy" point (Carter and Jennings 2002; Glaser and Strauss 1967; Lincoln and Guba 1985; McCracken 1988; Patton 1990). The primary goal was to facilitate meetings until the flow of new ideas and/or findings was minimal. Although there is no set heuristic as to the number of cases needed to reach saturation, previous research suggests 12 to 20 for a heterogeneous sample such as the one in this study (Carter and Jennings 2002; Glaser and Strauss 1967; Lincoln and Guba 1985; McCracken 1988; Patton 1990).

Of the 20 partnership meetings facilitated, a major retailer provided an opportunity to use the model with nine product and service suppliers involving a diverse set of relationships. Both critical component suppliers and support product suppliers were included in the sample. Seven of the meetings took place at the retailers' facilities and two were conducted at the suppliers' facilities.

Another nine partnership cases were completed with three companies in the consumer goods sector and their suppliers. The nine relationships included suppliers of raw materials and packaging materials as well as a vertically integrated internal relationship between two wholly owned subsidiaries of the same company who also conducted business with companies outside of the relationship. Six of the meetings took place at the customers' facilities and three were conducted at a neutral site.

The final two cases involved a major company in the technology sector. The cases involved service suppliers. One of the associated meetings was conducted at the customers' facilities and the other was at a neutral site.

FINDINGS

Partnership in practice requires a repeatable managerial process that will guide the analysis and implementation of appropriate levels of relationship components. This section reports the findings from our use of the model (see Table 1). First, description of the preparation that must take place prior to using the model is outlined. Next, the partnership facilitation process is reviewed with a specific focus on providing practical suggestions on how to maximize its effectiveness as a managerial tool. These suggestions reflect the incremental knowledge gained beyond the Lambert, Emmelhainz, and Gardner (1996, 1999) studies. Finally, a set of broader issues concerning the use of the model is detailed.

TABLE 1

Process Stage	Key Points	Challenges scheduling difficulties 			
Preparation for Meeting	 review model prior to the meeting invite appropriate participants to include multiple levels and functions 				
Introduction and Expectation Setting Session	 communicate that the business is not at risk establish expectations of the process 	• ensuring candid discussion			
Drivers Session	 communicate the need to be selfish when establishing drivers ensure confidentiality of session be prepared to present ideas to the other party 	 establishing solid driver metrics explaining the customer service driver to the supplier learning how to score the drivers 			
Facilitators Session	 establish environment for the joint session learning how to jointly score the facilitators 	 ensuring candid discussion establishing the need to provide examples of past behavior 			
Targeting Session	• explaining the need to use lowest driver score	 communicating to the parties that the goal is the appropriate level of partnershi not to have the highest level 			
Managerial Components Session	 connecting to drivers and prescribed level of partnership formulating action plans that address managerial components and drivers 	 connecting action items to drivers prioritizing action items incorporating driver metrics 			
Wrap-up Session	 establishing appropriate follow-up schedule establishing appropriate assessment 	 maintaining momentum ensuring the allocation of managerial resources in order to execute action plans 			

PARTNERSHIP FACILITATION - KEY POINTS AND CHALLENGES

The successes attributed to the use of the model indicate that it is worth examining the implementation process. Managers consistently report that they would not have considered as many issues and would not have done so as holistically without the structure provided by the model. Some of the outcomes have surprised the users. A retailer used the model with a supplier who subsequently acquired a west coast manufacturing capability to provide full national coverage. The investment had been resisted before the partnership meeting. In another example, a consumer products manufacturer used the model in order to increase the flow of innovation opportunities from key suppliers. During one partnership meeting, a supplier committed to assigning a dedicated salesperson as well as dedicating an employee in their research and development area to this manufacturer. This commitment was made because the partnership meeting identified the concerns of the manufacturer as to how the confidentiality of joint innovations between the companies would be handled.

The value attributed to the model has been quantified by the managers who participated in this research. A consumer products manufacturer identified one of the outcomes of using the model was a vendor managed supply implementation that produced \$4.3 million in annual savings. Another case involving this manufacturer resulted in \$2.8 million in annual savings by identifying an opportunity to work with the supplier to restructure its network. One company attributed the acceleration of a key plant opening (a reduction of 2 months) to using the model. Thus, both qualitative and quantitative measures provided by managers involved in the research support the value of using the model to tailor relationships within the supply chain.

Preparation for Meeting

All parties involved in the process, MPFs and participants, have activities that should be completed prior to the meeting. These activities include participant selection decisions, meeting scheduling, meeting planning issues, and groundwork issues.

The management team that has made the decision to use the model must determine which business relationship(s) are candidates. Our findings suggest that managers go through a learning curve with the model. It is beneficial to begin with an important relationship but not a critical relationship in order to gain experience. Once a comfort level with the model has been developed, more critical relationships can be addressed. Additionally, management should consider the word-of-mouth issues associated with the decision to use the model with specific companies. In particular, what might be the reaction within a supplier or customer organization when it is discovered that a competitor has gone through the process and they have not? During several of our facilitations, managers from the company invited to participate in the meeting asked who else had gone through the process.

The meetings are greatly enhanced by the presence of individuals from multiple levels within the organizations and with diverse functional expertise. We also found that the make-up of the group sent a message to those in the other firm about the importance of the relationship to the party proposing the meeting. Also, it is important to involve the highest-level executives possible and still have the meeting. The more levels of management represented in the meeting, the less likely a change in one of these managers will negatively impact the commitments made in the meeting.

The need to have the involvement of multiple levels of employees with diverse functional expertise makes scheduling difficult. As was stated by one participant, "this is the first time all of these people have been together in the same room." The best way to handle this challenge is to have a high-level executive both state that the meeting is a priority and also attend the meeting. In this research, the presidents of several of the firms attended the entire meeting.

Some additional insights into the preparation for the meetings can be summed up as follows:

- Publishing a detailed agenda establishes expectations and maintains focus.
- The optimal session is one and a half days and back-to-back partnership meetings are not recommended.
- Scheduling a dinner at the end of the first day enables networking and clarification of the prior discussions.
- Reviewing the model in advance is good practice for all participants.
- MPFs should be conversant in the business situation.
- Providing a neutral location, spacious rooms, and proper supplies for recording and communicating smoothes the process.
- Packets including an agenda, a list of participants, and copies of materials for the sessions for each participant are needed.

While the preparation details appear to be intuitive, some meetings were hampered by a lack of attention to these issues.

The Partnership Meeting

Once the preparatory work is done, the partnership meeting is held. This meeting is a complex, multi-session process in which expectations are set, the environment is examined, and action plans are developed and assigned. Findings concerning the introduction and expectation setting session, drivers session, facilitators session, targeting session, managerial components session, and wrap-up session are each covered below.

Introduction and expectation setting session

The partnership meeting should begin with an introduction that reinforces the motivations for undertaking the process, a review of the model, and a discussion about expectations. For example, the vice president of one company detailed the corporate goals of increased innovation and profit margin growth as the underlying reason for using the model to build more structure into their relationships with key suppliers. In another firm, the vice president stated that the motivation for using the model was to achieve a structured and consistent approach to supply chain relationship

management. Whatever the reason, it is critical for those in attendance to understand that the business is not at risk.

It is common for participants from one of the companies to want more of a partnership because they feel that somehow it relates to the security of the business. It is important for the MPF to establish from the very beginning of the session that the goal is to tailor the partnership to the most efficient and effective type. It should be made clear that the goal is NOT to have a Type III partnership. The goal is to determine the most appropriate type of partnership, that is, obtain the desired business results for the least amount of effort. Incremental benefits must accrue to both firms, if management is going to invest incremental effort. This point should be reinforced throughout the meeting. The managerial time wasted on an unneeded Type III partnership would have large opportunity costs.

Some additional issues concerning the critical role of the MPF are:

- Two MPFs from outside the relationship are needed for the session that develops the drivers for each company.
- The MPF also serves as the lead trainer and pace setter for the process.
- The individual must be skilled in building consensus, probing for more information, assuring closure, and reinforcing agreements on action plans.

These recommendations were drawn from multiple cases. For instance, during a meeting at their customer's location, one supplier stated that the driver session felt like it was taking place back at their own headquarters. This comfort level would be difficult to achieve without an unbiased MPF.

Drivers session

A critical part of the partnership model is the drivers, the compelling reasons to partner. An important goal of the research was to validate the model. With respect to drivers, every case supported the four original elements. Each of the compelling reasons for a more closely tailored relationship identified by participants could be captured by one of the four drivers. The compelling reasons also had a specific driver that was the best fit; however, this required a careful explanation of the drivers by the MPF. Thus, the research supports the idea that the original drivers were mutually exclusive and collectively exhaustive. The drivers were also seen by the participants as being conceptually distinct from the facilitators and components. In addition to the validation of the drivers, the research also found many implementation issues.

It is necessary to ensure that the two parties objectively analyze their potential drivers of partnership. Representatives of the two firms should evaluate drivers separately and the evaluation must be from a selfish perspective. There are a number of issues that need to be addressed to make this portion of the model more actionable and effective.

The most fundamental issue is the potential for double counting. Since profits are a function of costs, service and marketing, there is a possibility for double counting. If a supplier hopes to market better as a result of increased partnership, they will also expect higher profit. A key for success is to admonish the participants not to double count. They should use the first three drivers whenever they are appropriate. Only those potential drivers of profit that do not overlap with the others or do not focus on any one of the others should be included in profit stability and growth. If a customer service improvement by the seller yields lower inventories for the buyer, this is asset/cost efficiency for the buyer. If it yields better customer service to the buyer's customers, then it should be counted as a customer service improvement for the buyer. If a joint effort can level volumes, then it should be in profit stability and growth.

Another difficulty with identifying and scoring drivers comes from the need to consider only the incremental gains possible through partnership. Thus, if a cost savings could be gained through hard bargaining or competitive bidding, it should not be scored high as a driver. If a savings due to deploying a new technology could only be contemplated in the context of a close, long-term cooperative relationship, then it should be counted. Making this distinction is often difficult.

It is often challenging to get suppliers to think in terms of their own self-interest particularly if the buyer initiated the partnership meeting. Since they respond to the customer in a customer-oriented way in most discussions, taking a selfish perspective is sometimes difficult.

Customer service poses a consistent problem for sellers. They want to score or count customer service improvements to the potential partner as their drivers. While these are advantages to the potential partner, they are not compelling reasons for the seller to want a closer relationship. In order for the evaluation to be selfish on the part of the seller, only customer service improvements that can be offered to other customers as a result of more closeness in this relationship should be counted. If a firm, through partnership, can develop a customer service delivery approach that can later be rolled out for non-partner accounts, then the seller can score customer service as a compelling reason to partner.

When evaluating a driver each side should define specific bullets that apply to their business situation. It is important to put measurable goals on each specific bullet identified by the participants. An example for cost efficiency could be to reduce controllable costs in the component parts by 5% per year. A marketing advantage that would be harder to quantify in dollars would be to come up with at least five new product ideas over a two year period, one of which would reach commercialization. After the group comes up with drivers specific to their situation, the MPF should challenge them to come up with measurable goals.

For each driver of partnership the managers of the buying firm and the managers of the selling firm must decide on a probability. For the first driver, the question is "What is the probability that this relationship will substantially reduce channel costs or improve asset utilization?" The scoring is on a five-point basis from 1 to 5 ranging from zero% chance to 100% chance. Thus, in the scoring process the managers for each firm will determine four driver scores based on the

probability of making substantial gains for their firm. There is no expectation that the drivers will be in the same categories for each firm, nor will the total scores be the same. Each side must assess their own self-interest independently and honestly, which is why the business cannot be at risk.

Drivers are assessed on "the probability that this relationship will substantially..." with the key word being substantially. If the driver bullets within one of the four drivers are collectively weak on substantiality, then a probability of getting a substantial advantage should be low, before factoring uncertainty into the judgment. When one buyer organization assessed the potential for cost avoidance through partnership, they found a large number of potential savings. However, the total savings would only amount to a small part of 1% of the overall costs for the firm, therefore the rating had to be a low score even though managers thought achieving the savings was relatively certain.

It is important to have a blank driver form for the recording of driver elements specific to the relationship rather than use the generalized bullet points in the original model (see Figure 2). The group should develop an exhaustive list of descriptors for each specific driver and then through discussion reduce it to a parsimonious list that can be summarized in a few bullet points. Each category should be evaluated and scored. Evaluating each and weighting each, then coming up with a probability for each may add a false sense of accuracy, slow the process, and/or defy consensus. The participants should seek consensus for the final number for each of the four drivers. It is not reasonable to average the numbers, since one person's reason to choose a low or high probability may not have been factored into others' thinking. Talking about differences and coming to consensus is very useful in encouraging communication between the participants and facilitating implementation later. Issues come out in the defense of specific ratings that otherwise would not emerge. Also, there needs to be buy-in from the participants if the drivers are to be achieved.



FIGURE 2

EXAMPLE ASSESSMENT OF DRIVERS FORM

Drivers are strategic factors which result in a competitive advantage and which help to determine the appropriate level of a business relationship. For each driver, circle the boxed number which reflects the probability of your organization **realistically** achieving a benefit **through forming a tighter relationship**.

	Probability					
	No Chance				Certain	
ASSET/COST EFFICIENCY	0%	25%	50%	75%	100%	
I. What is the probability that this relationship will substantially reduce channel costs or improve asset utilization?	1	2	3	4	5	
			1			
•						
•						
If you rated efficiencies in the shaded area and if the advantage i eigher a sustainable competitive advantage or it allows your firm match benchmark standards in your industry, circle 1 to the rigl	n to					

Source: Adapted from Lambert, Douglas M., Margaret A., Emmelhainz, and John T. Gardner, "Developing and Implementing Supply Partnerships," *The International Journal of Logistics Management*, Vol. 7, No. 2 (1996), p. 6.

Drivers for the supplier and the buyer will rarely match up in strength by category. It is important to emphasize this to the seller, as they often feel that their score on a particular driver should match their counterpart's score. In fact, often sellers have low customer service scores while buyers often have high customer service scores. It is not important that the scores match, just that both sides have compelling reasons to commit more resources to the relationship than is typical of an arm'slength relationship.

Once each side has scored their drivers, the next step is to come together and present these drivers to the other side. It is important for the other side to explain why the drivers were selected and how they were scored. This represents an expectations-setting session that is critical for partnership success. One of the reasons that partnerships fail is the existence of unrealistic expectations by the parties involved in the relationship (Foster 1999). What each bullet point means as well as the score for the overall driver and the thinking behind that score needs to be understood by both sides of the relationship. If the representatives of the other firm indicate that they cannot or will not help achieve a particular driver, the driver should be reevaluated. If no-one objects to the other side's

drivers, then management is obligated to help the other firm achieve its drivers as the partnership is implemented.

There is a direct connection between drivers and outcomes. If the drivers are quantified well in the driver assessment process, then the evaluation of the partnership over time is made much easier. An example for asset/cost efficiency would be the reduction of logistics costs by 7% per year over the next three years. By knowing the exact expectation there is more realistic buy-in and better tracking of progress when outcomes are measured over time.

Facilitators session

Facilitators are the environmental factors that make implementing partnership easy or difficult and they are assessed in a joint session. The evaluation process should focus on the potential for the two firms to mesh easily, so the fit rather than each firm's individual characteristics is the issue to be addressed. The focus of the session is to identify the degree to which the four major environmental factors and the five additional facilitators in the model are present. The cases support the mutually exclusive and collectively exhaustive nature of the facilitators.

The facilitators should not be examined at the outset of a relationship. After a period of working together, the two firms will have a much easier time assessing each facilitator. In a new relationship, a logistics service provider and a large telecommunications manufacturer went through the process at the outset. However, the managers felt it was not possible to complete the facilitators because they lacked experience working together and decided to wait six months before finishing the process. The experience gained over these months sharpened the managers' views about how well the two firms would naturally mesh.

It is critical that the person leading the session emphasize the dysfunctionality of painting an overly positive picture of the environment. The result will be to move the firms into more partnership than the situation demands and consume more managerial resources than necessary. The participants should be challenged to give examples of each claim and to relate each example to how it might result in a partnership being easier to implement. If both sides claim employee empowerment, then a concrete example of empowered decision-making is in order. In one case both sides were indicating a strong quality focus, but one was a six sigma supporter and the other was focused on relationships, not process. Both firms were very strong and successful with their approach, but these differences could make joint work more difficult.

There are a number of small changes in the descriptions of the facilitators that would add clarity. The TQM language in management philosophy and techniques should be replaced by references to continuous improvement and quality systems. Within mutuality, sharing financial information is a key indicator. Openness in sharing sensitive information is a key to building partnership. Challenging the participants to give examples of taking a longer-term view is also a good practice. The discussion on symmetry should focus on the concept that there should not be a junior partner.

Bonus points are given for environmental factors that cannot be reasonably expected in every relationship but when they are present they strengthen the relationship. For example, one of the cases studied involved two firms headquartered in the same city. This proximity increases the ability of employees at all levels in both firms to interact more frequently. However, managers regularly want to claim close proximity based on something other than the two headquarters being in the same metropolitan area. A field office for one firm located close to the headquarters of the other or an onsite account manager is not close proximity as defined by the model. It is hard to have informal and social contacts between top management and others up and down both organizations if they are not closely co-located. When claims of prior experience with partnership are made, they should be based on the style of relationship described previously. As was the case with drivers, it is important to gain consensus on the facilitator scores.

Targeting session

The model uses a three by three matrix to prescribe partnership type and therefore is subject to the difficulties present with any grid approach. The MPF needs to be sensitive to the fact that a single point change on either drivers or facilitators can move a relationship from a Type II partnership to a Type II or to a Type I. The prescriptions near the intersections of the boxes need to be evaluated with care. If a Type III partnership is indicated, but no joint investment is demanded to achieve the drivers, a low target for the financial component is fine. It is possible to place a relationship squarely between two types of partnership, as well. The goal is to tailor the relationship to fit the drivers and the environment – not to match the grid.

Since the drivers are being assessed independently, it is possible for the firms to have driver scores that fall into two different categories (low, medium, or high). When one firm has a driver score in a higher category than the other, the low driver score is used. Like any relationship the party that wants it the least determines the outcome. The relationship is only as strong as the weakest commitment. There will be only one facilitator score since facilitators are evaluated jointly.

An issue not addressed in the Lambert, Emmelhainz, and Gardner (1996, 1999) research is how to handle a mismatch in driver scores. At the beginning of the current study there was considerable concern about the potential for disparity in driver scores. After experiencing two cases of large disparity in scores, it appears that this situation need not damage an otherwise good business relationship. It is important for the MPF to note the disparity as it emerges and encourage the representatives of the lower-scoring organization to emphasize how their drivers were scored. The MPF should reinforce the idea that the reason for using the lowest driver score is because the firm with the least amount to gain will determine the level of focus on the relationship.

By the end of the targeting session, both parties should have a clearer understanding of the joint expectations of their relationship. This is critical for partnership success as well as useful if a partnership is not indicated. In the latter case, both parties benefit from a better understanding of why an arm's length relationship is the best fit.

Managerial components session

While the drivers and facilitators determine the potential for partnership, implementation of the management components determines the type of partnership actually achieved. In validation of the model, managers were able to connect their action plans to the managerial components within the model. All of the action items from the 20 cases could be expressed through the various components in the model.

This session is critical since it involves developing the action plan. The first three components, planning, joint operating controls, and communications, are the keys to a successful relationship. Setting these three at the appropriate position typically takes the most time. To help the process along, each participant should have the table of management components available as well as a note page to record current and desired state as well as action items, timelines, and responsible parties.

The first step is to assess the current relationship component by component. In fact, the level of the analysis should be bullet by bullet within the components, as each component can be implemented in a tailored fashion. Thus, a relationship can entail joint planning on a regularly scheduled basis but focusing on tasks. A typical review of the current state of management components found many of them with bullet points in different columns. The current implementation of the management components reveals the amount of partnership that has been implemented in the relationship to this point in time. This provides initial guidance on managerial components that need more or less focus depending on the desired level of partnership.

The eight components should be reviewed again to determine the target level of implementation based on the targeted partnership type. The participants will be determining action items such as forming a task force to set up communications links that support the attainment of the targeted partnership. In one relationship, management chose to form a steering committee charged with developing a vision for the relationship. This committee was responsible for ensuring that progress was made towards reaching the desired levels of implementation of the management components.

If specific actions are properly identified, then responsibility can be placed on individuals and due dates established. It is not enough to say that metrics for a particular hard-to-measure driver should be jointly developed. The parties need to determine who should be involved, who leads, when the work will be completed, and to whom they will report. If this level of detail is achieved in the managerial components session, the outcomes assessment to be done later will be that much easier and the probability of the relationship staying on track is higher. The action items from the managerial components session need to become part of the ongoing operations planning process, such as a quarterly business review.

The final, but very important, step in the components session is to review the drivers to ensure that each has been addressed. Drivers from each side should be available to all participants. If a driver for the seller (as is often the case) is to gain access to other business units within the parent company, then the trust and commitment components need to have specific action items. An example item would be to communicate examples of the level of commitment and trust in the relationship

within their respective company newsletters. This was an action item in one relationship which was only added after a review of the drivers indicated that the marketing driver of the seller was not fully covered in the components after the first pass at setting action plans.

For each specific managerial component we have some additional suggestions. Based on our experiences, we would recommend the following changes and adjustments to the management components:

- Planning Participants often have difficulty with the distinction between process and relationship as the focus of planning. An example of a process focus would be the development of a method for making changes to the partner's delivery parameters, while a relationship focus would institutionalize the partnership by putting the maintenance of the relationship within senior managers' job descriptions for each firm.
- Joint operating controls Participants should be clear that this component refers to the operations at the interface between the firms. It is unlikely that management would allow a key value-adding step to be modified by a partner independently. It is important to give realistic examples. The distinction between suggesting changes and making changes after approval is subtle.
- Communications The electronic component remains an important consideration, however it is becoming less of a question about whether electronic communication is used or not. The new differentiator is the types of electronic communication taking place between the organizations and the degree of tailoring of these tools to the specific relationship.
- Risk and reward sharing When addressing this item the managers should be challenged to provide examples of what sharing will take place and how it will take place. Will there be a gain-sharing program developed? How would management in each firm react to some fairly realistic hypothetical scenarios regarding the sharing of the potential costs and benefits of jointly developed initiatives?
- Trust and commitment This should be distinguished from the mutuality construct in the facilitator portion of the model. Where mutuality is a propensity, here it is specific to the two firms. Trust is managerially built as a spiral of commitment, performance, and communications of the trust building activities throughout the organizations. These three are repeated as the spiral raises the level of trust. Each of these three is under managerial control and should be considered.
- Contract style Business as usual does not make it a partnership. If no supplier or no customer operates on a contract, then the absence of a contract should not be interpreted as a Type III partnership. Conversely, if the legal department makes everyone write a detailed contract, but the parties do not use it to manage the relationship, then the existence of the contract is not the issue either. The key is the amount of tailoring of the business relationship.

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- Scope Including more value-added steps in the relationship typically makes the bonds tighter. The key issue to be considered is what would happen if this partner disappeared. How would the loss of the partner affect the business unit or the corporation?
- Investment As mentioned above, financial commitment only makes sense if there is a need to make an investment in order to achieve relationship drivers.

Components need to be examined three times, each with a different goal: 1) to determine the current state; 2) to determine desired state; and 3) to make sure nothing was omitted.

Wrap-up session

A key aspect of the final wrap-up session is to reinforce to the participants that the outcomes of the process should result directly from the drivers, which is why it is so important to articulate with detail each organization's drivers. If both parties are achieving their drivers, the partnership will be viewed as a success. Therefore, during the components session it is important to bring back the drivers and establish specific action plans for achieving the drivers. The most common approach was to establish a set of action items with assignment of responsibility and due dates. This is needed in order to maintain the momentum gained in the meeting.

One meeting failed to develop these action plans before ending the process. Their plan was to follow up the partnership meeting with a videoconference focused on developing the action plan and assigning time frames and responsibilities for achieving the drivers. The follow-up videoconference failed to demonstrate the same level of focus and energy that existed during the partnership meeting. According to one of the managers, "we had to schedule an additional team building meeting in order to regain the momentum that was lost by waiting to establish an action plan." Thus, action plans, time frames, and responsibilities should be included in the process whenever possible.

FUTURE RESEARCH

There are several potential research opportunities that focus on using the partnership model as a managerial tool. A primary area of opportunity is developing a clearer understanding of the value of the process itself. In other words, what quantifiable benefits do the organizations realize as a consequence of utilizing the model as a basis of their partnership activities regardless of the type of partnership implemented? Can the value of the process itself be seen in the financial performance of both organizations? Associated with this issue would be an examination of the longitudinal aspects surrounding the use of the model, especially in terms of the enduring value of the process over time. Other potential research opportunities include:

• Does the partnership model facilitate an increased ability to integrate supply chain management processes between organizations? Of particular interest in this regard would be the impact of using the model as part of the customer relationship management and supplier relationship management processes (see Croxton et al. 2001).

- How should partnership activities be integrated into the strategic direction of an organization? How can the drivers associated with the partnership model be rolled into a business plan for the relationship?
- Are the incremental benefits of increasing the level of tailoring in a relationship (i.e., Type II and III) worth the incremental costs associated with this tailoring?
- What are the most effective methods for determining the specific members of one's supply chain with whom to use the partnership model? How do we manage relationships beyond Tier 1?
- How might the partnership model be used to support other supply chain initiatives? Could use of the model increase the success rate of supply chain initiatives such as CPFR?

CONCLUSIONS

Partnership can be an important aspect of successful supply chain management. A welldesigned facilitation process for establishing the appropriate level of partnership with other members of the supply chain network can have substantial benefits. These benefits are especially relevant when addressing an organization's critical supply chain linkages. Although supply chain management offers many internal opportunities for improvement, the real opportunities will come from reaching out to other members of the supply chain and forming efficient and effective relationships. The current research validates the trustworthiness of an established managerial tool for structuring these relationships. Through a systematic analysis of 20 cases, the research found that the fundamental components of the model were sound and the use of target types of partnership worked well. Additionally, enhancements to the Lambert, Emmelhainz, and Gardner (1996, 1999) model like these in the current research, should provide managers with an actionable method for facilitating the formation of partnerships with their key supply chain members.

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