Mapping Strategic Consensus

Paul L. Stepanovich, Old Dominion
James D. Mueller, College of Charleston

Strategic consensus generally refers to the extent that organizational members are in agreement with strategic priorities. While alternative methods for measuring consensus exist, the authors extend previous studies that have successfully applied conjoint analysis in capturing managerial opinions. The processes of collecting and interpreting data through conjoint analysis and reporting the results through the construction of cognitive maps is explained and illustrated. The techniques explored can be applied to all levels of an organization in the identification, communication, and subsequent alignment of strategic priorities and initiatives.

An integral part of the strategic management process is determining performance areas that are critical to the organization's success. The subsequent prioritization of these areas, often termed critical (or key) success factors, is considered by many to be a prerequisite for developing appropriate strategic initiatives for the organization (Rockart, 1979; Leidecker &Bruno, 1984; Vasconcellos e Sa' & Hambrick, 1989). The processes of communicating and achieving commitment to strategic initiatives are often thought to be equally important for successful strategy implementation. All of these activities—identifying, prioritizing, communicating, achieving commitment to, and implementing strategic initiatives—comprise the strategic alignment process.

As discussed in this paper, at least three sub-constructs of strategic alignment can be identified in the literature. External strategic alignment entails matching a firm's resources, capabilities and strategies with the demands of the external environment— customers, competitors, regulators, owners, community, etc. Internal strategic alignment is concerned with the coordinated mobilization of the firm's internal resources in strategy implementation. Both external and internal alignment involve a "meeting of managers' minds" to attempt a consensus of opinion before strategic decisions are made or strategies are implemented. Strategic consensus, then, is identified as a third component of the strategic alignment paradigm.

Since a direct meeting of humans' minds is not yet possible, managers often rely on a variety of cognitive mapping techniques to facilitate understanding of complex issues (Eden, 1992; Bougon, 1992) . Of particular relevance are those used to elucidate strategic thinking (Huff, 1990), scenario development (Warren, 1995), strategic options development and analysis (or SODA) (Eden, 1989), and strategy alignment (Broadbent & Weill, 1993; Thomas & Dewitt, 1996; Chan et al., 1997).

The purpose of this paper is to present conjoint analysis as a method for measuring the degree of consensus among members of an organization regarding strategic issues and options.

While conjoint analysis has been used in previous studies at the top management team level (Priem, 1990; 1992; 1994), we complement this research by using the resultant data to construct cognitive maps that represent managerial consensus. We first distinguish between external alignment, internal alignment, and consensus through a review of extant literature. We then discuss the application of conjoint analysis as a tool for collecting and analyzing managerial consensus of opinion. Finally, in a sample application of the technique, we show how the resultant data can be used in the construction of cognitive maps to assist organizations in the external and internal strategic alignment processes.

BACKGROUND LITERATURE: THE STRATEGIC ALIGNMENT-CONSENSUS CONSTRUCT

The construct of strategic alignment is widely discussed in the literature and is represented by a variety of descriptive labels (see Table 1). While some of the terms shown in Table 1 appear to be differentiated on semantics alone, it appears that there are at least three distinct sub-constructs within the alignment literature. For the sake of simplicity, we label these three constructs external alignment, internal alignment, and consensus.

TABLE 1
Expressions of Strategic Alignment and Consensus

Term *Source*	Meaning and/or Context
Strategic Fit *Naman & Slevin, 1993*	Alignment of firm's strategy with external environment
Strategic Fit; Strategic Compatibility *Newport et al, 1991*	Consistency and compatibility among strategies and their implementation within and between corporate, business, and functional levels in an organization
Corporate Coherence *Hambrick, 1997*	Integrated logic and basis for action within a company--its unity of action
Organizational Alignment *Powell, 1992*	Compares I/O strategic management paradigm with organizational alignment paradigm
Strategic Alignment *Henderson & Venkatraman, 1999*	Strategic Management of Information Technology Two parts: strategic fit and functional integration
Strategic Marketing Fit *Smith et al. 1995*	Alignment of manufacturers and retailers
Strategic Consensus *Floyd & Wooldridge, 1992*	Alignment of strategy with middle and operating managers' understanding, support, and commitment
Strategic Consensus *Priem, 1992*	Internal alignment of top management team
Manager-Strategy Alignment *Kerr & Jackofsky, 1989*	Alignment of managers with strategy through management development
Manager-Strategy Alignment *Szilagyi & Schweiger, 1984; Herbert & Deresky, 1987*	Alignment of managers with strategy through management selection process
Acculturation Incongruence *Nahavandi & Malekzadeh, 1988*	Alignment of acculturation process in post-merger firms
Goal Congruence *Witt, 1998*	Alignment of supervisor subordinate goals and priorities
Value Alignment *Mayer & Schoorman, 1998*	Degree to which employee and employer values are aligned
Strategic Coalignment *Venkatraman, 1990*	Alignment of three functional areas of business: marketing, manufacturing, and administration
Market Alignment *Cobb, et al., 1998*	Alignment of firm strategy with customer wants and needs

Arguably the most widely used definition of external strategic alignment relates to the "goodness of fit" between a firm's resources and the environment in which it operates. More precisely, "fit" has been defined as the degree to which a firm has adjusted and can adjust to environmental structure, processes and strategic characteristics (Naman & Slevin, 1993). This process of adjustment is the essence of the strategic management paradigm. It is the fundamental SWOT model, or in Mintzberg-speak, the "design school" model (Mintzberg, 1990). The relationship between fit and alignment has been summarized, "Optimum fit equates to maximum profit and, by assumption, needs no further justification." This (SWOT) model, sometimes called the "alignment" model, dominates the teaching and research of strategy. It takes all the issues that might upset the firm's progress toward its goals, whether they occur within the firm or within its environment, and relocates them at one or the other of these interfaces (Spender, 1992).

While industrial organization (IO) economists generally hold that firm performance is best explained by emphasizing the importance of external (industry) factors (Porter, 1980), and proponents of the resource-based view (RBV) of the firm (Barney, 1991; Wernerfelt, 1984) tend to emphasize internal factors, both paradigms share the SWOT model as a basic tool of strategy development. This process of external alignment, for both schools of thought, is the essence of strategy formulation.

In contrast, internal alignment is addressed primarily in the strategy implementation and strategic change literature (Day, 1999; Hambrick & Cannella, 1989; Kilman, 1989; Tichy, 1983). Research has been conducted in terms of vertical alignment (Newport et al, 1991; Floyd & Wooldridge, 1992), horizontal alignment (Venkatraman, 1990), and within top management teams (Priem, 1990; 1992). While these studies generally posit the need to keep the organization's resources internally aligned during strategy implementation, particular import is placed on alignment during times of strategic change, *e.g.*, in the implementation of new strategies and processes, change of leadership, or in post merger/acquisition activities (Nahavandi & Malekzadeh, 1988; Shanley & Correa, 1992).

Alternative labels have been used to represent the internal alignment construct. Newport *et al.* (1991) use the term "fit" to describe the "consistency and compatibility among strategies and implementation within and between corporate, business, and functional levels in an organization." Hambrick's (1997) "corporate coherence" is "an integrated logic and basis for action within a company—its unity of purpose, its unity of action." Additionally, Helton (1991) expresses the degree of "organizational alignment" in terms of the amount of time managers spend on core activities. Regardless of terminology, internal alignment appears to be a measurement of action, or the degree to which an organization is following expressed strategies. Consensus, on the other hand, is more a measure of intent—the degree to which organizational members are in agreement concerning what should be done with respect to choice of strategy—not a measure of what actually occurs. Strategic consensus has been investigated both at the top management team (TMT) level (Dess, 1987; Wooldridge & Floyd, 1989; Priem, 1990; Homburg et al., 1999) and with managers at the operational level (St. John, et al., 1991; Floyd & Wooldridge, 1992). While there is not complete agreement in the literature, there is strong evidence to suggest that at least in some areas of the organization, managerial consensus does lead to increased performance (Bourgeois, 1980; Priem, 1990; St. John *et al.*, 1991; Homburg *et al.*, 1991; Lindman *et al.*, 2001).

Just as a variety of labels exist for alignment, the consensus construct is also represented by a number of aliases: manager-strategy alignment (Szilagyi & Schweiger, 1984, Herbert & Deresky, 1987; Kerr & Jackofsky, 1989), goal congruence (Witt, 1998), value alignment (Guth, 1965), organizational commitment (Mayer & Schoorman, 1992; 1998), commitment (Guth & MacMillan, 1986), and acculturation congruence (Nahavandi & Malekzadeh, 1988), to name a few. Cobb *et al.* (1998) use market alignment to capture not only consensus, but also external and internal alignment as well. Here, market alignment is: (1) a measure of the internal consensus of perceptions about what customers want; (2) a measure of the difference between internal perceptions of customers' wants and actual customer want (what we term external alignment); and (3) a measure of employee understanding of the appropriate courses of action needed to satisfy these wants. (If it is assumed employees act effectively on this understanding, then this would correspond with internal alignment. Absent effective employee action, this is more a measure of communication effectiveness).

To summarize our interpretation of the consensus-alignment construct, external alignment is said to occur when there is an "appropriate" matching of a firm's resources with the external environment, *i.e.* an appropriate strategy has been selected. An organization is said to be internally aligned when managers in an organization are acting in accordance with this strategy—*i.e.*, the strategy is being effectively implemented. Strategic consensus is simply the degree of agreement that exists with respect to any issue or option of strategic importance.

Given these terms of reference, a number of conditions could theoretically exist in an organization, as is illustrated in Table 2. Intuitively, one would expect that a higher level of managerial consensus on the appropriateness of a strategy would help to ensure commitment to that strategy, and that this commitment would increase the likelihood of successful strategy implementation. While we do not disagree with this conventional wisdom, we are leaving it to other researchers to continue the investigation into whether a high degree of consensus and/or internal strategic alignment leads to increased performance. This paper, rather, is intended to complement existing research in the field by presenting conjoint-generated cognitive maps as an operable alternative for measuring strategic consensus. In the ensuing discussion, we illustrate how the technique can be used to assist in the prioritization of strategic issues and in the identification of individual and group preferences for strategic options.

Conjoint analysis is a marketing research technique designed to measure the trade-offs that occur in the minds of consumers among alternative product profiles (Green & Rao, 1971). It uses experimental design and analysis of variance to analyze preferences among combinations of product factors. It was developed as an alternative to traditional importance ratings of product attributes. Unlike a simple rating of importance (where everything might be important) conjoint analysis forces consumers to choose among alternative profiles. For example, in the design of an automobile, designers much choose among performance, comfort and price, that is, designers must "trade-off" among these factors. If consumers are asked to indicate the importance of these factors, they could easily say all are important. Designers, however, cannot provide an automobile that has simultaneously high performance, high comfort and low cost. The challenge is to identify the combination of levels within factors that will yield the highest utility and market share.

TABLE 2
Sample Permutations of the Alignment-Consensus Construct

Condition	Example
High External Alignment Low Consensus	An organization's selected strategy is "right" but not everyone is in agreement
Low External Alignment High Consensus	Everyone agrees on the choice of strategy, but it is absolutely the wrong thing to do
High External Alignment Low Internal Alignment	A great strategy has been selected, but has been poorly implemented
Low External Alignment High Internal Alignment	A poor strategy is perfectly executed
High Consensus Low Internal Alignment	Managers are in complete agreement about what should be done, but are completely inept at mobilizing resources in implementation
Low Consensus High Internal Alignment	Despite low managerial consensus on appropriate courses of action, the actions of the firm's employees are highly concerted

In a conjoint design, factors (product characteristics) are identified along with levels within each factor. Consumers are presented with combinations of the factor levels that represent alternative product packages. In the automobile example, the factors might be performance, comfort and price. The levels might be high and low performance, high and low comfort, and high and low price. One package or combination could represent the ideal design, that is, high performance, high comfort and low price. Another might be low performance, low comfort and high price. Obviously, this would not be preferred. While the extremes are easy to identify, the intermediate combinations are more difficult. How would a consumer rate the combinations of high performance, high comfort and high price; high performance, low comfort and high price, and; low performance, high comfort and low price? When forced, will they prefer price or comfort or performance?

In a full factorial design, all possible combinations (eight packages) would be presented to the consumer for a ranking of preference. Repeated measures analysis of variance provides utility weights for each individual for each factor. These weights allow the researcher to "model" alternative product packages to predict a preference for each individual. In most applications, a full factorial design is not possible. For example, with six factors and three levels each, the researcher would need to present consumers with 729 packages to evaluate. Fortunately, fractional factorial designs are available that allow consumers to evaluate relatively few packages, for example sixteen to twenty, and still provide utility weights on the main factors. The fractional factorial design confounds interaction effects.

Regarding reliability, Bateson *et al.* (1987) conducted an extensive study of reliability in conjoint and found that the mean reliability correlation was .75. With respect to validity, Green and Srinivasan (1990, p. 13) summarize the research in this area and conclude, "In sum, the empirical evidence points to the validity of conjoint analysis as a predictive technique."

Thus, conjoint analysis measures an individual's utility of product characteristics in a forced-choice context. The interest in this study is to apply the conjoint technology to another forced-choice situation, that of preference of strategic alternatives among decision-makers within an organization. As previously mentioned, conjoint analysis has been used to measure alignment within the top management team (Priem, 1990; 1992), strategic thinking (Bronn & Olson, 1999), and strategic judgment (Priem & Harrison, 1994). We propose using this technique as a means for assessing consensus on a broader organizational basis. Specifically, this pilot study explores the use of conjoint analysis in quantifying the degree of consensus among and between decision-making and planning groups in an organization. The hypothesis is that the variation among the weights of the factors can be used as an indicator of the degree of consensus among decision makers.

METHOD

A small not-for-profit organization (35 employees) was embarking on a strategic change initiative and agreed to participate in the consensus measurement exercise. The organization provides services to business in an urban area of about 1.2 million people. The organization used to consist of five independent offices but these were merged in the early 1990s. The new umbrella organization centralized several functions but retained the regional offices.

The organization has been experiencing external environmental pressures and has recently embarked on a major strategic change initiative. As a result, the leadership expected that there would be disagreement or confusion among employees regarding the direction of the organization. Thus, a primary objective in this study was to provide an initial measurement of consensus prior to a strategic planning initiative. They were particularly interested in getting a baseline measurement of consensus from which to gauge future efforts. They were interested in an overall measure of consensus for the organization and, to a lesser extent, were interested in the consensus among three levels within the hierarchy.

The first step in the consensus measurement process consisted of identifying the appropriate conjoint factors and levels. The traditional conjoint analysis terms "factors" and "levels" have been changed to "issues" and "options" respectively to better communicate the concepts in a strategic planning context. To identify the specific issues and options, one of the researchers met with the Director of Communications to review the strategic plan that was in the process of being developed. The researcher extracted eight potential issues from the plan and listed three possible options per issue. The Director also developed a list of possible issues and options. The researcher, Director, and President ultimately met to determine the final list of issues and options (shown in Tables 3 and 4).

The issue focus refers to internal or external orientation, that is, do the employees focus on the internal operations of the organization or do they focus on the external environment and what is affecting their "customers"? Historically the organization has tended to be inwardly focused, but it is now considering whether to take a more "customer needs" approach. Cohesion is the issue of centralization versus decentralization. In this case, it refers to the degree of power held by the central office and the degree held by the regional offices. Programming represents three alternative operating strategies (or options): should the organization continue to focus on the existing customer base (member services), change its

emphasis to actively building the customer base (economic development), or shift to a "political focus" (legislative affairs). Involvement refers to the degree to which the organization should have customers actively involved in the decision making of the organization. Historically, the involvement has been intentionally limited to a few major customers but they are considering expanding the involvement. Finally the issue of revenues represents the methods used to raise money in this not-for-profit organization. Should it be business as usual (traditional sources) or do they need to get creative and expand ways they can bring in money? The terminology in the issues and options reflects that of the organization. Many of the issues are unclear; the leadership admittedly has not provided clear direction.

TABLE 3
Issues and Options Results for a Sample Individual

Strategic Issue	Strategic Options	Sample Individual	
		Option Weights	Issue Importance
Focus	1. Internal	+1.50	3.0
	1. External	-1.50	
Cohesion	2. Local	-0.50	1.0
	3. Regional	+0.50	
Programming	4. Member Services	0.00	1.0
	5. Economic Development	+0.50	
	6. Legislative Affairs	-0.50	
Involvement	7. High	-0.50	1.0
	8. Low	+0.50	
Revenue	9. Traditional Sources	-1.50	3.0
	10. New Sources	+1.50	

SPSS Conjoint 8.0 was used to generate eight cards representing a fractional factorial design. A demographic questionnaire was used to collect information on gender and grade level (staff, management, and executive) within the organization. The individual results were anonymous; there was no way to link results to any individual.

Since the organization is small it was agreed that all 35 members would complete the exercise. One of the researchers briefly presented the concepts of alignment and the conjoint technique and administered the conjoint exercise at a monthly staff meeting. The participants were presented with the issues and options along with a brief description with time for questions. They were also given a definitions sheet for reference during the card sort exercise. They were then instructed to sort the eight cards into three preference piles (most prefer, least prefer, and something in between), placing roughly an equal number of cards on each pile. They then sorted each pile from most preferred to least preferred. When complete, the eight cards were to be ordered from most preferred to least preferred. The order number (1-8) serves as the dependent variable and the issue-option combinations as the independent variables in conjoint analysis.

The results were double keyed and analyzed using SPSS Conjoint 8.0. The nonmetric, additive conjoint model is used since the primary purpose is to measure an individual's preference for the main factors. The interaction effects are not considered relevant and are assumed to be minimal (Hair *et al.*, 1995). In fact, the R^2 value, which measures the proportion of the variance that is explained by the main effects, is used as quality control indicator. In pilot studies, low R^2 values were examined and found to be errors that had occurred in the sorting procedure. Therefore, all values below .60 were to be automatically examined; however, none were found in this application.

RESULTS

From the results of the conjoint analysis, three dimensions can be extracted for the consensus exercise. They are directional consensus, importance, and importance consensus. Directional consensus provides, for each strategic issue, the degree to which the participants are "going in the same direction." For example, do half the members prefer an internal focus and half an external or do all prefer an internal? Importance simply indicates the relative level of importance of one issue versus another, based on the average across respondents. Is "Focus" more or less important than "Cohesion" and by how much? Importance consensus measures the degree of agreement among respondents regarding an issue's level of importance. Did all respondents agree that Focus was important or did some consider it very important and others not at all important? With these three dimensions, we will know which issues are important, whether there is agreement as to this importance, and if employees concur on the preferred options within each issue. Each dimension is further defined next.

Directional Consensus

Because dependent and independent variables are available for each participant, SPSS reports the utility each individual has for each option within an issue. The utility is a weight that raises or lowers the degree of preference that an individual has for a card containing that option. Looking across individuals, then, it is possible to determine the amount of agreement that exists for the direction within an issue. For example, if an issue has two options, A and B, and all respondents agree that option A has a positive utility, then there is complete agreement on direction for that issue. If, on the other hand, half the respondents prefer option A (*i.e.*, it has a positive utility) and half prefer B, then there is no agreement on direction.

Thus, directional consensus may be quantified using the proportion of respondents who prefer an option. In the case of two options, the calculation is simply the absolute value of the difference between the proportion indicating one direction and the proportion indicating the other direction. If 60% indicated preference for one direction, then 40% must have indicated a preference for the other direction. The directional consensus is 20%. At the extremes, if 100% indicate one direction, then the directional consensus is 100%. If 50% indicate one direction, then the directional consensus is 0%. If there are three options, then the proportion indicating a preference for each option is calculated. The absolute values of each of the three possible combination differences is averaged and divided by .6667. Thus, complete agreement yields a measure of 100% and no agreement (33% for each option) yields a measure of 0%.

Importance

The utility weights for the options can also be used to provide a measure of the issue's importance to an individual. Those issues where the options have high weights (more extreme in direction) will be more important. Thus, the importance for an issue is simply the difference between the maximum weight and the minimum weight of the options within that issue. This is calculated for each individual. Averaging across individuals provides an overall measure of an issue's importance to the members of the organization.

Importance Consensus

Given the importance results for each individual it is possible not only to average the results for an overall measure of importance on an issue, but also to measure the degree of variability around that average. This would reflect the amount of agreement of an issue's importance. If there is wide variability, then there is poor importance consensus — little agreement among respondents that an issue is important or not important. If there is little variability, then there is high importance consensus. This is measured using a standard deviation.

The three dimensions above can be summarized in a consensus map (see Figure 1). The issues are plotted on two dimensions, directional consensus (x-axis) and issue importance (y-axis). Using the means to define quadrants, issues in the upper left quadrant (quadrant one) represents those that are considered important, generally, and in which there is poor agreement on direction. When all organization member results are overlaid, the weight values will be large and in opposing directions, that is, some members will prefer one option and some a different option. The lower left quadrant (quadrant two) contains issues that are of less importance, in general, and for which there is poor agreement on direction. The pattern is similar to that of quadrant one but the weights are less extreme. The right side, upper and lower quadrants, contains issues for which there is general agreement on direction. In quadrant three (upper right), there is general agreement on direction on important issues. In quadrant four (lower right), there is general agreement on direction on less important issues. The measure of importance is obviously relative and all issues should be considered important or they would not have been selected as strategic issues.

The third dimension in the summary is importance consensus and can be captured by placing bubbles within the map to represent an issue. A large bubble indicates less agreement on the importance of an issue, *i.e.*, some members could feel the issue was important while some do not. This reflects a large standard deviation and a large bubble. If members are consistent in their rating of an issue's importance it will have a small standard deviation and a small bubble.

To illustrate some of the measures, an individual from the organization has been selected at random. The option weights for this respondent are presented in Table 3. Adding and subtracting these weights from a constant term (4.5 for this individual) predict this individual's preference for the selected set of options. Since there were eight cards in this exercise, the range of predicted scores is from one to eight. The larger the difference on the weights the more important that issue is to the individual. The importance score (the maximum weight minus the minimum weight) for each issue is also shown in Table 3 for this individual.

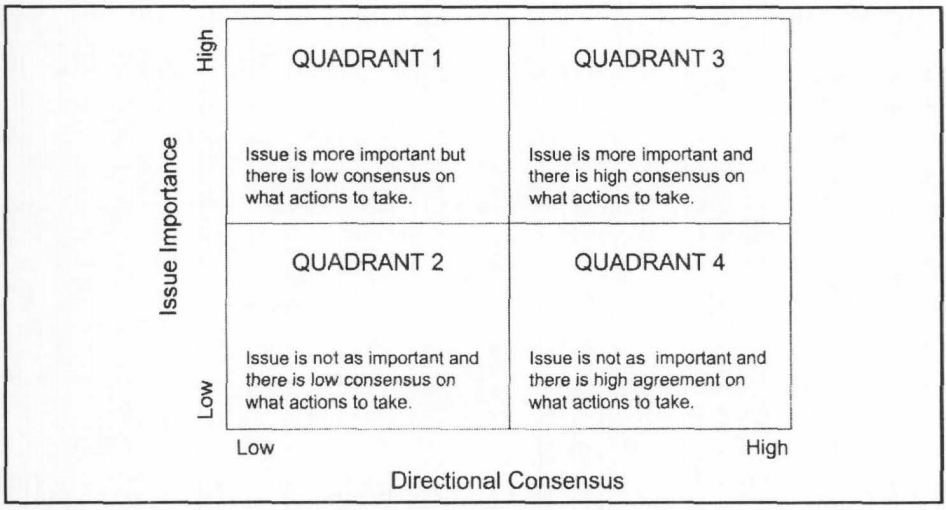

Figure 1. Issue Importance and Directional Consensus.

By overlaying the results for all members of the organization, it is possible to determine the degree of consensus among members. Figure 2 presents the results for the issue Focus for the selected individual and for all of the Staff category members. It is apparent that about half of the Staff members prefer an internal focus and half an external focus. The weights range from one to two and are therefore fairly important to the Staff members. Also, there appears to be a moderate degree of consistency in the importance ratings. Thus the issue of Focus among Staff members might be an area of concern – high importance and low agreement on direction. This should remain a hypothesis until the other issues are examined. Each issue can be examined this way.

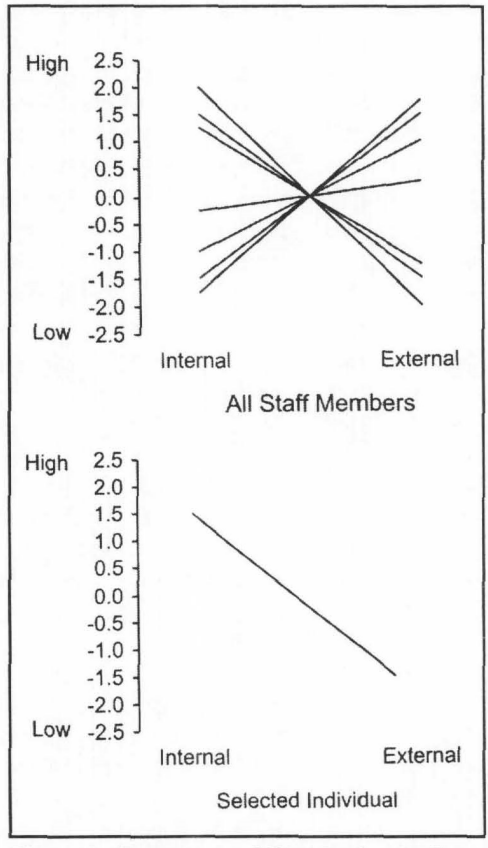

Figure 2. "Importance" Results for the Issue *Focus*.

Directional consensus for all issues and options for the organization as a whole and for each sub-group is summarized in Table 3. For the issue Focus, nearly two-thirds of all respondents preferred an external focus. For management, the proportion was 75%. A little over half of the staff members and executives preferred an

TABLE 4
Directional Consensus Details for Organization

Strategic Issue	Strategic Options	Staff	Mgmt.	Executive	Combined
Focus	Internal	44.4%	12.5%	28.6%	28.6%
	External	55.6%	75.0%	57.1%	64.3%
Cohesion	Local Control	11.1%	25.0%	0.0%	10.7%
	Regional Control	88.9%	62.5%	100.0%	82.1%
Programming	Member Services	22.2%	62.5%	28.6%	39.3%
	Economic Development	77.8%	37.5%	57.1%	60.7%
	Legal Affairs	22.2%	75.0%	42.9%	42.9%
Involvement	High	66.7%	87.5%	71.4%	75.0%
	Low	22.2%	12.5%	28.6%	21.4%
Revenue	Traditional Sources	44.4%	37.5%	14.3%	28.6%
	New Sources	44.4%	37.5%	42.9%	42.9%

external focus. For Cohesion, 83% of all respondents preferred a regional emphasis and this was consistent among levels. For Programming, staff members preferred economic development (78%), management legislative affairs (75%) and membership services (62%), and executives were more evenly divided but preferring economic development and legislative affairs. For Involvement, 75% of all respondents preferred high involvement and this was consistent across levels. Lastly, for Revenue, staff and management equally preferred traditional and new sources, whereas executives preferred new sources (43%) over traditional ones (14%).

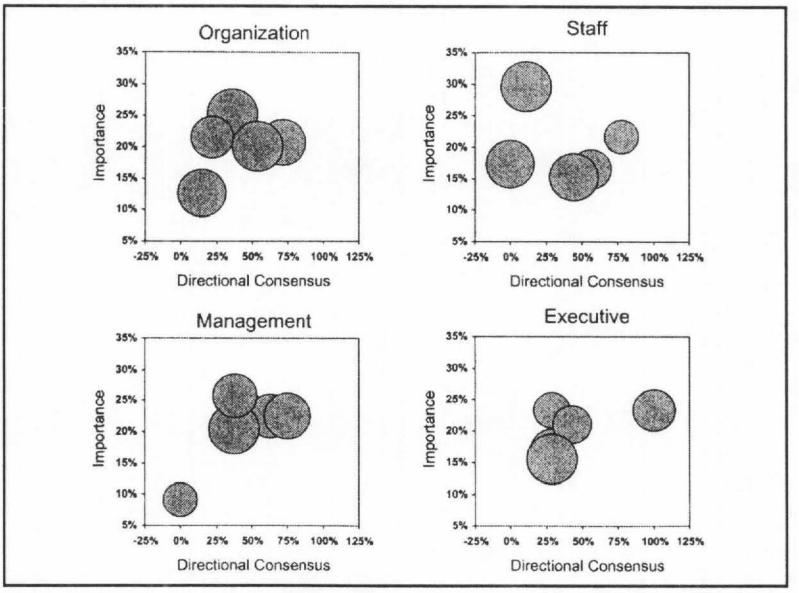

Figure 3. Consensus Maps for Staff, Management, Executives and Organization.

TABLE 5
Consensus Dimensions for Organization

	Focus	Cohesion	Program	Involve	Revenue
Overall					
Directional Consensus	35.7%	71.4%	21.6%	53.6%	14.3%
Importance	25.2%	20.7%	21.5%	20.0%	12.6%
Importance Consensus	14.8%	12.1%	10.5%	14.1%	13.7%
Staff					
Directional Consensus	11.1%	77.8%	56.1%	44.4%	0.0%
Importance	29.5%	21.6%	16.4%	15.2%	17.2%
Importance Consensus	14.0%	6.8%	9.3%	12.8%	12.5%
Management					
Directional Consensus	62.5%	37.5%	37.9%	75.0%	0.0%
Importance	22.5%	20.4%	25.7%	22.4%	9.0%
Importance Consensus	12.2%	15.9%	11.9%	13.4%	7.7%
Executives					
Directional Consensus	28.6%	100.0%	28.9%	42.9%	28.6%
Importance	17.0%	23.2%	23.3%	21.0%	15.5%
Importance Consensus	14.1%	14.4%	10.4%	12.5%	21.1%

Note: The data included in this table were used to construct the maps depicted in Figure 3.

Directional consensus is summarized, combined with importance and importance consensus, and illustrated in Figure 3 and Table 5. Continuing the example of the issue Focus among Staff members, it is apparent that Focus does lie in quadrant one – high importance and low agreement on direction. Importance consensus on this issue is not particularly strong, judging from the relatively large bubble size.

Comparing Staff results with those of Management and Executives, Focus is relatively less important and there is somewhat more directional consensus in both of these groups. For Managers and Executives, Programming is both more important and demonstrates less directional consensus than Focus. While Focus is a major concern among Staff members, Programming is the area for concern for Managers and Executives.

DISCUSSION

As stated earlier, the intent in this organization was simply to provide a benchmark regarding the degree of consensus at a point in time. The results were presented to the entire organization. They basically confirmed what they, especially the executives and mangers, suspected which was that the results would be "all over the place." There had been a concern initially by the authors and the Director of Communications as to how well the organization members — ranging in education from high school to graduate degrees — would understand the results.

Surprisingly, there was general understanding based on the quantity and quality of the questions asked during the presentation. Humorous comments were made regarding some of the charts showing discrepancies on directional alignment. It did not come as a surprise to them. They made specific reference to some of the differences among levels in the organization and pointed out how managers were at times being "caught in the middle."

Efforts within the organization following these results were focused on defining a clear strategy (selection of options) and communicating that strategy throughout the organization. Special efforts were given to delineating a clear plan regarding Programming, as this issue was not only critical in the eyes of the executives, but also had poor agreement on direction. Plans are in place to repeat the consensus exercise after one year to evaluate the effectiveness of the communication process and the strategic planning effort.

While the above results are specific to the application, there are four general topics that are generic to the conjoint application and that should be addressed. The first concerns how much alignment is good. We assumed at the outset that, in general, more alignment is better than less alignment. Whether or not there should be complete agreement among organization members is an issue frequently investigated in the organizational behavior literature. The importance of consensus may be a matter of where one is relative to the planning process. Early in the strategic planning stage, when direction is not obvious or clear, encouraging opposing views might be considered good and would result in low consensus. However, when the decision has been made on direction, then low consensus may not be good. It needs to be clear in the development of the issues and options which phase of the process the organization is in. If the preferred directions for some of the low consensus issues were clearly defined strategy, then a significant level of disagreement is a problem. Either some members are unaware of the agreed upon direction or they are failing to get on board with the decision. If these issues were exploratory, that is, the management wanted a take on what might be a preferred direction, then the level of disagreement may be acceptable.

Second, the results of the conjoint exercise are highly dependent upon having the right issues and options. There is nothing in the technique to tell us if those selected are appropriate, and there is nothing that can be done after the fact. Our experience to date with the technique indicates that the respondents should feel uneasy during the card sorting exercise. The subjects in this exercise were specifically asked if the sorting was easy and the resounding answer was no. This is a clue that the selected issues are appropriate or at least are useful. The fractional factorial design limits us to five or six issues with two or three options within each. While there are other approaches to conjoint that allow more issues to be addressed, we prefer the fractional factorial design due to its simplicity in demonstrating the trade-offs and for evaluating each card as a concrete scenario.

Third, the results demonstrate that which is and not that which should be. There may be high directional consensus for an issue, but it may be the wrong direction. Examining the appropriateness of the preferred options is another exercise. In this case, the technique can raise questions for dialogue regarding the preferred direction or the need for communication and or training and development efforts.

Finally, when the technique was initially considered, it was thought that the exercise would be useful in simply feeding back results to individual members as in the Delphi technique. Part of low consensus might be out of ignorance as in: "I though it was obvious that our major emphasis was legislative affairs. I didn't realize I was the only one who thought so."

While we have focused on the technique of identifying managerial consensus on strategic priorities, we recognize that this is only one part of the strategic alignment process. Alternative strategies for achieving internal alignment among managers exist in both preventing and correcting instances of actions that are inconsistent with explicit strategic priorities. Advocates of prevention strategies suggest that internal alignment is best achieved by "matching" managers with the position and/or strategy (Leontiades, 1982; Reed & Reed, 1989; Szilagyi & Schweiger, 1984; Herbert & Deresky, 1987), while others assert that corrective alignment can be achieved through management training and development activities (Kerr & Jackofsky, 1989). Regardless of the philosophical approach to achieving alignment that an organization holds, the process of measuring and mapping organizational consensus can assist greatly in the identification and communication of strategic issues and priorities.

Proponents of the knowledge-based view of strategy emphasize looking for potential sources of competitive advantage within the organization's members. Other strategy researchers have posited the importance of understanding strategy at all levels and of gaining organizational commitment to ensure effective strategy implementation. In this paper, we have presented a relatively easy method that can be used not only to help capture and communicate organizational knowledge, but also to measure and portray employee understanding of strategic issues and priorities.

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