Antecedent Group Affiliation: Determining the Importance as a Measure of Propensity to Participate in Interfirm Collaborative Initiatives

Working Paper #9
Louisiana Forest Products Laboratory
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October 17, 1995

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Introduction

The purpose of this paper is to develop a conceptual framework for antecedent group activities among participants of interfirm collaborative initiatives in the context of rural economic development. Elements of interfirm collaborative activities are specifically discussed in current literature (Rosenfeld 1994; Lichtenstein 1992; Jarillo 1988; Lewis and Weigert 1985) as well as alliances or partnership relationships in marketing channels (Anderson, Hakansson & Johanson 1994; Wilson and Miller 1992; Thorelli 1986) and control in network organizations (Pyatt 1995; Larson 1992).

The focus of this proposal is on fragmented industries composed primarily of small to medium sized businesses. In fragmented industries where individual companies do not hold commanding positions in the market, collective strategies or interfirm collaborative initiatives represent viable strategic options (Dollinger 1990; Malecki and Tootle 1994). Small firms in fragmented industries often act and react much as the individual decision makers who own and operate them (White 1988; Granovetter 1985). Study social influences and relationships affecting these businesses are hypothesized to be similar to the social influences affecting individual actors in social groups.

A review of marketing, organizational development, small business management and entrepreneurship, sociological, and rural development literature is presented to provide a contextual frame-work in which to conduct research on the influences of associative group activities on the diffusion of interfirm collaborative initiatives. A review of research on networks illuminates opportunities to apply ICI principles and organizational forms. In addition, insight into the problems and/or obstacles facing small and medium sized businesses in rural areas regarding adoption and participation in networks are presented.

Interfirm Collaborative Initiatives Defined

A distinction needs to be made between interfirm collaborative initiatives and interfirm collaboration. Interfirm Collaborative Initiatives (ICIs) are the set of formal activities, both precursor and present state, that are the foundation of establishing interconnected groups of three or more firms commonly referred to as networks. Interfirm collaboration is the act of cooperation between firms for the individual and mutual benefit of all actors.

ICI Organizational Structure and Components

Interfirm collaboration between firms is the result of relationships formed by ICI implementing organizational structures. Examples of ICI driven organizations may be trade associations, chambers of commerce, university outreach projects, governmental economic development initiatives or other interagency collaborative activities. ICIs may provide the foundation for economic development efforts, based, founded and directed in the private sector, public sector or some combination of both.

A key component that distinguishes ICIs from other competitive strategies or activities is that ICIs must have as their primary purpose the development of collaboration and cooperation between three or more private sector firms. The resulting network may be characterized as a hard or soft network (Rosenfeld 1995).

Hard networks are those networks in which there is a high degree of inter-dependence based on shared responsibility in product or service delivery. In a hard network there may also be a high degree of individual business strategy commitment (Bosworth 1995, Lichtenstein 1992, Jarillo 1988). On the other hand, a soft network is one in which a high level of interdependence or individual business strategy commitment has not occurred (Bosworth 1995). Soft networks include such activities as collectively associating to reduce insurance costs or sharing the costs of training programs (Bosworth 1995). It follows that some networks may be categorized as both hard and soft, depending on the mix of programs and services provided. An ICI organization does not necessarily make a net profit as a free market competitor. The private sector companies participating in the networks which result from ICI activities represent the level where market interaction occur and where the net profit motive becomes relevant.

Additionally, the objectives of ICI activities may be similar to those of network activities identified by network researchers(Rosenfeld 1995; Friedman 1987; Jarillo 1988) and include, but are not necessarily limited to, enhancing business performance, increasing competitiveness and increasing profitability. Additional benefits such as market stability, improved community relations, increased ability to attract new members to networks and strengthening and maintaining business relationships may result from ICI activities. Borrowing from Latham's (1964) discussion of industrial team formation, the ultimate goal of any ICI sponsoring organization is to create or enhance commercially viable development opportunities which are both satisfying and productive to all participants.

ICI Functions

To attain the goals of network formation or interfirm collaboration, an ICI organization may function as: 1) a bridge between public and private sector entities, 2) central contact point for industry participants and market actors, 3) central contact point for ICI participants, 4) locus for results of network activities and 5) as a persistent contact point for maintenance of relationships after transient market opportunities, around which temporary network(s) may form, have ended. This latter function may be one of the most critical functions, if the need to preserve the interdependent investments made by the network's participants is a factor, and hence continue to improve the return on investment to participants.

In a network setting an ICI, emphasizes purposeful and formalized formation of cooperative efforts as opposed to unintended or emergent cooperative actions which may result from dyadic relationships (Dollinger 1990). In emergent cooperative activities, cooperation between actors develops over a period of time. Confidence and trust is built between parties as a result of knowledge of one another's activities and capabilities. As a result, network participants eventually find ways to mutually exploit that knowledge and experience (social capital) (Putnam 1993). The opportunity for collaboration results from the fact that the parties are able to become familiar and trusting of each other based on dyadic interaction.

Conversely, cooperative activities resulting from ICI activity is a purposeful formal strategy aimed at enabling all actors to participate in mutually beneficial activities. Example of these activities include jointly producing lines of products, jointly marketing products or services, or subdividing production along lines of specialization.

However, not all members may participate in the same activity at the same time. Lack of participation in a particular activity by a network member may result from bas timing of the opportunity for some members, individual company work loads, cost of the specific project or any number of subjective reasons. The point is that all actors are made aware of the opportunity and are given an equitable opportunity to participate depending on each actor's specific situation at a given point in time.

Interfirm collaborative initiatives can be further distinguished from networks or networking. Lichtenstien (1992) defines a network as consisting of at least three firms that come together to gain competitive advantages that no individual company could achieve alone. As such, networks are characterized by relationships of collaboration and/or inter-dependence. Berkowitz (1988), writing from a structural sociology perspective, defines networks as a graphic device used to map patterns of relationships between the parts of complex social structures. Another definition of networks is the value added partnership (Johnston and Lawrence 1988) in which a set of independent companies work closely together to manage the flow of goods and services along the entire value added chain. Thorelli (1986) defines networks as "consisting of 'nodes' or positions .... and links manifested by interaction between the positions. Further, in electronic data processing, the term network reaches almost infinite mix of bits, bytes, wares and space. However, within the context of ICIs, networks and networking may be results of or integral activities that result from interfirm collaborative initiatives.

Foundations of Interfirm Collaborative Initiatives

Social capital development, information transfer, social influences, cultural influences, social structures and economic forces are all factors which daily affect the lives of people. As interpersonal influences, these factors must be considered in order to understand ICIs as viable competitive market structures.

Recognition of the development of social capital and social influences among actors in dyadic and network arrangements in markets as well as in purely social settings is documented in current literature (Putnam 1993; Malecki and Tootle 1994). Putnam (1993, pp. 167) defines social capital as a collection of features of social organizations. Included in this definition of social capital are trust, societal norms and values and networks which can improve the efficiency of society by facilitating coordinated actions. Therefore, social capital formation is an important aspect of relationship development (Putnam 1993).

Social capital resulting from participation in antecedent associative/voluntary groups is linked to the propensity of actors to adopt ICIs as competitive strategies in fragmented industries is the hypothesis of this paper. However, the effect of these social experiences, on the process of developing interfirm collaborative initiatives is not well understood. Consequently, social interaction based research is now being called for because of the complexity of network development and to assist those who would undertake the task of network formation. (Anderson et. al. 1994).

In the context of northern Italy's economic development programs, from the period 1970 - 1990, Putnam discusses the level of civic involvement of the population in civic activities. He uses the term civic-ness as a measure of the level of citizen participation in public affairs. Putnam found a high correlation between civic-ness in an area and the likelihood that an area is progressive in its economic development efforts. Putnam discusses, in a historical context, the differing cultures of Italy. He demonstrates how a region's culture of civic-ness effects the interaction of the region's populace with the public sector and vice versa.

Hence, civic-ness is a measure of the propensity to participate of a given population and as such is part of the culture. This important concept of *culture* as defined by Robertson (1987) includes relationships and time. Other definitions include the transmission of behavior patterns and institutions (Webster 1994). These aspects of culture provide the contextual basis for a second social construct, cultural attenuation.

The concept of cultural attenuation (Freudenburg 1994), demonstrates how, over time, continued exposure or acclimation to a phenomena may create a willingness to accept the phenomena as a natural and expected component of the local cultural, economic and/or physical environment. He believes the differences in the reaction of the populations of the two regions can be explained by the phenomena of cultural attenuation. For example, offshore oil drilling in Louisiana did not meet with the rejection that proposed offshore oil development met in northern California and Oregon. In essence, the offshore oil industry in Louisiana had become highly developed with a history of positive economic impact and good community relations before recent concerns about environmental issues arose. Since there have been no major ecological disasters related to offshore oil production in Louisiana, the concern about such a hypothetical incident is minimal. In addition, many petroleum industry executives are active in the communities of south Louisiana. The positive interaction between the companies and the communities in which they are located, strengthens the public perception of the industry and its cultural fit. The extent of relationship development between the petroleum industry companies and communities in which they operate, typify a third construct called embeddedness (Dollinger

1991). Embeddedness emphasizes relationship development and social connections of the business environment.

Granovetter (1985) demonstrates how small business owners and managers utilize personal contacts of family, friends and business contacts throughout the community or area as initial sources of funding, promotion and resource location. Because this network of existing contacts ease the process of business start-up as well as expansion within the community, the business is said to be embedded in the community and its network of social influences and relationships. Embeddedness may be another factor which influences the propensity to participate in an ICI.

Using the constructs of civics-ness, cultural attenuation and embeddedness, one could expect a relative receptive cultural environment for the acceptance of networks if business owners in a given area or region reflect a propensity to join associative groups. Analysis of civic participation of rural based network participants may offer important insights into how to best approach potential network participants. By applying the concepts of Putnam, and Granovetter to the propensity of business owners or managers to participate in civic organizations or other voluntary groups, one may be able to offer suggestions concerning strategies for the development of networks and/or the potential of network development as a useful tool for rural economic development activities. The diffusion of this management technology through the business community may be a function of the network process and is discussed in the following section.

Diffusion Theory

Diffusion theory is the subject of research in a variety of disciplines (Brown 1981; Rogers 1962; Redlich 1953). According to Rogers (1971) the roots of diffusion theory can be found in the anthropology tradition. Generally, anthropologists have centered their research on the connections between culture and social change. Major areas of diffusion research are categorized as 1) anthropology, 2) early sociology, 3) rural sociology, 4) education, 5) medical sociology, 6) communication, and 7) marketing as well as general sociology, agricultural economics, psychology and others (Rogers, 1971; Kroeber, 1937; Dobyns 1951; Bliss, 1952; Tarde 1903; Bowers 1937; Wilson and Gallup 1955; Mort and Cornell 1938; Katz 1957; Coleman 1958).

Robertson (1987;pp.511) defines diffusion as the spread of cultural elements from one culture to another and he defines culture as the shared products of human society. He includes material and non-material products in the diffusion process, such as cultural norms and values as well as ideas. More generically, Mowen (1992) believes the term 'diffusion' refers to the process by which ideas, concepts, products and/or services gradually spread through a medium of some type to ultimately reach a state of equilibrium.

In addition, the two most important methods of diffusion are through mass media and word of mouth (Bass 1969). In fact, research in the area of diffusion theory conducted by Bass (1969) included only these two 'media' for diffusion. Rogers (1971) cites Bowers (1937) who found that interpersonal contact or word of mouth is a far more important mode of diffusion for later adopters. Also, implicit in the diffusion process are the elements of time passage and developmental stages.

Ryan and Gross (1943) were possibly the first to recognize that diffusion occurs in stages. Wilkenberg (1952) was the first to recognize that diffusion was a process rather than a discrete entity. Rogers (1962) amplified this concept by dividing the diffusion process into five stages; awareness, interest, evaluation, trial and adoption. As a process, it should be noted that the five stages of diffusion are not discrete and they may often overlap. Similarly, the concept of diffusion of innovations is the process by which products or *ideas* (emphasis added) are communicated within social systems (Walters and Bergiel 1989).

Rogers (1971;pp. 30) cites Katz (1961) who found that a system's social structure and innovation diffusion have an intertwined relationship. Rogers (1971) adds that a systems social system affects diffusion, and vice versa. Katz (1961) emphatically states that it is "unthinkable to study diffusion without some knowledge of the social structures in which potential adopters are located...". Adoption of innovations is an integral part of the diffusion of innovations and establishes the context for diffusion of group influences on the adoption of Interfirm Collaborative Initiatives. Therefore it is appropriate to next discuss the innovation adoption process.

Innovation Adoption

There are five characteristics which influence the likelihood of the acceptance of an innovation. These characteristics are: 1) relative advantage, 2) compatibility, 3) complexity, 4) trialability and 5) observability (Schiffman & Kanuk, 1978).

The *relative advantage* of the innovation is the advantage(s)perceived by potential adopters. *Compatibility* refers to the degree which the innovation is consistent with current needs. *Complexity* concerns how easily the innovation is understood. The easier to understand the more likely the innovation will be accepted. *Trialability* relates to the level of commitment required to test the innovation for compatibility. *Observability* or communication is how easily the benefits can be observed or communicated (Schiffman & Kanuk 1978). According to Walters & Bergiel (1989) the easier or quicker these five characteristics create utility, the shorter the adoption process.

Once a product, service, or idea/concept has been brought to the attention of the actors or potential participants, they typically seek information about the economic and social benefits to be derived from the current opportunity (Rogers 1971) . At this stage, very few of the participants are likely to adopt this concept. However, there is likely to be a only a small group of individuals who may be analogous to innovators.

Research has shown that innovator are opinion leaders and that they share common traits. However, not all traits may be present in each individual and varying cultures may value these common traits differently (Cosmas and Sheth 1980). Regardless of cultural context, perhaps the single most important function required to begin the diffusion process is important to reach those participants who embody the traits of the opinion leaders. The early endorsement of an innovation or opportunity by the innovators may be critical to the success of the effort.

Innovators are a small fraction, about 2.5% of the entire population, of the population (Rogers 1958). They are small in numbers, though they are usually among the most influential people in the population. These people are normally the opinion leaders and trendsetters for any given population (Walters & Bergiel 1989). Rogers (1971) states that the salient value of the innovator category is venturesomeness. Willing to accept risk, the innovator embraces the hazardous and the risky. Innovators gather information about the issue at hand and examines the feasibility of the issue relative to themselves and their particular circumstance (Schiffman & Kanuk 1978). They become interested in new concepts very early. They evaluate the concept for its pros and cons. If they find the innovation appropriate they may initiate action themselves or with other willing or pliable persons or firms. This action on behalf of an innovator marks the beginning of the trial stage.

The trial stages begins only after the innovators have acquired sufficient knowledge about the issue of interest. This stage may be far more crucial than all the other stages. The results of adoption at this stage determine whether the diffusion process will continue. At this point in the diffusion process a relatively small group of people are involved.

Therefore, it is important to attract the next category of members, the early adopters. This group of people are fairly open to new ideas, though they tend not to take as many risks as the innovators. They expect the innovators to do the groundwork that validates the early adopter's decision. They closely observe the innovators and their actions, purchases new products or services or acceptance of new concepts. By doing so they confirm that the new concept is a tenable and practical one.

This group of people is larger in numbers than the innovators, about 13.5% of the population In terms of socioeconomic factors, several generalizations about this population segment have been developed (Rogers 1958).. Relative to later adopters, innovators generally have significant financial resources; are more active socially; are better educated and hence more literate; have greater upward social mobility and status; own, manage or operate larger units; are more commercially oriented; a more favorable attitude to the use of debt and are more specialized than other adopter groups (Rogers 1971). They are not as large of a group as the third category of adopters, the early majority, which represent about 34% of the population (Rogers 1958).

Members of the early majority are a substantial part of the market for products or ideas. They, along with the aforementioned groups account for about half the population. They are rather conservative in their approach toward anything new and adopt a "wait and watch approach". Once convinced of the feasibility of a proposition, they become active participants in the process of adopting the concept. When a product or concept reaches this stage of diffusion the probability is high that the product, service or concept will complete the entire diffusion process.

It is at this stage that the final two groups, the late majority and laggards, adopt the new product, service or concept (Rogers 1958). It is important to keep in mind that combined these two groups account for nearly half the population. Because this group consists of such a large percentage of the population, it is important that they adopt the innovation for the process to be completed.

While these classification schemes are useful in defining how innovations are spread through any given population, further clarification is needed to understand the motivations and characteristics of those who start and manage the small businesses which dominate fragmented industries. A brief discussion of the entrepreneur will offer a better understanding of who ICIs target in the effort promote cooperation and collaboration.

Entrepreneur Defined

The term entrepreneur is used to represent all persons operating businesses who control critical decision making positions. We include top managers who are employees of the firm as well as the traditional view of the entrepreneur as the risk taker who starts new enterprises and is opportunity oriented. Definitions of the entrepreneur vary but most definitions include elements of risk assumption, organization and management (Steinhoff & Burgess 1989; pp. 23). Aldrich and Zimmer (1988) differentiate the operating modes of entrepreneurs and managers by noting that entrepreneurs are driven by opportunity and managers are driven by the need to invest resources. The crucial difference is that entrepreneurs view the opportunity to invest as the critical element and managers view the resources to be invested as the critical element (Aldrich & Zimmer 1988). Importantly, Aldrich, Rosen and Woodward (1987) identified interactions of entrepreneurs and social networks as one of the primary reasons why entrepreneurs succeed. Regardless of divergent views in terms of entrepreneurial activity, the critical element is the ability to control the decision making process and to act upon it ; hence, the ability and opportunity to decide to participate in interfirm collaborative initiatives.

Social Context of ICIs in the Marketplace

This brings us to the questions, "Why study the social context of interfirm collaborative strategies? Why should decision makers be viewed in the context of the environment in which they operate?" As we shall see, many scholars believe that decision makers must be viewed in the context of their previous experiences and the impact these experiences have had upon their current role as well as the operating environment in which they currently interact.

Boeker (1989;392) provides a corollary to such a perspective when he states that any firm is a reflection of the time and place in which it is formed. The firm is indelibly "imprinted" by these environmental factors; factors which include the experiences of the founder and his/her life experiences. Stated as a hypothesis, Boeker says the previous functional experience of the founder will be positively associated with the importance of that function in the organization (Boeker 1989;393). Granovetter (1985) offers the concept of embeddedness which states that to analyze behavior and institutions as independent from the social relations which constrain them or as independent of social forces is a grievous mistake. The context in which we choose to view interfirm collaborative initiatives is the market. For our purpose, we will utilize White's (1988; pp. 228) interpretation of a market as a tangible clique of firms observing one another in the context of an aggregate set of buyers operating in a market context.

The study of collective behavior is by definition the study of relationships within a determined context; in this case a market context. The relationship variable must include more than one actor for there to be a relationship. Therefore, if the firm is involved in relationships with other firms, then it should be considered as part of the market and not apart from the market.

Wellman and Berkowitz (1988) offer a structural sociologist's perspective on the establishment of social relationships among firms as an intrinsic part of the formation of markets. Aldrich and Zimmer (1986) in their study of entrepreneurship state that entrepreneurs cannot be studied as atomistic actors functioning as social isolates; such an actor would be an example of social pathology. White (1988) in his study of markets states that the "actors" in markets are firms and that by suppressing internal details the firm can be viewed as role taking, integral actors. By applying White's logic the same model can be applied to markets consisting of individuals such as producer craftsmen or other small firms. From this perspective these small firms can be viewed as acting and reacting as individuals.

Granovetter's embeddedness concept (1985; Pp. 487) in terms behavior relates the firm's interactions with its environment. His view is that analysis of human action requires we not view actors as atomized decision makers outside a social context but rather we should view them and their actions as imbedded in a system of ongoing social relations. Granovetter cites Marsden (1981,1983) who places emphasis on how collective actions in decision situations modify results that would occur in an atomistic situation. Wellman and Berkowitz (1988;128) expand this context in their study of communities and provide a global perspective of economic activity by stating that social structures provide a way of going from small scale to large scale (individual-company-industry). From this "community" perspective one can make these conceptual links without imposing a radical discontinuity in analysis; that the "isms" and "zations" which make up markets and communities are not abstract forces but rather patterns of concrete relations between social entities including individuals, groups and organizations (Wellman and Berkowitz 1988). A brief review of groups and the dynamics of group behavior will provide further insight into group processes.

Voluntary Groups

From an organization management perspective, Kast and Rosenweig (1979) define a group as an assemblage, cluster or aggregation of persons related or united by common ties or interests. Sociology emphasizes the dynamics or face-to-face relationships and interactions among individuals. Dessler (1980) cites numerous studies of work place groups and the effect on work group members conformity to group norms. Group norms are special sentiments or laws which emerge to govern functions, outcomes and activities within the group. These norms are an important aspect of the group's cohesiveness which is dependent on the group's attractiveness to its members. Numerous factors influence this cohesiveness including the size of the group, intergroup and intragroup competition, group status, goal congruity, environment and proximity and the stability of relationships in the group (Dessler 1980;296-297).

Kast and Rosenweig (1979;288) cite Homans (1950) who suggest three important concepts of individual behavior in social groups: activity, interaction and sentiment. In essence, the more people are involved in an activity, the more likely they will interact with each other. Further and perhaps more important to the concepts proposed herein is that interaction in one area may often lead to shared activity in unrelated areas and other joint activities. Over time continued activity will increase the likelihood of shared sentiments. Additionally, continued interaction may lead to the adoption of similar value systems (Homans 1950). These aspects of group participation provide the basis for social capital development (Putnam 1993). Social capital development is elemental to researching the influence of antecedent group experience on the adoption and diffusion of ICIs. Because repeat participants in voluntary groups have had their expectations met and they have realized the benefits and the costs of group participation they may be predisposed to involve themselves and their business in an ICI.

The experience of having expectations met is central to the definition of trust formation in a sociological context (Lewis and Weigert 1985). They believe that trust is the property of collective units not isolated individuals. As such, trust relates to relationships of people and not to the state of the individual. Seen in this light, they posit that “trust exists in a social system insofar as members of that system act accordingly and are secure in the expected future constituted by the presence of each other or their symbiotic representations. This definition of trust raises the central question about antecedent group participation. Does prior group participation and trust building experience, provide a crucial element on which the decision to participate in an ICI could be made? The possible connection is worthy of investigation.

Cultural Variations

The adoption of similar value systems among groups may provide yet another measure by which cultural bias issues related to the study antecedent associative group participation can be overcome. Studying groups from diverse areas should reflect the cultural influences of a particular region. Robertson (1987;74) points out that variations occur within cultures as well as across cultures. He adds that modern society tends to have more diverse populations and experiences more rapid cultural changes. The importance of the cultural variances was vividly demonstrated by Freudenburg (1993).

Curtis (1971) and Putnam (1993) both cite de Tocqueville ([1835] 1945:48) who stated that people in the United States are the benchmark by which the rest of the world is measured in terms of their propensity to join voluntary groups. Curtis (1971) cites numerous authors (Bryce 1953; Weber 1911; Myrdal 1944; Bell and Force 1956 and Babchuk and Booth 1969) who echo this sentiment. However, other researchers have sounded a note of dissonance about de Tocqueville's proposition (Wright and Hyman 1958; Hausknecht 1962; Hyman and Wright 1971). Whether de Tocqueville's perspective was true was the focus of a six nation secondary analysis conducted by Curtis (1971).

Curtis looked at studies of voluntary groups in six nations including the United States, Canada, Italy, Mexico, England and Germany. The findings indicated that American and Canadians are indeed "joiners". For these two countries about 60 percent of the respondents reported affiliation with one or more groups including unions. However, only about 50% reported affiliations without union inclusion and only 30 percent reported non-union multiple affiliations. Specifically, direct relationships were found between group membership and education level, income, occupational status, respondent social class, age and married vs. single status. Community size showed varying results with the overall conclusion that community size showed little direct correlation.

These findings represent relative high levels of affiliations for Americans and tend to validate de Tocqueville's statements. In the context of ICIs, they emphasize the importance of understanding the affilial propensity and preferences of members of fragmented industries as another tool in increasing the probability of successfully creating an interfirm collaborative initiative. Consequently, the study of socially diverse groups within fragmented industries companies may offer significant insight into the validity of the impact of previous associative group experience on the diffusion process for ICIs.

<u>Interfirm Collaborative Initiatives in Rural Areas</u>

Rural areas have undergone significant structural changes in the past two decades (Deavers 1991; Schoening 1986; Drabenstott & Smith 1990). Manufacturing companies located in rural areas face increased competition from emerging countries (Beaulieu 1988). In response to the challenges present in these changes, rural manufacturing companies and particularly rural based natural resource manufacturing concerns have sought innovative processes with which to remain competitive (Glasmeier 1991; McNamara & Green 1988; Reid 1991). One of these methods which found its way to the United States from Europe and Japan is the process of interfirm collaboration (Rosenfeld 1994).

The success of high visibility rural based collaborative initiatives takes on added significance in view of Beaulieu's (1988) analysis of rural economies. Fendley and Christenson (1989) cite Beaulieu (1988) who found that extractive industries as well as traditional agriculture are all declining. In addition, mature industrial sectors continue to seek low labor costs offshore in order to remain profitable (Winter 1986). These changes in the structure of rural economies require that local development officials must find viable alternatives to replace declining economic bases (Flora et al 1991).

A series of grants made in 1990 by the NorthWest Area Foundation offer a high profile example of and intentional collaborative strategy development effort. In a review of the resulting rural manufacturing networks, Sommers (1994) reports on the effectiveness of manufacturing networks in rural areas. Based on the European model of network development (Piore and Sabel 1984) several grants were made to test the model in areas of intense economic difficulty.

These networks were located in relatively isolated rural areas with significant geographic and economic barriers.

Sommers (1994) found that each of several interfirm collaborative projects in the northwest United States had achieved some degree of success. Rosenfeld (1993) determined that regardless of the difficulties, rural networks can be successful. Further, Rosenfeld reports that networks, have considerable potential to improve competitiveness and expand opportunities in diverse rural economies (Rosenfeld 1995).

For example, an ICI organization in which the principal author was involved was established specifically to assist the development of cooperative marketing networks for small furniture and cabinet makers, address issues relating to employee training, management training, technology transfer and information dissemination.

Marketing network development efforts of that ICI organization have included the establishment of a for profit manufacturer's showroom, a full color hardcopy catalog and an electronic version on the Internet, a home furnishings manufacturer's tradeshow in a large home furnishings show, special promotional agreements retail home furnishings outlets, magazine and newspaper advertising and numerous other related activities. Employee training programs are primarily focused around the use of vocational -technical institute programs developed and targeted for small woodworking companies. Management training has been provided through a series of seminars defined by a consensus of member company managers. These seminars are then conducted by local university and government officials, industry experts and Small Business Development Center personnel. Technology transfer is often facilitated by universities and other public sector agencies, again on the basis of consensus opinion, need and on a case-by-case basis. Not all ICI members participated in each opportunity, but all were made aware of the opportunities and afforded access to them.

Rural Fragmented Industries

Until recently the collective behavior of these companies has been largely ignored (Astly and Fombrum 1987; Dollinger 1990; Sommers 1992). However, the role of small business in the economy has been appreciated by the public sector for years. Steinhoff and Burgess (1989; Pp. 5) cite the Sherman Act of 1898 as evidence of United States government policy aimed at maintaining competition in the business community by providing anti-monopoly protection and hence opportunity for small business. In addition, they state that small businesses make up 99 percent of all non-farm enterprises in the United States (Steinhoff & Burgess 1989; Pp. 6). These authors also state that mass production must have small specialized businesses in order to distribute their goods and services.

Dollinger (1990) cites Dess (1987) and Porter (1980) who characterize fragmented industries as consisting of small competitively weak companies that experience intense competition. Dollinger (1990) believes that small powerless businesses have an option to "all against all" competition. He acknowledged the "special problems" faced by fragmented industries in the development of collective efforts and says that only the deliberate organization of a formal entity changes collective actions from emergent to intentional strategies. Dollinger (1990) cites Astley and Fombrum (1983) who define collective strategy as a "systematic response by a set of organizations in order to absorb the variation present in their environment".

A powerful and compelling reason for studying fragmented industries of small companies lies in the concept of industrial dualism (Piore and Sabel 1984; Pp. 27). Industrial dualism states that craft production is necessary whenever there is a fluctuation or relatively low level of demand in a market that makes it too uncertain or when the market opportunity is too small for the mass producers to participate. The economic concern for the mass producer in these situations is the lack of economies of scale which may occur when:

1. A product or service is labor intensive.
2. The job skill requirements are very high on a per item basis.

These conditions may lead to situations where the application of mass production processes are inappropriate or infeasible. Piore and Sable (1984) depict such a situation when describing the primary differences between the nature of mass production and craft production. In general terms mass production is the creation of general goods through specialized resources yet the special-purpose machinery used in mass production cannot itself be mass-produced.

Small firms survive in niche environments by supplying demand or by responding to changes in demand by virtue of their adaptability and flexibility. For example, rapidly changing customer tastes or the customer’s willingness and ability to pay the additional production costs for personalized items provide the niche opportunity for the craft production operation. As such, craft production is seen as a necessary complement to mass production. Further, because most markets are dynamic, one must assume that the above situation will continue for the foreseeable future. In addition, Piore and Sabel (1988; pp.191) offer price differentiation as another reason why customized products/services producers can compete in markets. They state the smaller the difference in the selling price of mass-produced and custom goods the easier it is to attract customers away from the mass-produced goods.

Conclusion

Interfirm Collaborative Initiatives are those activities which are intended to bring about cooperation and collaboration between three or more firms. These activities by definition are precursor in nature and should not be confused with networks which are three or more firms working together characterized by some degree of interdependence.

Interfirm Collaborative Initiatives are important because they represent a set of purposeful activities with the specific objective of creating interfirm collaboration. Unlike unplanned emergent collaboration which may develop in dyadic relationships, the purposeful nature of these collaboration development activities provide viable competitive strategies for groups of three or more businesses and entire industries.

Numerous factors such as economic conditions, competitive factors, and technology related issues, labor cost concerns, resource availability and numerous other factors influence the decision of persons considering joining ICI organizations. The study of the antecedent group activity of ICI participants can provide valuable insight to policy makers and implements attempting to introduce ICI concepts as methods of enhancing economic development in fragmented rural based industries. Knowledge of how ICI and network participants utilize voluntary groups will provide significant insight into methods of communication, priority development and methods of service delivery for ICI implementers and network managers.

Research has shown the process of network development to be protracted and fragile (Rosenfeld 1995; Lichtenstein 1992). In addition, political issues and limited resources further complicate the measure of cost effective results from formal network efforts. Consequently, knowledge of the predisposition of sector specific trendsetters in any area could constitute the difference between success and failure in economic development efforts which seek to implement ICIs.

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