

**Driving Forces and Success Factors
for
Mergers, Acquisitions,
Joint Ventures, and Strategic Alliances
Among Local Cooperatives**

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Abstract

The trend toward greater consolidation in agricultural production and in agribusiness is creating the conditions that squeeze local farm supply and grain marketing cooperatives from three directions. As farms become larger and fewer in number, each individual farmer-customer is more critical, making relationships and services offered more important than ever before. At the same time that each customer has a greater impact on the cooperative's bottom line, the competition is also consolidating, creating a fiercer "survival of the fittest" marketplace. On the other side of the local cooperatives' business, suppliers and grain marketing firms are also fewer and larger, limiting choice and bargaining power for local cooperatives. In response, local cooperatives are engaging in a variety in business arrangements, including strategic alliances, joint ventures, mergers, and acquisitions. This paper has two objectives. The first is to examine the driving forces that motivate local cooperatives to get involved in strategic alliances, joint ventures, mergers and acquisitions. The second is to examine the relative importance of factors in the success of these new business arrangements.

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Preface

The data for the analysis in the paper was obtained from 70 locally owned cooperatives in Colorado and Indiana (35 in each State). In-person interviews with the managers were conducted in the spring of 2000 and data was collected on level of sales, number of employees, and the volume of business that would be lost to the local economy if the cooperative were not operating.

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Highlights

Local cooperatives are a varied group. Sizes range from less than 1,000 members to more than 4,000 and from less than \$15 million in sales to more than \$60 million. Non-member business is also an important source of sales for local cooperatives. They are adopting information technologies in varying degrees, favoring those applications related to operations management. In addition, there are some differences between cooperatives in the Great Plains and the Eastern Corn Belt, as characterized by the type and number of business activities cooperatives in which the two regions are engaged.

The most important factors that motivate mergers, acquisitions, joint ventures, and strategic alliances (decreasing number of farms, increased costs, the industrialization of agriculture, increased competition, decreased profits) are directly related to consolidation of agribusiness and the industrialization of agriculture. Cooperatives seem to be turning to these business arrangements to deal with the challenges presented by this trend toward consolidation in production agriculture and agribusiness.

Key factors that contribute to the success of mergers, acquisitions, joint ventures and strategic alliances are related to interpersonal dynamics: trust, communication, commitment, and having managers that can work together as a team.

Results suggest that training for cooperative personnel and boards needs to include communication skills, trust building, and team-building exercises. Cooperative managers and other personnel are key to the success of a merger, acquisition, joint venture, or strategic alliance.

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Introduction

Increasingly, local agricultural cooperatives are wrestling with challenges resulting from the consolidation of agricultural production. In 1969, there were 2,730,250 farms in the U.S.; by 1997 the number had dropped to 1,911,859, down 30 percent. At the same time, the average size of a farm had grown 25 percent from 389 acres to 487 acres (U.S. Department of Commerce 1974, Census of Agriculture 1997). As the number of farms decreases and the amount of business conducted with remaining farms grows, each farm customer becomes more crucial to a local agricultural supply and grain marketing cooperative.

The competition for the farm dollar grows more aggressive. Cooperatives are courting fewer customers, each with greater buying power. Both the farm supply (seed, chemical and feed) and grain industries have been consolidating, leaving fewer players to compete for business from the remaining producers.

In addition, the key firms in these industries are, in many cases, also the local cooperative's suppliers or grain customers. This means fewer choices for the cooperative when it comes to deciding whom to buy from and sell to, reducing the local cooperative's bargaining power.

This environment of consolidation results in the local agricultural supply and grain marketing cooperatives struggling with simultaneous challenges on multiple fronts. For many, the response is structural change (Cummins 1993, 1999; Warman). During the course of this research, the managers of local cooperatives were surveyed to identify the types of business arrangements they are using for structural change, including mergers, acquisitions, joint ventures, and strategic alliances with other cooperatives or with investor-oriented firms. Cooperative membership is often reluctant to pursue mergers, for fear of losing the firm's identity and the quality of service to which they are accustomed (Reynolds). Instead, many cooperatives form joint ventures and strategic alliances to share the burden of a project, while retaining the cooperative's identity (Liebrand and Spatz). Reynolds also comments that experience with joint ventures tends to ease the transition during a merger for both members and management.

This paper has two objectives. First, examine the driving forces that motivate local cooperatives to get involved in strategic alliances, joint ventures, mergers and acquisitions. Second, examine the relative importance of factors in the success of these new business arrangements.

This section describes the data used in this analysis and provides some descriptive statistics of the cooperatives that participated. The third section discusses and analyses cooperative restructuring activities. This is followed by conclusions and recommendations for cooperative managers.

Data and Descriptive Statistics

Seventy local agricultural supply and grain marketing cooperatives in Indiana and Colorado, 35 in each state, were surveyed during May and June of 2000. Interviewers conducted in-person interviews with the general managers. Each interview used a standard survey instrument and was conducted by the same interviewer in each state.

The survey instrument had five sections. Descriptive information about the cooperative, including size of market territory, lines of business, and size of the cooperative was collected from a series of questions in the first section. The second section focused on the cooperative's impact on the local economy and asked about number of employees and value of business in the local community. The third section asked managers to rate, using a 5-point Likert scale, the importance of driving forces and success factors for mergers, acquisitions, joint ventures, and strategic alliances. The managers were also asked open-ended questions about business trends and the impact of the changing agribusiness environment on their cooperatives. Section four asked questions about the cooperative's financial performance and its decision-making process. The final section inquired about emerging issues facing cooperatives.

Lines of Business

Local cooperatives were engaged in a number of businesses – farm supply, grain marketing and administrative services. Farm supply has four main divisions:

agronomy, energy, retail farm supply, and feed. Sixty-nine cooperatives (34 in Indiana, 35 in Colorado) tallied the businesses in which they were engaged. Table 1 shows the number of cooperatives in each state, their business activity and the corresponding percentage of respondents.

Some of the Colorado cooperatives are more specialized and focused in their product offering than those in Indiana. Examples include cooperatives that focus on a specific division, such as only marketing, grain, or offering products and services aimed at customers who grow a specific crop, such as onions or potatoes. Other Colorado cooperatives have a wider offering in the major divisions, although there is a tendency to not maintain all five major divisions.

Indiana cooperatives, by contrast, are more consistent regarding products and services offered. They offer a wide range of products and services, with 79 percent or more of these responding that they are engaged in each of the five major divisions.

This difference between the products and services offered by local cooperatives in Colorado and Indiana is due to two factors. First is the type of agricultural production. Colorado's agriculture is more diverse due to topography and its associated climatic differences that ranges from high

Table 1: Cooperatives Involved in Specific Lines of Business²

Line of Business		Number of firms involved in this line of business		Percentage	
		CO	IN	CO	IN
Farm Supply					
<u>Agronomy Division</u>					
	Seed Sales	24	34	69	100
	Chemical Sales	25	34	71	100
	Fertilizer Sales	24	34	69	100
	Agronomic Consulting	16	31	46	91
	GPS Mapping	4	30	11	88
	Variable Rate Fertilizer/Chemical Application	8	30	23	88
<u>Energy Division</u>					
	Petroleum Supply (Bulk Fuel)	24	28	69	82
	Gas at the Pump	23	21	66	62
	C-Store	15	15	43	44
	Liquid Propane Supply	20	25	57	74
	Retail Farm Supply Store	27	22	27	63
<u>Feed Division</u>					
	Feed Sales	22	28	63	82
	Toll Milling	10	12	29	35
	Livestock Nutrition Consulting	13	25	37	74
	Animal Health Products	19	26	54	76
Grain Marketing					
<u>Grain Division</u>					
	Grain Handling	19	30	54	88
	Commodity Brokerage Services	15	7	43	21
	Identity-Preserved Grain Contracts	18	15	51	44
Administrative Services					
<u>Financing</u>					
	Crop Input Loans	8	23	23	68
	Operating Loans	5	15	14	44
	Livestock Production Loans	6	8	17	24
	Feed Loans	5	10	14	29
	Crop Insurance	2	5	6	15
	Electronic Ordering	3	7	9	21

²35 responding in Colorado, 34 in Indiana

plains to mountain regions. This results in a greater range of crops, including wheat, corn, sorghum, fresh fruits and vegetables, potatoes, cattle, sheep, and hogs. Indiana's climate and terrain are relatively homogeneous, favoring traditional Corn Belt crops such as corn, soybeans, wheat, and hogs.

A second factor is the manner in which cooperatives were established. Indiana Farm Bureau organized many of the Indiana cooperatives within a 5-year period in the late 1920s and early 1930s³. More diverse groups of producers established the cooperatives in Colorado over a wider period of time.

Cooperative size

Figure 1 shows the percentage of responding cooperatives that fall into each of five groups based on the number of members. Figure 2 shows the percentage of total membership of all cooperatives, responding to the survey, which is accounted for by each cooperative size category. While almost half of all responding cooperatives (47 percent) had less than 1,000 members, firms in this category only accounted for 13 percent total cooperative membership represented in this survey. Likewise, the largest cooperatives (4,000 or more members) represent only 12 percent of the responding firms, but account for 51 percent of total cooperative membership.

³ Many still include Indiana Farm Bureau Cooperative in the corporate name.

Figure 1 – Responding Cooperatives in Each Size Category (Size Category by Number of Members)

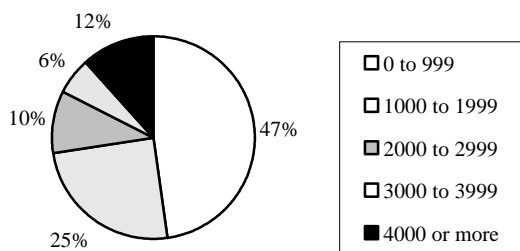


Figure 3 – Responding Cooperatives in Each Size Category (Size Category by Fiscal 1999 Sales)

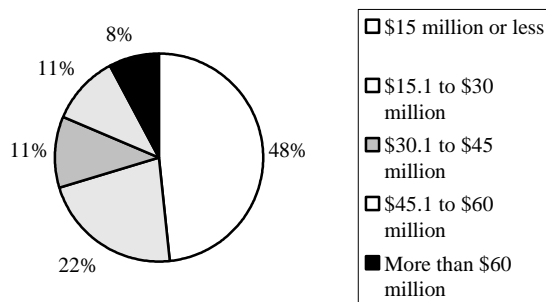
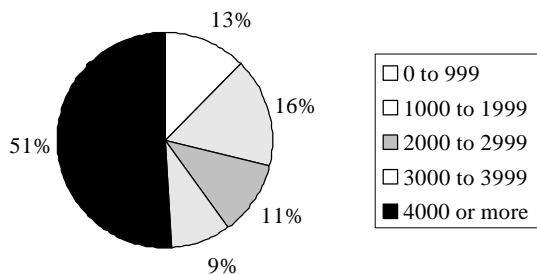


Figure 2 – Responding Cooperatives' Membership in Each Size Category (Size Category by Number of Members)



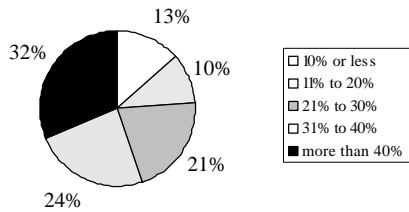
million. Thirty percent had sales in excess of \$30 million.

Source of Business

All examples in this sample are open cooperatives, allowing business to be conducted with non-members. When asked, 56 percent of the respondents indicated that more than 30 percent of their business volume is conducted with non-members (Figure 4). Nearly a third (32 percent) indicated that non-members accounted for more 40 percent of their business volume. For many cooperatives, non-members have become an important source of business.

Figure 3 shows the percentage of responding cooperatives that fall into five categories, grouped by level of total sales for fiscal year 1999. Even though these firms are locally owned, they are not necessarily small firms. More than half (52 percent) had sales exceeding \$15 million for fiscal 1999. Total sales in fiscal 1999 for local cooperatives in Colorado and Indiana ranged from less than \$15 million to more than \$60

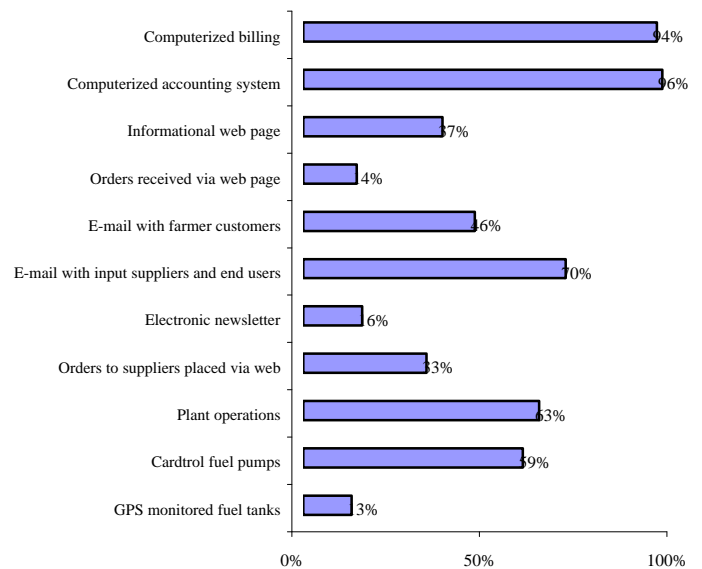
Figure 4 – Responding Cooperatives in Each Volume of Business Category (Category by Percent of Business Attributed to Non-Members)



Technological Adoption

Local cooperatives are bringing information technologies into their operations, particularly for internal and business-to-business applications. Figure 5 shows the percentage of respondents that have adopted specific information technology applications. Information management applications for internal use are the most prevalent. Most respondents used computerized billing and accounting systems. Computerized plant operations, which includes equipment such as inventory computers for delivery trucks and GPS-monitored herbicide tanks, were used by 63 percent of the cooperatives. Both e-mail and Web-based ordering is more commonly used with suppliers, in a business-to-business environment, than with customers. Of the cooperatives that maintain their own Web pages, a little more than a third offer Web-based ordering to their own customers.

Figure 5 – Use of Computerized and Automated Operations by Sample Cooperatives



Analysis of Restructuring Activities

Data on Restructuring

Local agricultural cooperatives are restructuring to meet the challenges presented by consolidation in agribusiness. To gain insight on how local agricultural cooperatives are using mergers, acquisitions, joint ventures and strategic alliances to remain competitive, managers were asked a series of questions about their restructuring activities. Managers were first asked whether their cooperative had participated in a merger or acquisition in the last five years. If the reply was affirmative, they were asked to describe the nature of the activity and rate how successful each was. In addition, based on their experience with these business arrangements, they were asked to rate the importance of eight driving forces that might motivate a merger or acquisition. These questions used a Likert scale, with a score of 5 being most important and a score of 1 being least important. They were also asked

to rate the importance of a set of 10 factors that could contribute to the success of a merger or acquisition, again using a Likert scale. A similar set of questions was asked about the firm's participation in joint venture and strategic alliance agreements, and results are presented in the following sub-sections.

Mergers and Acquisitions

In this section, we focus on the driving forces and success factors, from the perspective of managers, for mergers and acquisitions. Managers were asked to rate these factors on a Likert scale from 1 to 5, with 5 being very important. From these ratings a weighted mean rating for each factor was calculated. Figure 6 presents the weighted means for the driving forces behind mergers and acquisitions, while Figure 7 presents the results pertaining to the success factors for these arrangements.

Figure 6 reports the mean ratings that managers assigned to factors that motivate mergers and acquisitions for local cooperatives. The highest mean values correspond with the factors of decreasing number of farms, increased costs, decreased profits, increased competition, and the industrialization of agriculture. These are the factors directly related to consolidation of production agriculture and agribusiness and the industrialization of agriculture. Of less impact for motivating mergers and acquisitions are the factors not directly related to consolidation and industrialization, such as government regulations and needing cash.

Figure 6 Weighted Mean Ratings for Driving Forces for Mergers and Acquisitions

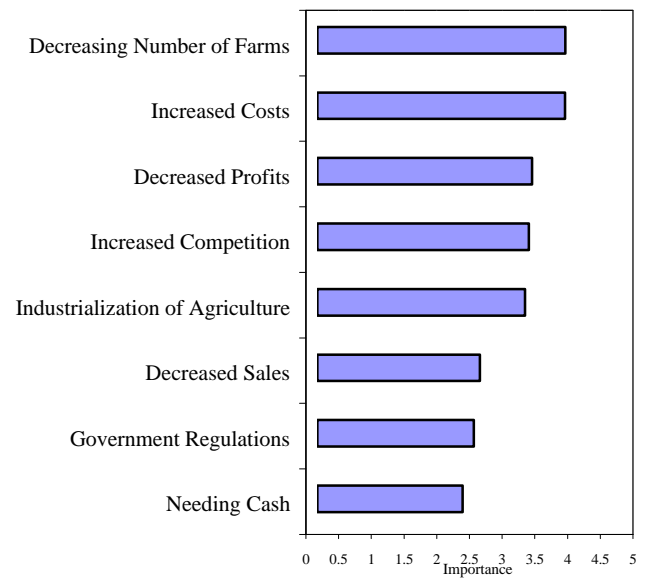


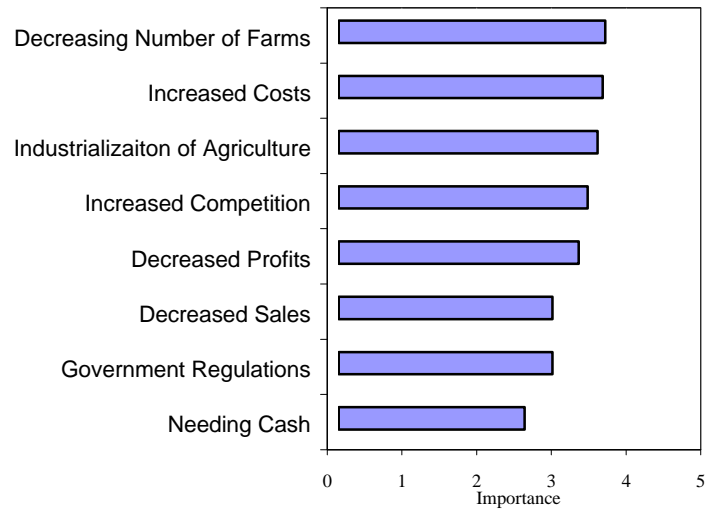
Figure 7 reports the mean ratings that managers assigned to factors that contribute to the success of mergers and acquisitions. Those factors with the highest mean values include communication, trust, achieving overall synergies, and managers working well together. Those with the lower mean values included keeping egos in check, decreased costs, having common goals, the financial stability of the firms, and increased sales.

Of key interest from this set of results is that the highest ranked factors consist of those directly related to interpersonal dynamics among the personnel involved. More tangible factors, such as decreased costs, financial stability of the firms, and increased sales were assigned lower ratings by the managers.

Figure 7 – Weighted Mean Ratings for Success Factors for Mergers and Acquisitions



Figure 8 – Weighted Mean Ratings for Driving Forces for Joint Ventures and Strategic Alliances

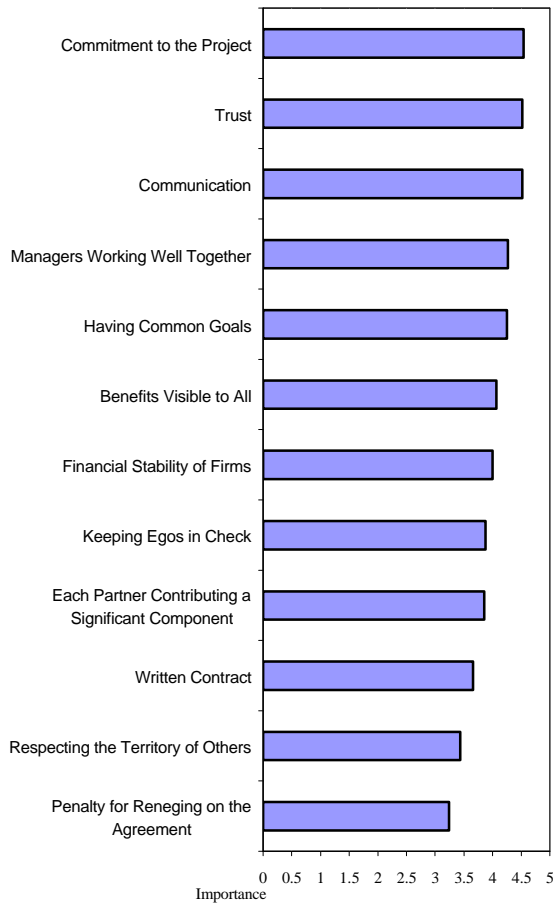


Joint Ventures and Strategic Alliances

Figure 8 reports the mean ratings that managers assigned to driving forces for joint ventures and strategic alliances for local cooperatives. Factors with the higher mean values included decreasing number of farms, increased costs, the industrialization of agriculture, increased competition, decreased profits, decreased sales, and government regulations. These factors are heavily influenced by factors directly related to consolidation and industrialization, while the lower ranked factors are not related to these trends.

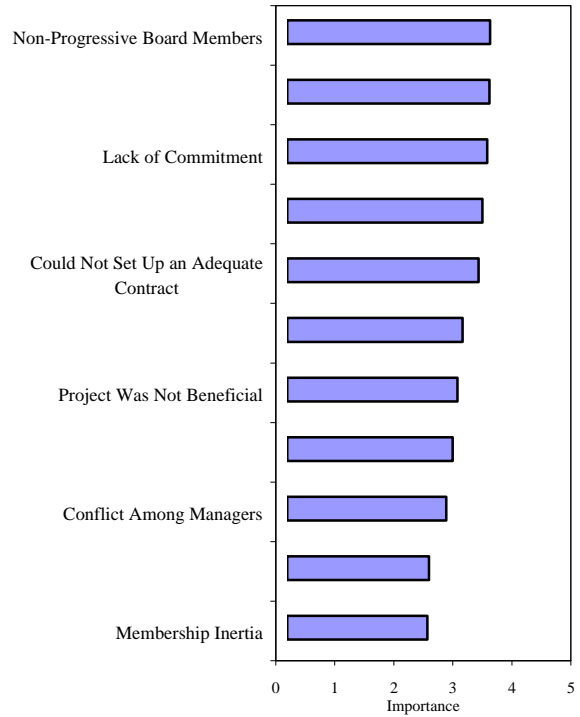
Figure 9 reports the mean ratings that managers assigned to factors that contribute to the success of joint ventures and strategic alliances for local cooperatives. The factors with the highest rankings include commitment to the project, trust, communication, managers working well together, and having common goals. Again, as with mergers and acquisitions, the group with the highest means is greatly influenced by success factors related to the interpersonal dynamics of joint ventures and strategic alliances, particularly commitment, communication, and trust.

Figure 9 – Weighted Mean Rating for Success Factors for Joint Ventures and Strategic Alliances



The managers were also asked whether they had considered any joint ventures or strategic alliances in the last five years that had not been pursued. Those that had were asked to rate factors contributing to their decision to not enter into the agreement(s) in question. Figure 10 shows a list of these factors and their weighted means.

Figure 10 – Weighted Mean Ratings for Factors for Not Entering into Joint Ventures and Strategic Alliances



Conclusions

Local agricultural cooperatives are facing the challenge of remaining competitive in a business environment characterized by consolidation of customers, competitors and suppliers, plus other cooperatives. To remain competitive, many cooperatives are participating in mergers, acquisitions, joint ventures, and strategic alliances.

Sizes of local cooperatives range from less than 1,000 members to more than 4,000 and from less than \$15 million in sales to more than \$60 million. Non-member business is also an important source of sales for local cooperatives. They are adopting information technologies in varying degrees, favoring applications related to operations

management. There are some differences between cooperatives in the Great Plains and the Eastern Corn Belt, as characterized by the nature of business activities in which cooperatives in the two regions are engaged.

The most important factors that motivate mergers, acquisitions, joint ventures and strategic alliances (decreasing number of farms, increased costs, the industrialization of agriculture, increased competition, decreased profits) are directly related to consolidation of agribusiness and the industrialization of agriculture. Cooperatives seem to be turning to business arrangements to deal with the challenges presented by consolidation in production agriculture and agribusiness.

The key factors that contribute to the success of mergers, acquisitions, joint

ventures and strategic alliances are related to interpersonal dynamics: trust, communication, commitment, and having managers that can work together as a team. This supports the earlier results of Fulton et al, and van Duren et al. Or, as one member of the M&A Group⁴ stated in a roundtable discussion in the *Harvard Business Review*, "...we communicate, communicate, communicate (Carey)."

These conclusions suggest that training for cooperative personnel and boards needs to include communication skills, trust building, and team building exercises. A member of the M&A Group pointed out that the most important investment by a firm is in its personnel (Carey). The managers and other personnel are key to the success of a merger, acquisition, joint venture or strategic alliance by a cooperative.

⁴ The M&A Group is a forum for chief executive officers to discuss business strategy specific to mergers and acquisitions.

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