

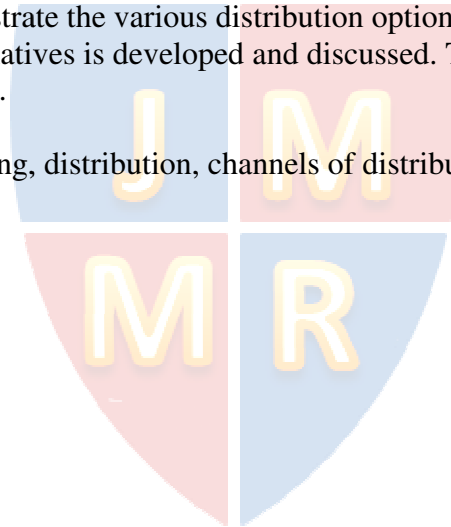
Symbiotic marketing: a network perspective

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ABSTRACT

A number of channel alternatives have been identified which firms utilize in distributing their products and services. These alternatives include the traditional marketing channel, the vertical marketing system, vertical integration, strategic alliances, network organizations, and the horizontal marketing system. One alternative that has not received much attention is symbiotic marketing. As originally defined, symbiotic marketing is “an alliance of resources or programs between two or more independent organizations designed to increase the market potential of each” (Adler, 1966). It is argued, herein, that symbiotic marketing is a more comprehensive and inclusive construct for explaining and understanding marketing channel phenomenon. The concept is discussed, reviewed, and expanded in the context of network analysis. Industry examples are provided to illustrate the various distribution options available to the firm. A typology of distribution alternatives is developed and discussed. Testable hypotheses are developed for further analysis.

Keywords: symbiotic marketing, distribution, channels of distribution, joint venture, strategic alliance, strategy



INTRODUCTION

In marketing channel strategy literature, a number of channel alternatives have been identified which firms utilize in distributing their products and services. These alternatives include the traditional marketing channel, the vertical marketing system, vertical integration, strategic alliances, network organizations, and the horizontal marketing system. These channel forms have been studied by market researchers relatively thoroughly and from a number of perspectives. However, one other strategic alternative has been identified and discussed by a limited number of authors but has yet to receive the same level of attention as that of the aforementioned forms of distribution. This infrequently cited strategy is the broader, perhaps more holistic concept of symbiotic marketing (Adler, 1966). As originally defined, symbiotic marketing is “an alliance of resources or programs between two or more independent organizations designed to increase the market potential of each” (Adler, 1966). First introduced in the mid-1960s, the concept of symbiotic marketing has rarely been discussed by market researchers in either academic or popular literature. There are only a handful of published articles whose underlying theoretical basis is that of symbiotic marketing-related concepts (Adler, 1966; Varadarajan & Rajaratnam, 1986). In other cases, symbiotic marketing has been dispatched as a synonym for a horizontal marketing system (Kotler, 1991). The concept is much more powerful and comprehensive than this lack of focus by marketing scholars indicates.

In what ways is symbiotic marketing a more comprehensive and inclusive construct for explaining and understanding marketing channel phenomenon? First, symbiotic marketing provides a strategic direction to channel considerations. Rather than develop strategically important core competencies and resources internally, firms which practice symbiotic marketing are actively and continually scanning both the external and the competitive environments for likely partners with such resources. This shifts the firm from being primarily internally-oriented (developing its own capabilities) to externally-oriented (partner with others with such capabilities). Nike is, perhaps, the best known example of this external orientation to resource acquisition. The firm has forged over 140 alliances with international partners to gain functional expertise in production, marketing, and distribution. Second, the modes of symbiotic marketing comprise virtually all of the various forms of distribution identified in extent marketing and management literature. Modes of symbiosis include strategic alliances, joint ventures, co-marketing agreements, vertical marketing systems, horizontal marketing systems, and traditional buyer-seller marketing channels. However, forms of distribution strategy which employ mergers and acquisitions as a tool, such as vertical integration, violate the spirit of the concept of symbiotic marketing. Once firms are integrated, they are no longer “independent organizations” which is a requirement under our adopted definition of symbiotic marketing. Therefore, all forms of distribution strategy, other than vertical integration, are considered within the scope of symbiotic marketing. This provides a broad, more robust framework for examining phenomenon associated with inter-organizational relationships.

Since no well-defined body of research exists addressing the specific dynamics of symbiotic marketing, this paper will borrow from extent literature on strategic alliances and network organizations as grounding for its analysis. Since virtually all of the modes of symbiosis are based on some form of collaborative organization (such as the vertical marketing system or co-marketing arrangement), this assumption appears to be supported. There is a well-developed, diverse, and “fragmented” (Vyas, Shelburn, & Rodgers, Pg. 47) body of research which focuses on strategic alliances (Harrigan, 1987; Lewis, 1990; Borys & Jamison, 1989; Contractor &

Lorange, 1988; Oliver, 1990; Spekman & Sawhney, 1990). This strategic alliance literature examines a variety of topics, some of which include: alliances as vehicles towards attaining firm strategic goals (Anderson & Narus, 1991), alliances as learning mediums (Badaracco, 1991), alliance performance (Harrigan, 1986), governance (Osborn & Baughn, 1990), and the value-adding contribution of alliances (Johnston & Lawrence, 1988). This prior research on strategic alliances will be highly useful as an underpinning for the symbiotic marketing framework. However, strategic alliance theorists have a tendency to focus on the inter-firm dyad that is established between the two alliance partners. A number of researchers have indicated that this single dyadic limitation need not be a requirement. For instance, it has been pointed out that strategic alliances need not be restricted to this single dyadic perspective and that they can take on the form of a highly complex, “maze” of inter-twined, international collection of distinct alliances. However, there is an emerging framework, and form of business organization, that is much more applicable to explaining and understanding this collection of inter-organizational alliances--- network analysis and the network organization. The network organization and its implications and relevance to this research will be developed thoroughly later.

Once the basis for symbiotic marketing has been established (drawing on network organization research), network analysis will be proposed as a tool for symbiotic partner selection and market selection. The underlying framework for this research is that the use of symbiotic marketing can return to a firm superior market success, if applied in a strategic manner, via such measures as first mover advantage, superior profit returns, and the ability to overcome barriers of entry into market niches dominated by well-entrenched competitors. Hypotheses will be proposed to test these assumptions.

TOPIC JUSTIFICATION

The primary objective of this paper will be to address an apparent gap in the current stream of marketing literature. This gap concerns the strategic or purposeful use of symbiotic marketing as a delivery system for a firm’s product or service. Marketing channel literature focuses, primarily, on explaining institutional and individual behavior patterns in the vertical integration of firms and traditional marketing channels. Only recently have market researchers focused on attempting to understand vertical (VMS) and horizontal marketing systems (HMS). Moreover, HMSs (alliances formed by competitors and between firms operating in dissimilar market segments such as American Airlines offering frequently flier points to American Express card holders) such as joint ventures, strategic alliances, and partnerships have been studied most heavily by management and organizational behavior theorists. Market researchers who have studied various forms of such horizontal relationships (Anderson, Hakansson, & Johanson, 1994; Achrol, 1991; Heide & John, 1990; Iacobucci & Hopkins, 1992) have focused their research studies on a single mode of a HMS such as strategic alliances or network organizations. Symbiotic marketing provides a broader framework from which researchers can apply their analysis tools. Beyond the handful of extant literature citations concentrating on horizontally-oriented marketing relationships, much of the research on channel strategy has focused on vertically-oriented channels such as VMSs (Etgar, 1976; Dant & Schul, 1992; Dawson & Shaw, 1989) and vertical integration (Buzzell, 1983; Anderson & Narus, 1990; Mohr, Fisher, & Nevin, 1996). This focus on vertically-oriented structures has discounted the emergence of horizontal strategies such as strategic alliances, partnerships, and co-marketing agreements. For instance, each of the three major US automobile manufacturers have forged alliances with foreign

competitors to market the foreign manufacturer's automobiles in the US---GM with Toyota and Opel, Ford with Mazda and Jaguar, and Chrysler with Mitsubishi and Fiat (Vyas, Shelburn, & Rogers, 1995).

The rationale behind vertically-oriented alliances or integration primarily gravitates around reducing transaction costs or achieving economies of scale or scope (Heide, 1994). Symbiotic relationships, on the other hand, allow the firm to achieve significant leverage in the marketplace by not only accessing external resources but also by identifying and exploiting market voids at a reduced capital outlay. Furthermore, as traditional market segment boundaries become increasingly indistinguishable, firms may have to abandon their traditional focus on market share as a corporate goal and design strategic distribution programs that provide some degree of isolation from competition (Day, 1990). This isolation is achievable through the use of symbiotic marketing strategies to establish one's firm quickly within well-defined and generally inaccessible market niches. Moreover, as markets become more global, in nature, it will be necessary for firms to utilize the resources of others to compete successfully with powerful, dominating firms and networks. These issues can be addressed via forming symbiotic relationships with capable partners as a means of market entry (both in international markets as well as profitable niche market segments) and resource acquisition.

Once a foundation and justification for symbiotic marketing has been established, network analysis can enrich this foundation by explaining how and why firms achieve superior market results via symbiotic marketing, providing a method for identifying potential market segment niches that may represent significant market opportunity, and providing guidance for firms in selecting symbiotic partners to penetrate these market niches. For the moment, let us define network analysis as "the structure and processes of groups [which] addresses the ways in which the structural properties of systems affect behaviors" (Hertz, 1996). The primary difference between network analysis and traditional approaches to explaining inter-personal or -organizational behavior (such as transaction cost theory) is that network analysis does not restrict relationship analysis to a single dyad--whether the dyad represents two individuals, two firms, or two other stakeholder groups. Network analysis examines all of the influences on the actor. For example, an analysis of a firm involved in a symbiotic relationship would have to include the influence of the firm's employees, suppliers, vendors, stockholders, community, etc. Network analysis is grounded in social science theory and has been used successfully in other organizational applications. This description serves as only a short introduction to the highly complex and useful concept of network analysis but the concept will be fully developed later in the paper.

Understanding the formation of symbiotic relationships in a network analysis framework is an important research topic for several reasons. First, an adequate framework for understanding symbiotic relationships has not been established in the marketing literature. Extant literature on partnership strategies has been limited in scope. That is, researchers have focused on only a single mode of symbiosis, such as strategic alliances, rather than examining the implications of the broader concept of symbiotic marketing relationships. Furthermore, only recently have marketing researchers begun to study and explain the growing phenomenon of strategic alliances and partnerships as a means of distribution strategy. Second, business competition is increasingly between distinct networks or groups of independent firms operating as a single competitive entity (Doyle, 1995). As stated eloquently by Kotler, "the winner is the company with the best network" (Kotler, 1994). There is strong empirical evidence that dyadic relationships in business do not exist in isolation but are influenced by other, associated

relationships. Therefore, the analysis of these business dyads must take into account the context in which they exist. Network analysis provides the researcher with the tools necessary for such an analysis (Achrol, Reve, & Stern 1983; Anderson, Hakansson, & Johanson 1994; Iacobucci & Hopkins 1992; Thorelli 1986). These comments point to the need to understand how firms or individuals can develop cooperative strategies to remain competitive. Strategic implementation of symbiotic marketing techniques provides the tools necessary to achieve this competitiveness and network analysis assists the researcher in understanding the underlying mechanism of symbiosis.

Finally, the lack of marketing literature which focuses on the specific conceptualization of symbiotic relationships should be addressed since the phenomenon is quite prevalent in a number and variety of industries, both domestically and internationally. An integrative framework should be developed to understand why and how firms enter into these types of partnerships. Such a framework will be useful to both academicians and practitioners. There are many examples of this trend towards symbiotic organizations in the business landscape, including (Park, 1996):

- Corporate Networks Operations, an alliance between Hewlett Packard and Northern Telecom to manufacture mainframe computer systems
- Agre Sense, a joint venture founded by Dow Corning Co. and Phillips Petroleum to develop and manufacture chemical pesticides
- Biin, an alliance between IBM and Siemens established to develop specialized computer systems for mission-critical applications
- Various consortia such as MCC, Sematech, Corporaton for Open System (COS), and Center for Advanced Television Studies (CATS)

To achieve these goals, this paper will first, introduce and review the extant literature addressing channels of distribution. This will provide a basis from which to develop our framework. Second, the concept of symbiotic marketing will be introduced and developed. The advantages of using symbiotic marketing rather than, say, strategic alliances as a component for our framework will be addressed. The framework will be developed which builds on that introduced by prior researchers (Adler, 1966; Varadarajan, 1984). The framework will focus on developing a typology of possible “modes of symbiosis” available to contemporary businesses and the identification and evaluation of symbiotic opportunities. Third, the general concept of market segmentation discussed and extant literature which is applicable to our study presented. Fourth, the powerful concept of network analysis will be introduced. It is not within the scope of this paper to fully develop the concept of network analysis. The focus will be on the qualitative, managerial implications and applications of network analysis, not on its usefulness as a quantitative structural analysis tool. Network analysis provides a richer perspective of examining relationships among networks of businesses or individuals within organizations. Rather than simply focusing on explaining and understanding the behavior of the two actors (or firms) which form a dyad by partnering, network analysis takes into account the influence of each and every actor on each side of the dyad. These other actors may include individual actors in each firm’s organizational structure, its employees, suppliers, customers, and functional middlemen. Each of these actors have a significant impact on the form of the relationship between the firms. Finally, based on the foundation provided by the review of extant literature, a model of symbiotic marketing’s usefulness as a strategic tool will be presented and justified. It is hoped that the hypotheses developed from the model will provide tested in future research.

MARKETING CHANNELS OVERVIEW

It is important to review the various marketing channels available to a firm. Before a firm can make an informed decision to seek out and enter into a symbiotic relationship, it must first examine other alternatives. These alternatives to symbiosis are the other channels of distribution discussed below. However, the theoretical foundation for symbiotic marketing resides in network organization and strategic alliance literature streams which will also be presented.

Extant literature on marketing channels can be segmented into two streams, channel design and channel management (Rangan, Menezes, & Maier, 1992). The channel design literature focuses on the structure of the channel of distribution and justifies the need for marketing and functional intermediaries such as distributors, brokers, wholesalers, retailers, and insurance providers (Williamson, 1985). The research in this area of traditional channels is rich, extensive, and historic, dating back to the seminal works Shaw and Weld, where the functions of intermediaries were first conceptualized (Shaw, 1912; Weld, 1916). There is little need to provide an extensive literature review of this well-known marketing area. The channel management literature concentrates on issues such as channel conflict and cooperation (Anderson & Narus, 1990), governance (Heide, 1994), and channel selection for new product introduction (Rangan, Menezes, & Mairer, 1992).

A traditional marketing channel is one which independent firms operate together, with some minor level of coordination, to deliver a product or service from the place of production to the consumer. Each member of the channel operates to maximize its own profit, even if it affects the overall profit of the channel negatively (Kotler, 1991). Perhaps more succinctly put, this situation can be illustrated as “highly fragmented networks in which loosely aligned manufacturers, wholesalers, and retailers have bargained with each other at arm’s length, negotiated aggressively over terms of sale, and otherwise behaved autonomously (McCammon, 1970). This channel is characterized by arm’s length transactions, competition, and rivalry (Park 1996). Actors within the channel are not typically concerned with developing nor maintaining relationships beyond those necessary to complete a transaction. Moreover, the short-term relationship that is forged simply to consummate the transaction is antagonistic (Astley, 1984). The structure of the traditional channel is hierarchical, in nature. Coordination in the traditional channel is motivated through a variety of market mechanisms both between the various levels of distribution and between the overall channel and the consumer (Etgar, 1976). Examples of such mechanisms include price deals, types and assortments stocked on shelves, levels of promotion, and location of retail outlets. Although traditional marketing channels have traditionally provided an efficient and effective means of bringing a firm’s products/services to market, their inherent uncooperative nature have given rise to some of the other hybrid structures described hereinafter.

A vertical marketing system (VMS), on the other hand, is a distribution channel in which producers, wholesalers, retailers, and other functional middlemen operate as an integrated entity to deliver a specific product or service to the customer (Etgar, 1976). The chief difference between traditional marketing channels and VMSs is that the VMS is controlled, to some extent, through some centralized mechanism. VMSs also differ significantly from vertical integration strategies, as indicated below. VMSs are an important component to the global economy as indicated by the statistic that more than 60% of all consumer goods and services are marketed through some form of VMS (Michman & Sibley 1980). VMSs derive their power and effectiveness in the marketplace by more sophisticated means than simply establishing ownership interests in various middlemen along the distribution channel (integration). VMSs are,

typically, comprised of firms within a single channel which derive synergistic returns when they combine their competencies and cooperate with each other. VMSs are typically classified into three categories: corporate VMSs (Sherwin Williams), contractual VMSs (retailer cooperatives such as Associated Grocers' and franchises), and administered VMSs (Proctor and Gamble). A review of the extant literature indicates that VMSs do possess intrinsic characteristics which can return operating efficiencies and economies of scale in distribution costs to the members of the VMS (Davidson, 1970; McCammon, 1965). Moreover, several forms of VMSs, such as franchises, provide the channel captain with some level of control over the other channel members through agency relationships (Bergen, Butta, & Waler, 1992). Interestingly, any one channel member can command a preponderance of the power or establish itself as the channel captain. Historically, the most influential or powerful member of the VMS (and the traditional channel) was the producer. An example of power commanded by the producer is Proctor and Gamble's 'control' over its retailers. P & G has significant influence on its retailers concerning display, promotion, and price policy issues even though the firm has no financial interest or direct control over these retailers. P & G has achieved this significant market power, which allows it to govern its channel, solely through the size of its product assortment, breadth, and the market share the firm has established. This leaves upstream channel members with little channel power in controlling the relationship with the manufacturer (Bergen, Dutta, & Walker 1992). However, this situation is changing. Powerful retailers such as multi-franchise fast-food proprietors and independent Coca Cola bottlers and distributors are closer to the customer than the producer. The information they gather, via scanner data and other collection devices and observing consumer shifts in preferences, is becoming increasingly strategically important to the producer. These retailers are becoming the key component along the value chain and commanding a significant level of power in their dealings with the producers.

Complete vertical integration, either forward or backward, is an extreme, special case of the more flexible phenomena of VMSs. Traditional economic theory defines vertical integration as the "combination, under single ownership, of two or more stages of production or distribution (or both) that are usually separate (Buzzell, 1983). For example, during the formative years of Ford Motor Company's development, the firm owned and actively managed virtually every stage along the supply chain necessary to manufacture its automobiles. The key issue that distinguishes vertical integration from the other forms of distribution is intra-channel ownership. The firms along the distribution channel are actually integrated financially and managerial. There are both advantages and disadvantages to integration. Advantages of complete vertical integration include: reduced transaction costs through integration economies achieved through eliminating steps and duplicated overhead, predictable flow of supplies and raw materials, improved coordination which reduces inventory carrying costs, improved marketing intelligence, and raised entry barriers. Disadvantages, on the other hand, include significant capital requirements to establish and maintain the integrated organization, reduced flexibility to react quickly to changes in the market, the potential for perpetuating obsolete processes, and less defined market focus (Buzzell, 1983; Harrigan, 1984).

Horizontal marketing systems (HMS) have received, perhaps, the least attention from marketing researchers, traditionally, although they are attracting research focus at an increasing rate. The HMS is most similar to the concept of symbiotic marketing, as defined within this article. Generic business formations which comprise HMSs include partnerships, strategic alliances, and joint ventures between firms operating in different markets. A HMS is defined as two or more, independent firms combining their resources to take advantage of a market

opportunity (Kotler, 1991). One of the key defining factors of the HMS is that the firms operate in completely different marketing spaces or markets -- hence, the horizontal orientation. By forming partnerships with firms outside of one's own market, firms reduce the risk of potential scrutiny under anti-trust regulations. In general, the concept of the HMS is similar to that of the VMS concerning their level of cooperation among the actors. Both strategies utilize some form of agreement among a number of independent firms (excluding complete vertical integration) to achieve market success. The firms within the systems form a network which is defined by relatively high cooperation and coordinated focus. The individual agent firms of the system engage each other for a variety of reasons including lack of direct access to strategically important resources, technical capability, buying power, promotional expertise, or any of a number of other core competencies required to enter and compete within a market successfully and profitably. Moreover, the firms anticipate that they will not only achieve both individual and system-wide profitability but also a higher level of profitability than they could achieve individually. That is, the actors in the system hope to achieve synergy.

As pointed out earlier, strategic alliances are a form of horizontal marketing systems, and the stream of literature which focuses on this form of distribution has been cited. For our purposes, the more recent research on the network form of organization is more compatible with our network analysis framework. This is so because much of the strategic alliance research has focused on the dyadic relationship between two organizational partners (Anderson, Hakansson, & Hakan, 1994). Network organization literature expands this analysis to take into account all of the actors influencing not only a dyad but any number of organizational linkages. An increasingly significant body of literature concerning business networks does exist (Archol, 1991; Achrol, Reve, & Stern, 1983; Anderson, Hakansson, & Johansson, 1994; Gadde & Mattson, 1987; Iacobucci & Hopkins, 1992; Webster, 1992). Business networks have become more prominent as formation alternatives due to changes in the business environment including industrial restructuring, corporate downsizing, vertical disaggregation of organizational functions, and the active outsourcing of key functional activities (Achrol, 1997). Developments in the network viewpoint of inter-organizational relationships, as cited by Anderson, et al (1994), include:

- “Deconstructed” firms which specialize in providing the value-added functions traditionally performed within the firm, such as research and development, production, or marketing, who then coordinate their expertise with other similar firms to deliver the complete, market offering
- The “value-adding partnership” defined as a “set of independent companies that work closely together to manage the flow of goods and service favorable against larger, integrated firms”
- “Virtual corporations” which are highly mobile, transitory organizations formed to take advantage of a particular market opportunity and dissolve immediately thereafter

A business network is defined as a set of two or more connected business relationships, in which each exchange relation is between business firms that are conceptualized as collective actors (Anderson, Hakansson, & Hakan, 1994). That is, the dyad formed by the two or more business partners is embedded in the relationships among and between each of the firm's stakeholders. Furthermore, exchange relations can be either direct or indirect, as outlined in the Figure 1 (Appendix A).

The mere presence of this collection of relationships or network of ties, does not constitute a network organization. It is the quality of the relationships which truly define the network organization. The relationships are non-hierarchical in structure, represent long-term

commitments, demand multiple roles and responsibilities, are reciprocal, and have an “affiliational sentiment” (Achrol, 1997). From these characteristics, it is clear that network organizations differ from simple networks of exchange relationships by the density (large number of relational ties), multiplexity, reciprocity of the relationships (strong affiliation with network by members) and a common value system which defines membership roles and responsibilities (Achrol, 1997).

SYMBIOTIC MARKETING

The original conceptualization of the symbiosis, as applied to business relationships, was developed in the mid-1960s. The phenomenon was originally termed symbiotic marketing (Adler, 1966). The concept was described by Adler as “an alliance of resources or programs between two or more independent organizations designed to increase the market potential of each” (Pg. 60). There are several key segments of this definition that are important to the framework developed herein. First, the formation of a symbiotic relationship is designed to return synergistic benefits to the participating parties. Second, the relationship is formed by independent organizations. Therefore, business arrangements or entities such as complete vertical integration and the outcome of a merger or an acquisition are not symbiotic, in nature. This is a departure from Adler’s original conceptualization but is supported by more contemporary marketing authors’ focus on “organizations that continue to maintain their distinct identity and are not linked by the traditional marketer-marketing intermediary relationship” (Varadarajan & Rajaratnam, 1986, pp. 8). Finally, symbiotic relationships are formed by combining resources. For the purposes of this article, symbiotic marketing will be defined as:

...the strategic blending of resources by two or more actors, who may be either direct competitors or operate in completely distinct markets, to achieve superior market returns not achievable by either party independently”.

The concept of symbiotic marketing was derived from the phenomenon of symbiosis in nature, defined as the “living together in intimate association of two dissimilar organisms for mutual benefit, and it is a widespread phenomenon in the natural world” (Street, 1975, pp. 58). The concept was framed to assist in understanding the unusual (at that time) phenomenon of unrelated and independent businesses forming partnerships and alliances with one another. This phenomenon represented a disjointed shift in paradigms -- from the more traditional, complete vertical integration-oriented mergers to the hybrid horizontally-oriented alliances. One of the underlying assumptions of symbiotic marketing relationships that differentiates them from traditional transaction-based business relationships is that there is “true” cooperation between the actors (Adler, 1966). This will be further illustrated in the following discussion concerning networks in marketing.

When first introduced, the concept of symbiotic marketing was predicted to have an increasingly significant impact on the business landscape (Adler, 1966). The original prediction was highly accurate -- symbiotic relationships have increased significantly in not only absolute number but also in the variety of business sectors they affect (Business Week, 1984). Moreover, forms of symbiotic relationships (strategic alliances) have occurred by the thousands involving many international businesses (Ellram, 1992). However, even as symbiotic relationships become more prevalent and important to business formation, evidence of research in this area by marketers is very limited. A literature search on symbiotic marketing or symbiotic relationships returns very little in terms of substance. Only recently have marketers begun to analyze the

impact of the more restrictive concepts of alliances, partnerships, and business networks on the marketing process (Anderson, Hakansson, & Johanson, 1994; Achrol, 1991; Heide & John, 1990; Iacobucci & Hopkins, 1992). There is, however, a relatively well-defined and deep stream of literature addressing strategic alliances in management science and organizational behavior. Even in the extant, extensive management literature on alliances, there is a lack of evidence that researchers have established a comprehensive framework (such as symbiotic relationships) for understanding business relationships between non-competitive organizations.

Even though interest by researchers and practitioners alike in explaining symbiotic relationships appears to be a relatively contemporary occurrence, such relationships have been prevalent in international markets for centuries. The Japanese zaibatsu, whose origin can be traced back many centuries, possessed many of the characteristics of symbiotic relationships discussed earlier (Hall & Hall, 1985). The original zaibatsu were large, inter-woven industrial complexes. These complexes consisted of many large corporations representing entire industries within the Japanese economy. The “nerve center” of the complex was typically a financial or a banking institution. Although primarily vertically-focused, the complex was typically comprised of members representing not only direct intermediaries (such as suppliers and retailers) but also functional intermediaries (such as insurance organizations). Similar to the zaibatsu, the keiretsu is an outgrowth of the original ancient zaibatsu. The zaibatsu were dissolved following World War II to reduce Japan’s potential for establishing itself as strong military threat. The keiretsu is also a complex matrix of organizations, associated with one another via informal alliance agreements and other instruments, to achieve market efficiency and power (Ferguson, 1990). This definition appears to be conceptually similar to that proposed for a symbiotic relationship.

The Japanese example of cooperation among both competitive and non-competitive firms provides an example of how competing businesses can cooperate to expand their market power and growth potential. Furthermore, the example can be expanded upon. The Japanese organizations were organized around a vertical channel, primarily. Symbiotic marketing requires that a firm expand its vision beyond its current business horizon. By identifying market opportunities, or synergistic partners, via constantly scanning one’s competitive and macro-environment, firms can achieve leverage in the market which was previously unachievable.

TRADITIONAL AND NETWORK PERSPECTIVES OF THE FIRM

Network analysis has been applied to a variety of organizational and interpersonal issues. To understand its application as a framework to explain successful symbiotic relationships, an overview of the topic is in order. However, it is beyond the scope of this paper to provide a thorough review of network analysis and all of its applications to organizational issues.

This section provides a backdrop for the rationale presented later in this research. That is, organizations are evolving towards network models due to shortcomings in traditional organizational forms. A review of the extant literature indicates that there are at least four prevailing theoretical frameworks which attempt to explain inter-firm relationships, from varying perspectives. These frameworks are transactions costs theory, agency theory, relational contracting, and the resource-dependence model. Agency theory is based on understanding and managing the inherent conflict between the principal and the agent in of a relationship (Fama, 1980; Jensen & Meckling, 1976). For instance, there is an agency relationship between manufacturers and independent distributors of their product. Agency theory’s applicability to understanding symbiotic relationships is questionable due to its underlying focus on the conflict

between the parties. The basis for symbiotic relationships is based more on cooperation and collaboration rather than confrontation. Furthermore, agency theory also focuses on minimizing the costs associated with monitoring this principal-agent relationship, which may be of less importance than the long-term market potential of the symbiotic relationship. Admittedly, monitoring costs are important factors in developing symbiotic relationships, however, focusing on controlling costs may introduce a condensed time horizon perspective into the evaluation of the relationship. This may encourage the actors to ignore or reduce the value of the longer-term, synergistic market potential that may exist through the symbiotic relationship.

The second framework frequently applied to explaining inter-firm relationships is transaction cost theory. The underlying rationale behind transaction cost theory is that the interactions between firms and the manner in which the relationship is controlled can be explained solely by the form of the transaction (Williamson, 1985). Transaction cost economics indicates that transactions can differ on four chief dimensions. These dimensions are: asset specificity (degree to which assets are allocated to facilitating transactions with a particular partner), uncertainty associated with transaction definition and performance (in the product market as well as between the partners), and limited frequency of transactions (Sheth, 1992). Transaction cost theory primarily applies to understanding vertical integration governance issues. One of its chief uses is to evaluate the “make or buy” decision but it can also be used to evaluate the benefit of utilizing independent distribution channels (brokers, agents, value-added resellers) over a direct channel of distribution (personal selling and direct mail) (Ragan, 1992). One of the major criticisms of transaction cost theory is that it fails to take into account the social context in which transactions are “embedded” (Heide, 1994). Therefore, network analysis appears to have a significant advantage over transaction cost theory in understanding inter-firm relationships because it explicitly examines the social consequences and interrelationships of these alliances.

The third framework, resource-dependence theory is grounded in social exchange theory (Heide, 1994). The resource-dependence framework is based on two concepts. First, organizations are social actors and inter-organizational relationships can be explained by examining inter-organizational dependence and constraints (Sheth, 1992). This dependence exists as a result of one of the underlying assumptions of resource-dependence theory--that firms are not completely self-sufficient (Heide, 1994). Therefore, firms must seek out other firms or actors which have key resources necessary to succeed, thereby, becoming dependent upon these other firms. Second, apprehension experienced by both parties can be explained by a lack of trust (i.e. uncertainty) between the parties. Since firms are depending upon other, independent actors for key resources, the constant flow of these resources is uncertain. If both parties had perfect information about each other, the issue of control of the relationship would be of minimal concern (Sheth, 1992). However, since the probability of gaining perfect information is low, actors seek to establish and control relationships, through formal and informal agreements, that reduce uncertainty and dependence (Heide, 1994). Again, this framework for examining organizational dyads is focused on a level of trust among the actors. Symbiotic marketing relationships, as examined by network analysis, provide a much more robust and comprehensive understanding of dyadic relationships.

The fourth traditional framework for examining inter-firm relationships is relational contracting theory. This theory was developed by Macneil, whose framework was grounded in non-contractual business relationships (Heide, 1994). The basis of the framework is that there is a distinct difference between “discrete” and “relational” exchange. Discrete exchange is characterized as exchange between actors which is completely independent of past and future

circumstances (Heide, 1994). This is the traditional economic concept of exchange--simply the transfer of ownership from one actor to another. Both actors remain completely independent and there is no guarantee that any future transactions will take place. Common retail transactions can be considered discrete transactions. Relational exchange, on the other hand, transpires through consideration of both a historical component and a social context (Heide, 1994). The transaction takes place through some form of social norm that has been established. The relational transaction concept is grounded in the concept of a clan mechanism. Individual members of the clan adopt the norms established by the clan. Therefore, the utility of the individual becomes secondary to the goals of the clan.

These traditional perspectives examine inter-firm relationships in virtual isolation. They only attempt to explain the dyad formed by two firms while not fully taking into account the effect of other potential actors' influence on the dyad. Network analysis, on the other hand, begins with the assumption that actors, regardless of whether they are institutions or individuals, operate within a complex domain of social relationships. Network theory is based on social network theory developed specifically to understand structures of relationships in networks and dyads (Knoke & Kuklinski, 1982). It is not possible to interpret the relationship between the actors, or understand the individual dyad, without taking into account the "relational context" under which the relationship operates (Galaskiewicz, 1996). Network analysis considers both the structure and processes of groups. It also explains how behaviors are affected by the structure of these groups. Relationships among the members of the network are the unit of analysis rather than the actors themselves. Furthermore, network analysis differs from traditional approaches in the underlying assumptions concerning channel conflict and potential for cooperation. In the traditional "market" alliance, *channel conflict is expected* and a purposeful attempt at minimizing it is one of the key issues addressed during pre-alliance negotiations. Network analysis, in contrast, *assumes cooperation* as the basis of the alliance formation. Therefore, it is more probable that the result of a network analysis of potential symbiotic partners will result in determining which firms should not be potential partners rather than those who may be potential candidates (Hakansson, 1996). Other key assumptions that underlie network analysis are (adapted from Galaskiewicz, 1996):

- Actors and their behaviors are interdependent rather than autonomous. That is, one partner in a symbiotic relationship dyad does not operate within a vacuum. The partner's interconnected relationships with its employees, suppliers, and other constituencies must be considered. Additionally, the traditionally applied term, dyad, may be inappropriate as applied to symbiotic relationships since these are of a more complex nature.
- "The relationships that actors have with others are channels or conduits through which resources flow (pp. 20)."
- Each actor's position in the network determines its potential for developing opportunities and limits its possible actions.

The statistical network model contains three distinct estimable parameters (Iacobucci & Hopkins, 1992). The first of these are the *expansiveness* parameters (α) which indicates the propensity for actors to have relational ties and the intensity of such ties. For instance, the concept of "trust" can be examined in a network sense by determining the number of fellow actors a particular actor trusts (expansiveness) and the extent to which this actor trusts the other actors (intensity). The second set of parameters measure what is termed "popularity" (β). These parameters estimate the tendency of actors to receive socio-metric choices from other actors. Finally, set of parameters are the "reciprocity" estimates (ρ) which measure the degree to which

actors make mutual choices with other actors. These parameters are high in interpersonal ties. The model has been determined to follow a log linear model, in the form of:

$$Y_{ijkl} = 1 \text{ if actor } i \text{ related to } j \text{ with strength } k, \text{ and } j \text{ related to } i \text{ with strength } l, \\ = 0, \text{ otherwise}$$

$$\ln P\{Y_{ijkl} = 1\} = \lambda_{ij} + \theta_i + \theta_l + \alpha_{ik} + \alpha_{jl} + \beta_{jk} + \beta_{il} + \rho_{kl}$$

λ parameters are used in the model to constrain the probability for each dyad to one. The θ s are akin to grand means of the overall volume and strengths of choices sent and received in the network. The other parameters are defined above. Input into the model is based on estimates of the ties among actors in a network. This is typically established by binary estimates of relationships among network actors in diagraphs as depicted in Figure 2 (See Appendix B).

The purpose of this paper is not to provide a detailed introduction to network analysis. However, the underlying methodology must be presented, in a general sense, so that it is evident to the reader that there is a viable quantitative method available to analyze network organizations. Other methods that may be used to analyze network input data include structural analysis and factor analysis.

WHY SYMBIOTIC RELATIONSHIPS?

One might question the validity of using the term symbiotic marketing to describe phenomenon that appears to be no more than strategic alliances or network organizations at work. However, there is one key distinction between the concepts. Symbiotic marketing is the strategic use of collaborative enterprises such as network organizations. That is, symbiotic marketing is a strategic tool that marketers may use to achieve their marketing objectives. In this paper, a strict definition of strategy will be utilized. Strategy, in a military sense, is “a formal association of sovereign states for the use of military force, intended against specific other sovereign states, whether or not these sovereign states are explicitly identified” (Snyder, 1991). Applying this definition to the use of business partnerships to achieve the firm’s goals, strategy can be viewed as a formal attraction of independent firms for the use of competitive their combined resources, intended for use against other specific firms, whether or not the other firms are specifically identified. Therefore, when referring to alliances or partnerships, what is actually meant is “competitive alliances” not simply “generic alliances” (Sheth, 1992).

Symbiotic relationships are important to organizations for a number of reasons. Perhaps the most important of these is that by developing symbiotic relationships, a competitive advantage can be achieved which may not have been possible without the contribution each firm’s resources. There are five outcomes of symbiotic marketing (termed networking by Doyle) that contribute to this enhanced competitive advantage (Doyle, 1995):

- By focusing on the whole value chain, rather than only the firm’s, managers have the opportunity to enhance quality or reduce costs in domains that were inaccessible prior to symbiosis.
- Each firm has access to external technical expertise which is crucial for product innovation and re-engineering processes. For instance, it is estimated that Japanese firms depend on partners for up to 60% of their research and development. Additionally, symbiosis enhances each firm’s access to market information, thereby, reducing the cost of product research and development and information gathering through the process of this information sharing (Ricks, 1993).

- Symbiotic alliances also allow firms to be more nimble. Firms can access resources that they may not have developed internally immediately by locating partners with such resources.
- Alliances also have a direct effect on a firm's financial leverage. Depending upon the nature of the alliance, a firm may be able to increase revenue, return on assets, and convert fixed costs to variable, thereby, producing a more stable annual net income.
- Each firm within the partnership will, undoubtedly, reduce its costs and receive higher quality output by outsourcing its needs to those who specialize in a particular function. As pointed out by Doyle, "this is because unlike internal support services, the products of network members are continually market tested -- if customers are not happy they can move elsewhere."

In addition to the advantages pointed out above, firms can also reduce their exposure to market risk by spreading such risk among all of the individual members of the symbiotic relationship. This is especially critical in emerging technology fields which are developing products such as high-speed computer microprocessors, genetic research, and high definition television. Finally, the establishment of symbiotic relationships can be viewed as a defensive strategy to combat both potential hostile corporate takeovers and competitors (Ricks, 1993). By forming strong and diversified symbiotic relationships, firms effectively raise the barriers of entry into each market they penetrate. For instance, a small, independent software developer may focus on providing relational database solutions for the legal professional end-user market. He may be very successful by focusing on this highly defined market segment. However, if Microsoft determines that this segment could be profitable and forms a symbiotic relationship with one of the independent developer's competitors, the entire competitive environment would mutate. It would be unlikely that the independent developer could continue to operate successfully in this market unless he increased his capital investment in advertising and product development, for instance. Microsoft has raised both the barriers of entry and the level of competition simply by forming an alliance with someone who has specific market and product knowledge and by being capable of providing a unmatched capital infusion and brand name recognition.

MODES OF SYMBIOTIC RELATIONSHIP: CONCEPTUAL FOUNDATION

There are a number of modes of symbiotic marketing relationships both evident in industry as well as identified by researchers. In the extant literature, these modes have simply been identified in a descriptive nature. In this section, an alternative typology for classifying modes of symbiotic relationships will be proposed. The outcome of the presentation will be a proposed typology of symbiotic marketing modes which will be used within the broader network framework of such marketing relationships. Each mode of symbiosis has its own distinct behavioral and managerial implications.

The proposed typology is theoretically grounded in the original research conducted by Adler, the analysis of strategic alliances provided by Sheth, and the proposed typology of business organizations developed by Achrol (Sheth, 1992; Adler, 1966; Archrol, 1997). Adler's original identification of modes of symbiosis allocated each mode to one of two categories, either joint ventures or facilities sharing (including licensing, and franchising). The basis for classification depends upon the level of innovation in organizational form. Obviously, the modes

of symbiosis classified as new joint ventures result in a completely new organization. This represents one end of the symbiotic continuum. The other boundary of the continuum is represented by the use of an agent or broker during the marketing process. There is virtually no effect on the organization when using a broker and the relationship is short-lived and transient. However, the use of a broker does provide a key resource to the firm (in bringing together the buyer and the seller) and is, therefore, a form of symbiosis.

Based on this origin framework proposed by Adler, let us propose that the New Joint Ventures modes of symbiosis originally identified be classified as Strategic Symbiotic Modes and Facilities Sharing, Licensing, and Franchising as Tactical Symbiotic Modes. These descriptive labels appear to be more illustrative classifications based on the underlying rationale behind forming such relationships. Tactical modes are more short-term in temporal character and, primarily, developed to address narrow or specific market opportunities. However, these tactical modes are no less important than the strategic modes. Adler indicates that these tactical symbiotic modes are less often used, which may not be true in today's marketplace. Agents are frequently used, and becoming increasingly important, in technology "vertical" markets. These agents are more commonly called value-added resellers (VARs). Perhaps, more importantly, franchise systems are included as a mode of tactical symbiosis. Since franchise (vertical marketing system) sales account for 13% of all retail sales, tactical modes contribute significantly to the marketing landscape (Boone and Kurtz, 1995; Pg. 491).

There are a few issues with Adlers typology with which the currently proposed framework will address. First, one must question Adler's inclusion of survivors of mergers and acquisitions as a mode of symbiosis (Varadarajan, 1986). Once firms are acquired or merged, the distinct original firms lose their independence. This violates the spirit of symbiotic marketing. Although the outcome of a merger would obviously alter the organization significantly, as required under Tactical Symbiotic Modes, both of the original participants would be stripped of their independence and eventually, their distinctive core competencies. Second, complete vertical integration is included by Adler in his Facilities Sharing, Licensing, and Franchising group. Vertical integration is not considered a component of the proposed Tactical Symbiotic Group for the same justifications just cited. Rather than acquire a firm for its manufacturing capabilities, for instance, the symbiotic approach would suggest that the firm needing manufacturing expertise negotiate a manufacturing agreement with a plant which is operating at less than capacity. The end would be the same but the means are quite different. Table 1 (See Appendix C) summarizes the individual modes of symbiosis identified in the extant literature and how they have been classified by other researchers.

In order to examine symbiotic relationships in a network framework, the typology of modes of symbiosis must be oriented in such a way that certain assumptions about how actors in a particular classification may behave with one another. Our typology proposes that actors interact with one another based upon their competitive orientation. That is, our typology classifies modes of symbiosis based on the whether the actors participating in the alliance are typically competitors (competing for the same customers) or non-competitors. This type of classification reasoning is based on that utilized in developing a typology for strategic alliances (Sheth, 1992). However, bear in mind that not all alliances are strategic, in nature. Symbiotic modes can be examined in two dimensions, purpose and parties, and further evaluates each alliance on two levels of these dimensions, strategic vs. operations, and competitors vs. non-competitors.

Sheth's conceptual model indicates that based on these alliance characteristics, there are four alliance types. First, cartels are developed through formal or informal agreements among competitors to address operational issues. These organizations are formed to address tactical rather than strategic issues. The most familiar cartels are found in the petroleum industry, such as OPEC. Due to anti-trust regulations, cartels are not typically found in the US. Second, non-competitive alliances which are focused on operational or tactical issues are represented by cooperatives. Traditional agricultural cooperatives such as those that represent cheese and dairy industries are probably the oldest example of this type of alliance. However, non-competitive alliances are becoming more common with contemporary progressive businesses. Examples of these alliances include co-marketing alliances such as the recent McDonalds and Walt Disney film co-marketing campaigns and Intel's Pentium microprocessor co-marketing agreements with computer system and software manufacturers. Third, competitive alliances are between rival firms which remain competitors beyond the alliance and enter the alliance for strategic reasons. Competitive alliances have become a useful tool for entering foreign markets and developing a global presence. One obvious example of competitive alliances is the joint automobile manufacturing agreement between Toyota and General Motors. Finally, collaborative alliances are formed by firms which do not compete with one another directly and are formed for strategic reasons. This is perhaps the most illustrative type of alliance, in a symbiotic sense. Collaborating partners typically become heavily involved with one another's operations including production, marketing, and financing. The joint venture is the most popular form of collaborative alliance. Chevron Chemical and Ecogen, Inc. formed an alliance which illustrates this form of alliance. Ecogen is a small agricultural biotechnical firm. Chevron Chemical (a subsidiary of Chevron Corp.) develops agricultural chemicals, specializing in bio-pesticide products. The two firm's product lines are complementary rather than substitutes. The alliance permitted Ecogen to utilize Chevron's well-established channels of distribution. The alliance returns benefits to both firms: Ecogen gains access to Chevron's extensive distribution network and Chevron gains a complementary product to broaden its product line (Chan and Heide, 1993).

Using the alliance-based matrix as a means for developing a typology of symbiosis has significant drawbacks. The most restrictive of these drawbacks is the static nature of the classification scheme. A firm may be involved in both competitive and collaborative symbiotic modes, simultaneously. This proposed matrix of symbiosis builds on Sheth's theoretical concept of purpose of the alliance formation. However, the present study offers a new dimension---degree of symbiosis---to evaluate modes of alliances. This was done due to the difficulty in classifying alliances based on their competitive orientation, as mentioned earlier. With this framework in mind, it is proposed that network organizations offer the best example of the type of organization which is most effective in symbiotic marketing. Therefore, it is proposed that a typology of network organizations will be more applicable to symbiotic marketing. Building on Sheth's framework, next is a proposed typology of network organizations, developed by Achrol (Achrol, 1997).

- **Internal Market Networks**-The guiding principle for this form of network is the dissolution of the internal firm hierarchy within the conventional firm (as far as reasonably possible), replacing them with direct exchange networks among organizational units mediated by some level of market process. All organizational units are reduced to individual profit centers. Although this may seem like some form of laissez-faire management form, it is actually an alliance among so-called intrapreneurs. As profit centers become more efficient and profitable, firms will spin-off such units and the network will evolve into vertical market

networks. Asea Brown Boveri is an example of this type of network. The firm is structured in such a way that it is actually comprised of relatively autonomous internal enterprise units, operating as independent profit centers (Snow, 1997).

- Vertical market networks (marketing channel networks)-This is not a true strategic alliance but a functional alliance, in the sense of a vertical marketing system. There is typically a primary “integrator” or “hub”, whether it is the manufacturer, the marketer, the research firm, or the reseller. It is defined as the “organizational set of direct supply or distribution relationships organized around a focal organization best positioned to monitor and cope with the critical contingencies faced by the network participants in a particular market.” An example of this type of business network include Sun Microsystem’s use of alliances with chip manufacturers, distribution firms, and service providers so that the firm can concentrate its resources on research and development of advanced computer systems. Nike is also frequently cited as an example of this type of network (Walker, 1997). Nike functions as the integrator of the network. The firm focuses on research and development, design, and marketing, while depending upon its network partners for the remaining essential business functions such as manufacturing and distribution.
 - Intermarket or concentric networks-This form of network is characterized by arrangements between firms which operate in a variety of unrelated market segments. The primary example of this form of network organization is the Japanese keiretsu or the Korean chaebol, as described earlier. The relationship among the firms in this form of network is driven by the interdependence and reciprocity that exists among the members of the network, as evidenced by cross-stock ownership and utilization of common resources such as common board of directors.
 - Opportunity Networks-This highly flexible form of a network is much closer to the market than to the typical organizational hierarchy. It is defined as a “set of firms specializing in various products, technologies, or services that assemble, disassemble, and reassemble, in temporary alignments, around particular projects or problems.” (Achrol, 1997, pp. 298). Achrol (1997) describes this form of network in detail. The alliances within the network are organized around a central information and exchange firm which operates as a clearinghouse for information and regulates the individual actions of the firms within the network. The firm serves as a clearinghouse for information, manages the collection and dissemination of strategic marketing information, and coordinates market-oriented activities. The firm employs active environmental scanning and adaptive mechanisms oriented to and driven by consumers and markets.

These opportunity networks truly embody the concept of symbiotic marketing. The nerve center of the opportunity network is a central marketing office. This office monitors marketing intelligence by measuring changes in customer needs and wants, economic shifts and trends, and by fielding customer inquiries. This information is maintained in an automated system which is supported by an expert system which distributes the information to the proper parties. The other side of the network maintains close ties with a variety of specialized suppliers and vendors, continually updating information concerning inventory levels, pricing, product design capabilities, product specifications, etc. Matches between the marketing intelligence results and the vendor/supplier capabilities can be negotiated quickly due to the constant upgrading the system knowledge. Although this form of network is continuing to evolve towards formation, there are several examples of firms which utilize the concept. First, are the direct marketing companies which specialize in the use of a variety of marketing channels to distribute consumer

products such as television infomercials (with associated 800/888 telephone numbers) and the internet. Second, the Japanese general trading companies also utilize these concepts. Finally, electronic marketing systems (Achrol, 1997) such as those used by Baxter-Travenol Hospital Supply, McKesson, and Digital Equipment Corporation are close to the opportunity network. These systems integrate and provide access to the knowledge base of the entire value chain.

From these proposed forms of business network organizations, a typology can be developed (See Figure 3, in Appendix D). It is based on the “degree of symbiosis” involved in the organization and the degree of “closeness” to the end user.

PROPOSED HYPOTHESES

The degree of closeness can be operationalized in several ways in an attempt to validate the schema. One might evaluate a firm’s closeness to its customers by the number of hierarchical levels in a firm’s organizational chart. A “flatter” organization, with few organizational levels, will be closer to the customer. Alternatively, one might evaluate the “degree of vertical dissaggregation” within a firm (Achrol, 1997). This degree of vertical dissaggregation is measured by the number of traditionally core business functions such as marketing, manufacturing, or research and development that the firm outsources. Once operationalized, certain hypotheses can be tested to attempt to validate the proposed typology of symbiosis, above.

Hypothesis 1: Opportunity networks will be more vertically dissaggregated than Internal Market Networks.

Hypothesis 2: Internal Market Networks will be more vertically dissaggregated than Vertical Market Networks.

Hypothesis 3: Vertical Market Networks will be more vertically dissaggregated than Concentric Networks.

These hypotheses would have to be tested by primary data sources. Firms that represent each type of network would be selected for the study. For instance, key informants from Nike would provide information on vertical market networks and informants from Asea Brown Boveril would provide information on internal market networks. The a priori contrasts indicated in the hypotheses above would be tested using standard statistical methods such as t-tests.

One of the foundations of symbiotic marketing is that it is more profitable and/or a more effective market entry strategy than traditional marketing options. These propositions can be tested in a number of ways. The following hypotheses offer only a starting point for further research. These hypotheses can be tested using secondary data sources for publicly traded companies, indicating profitability.

Hypothesis 4: All other things being equal, focal firms utilizing opportunity networks are more profitable than the channel captain of a traditional marketing system (hierarchical organization).

Hypothesis 5: All other things being equal, focal firms utilizing opportunity networks achieve a first mover advantage in more cases than the channel captain of a traditional marketing system.

Building on prior research, the following proposal represents a guiding framework for selecting a symbiotic partner. Not all potential partners will strategically “fit” within a network. The foundation to developing a strong network is selecting partners that will synergistically add to the value of the entire network (Slowinski, Seelig, & Hull, 1996). There are at least two

determinants which are important in selecting potential symbiotic partners. These are corporate culture (management style) and experience with symbiotic relationships. These two constructs---organizational compatibility and prior history of business relations---have been operationalized in other studies focusing on success factors of co-marketing alliances (Bucklin and Sengupta, 1993). It is hypothesized that firms who have participated in prior symbiotic relationships have advanced along the learning curve and will make better partners. For example, one small biotechnological firm with only 130 employees was involved with 13 alliances (Slowinski, Seelig, & Hull, 1996). This firm has learned significantly from its experiences with other partners (at their expense!) and would probably make a better partner than a firm with no experience. Compatibility of corporate culture also plays a key role in partner selection. For instance, firm goal compatibility has been found to enhance the effectiveness of inter-organizational dyads (Bucklin & Sengupta, 1993). There are valid and reliable measures of corporate culture which can be used to determine the compatibility of firms' management style and corporate culture. However, these measures must be modified to take into account the entire value chain of a firm, not simply the single dyad formed between two firms. For instance, in evaluating the compatibility of two firms, in a network perspective, one must take into account not only the firm's internal corporate culture but also the cultures of the focal firm's suppliers and customers. Models utilizing network analysis techniques can be developed to evaluate these hypotheses. Moreover, the type of data will probably have to be primary and will need to be collected from a key informant

Hypothesis 6: Firms with prior experience as a partner in a mode of symbiosis will make better symbiotic partners.

Hypothesis 7: Firms who are more compatible, from a management style or corporate culture perspective, with a focal firm will make better symbiotic partners.

CONCLUSIONS AND RECOMMENDATIONS

This research has provided an overview of marketing channel developments. The focus has been to re-establish symbiotic marketing as a strategic tool in light of the increase in usage of various modes of symbiosis by firms. Moreover, symbiotic marketing has been presented in a framework utilizing a network perspective. As firms move more towards networked relationships, marketers should attempt to understand how such relationships evolve and why they are different from traditional forms of organization. This research has proposed several hypotheses which can be tested whose results may answer several of these essential questions. Finally, the proposed typology for symbiotic marketing modes, in a network perspective, must be validated. Future research can add significantly to the body of knowledge concerning symbiosis by validating this typology.

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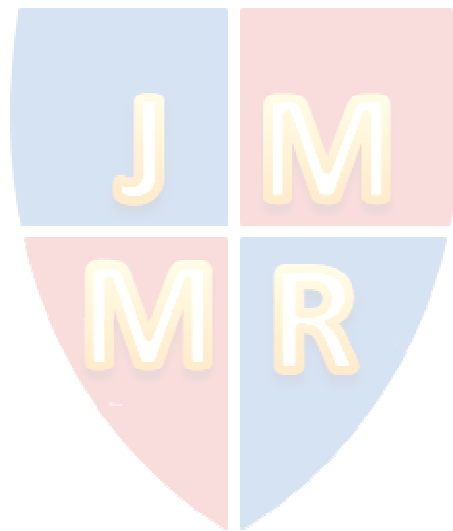
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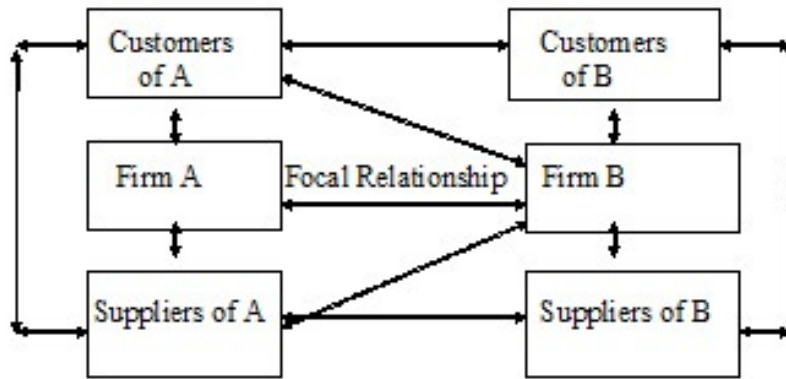
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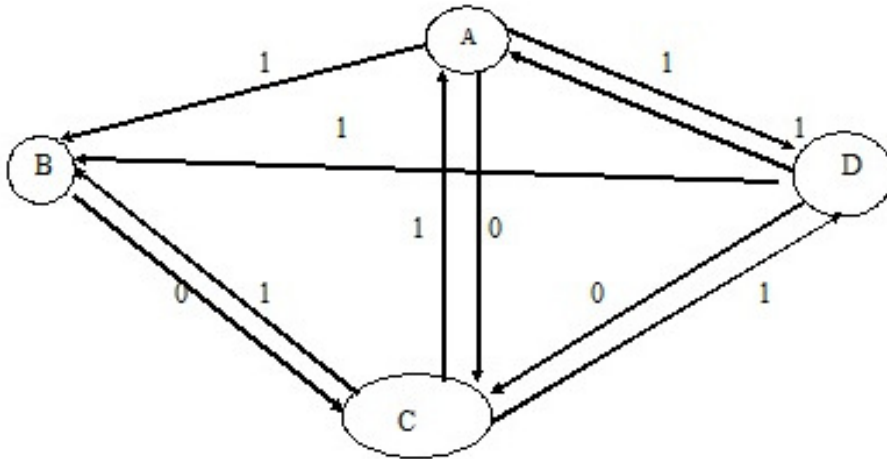
Appendix A



Indirect/Direct Relationships Among Business Network Members
(Solid Lines are Direct/Dotted are Indirect)

Figure 1

Appendix B



Hypothetical Network Relationship Diagram

Figure 2

Appendix C

| | |
|--|------------------------------|
| Facilities Sharing, Licensing, and Franchising | Joint Ventures |
| Licensing | Equity Position |
| Franchising | Technology Exchange |
| Cooperatives or Consortium | Joint Ventures |
| Administered Vertical Integration | Joint Product Development |
| Traditional Marketing Channels | Joint Technology Development |
| Import/Export Agreements | Co-Marketing Agreements |
| | Manufacturing Agreements |
| | Shared Distribution |
| | Joint Sales Organization |
| | Joint Service Department |

Original Modes of Symbiosis*

*Based on modes of symbiosis outlined in Adler (1966) and Varadarajan (1986)

Appendix D

