# Employee Alignment with Strategic Change: A Study of Strategy-supportive Behavior among Blue-collar Employees

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It may not be surprising that poor organizational strategies often fail, but research in strategy implementation demonstrates that even good strategies fail during implementation (Bonoma, 1984; Huff and Reger, 1987; Wooldridge and Floyd, 1989). Failure of a new strategy or a strategic innovation is often due to the inability or resistance of individual employees to commit to a strategy and adopt the necessary behaviors for accomplishment of strategic objectives (e.g., Heracleous and Barrett, 2001). Failures in this process of strategic commitment lead to strategic misalignment, or individuals failing to engage in behavior that supports the organization's strategic goals (Boswell and Boudreau, 2001). Because strategy implementation is predominantly goal-directed (Barney, 1998) and teleological in nature (Van de Ven and Poole, 1995), strategic misalignment reflects the absence of goal-directed behavior.

The problem of strategic misalignment has a considerable history in the management discipline and has been described under numerous labels such as the problem of achieving coordinated action, goal incongruence and non-alignment (Barnard, 1938; Boswell *et al.*, 2006; Labovitz and Rosansky, 1997; March and Simon, 1958). This body of research has provided considerable insight into the challenges that impede collective

alignment with strategies. However, little is understood about the mechanisms by which individuals come to be aligned with strategies.

The purpose of this study is to understand the antecedents of alignment by examining the role an individual's strategic knowledge and commitment play in subsequent engagement in strategy-supportive behavior. Strategic knowledge represents an individual's global understanding of a strategy being pursued by his or her organization; individuals who agree with statements such as ''I understand what strategy X is all about'' are demonstrating strategic knowledge as we define it. We propose that strategic knowledge and several individual characteristics influence strategic commitment, which we define as an individual's willingness to support a strategy. Three questions guided our research: (1) how does individual knowledge of the organization's strategy influence commitment to the strategy, (2) what additional antecedents contribute to strategic commitment, and (3) does strategic commitment predict strategy-supportive behavior? For this research we adopt a definition of strategy that reflects what many multi-unit manufacturing firms would call an operating strategy. For example, this definition would include strategic initiatives that are somewhat narrow in scope and yet help to guide the operating units within an organization.

We believe our research contributes to management scholarship in several ways. First, we explore a subcomponent of generalized commitment, namely commitment to a particular strategic initiative (cf. Jansen, 2004; Neubert and Cady, 2001). Such a focus seems especially relevant today, given the increasingly short-term bonds between individuals and organizations (Rousseau, 1997). Second, the framework proposed broadens the strategic perspective to include individual actors rather than focus on the organizational level and associated outcomes. Similar strategy-individual linkages have led to breakthroughs in strategic human resource management (Barney and Wright, 1998; Schuler and Jackson, 1987; Wright and Snell, 1998) and the upper echelons perspective (Finkelstein and Hambrick, 1996; Hambrick and Mason, 1984). Third, we test the theory in a lean transformation setting, providing greater contextual insight into how commitment to a strategy may be facilitated and its ability to predict strategy-specific behavior. We chose to study an organization that was adopting a strategy built on lean manufacturing in large part because a successful lean strategy necessitates both understanding and involvement from production employees (e.g., Mehta and Shah, 2005). Finally, results provide important managerial implications regarding design, training and communication issues associated with strategic change processes.

## Achieving Strategic Alignment

Individuals are strategically aligned when their behaviors correspond with their organization's strategy. For example, an organization may require its members to support an intensive customer service strategy by engaging in what we term ''strategic supportive behaviors.'' In this instance, an employee who is strategically aligned will engage in behaviors that proactively reach out to customers (e.g., courtesy calling, promptly responding to requests, detecting/

preventing future problems). Similar to management by objective (Drucker, 1954), strategic alignment requires individuals within an organization to behave in a contributory manner in order to support the strategic goals of the organization.

The term strategic alignment has recently been used to describe individual strategic contributory behavior in both academic (e.g., Wooldridge and Floyd, 1989; Boswell and Boudreau, 2001) and practitioner (Labovitz and Rosansky, 1997) contexts. However, the problem of individuals being misaligned with organizational strategies (i.e., not behaving to support a strategy or objective) has an extensive history in management science. Barnard (1938) highlighted the need for organizational member contribution to higher-order organizational goals. In their classic text *Organizations*, March and Simon (1958) discuss the need for employees to contribute to the goals of the firm. Drucker (1954) augmented these works by developing management by objective. Management by objective established a hierarchy of objectives for employees within an organization with the ultimate purpose being the strategic goals of the organization. The balanced scorecard approach (Kaplan and Norton, 1992) is perhaps the most recent conceptualization of management by objective and involves more metrics. A common theme to all these approaches is the need for employees to behaviorally contribute in order to support organizational strategies. Overall, these works highlight the challenge of ensuring that employees engage in strategically supportive behaviors.

**Commitment within Organizations**

Commitment research provides insight into the challenge of aligning people with organizational strategies. The commitment literature offers an extensive inventory of studies that demonstrate relationships between organizational commitment, work attitudes and behavioral outcomes (Meyer *et al.*, 2002). Mowday, Porter and Steers (1982) define organizational commitment as an individual's attachment and willingness to support his or her organization. Although the concept of organizational commitment has demonstrated its utility for explaining organizational phenomena, several researchers have unpacked the concept of commitment to include additional dimensions such as intensity and focus.

O'Reilly and Chatman (1986) drew upon Kelman's (1958) work to explain the varying levels of commitment intensity within individuals. Becker and colleagues advanced the argument by asserting that unpacking commitment involves two major dimensions, the basis of commitment and the foci of commitment. Basis represented the individual intensity of affiliation and foci represented the object to which individuals commit (Becker, 1992; Becker and Billings, 1993). Our review is limited to foci of commitment since our work focuses on application of the commitment to organizational strategy. However, we see a need for future research that investigates the intensity to which individuals commit to various objects.

Several authors have argued that individuals within an organizational context suffer from competing commitments, which has implications for overall organizational commitment

(Becker, 1992; Reichers, 1985). For example, if organizational commitment is a multifaceted phenomena, then facets (e.g., peer group commitment, role commitment) that compose organizational commitment could interact in certain ways to alter overall organizational commitment depending on certain contexts. A considerable number of commitment types based on varying foci have been identified in the organizational literature (Becker and Billings, 1993; Bridges and Harrison, 2003; Neubert and Cady, 2001; Reichers, 1985).

Exploring more specific forms of commitment such as goal and program commitment provides additional understanding into the problem of strategic misalignment. Locke, Latham and Erez (1988) defined goal commitment as an individual's attachment and determination to reach a goal. Goal commitment research in organizations has been conducted primarily on work group and unit level goals (Locke and Latham, 1990). Goal commitment has been identified as a necessary component of goal achievement (Locke *et al.*, 1988), which presumes goal supportive behavior. Since strategy is primarily goal directed, it is likely that the concept of goal commitment can be extended to encompass strategic goals.

A concept similar to goal commitment is program commitment. Program commitment is an individual's attachment to an organizational program (Neubert and Cady, 2001). Program commitment is focused on the specific scope for an organizational program that may, or may not, be strategic in nature. For example, a program could be non-strategic such as a ''keep your work area clean'' program or strategic such as meeting ISO 9000 quality standards. Program commitment has been linked to program supportive behavior and attitudes (Neubert and Cady, 2001). Drawing from the logics of goal and program commitment, one can argue that the focus of commitment can be applied to an organizational strategy.

Wooldridge and Floyd (1989) and Noble and Mokwa (1999) have introduced the concept of strategic commitment. Wooldridge and Floyd (1989) mention the need for managers to be strategically committed, but go no further than highlighting the need for strategic commitment. Noble and Mokwa (1999) operationalized the concept of strategic commitment by examining middle managers' commitment to a marketing strategy and found that managers' self-reported commitment to their organization's marketing strategies was correlated with role performance. Noble and Mokwa's (1999) work is indeed helpful, as it appears to be the first work to empirically examine employee commitment to a strategy and associated outcomes. In summary, the studies above reveal opportunities to focus the concept of commitment on strategic phenomena and evaluate the impact of potential antecedents and outcomes in additional contexts.

### Knowledge within Organizations

Numerous definitions have been offered for conceptualizing knowledge within an organizational context. However, a widely agreed upon understanding of knowledge within organizational settings is problematic (Nonaka and Takeuchi, 1995). The challenge is exacerbated when one seeks to define individual knowledge of organizational strategy. We have

chosen to view strategic knowledge as individuals' global understanding of their organization's strategy. Our knowledge definition contains both explicit and tacit aspects. The explicit aspect of strategic knowledge is certain facts that are easily transferable to organizational members (Polanyi, 1967). Examples of explicit strategic knowledge include production targets and documented work procedures. The tacit aspect of knowledge requires the individual to personalize knowledge (Polanyi, 1967), meaning that individuals form their own linkages based on what they know and have experienced. Tacit knowledge is described as being difficult to explain or separate from context (Nonaka and Takeuchi, 1995; Polanyi, 1967) and plays a key role in decision-making processes in top management teams (Brockman and Anthony, 1998). Both these aspects of strategic knowledge allow individuals to make sense of their social context and frame their behavior to interact with the environment.

Generally, the strategic implementation process requires establishing a common body of strategic knowledge. This has been termed by some as sensemaking (Weick, 1995), sensegiving (Gioia and Chittipeddi, 1991) and line-of-sight (Boswell and Boudreau, 2001). We argue that strategic knowledge is a necessary precondition for effectively committing to the organization's strategic goals. Individuals must possess a global understanding of their organization's strategy that is similar to those who created the strategy. An organization high in aggregate individual strategic knowledge will have a shared interpretation among its members as to the nature of the strategy, its goals,

and how each member can contribute to accomplishing the goals.

Labovitz and Rosansky (1997) and Wooldridge and Floyd (1989) appear to be the first to mention the role of strategic knowledge for supporting employee strategic alignment. Labovitz and Rosansky (1997) offer a series of practitioner accounts of how firms such as Fed-Ex have achieved strategic alignment with employees and have reaped the rewards of high performance. Wooldridge and Floyd (1989) argue that the role of the manager is to facilitate strategic understanding in order to help reinforce employee commitment. Further, they extend the idea that strategic knowledge needs to be explored at lower levels within the organization. However, neither of these works empirically examines how individual strategic knowledge contributes to strategic alignment within organizations.

More recently, Boswell and Boudreau (2001) introduced the concept of line-of-sight, a combination of employees' strategic understanding and knowing how to behaviorally contribute to their organization's strategy. In a hospital setting with clerical workers, they found that individual knowledge of the organization's strategy was related to strategically congruent behavior (i.e., behaviors supportive of the strategy). Another recent exploratory study in a health maintenance organization examined the role of a communication program for developing individual knowledge of strategic goals (Enriquez et al., 2001). The study found a relationship between high personal involvement in achieving strategic goals and high knowledge of the organization's goals. In addition, respondents demonstrated better strategic knowledge

after a strategic goal communication program. However, this work did not examine subsequent employee attitudes and behavior. Finally, Pappas and colleagues (2004) studied middle-manager strategic knowledge and social network characteristics. They found that both middle-manager strategic knowledge and network position characteristics were important factors determining strategically congruent behavior (e.g., championing, facilitating, synthesizing and implementing).

## A Commitment-based Framework for Strategic Alignment

Combined, the studies reviewed indicate that further evaluation of the concept of commitment to organizational strategy is likely to provide new insight. Initial evidence suggests that strategic commitment can be developed within organizations and has the potential to contribute to strategic alignment. In our study, we examine the popular initiative of transforming to lean manufacturing. In addition, we build on past commitment research by further exploring the process by which knowledge of a strategy influences commitment to the strategy. Our proposed model is illustrated in Figure I and explicated in greater detail below.

## Strategic Knowledge → Strategic Commitment

Strategic knowledge works as the raw material for individuals' judgments about their organization's strategy. Cognitive theory indicates that knowledge serves as the medium for the formation and maintenance of schemas. Schemas are cognitive structures that individuals create and use to make order of the world. Increased knowledge helps make schemas more content rich (Fiske and Taylor, 1991; Lord and Foti, 1986). The more knowledge individuals possess about a strategy the better the quality of their schemas about the strategy.

This is especially the case with a lean manufacturing initiative, which mandates that employees have a clear understanding of its benefits and core principles, are empowered with more decision-making abilities, and are engaged in cross-training (Mehta and Shah, 2005; Womack and Jones, 1996). We refer to this type of strategic knowledge as requisite knowledge, where employees have access to the widest variety of strategy-supportive information relevant to the initiative (Nonaka and Takeuchi, 1995). There are several types of strategic initiatives that require such requisite knowledge, including six sigma, total quality management, and balanced scorecard (e.g., Buch and Tolentino, 2006; Choo *et al.*, 2007; Kaplan and Norton, 1992).

We recognize that not all knowledge gained about a strategy will unilaterally lead to commitment. In fact, there are likely to be circumstances where increased knowledge about a strategic initiative leads to a decrease in commitment, such as when that knowledge is perceived to have negative implications for the company or its employees. We therefore bound our prediction about the relationship with knowledge and commitment to requisite knowledge, such as that described above. Thus, knowledge becomes the means by which individuals gain a greater understanding of the strategic initiative. We therefore predict that individuals who possess

**Figure I**

**A Model of Strategic Commitment Predicting Strategically-aligned Behavior**
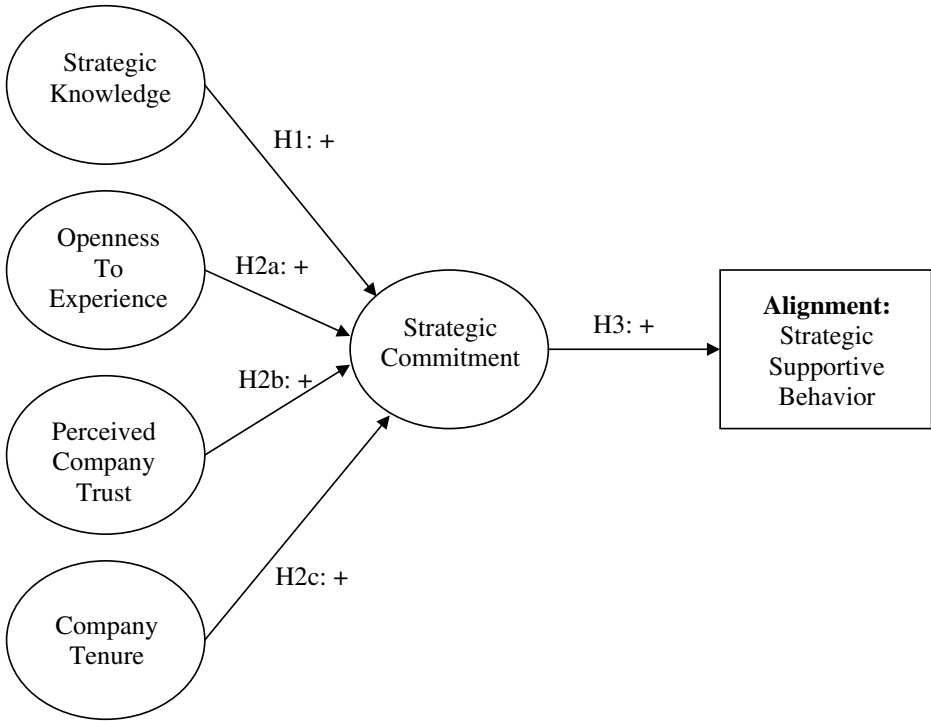


more strategic knowledge are more likely to commit to a strategy.

**Hypothesis 1:** Requisite knowledge about a strategic change initiative will positively predict strategic commitment.

In keeping with the more traditional commitment literature, we expect that certain individual characteristics will influence the likelihood of becoming committed to a particular strategic initiative. After reviewing recent research on commitment and strategic change, we focus on three such antecedents in the present study: openness to experience, perceived organizational trust, and or-

ganizational tenure. First, individual openness to experience is argued to be positively related to strategic commitment. Individuals who are open to experience tend to be broadminded, curious, learning-oriented and willing to face new challenges (Barrick and Mount, 1991). Lepine, Colquitt and Erez (2000) found that individuals who were open to experience were better able to deal with changing rules in a decision-making simulation. Therefore, we argue that individuals high in openness to experience will be better able to commit to a strategic change since most

strategies involve setting new objectives and learning new means to accomplish the objectives.

**Hypothesis 2a:** Openness to experience will be positively related to strategic commitment.

Employee trust in their leaders and organizations has been shown to have a positive relationship with organizational commitment and desired work attitudes (Dirks and Ferrin, 2001; Costigan *et al.*, 1998). Trust is defined as an individual's willingness to be vulnerable to another in exchange for a mutually beneficial outcome (Dirks and Ferrin, 2002). Trust has the ability to increase over time as a result of past successful trust-based investments. If employees have experienced success with past strategic initiatives, it has likely facilitated higher trust in the leaders responsible for those initiatives. Subsequently, new initiatives are likely to garner commitment due to those prior experiences.

The importance of trust would seem to be especially relevant for hourly employees faced with a new strategy. Blue-collar workers are known to be different from white collar employees on a number of facets (e.g., Tierney and Farmer, 2002), not the least of which is their education level related to business topics. Whereas white-collar professionals may have had education or training that allows them to use their own judgment with regards to a strategic initiative, blue-collar workers in a typical manufacturing environment are likely to have had neither. These persons have a more limited set of information sources upon which to rely when forming their attitudes about a given strategy. Therefore, trust in the organization's leaders becomes a proxy for supporting the strategic initiative and building commitment.

**Hypothesis 2b:** Perceived organizational trust will be positively related to strategic commitment.

Tenure represents a structural aspect of individuals' involvement with their organization, capturing the degree of embeddedness an individual has within an organization's structure. Mitchell and colleagues (2001) found that individual embeddedness within an organization was positively related to organizational commitment. However, strategic commitment differs from organizational commitment in that it has more to do with supporting change. Highly tenured individuals are likely to embody the very rituals and routines that help define the structure of the organization. We argue this to be especially true given a union context where additional incentives are provided to tenured employees. As a result, we propose that organizational tenure will be negatively related to strategic commitment since individuals who have been in the organization longer are likely to be more committed to the *status quo.*

**Hypothesis 2c:** Organizational tenure will be negatively related to strategic commitment.

## Strategic Commitment → Strategic Alignment

As mentioned earlier, several studies within the organizational commitment literature have demonstrated associated behavioral outcomes with commitment (Meyer *et al.*, 2002; Mowday *et al.*, 1982). Following the same logic used with other commitment-behavior relationships, we predict that individuals who are committed to a strategy will be more likely to

behave in a strategically supportive manner (i.e., have alignment with the lean strategy).

The theoretical underpinnings of the relationship between commitment and commitment-congruent behavior are likely to be a combination of affect and cognition. Affective events theory (Weiss and Cropanzano, 1996) provides support for the emotive linkages between commitment and commitment-congruent behavior. Affective events theory asserts that a precipitating work event will trigger emotional and cognitive processing within individuals; this processing is termed an affective reaction. The individual's affective reaction is an induced state (usually viewed as positive or negative) that acts to frame attitudes and behavior. We theorize that during a strategic change, individual affective reactions influence strategic commitment, which ultimately impacts individual engagement in strategy-supportive behaviors.

Examining the cognitive aspect of the relationship between commitment and commitment-congruent behavior, cognitive consistency theory indicates that individuals will reinforce their existing beliefs with congruent behavior (Fiske and Taylor, 1991). A specific example is that of cognitive dissonance theory. Cognitive dissonance theory asserts that individuals will behave in a manner that supports their attitudes and beliefs to avoid the dissonance (negative stimulation) that is caused by an inconsistency between opposed beliefs and behavior (Festinger, 1957). Therefore, both affective and cognitive theories suggest that individuals who commit to a strategy are likely to be predisposed to behaviorally support their commitment. We thus opera-

tionalize an individual's alignment by measuring the degree to which their behavior supports the lean strategy.

> **Hypothesis 3:** Strategic commitment will be positively related to engagement in strategy-supportive behavior.

## METHODS

### Sample and Organizational Context

Longitudinal survey data were collected at two points in time approximately one year apart from production employees in three plants of a manufacturing organization in the mid-Atlantic region of the United States. The organization was a relatively large, unionized manufacturer of semi-custom kitchen cabinets. Two of the manufacturing facilities were located in a rural industrial park, while the other was located several hours away at the outskirts of a large urban area. The operations were structured such that the primary raw material (e.g., rough lumber) would receive primary processing in one plant, which would then transfer the semi-finished goods for further processing, finishing, and assembly at the other locations.

The organization chosen was ideal for evaluating employee knowledge and commitment to an organizational strategy since the manufacturer had recently begun the implementation of an organizational-wide lean manufacturing strategy. Lean manufacturing is a strategy requiring significant employee involvement to change from traditional mass manufacturing to just-in-time manufacturing, and requires employees to adopt a series of lean-congruent behaviors. Specifically, employees must change their behavior and thinking to successfully contribute to a lean system. Examples of lean-congruent behav-

iors are reducing waste at workstations and taking proactive actions to improve quality and workflow (Allen *et al.*, 2001; Hunter *et al.*, 2004; Ohno, 1988; Womack and Jones, 1996). Management and union leaders had established urgency (Kotter, 1996) by communicating to hourly workers the necessity of this strategy in order to reduce costs and lead-time, increase quality, and remain competitive with overseas manufacturers. Thus, the lean manufacturing strategy was highly relevant to the workers, an important element for generating buy-in and facilitating behavior change.

**Data Collection**

The employee questionnaire was reviewed by an expert panel and pretested at a similar manufacturing organization. The first employee questionnaire (Time 1) was administered at one plant, with 162 out of 167 production employees responding (97%). The second survey (Time 2) was administered one year later at three plants within the organization, with 692 of 723 employees responding (95.7%). A year was chosen between data collections to allow for sufficient achievement of strategic transformation goals and to better suit our client's production cycle. In both cases, employees completed the surveys during their work shift in groups of approximately 50 employees. The surveys were administered in lunch or break rooms with no supervisory or management personnel present. The researchers took great care to reassure respondents of confidentiality and promptly removed completed surveys from the premises.

To match the data across time periods, employees were asked to provide either their name or employee number on a tear-away sheet. They were assured that all identifying information would be separated from their responses and eliminated from the data once matching was complete. To reduce single-source bias, tenure information was obtained from the company's human resource database and strategic supportive behavior was rated by the immediate supervisor at Time 2. Because the Time 1 data were limited to one plant, the matched sample across Times 1 and 2 was 99 employees (60.7% of total Time 1 respondents) used to test Hypotheses 1 and 2. Fifty-five percent of the matched sample was female and 79.2% had completed high school. The mean company tenure was 5.6 years and the average employee age was 40.8 years. The larger Time 2 sample was matched with supervisor data to test Hypothesis 3, resulting in 555 employees (80% of total Time 2 respondents). Fifty-six percent of this sample was female and 78.8% had completed high school. The mean company tenure was 6.5 years and the average employee age was 41.6 years.

**Measures**

*Dependent Variables.* The engagement in strategy-supportive behavior scale was built in line with Boswell and Boudreau's (2001) line-of-sight action scale, but modified using input from upper- and plant-level management at the company to highlight behaviors specifically relevant to supporting a lean initiative. This variable was measured at Time 2 by asking immediate supervisors to rate subordinates using four items on a five-point agreement scale ($\alpha = 0.83$). Supervisor ratings were used to reduce single-source bias and to help mitigate social desirability. Sample items from

the scale include, ''This employee continues to look for new ways to improve the effectiveness of his or her work.'' and ''This employee encourages others to try new and more effective ways of doing their jobs.'' The four items used in this scale were developed from interviews with company management and were based on their opinions of behaviors the hourly workers should engage in to support the lean strategy. The items were also reviewed with a sample of production supervisors prior to inclusion in the survey.

Strategic commitment served as both a dependent variable for the 99 employees who completed both Time 1 and Time 2 surveys, and as an independent variable predicting behaviors of the 555 employees who were rated by their supervisors. This variable was measured at Time 2 using a modified version of Neubert and Cady's (2001) six-item program commitment scale ($\alpha = 0.86$). Item wording was changed to describe commitment to the lean manufacturing strategy rather than general program commitment. A sample item is ''I am convinced that we need the lean transformation here at company Y.'' Items were measured on a five-point agreement scale.

***Independent Variables.*** Four independent measures were collected at Time 1. Strategic knowledge measures an individual's knowledge about his or her organization's strategy by asking factual questions about the strategy. This scale was modeled from the line-of-sight knowledge scale developed by Boswell and Boudreau (2001) using input from interviews with plant managers and company documents to develop strategy-specific items. Strategic knowledge was measured with six items on a seven-

point agreement scale ($\alpha = 0.74$). A sample item from the scale is ''Lean manufacturing is about reducing several forms of waste.''

Openness to experience was measured using a standardized scale (International Personality Item Pool, 2001) of ten items on a five-point agreement scale ($\alpha = 0.77$). Perceived organizational trust was measured using a four-item measure adapted from Robinson (1996) on a seven-point agreement scale ($\alpha = 0.89$). Company tenure was collected from the participating company's human resource database.

## RESULTS

A summary of descriptive statistics and correlations among the variables in our study are provided in Table 1. We examined the relationships between strategic commitment, its antecedents, and the outcome of strategic supportive behavior using AMOS 5.0 structural equation modeling software (Arbuckle, 2003).

The aggregate evaluation of model fit statistics indicates that the model is indeed a plausible representation of the proposed relationships. First, the model chi-square is low ($\chi^2 = 36.8$, df = 10). Acceptable models will have a chi-square statistic that is close to zero and non-significant (Maruyama, 1997). However, most structural equation models will have significant chi-squares, especially if the models have a large sample size. In addition, the confirmatory fit index (CFI = 0.99) and the normative fit index (NFI = 0.99) demonstrated acceptable fit values that were above 0.95 (Bentler, 1990). The CFI and NFI indices are more suitable for larger size samples and are not affected by sample size as much as the chi-square sta-

**Figure II**

**Structural Equation Modeling Results of Strategic Alignment Framework[a]**
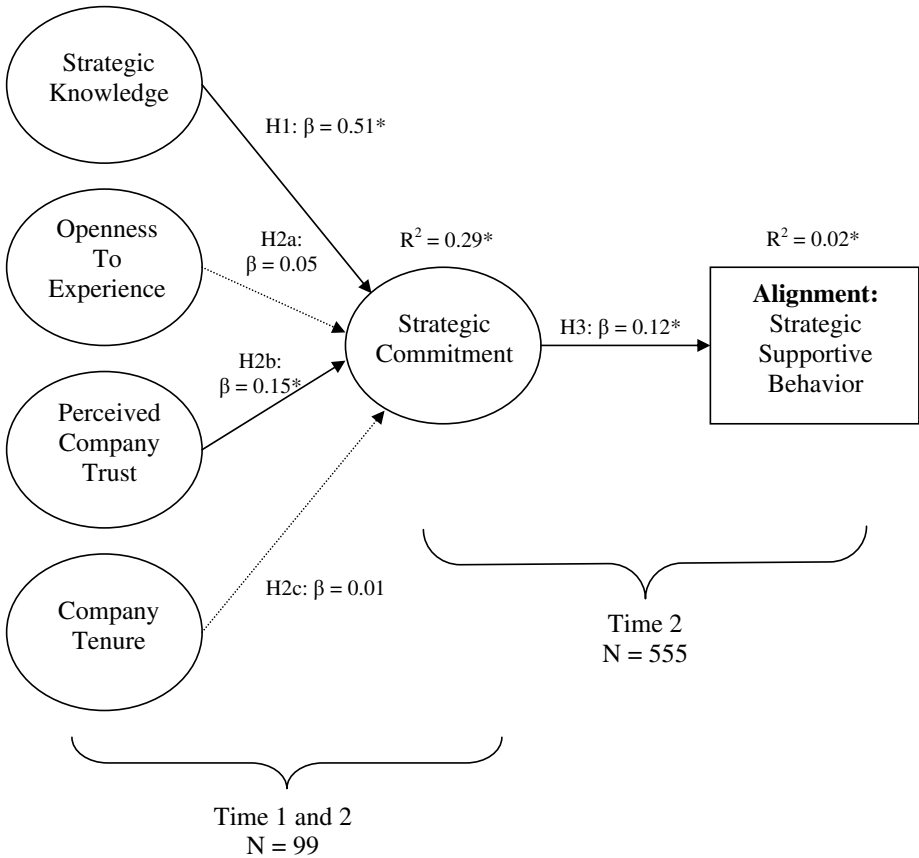


[a]Unsupported relationships are depicted in lighter font.
*Significant at $p < 0.05$.

tistic. Finally, the root mean square error of approximation (RMSEA = 0.07) indicated that the model also demonstrated acceptable fit (Steiger, 1998). In summary, the model fit results indicated a sufficient match between the proposed relationships and the observed relationships within the data.

The strategic alignment framework with standardized path coefficients is presented in Figure II. Beginning at the far left, strategic knowledge positively contributes to strategic commit

**Table 1**
**Descriptive Statistics and Correlations[a]**

| Variable | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| 1. Engagement in Lean Behaviors[b] (Time 2, supervisor-rated) | 3.23 | 0.76 | -- | | | | | |
| 2. Strategic Commitment (Time 2) | 3.50 | 0.69 | .13* | -- | | | | |
| 3. Strategic Knowledge (Time 1, seven-point scale) | 5.12 | 0.87 | .25* | .53* | -- | | | |
| 4. Openness to Experience (Time 1) | 3.53 | 0.56 | .16 | .22* | .32* | -- | | |
| 5. Perceived Organizational Trust (Time 1, seven-point scale) | 4.63 | 1.11 | .09 | .33* | .29* | .04 | -- | |
| 6. Organizational Tenure (Time 1, in years) | 11.72 | 12.04 | -.11 | -.04 | -.03 | -.32* | .03 | -- |

[a]N = 99 for Time 1 antecedents, N = 555 for Time 2.
[b]Items were measured on a five-point scale unless noted otherwise.
*p < 0.05.

ment, supporting Hypothesis 1. We found mixed results for Hypothesis 2. Openness to experience and company tenure were not significantly related to strategic commitment. However, perceived trust was significant and positively related to strategic commitment as hypothesized. Thus, Hypothesis 2b was supported and 2a and 2c were not. Finally, the relationship between strategic commitment and engagement in strategic supportive behavior was positive and significant, supporting Hypothesis 3.

## DISCUSSION

This study has added to the literature on strategy implementation in several ways. While past works have investigated commitment and implementation in middle-management (Noble and Mokwa, 1999) and upper-echelons contexts such as strategic decision-making teams (Dooley and Fryxell, 1999) and ''strategic consensus'' (Lindman *et al.*, 2001), we have applied some of the same issues to the bottom of the organizational pyramid. Our results reinforce that strategic knowledge is indeed important (Boswell *et al.*, 2006), and emphasize the role it plays in fostering individual strategic commitment. Our findings also demonstrate that the concept of strategic commitment has utility for addressing the problem of strategic misalignment. The results suggest that strategically committed individuals are predisposed to engage in strategic-supportive behavior, and that development of individual commitment to strategic initiatives is likely to assist the enactment of strategic transformation. Finally, our research follows in the footsteps of strategic human resources research (e.g., Wright and Snell, 1998) and of the upper-echelons perspective (e.g., Hambrick and Mason, 1984) by spanning micro-level individual behavior and macro-level strategy.

Our results provide evidence that individual trust for the organization positively influences strategic commitment. Leadership research suggests that supervisors are a central contributor to positive employee work attitudes (Dirks and Ferrin, 2002). However, more investigation is needed to determine whether trust in organizational leaders only acts as a proxy when knowledge is lacking or if it is necessary for commitment. Similarly, it is possible that strategic knowledge mediates the relationship between individual characteristics (e.g., openness to experience) and commitment. We were not able to test this causal link in our structural model given the survey timing. Future research examining the temporal links between knowledge, trust, and commitment may offer further insight into the dynamics of strategic commitment formation.

Openness to experience and tenure were not significant predictors of strategic commitment in this study, perhaps due to the small matched sample. However, the small negative correlation between tenure and strategic commitment lends preliminary support for Hypothesis 2c. In the context studied we knew that long-term employees were less than enthused about the lean changes because they thought it would disrupt the *status quo* to which they had become accustomed. Other individual differences such as positive affectivity or agreeableness may have an impact on strategic commitment. Future research in this vein can address the question of whether certain individual characteristics are more strategically neces-

sary than others for fostering strategic alignment.

Another potential limitation to our study is that in working with blue-collar employees, we may have introduced threats to validity, such as appropriate comprehension of survey items and social desirability responses. We were careful to pretest items with a similar group of workers, and we were careful to provide a non-threatening setting for employees. However, it is possible that blue-collar samples differ from white-collar samples in either measurement or substantive ways. We were careful to bound our theory development around the change context we were exploring, but additional research is needed to determine the extent to which trust and knowledge are strategy- or sample-specific.

## Implications for Practice

Practitioners are likely to benefit by developing strategic knowledge and commitment with their employees. Our research suggests that managers seeking to improve employee strategic alignment should increase levels of both strategic knowledge and trust within the workforce. As mentioned earlier, it is likely that other antecedents will also influence strategic commitment; the role of leadership for facilitating employee trust is one obvious source (Costigan *et al.*, 2004; Dirks and Ferrin, 2002). Managers can also improve employee strategic commitment by providing employees with strategic knowledge via both oral (e.g., team meetings) and written forms. In this organization and for this strategy, there was substantial effort made to communicate in both forms (e.g., bi-weekly newsletters, team meetings).

Managers would be well advised to consider the critical role of human capital during strategic change program design and implementation (e.g., Hitt *et al.*, 2007). During the strategy design stage training programs and communication plans should be established to facilitate knowledge and commitment. A training program providing knowledge about the strategy can develop positive employee attitudes such as strategic commitment. In tandem with training is the implementation of a sound change communication program that deals with employee misperceptions and opens a dialogue between management and employees. Open communication with employees during a strategic change is likely to develop trust and commitment that will lead to strategically aligned behavior.

Examining the behavioral linkage with strategic commitment demonstrates promise for improving individual alignment with strategy. In aggregate, improved individual strategic alignment is likely to lead to improved strategic implementation. Overall, if conditions can be influenced to improve individual commitment and facilitate strategically congruent behavior, great progress can be made to mitigate the problem of strategic misalignment. In summary, managers and organizational scientists will benefit from facilitating and investigating the linkages between individual psychology and organizational strategy. By juxtaposing these concepts, a critical element will be brought forth to address the problem of strategic failure—the individual.

## References

Allen, J., C. Robinson and D. Stewart. 2001. *Lean Manufacturing: A Plant Floor Guide*. Dearborn, MI: Society of Manufacturing Engineers.

Arbuckle, J. L. 2003. *Amos Version 5.0*. Chicago, IL: SmallWaters Corporation.

Barnard, C. I. 1938. *The Functions of the Executive*. Cambridge, MA: Harvard University Press.

Barney, J. B. 1998. *Strategic Management*. Boston, MA: Irwin.

——— and P. M. Wright. 1998. ''On Becoming a Strategic Partner: The Role of Human Resources in Gaining Competitive Advantage.'' *Human Resource Management* 37 (1): 31-46.

Barrick, M. R. and M. K. Mount. 1991. ''The Big Five Personality Dimensions and Job Performance: A Meta-analysis.'' *Personnel Psychology* 44: 1-26.

Becker, T. E. 1992. ''Foci and Bases of Commitment: Are They Distinctions Worth Making?'' *Academy of Management Journal* 35 (1): 232-244.

——— and R. S. Billings. 1993. ''Profiles of Commitment: An Empirical Test.'' *Journal of Organizational Behavior* 14: 177-190.

Bentler, P. M. 1990. ''Comparative Fit Indexes in Structural Models.'' *Psychological Bulletin* 107: 238-246.

Bonoma, T. V. 1984. ''Making Good Strategy Work.'' *Harvard Business Review* 62 (2): 69-77.

Boswell, W. R. and J. W. Boudreau. 2001. ''How Leading Companies Create, Measure and Achieve Strategic Results Through 'Line of Sight'.'' *Management Decision* 39 (10): 851-859.

———, J. B. Bingham and A. J. S. Colvin. 2006. ''Aligning Employees Through 'Line of Sight'.'' *Business Horizons* 49: 499-509.

Bridges, S. and J. K. Harrison. 2003. ''Employee Perceptions of Stakeholder Focus and Commitment to the Organization.'' *Journal of Managerial Issues* 15 (4): 498-509.

Brockman, E. N. and W. P. Anthony. 1998. ''The Influence of Tacit Knowledge and Collective Mind on Strategic Planning.'' *Journal of Managerial Issues* 10 (2): 204-222.

Buch, K. K. and A. Tolentino. 2006. ''Employee Expectancies for Six Sigma Success.'' *Leadership and Organization Development Journal* 27 (1): 28-37.

Choo, A. S., K. W. Linderman and R. G. Schroeder. 2007. ''Method and Psychological Effects on Learning Behaviors and Knowledge Creation in Quality Improvement Projects.'' *Management Science* 53 (3): 437-451.

Costigan, R. D., S. S. Ilter and J. J. Berman. 1998. ''A Multi-dimensional Study of Trust in Organizations.'' *Journal of Managerial Issues* 10 (3): 303-317.

———, R. C. Insinga, G. Kranas, V. A. Kureshov and S. S. Ilter. 2004. ''Predictors of Employee Trust in Their CEO: A Three-country Study.'' *Journal of Managerial Issues* 16 (2): 197-216.

Dirks, K. T. and D. L. Ferrin. 2002. ''The Role of Trust in Organizational Settings.'' *Organization Science* 12: 450-467.

——— and ———. 2001. ''Trust in Leadership: Meta-analytic Findings and Implications for Research and Practice.'' *Journal of Applied Psychology* 87: 611-628.

Dooley, R. S. and G. E. Fryxell. 1999. ''Attaining Decision Quality and Commitment from Dissent: The Moderating Effects of Loyalty and Competence in Strategic Decision-making Teams.'' *Academy of Management Journal* 42 (4): 389-403.

Drucker, P. 1954. *The Practice of Management.* New York, NY: Harper.

Enriquez, V., J. McBride and L. Paxton. 2001. ''Improving Knowledge of Strategic Goals and the Impact on Organizational Commitment.'' *Health Marketing Quarterly* 18: 119-132.

Festinger, L. 1957. *A Theory of Cognitive Dissonance.* Palo Alto, CA: Stanford University Press.

Finkelstein, S. and D. C. Hambrick. 1996. *Strategic Leadership: Top Executives and their Effects on Organizations.* New York, NY: West Publishing Company.

Fiske, S. T. and S. E. Taylor. 1991. *Social Cognition.* New York, NY: McGraw-Hill.

Gioia, D. A. and K. Chittipeddi. 1991. ''Sensemaking and Sensegiving in Strategic Change Initiation.'' *Strategic Management Journal* 12: 433-448.

Hambrick, D. C. and P. A. Mason. 1984. ''Upper Echelons: The Organization as a Reflection of its Top Managers.'' *Academy of Management Review* 9 (2): 193-206.

Heracleous, L. and M. Barrett. 2001. ''Organizational Change as Discourse: Communicative Actions and Deep Structures in the Context of Information Technology Implementation.'' *Academy of Management Journal* 44: 755-778.

Hitt, M. A., L. Bierman and J. D. Collins. 2007. ''The Strategic Evolution of Large U.S. Law Firms.'' *Business Horizons* 50: 17-29.

Huff, A. S. and R. K. Reger. 1987. ''A Review of Strategic Process Research.'' *Journal of Management* 13 (2): 211-236.

Hunter, S. L., S. Bullard and P. H. Steele. 2004. ''Lean Production in the Furniture Industry: The Double D Assembly Cell.'' *Forest Products Journal* 54 (4): 32-38.

International Personality Item Pool. 2001. ''A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences.'' http://ipip.ori.org/

Jansen, K. J. 2004. ''From Persistence to Pursuit: A Longitudinal Examination of Momentum During the Early Stages of Strategic Change.'' *Organization Science* 15 (3): 276-294.

Kaplan, R. S. and D. P. Norton. 1992. ''Using the Balanced Scorecard—Measures that Drive Performance.'' *Harvard Business Review* (January-February): 71-79.

Kelman, H. C. 1958. ''Compliance, Identification, and Internalization: Three Processes of Attitude Change.'' *Conflict Resolution* 2 (1): 51-60.

Kotter, J. P. 1996. *Leading Change.* Boston, MA: Harvard Business School Press.

Labovitz, G. and V. Rosansky. 1997. *The Power of Alignment: How Great Companies Stay Centered and Accomplish Extraordinary Things.* New York, NY: John Wiley and Sons.

Lepine, J. A., J. A. Colquitt and M. Erez. 2000. ''Adaptability to Changing Task Contexts: Effects of General Cognitive Ability, Conscientiousness, and Openness to Experience.'' *Personnel Psychology* 53 (3): 563-593.

Lindman, F. T., T. E. Callarman, K. L. Fowler and C. A. McClatchey. 2001. ''Strategic Consensus and Manufacturing Performance.'' *Journal of Managerial Issues* 13 (1): 45-64.

Locke, E. A. and G. P. Latham. 1990. *A Theory of Goal Setting and Task Performance.* Englewood Cliffs, NJ: Prentice Hall.

———, ——— and M. Erez. 1988. ''The Determinants of Goal Commitment.'' *Academy of Management Review* 13 (1): 23-39.

Lord, R. G. and R. J. Foti. 1986. ''Schema Theories, Information Processing and Organizational Behavior.'' In *The Thinking Organization.* Eds. H. P. Sims, Jr. and D. A. Gioia. San Francisco, CA: Jossey-Bass. pp. 20-48.

March, J. G. and H. A. Simon. 1958. *Organizations.* New York, NY: Wiley.

Maruyama, G. M. 1997. *Basics of Structural Equation Modeling.* Thousand Oaks, CA: Sage Publications.

Mehta, V. and H. Shah. 2005. ''Characteristics of a Work Organization from a Lean Perspective.'' *Engineering Management Journal* 17: 14-20.

Meyer, J. P., D. J. Stanley, L. Herscovitch and L. Topolnytsky. 2002. ''Affective, Continuance, and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences.'' *Journal of Vocational Behavior* 61: 20-52.

Mitchell, T. R., B. C. Holtom, T. W. Lee, C. J. Sablynski and M. Erez. 2001. ''Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover.'' *Academy of Management Journal* 44: 1102-1121.

Mowday, R. T., L. W. Porter and R. M. Steers. 1982. *Employee Organization Linkages: The Psychology of Commitment, Absenteeism and Turnover.* New York, NY: Academic Press.

Neubert, M. J. and S. H. Cady. 2001. ''Program Commitment: A Multi-study Longitudinal Field Investigation of its Impact and Antecedents.'' *Personnel Psychology* 54 (2): 421-448.

Neumann, J. E. 1989. ''Why People Don't Participate in Organizational Change.'' In *Research in Organizational Change and Development, Vol. 3.* Eds. W. A. Pasmore and R. W. Woodman. Greenwich, CT: JAI. pp. 181-212.

Noble, C. H. and M. P. Mokwa. 1999. ''Implementing Marketing Strategies: Developing and Testing a Managerial Theory.'' *Journal of Marketing* 63: 57-73.

Nonaka, I. and H. Takeuchi. 1995. *The Knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation.* New York, NY: Oxford University Press.

Ohno, T. 1988. *Toyota Production System Beyond Large-scale Production.* Cambridge, MA: Productivity Press.

O'Reilly, C. and J. Chatman. 1986. ''Organizational Commitment and Psychological Attachment: The Effects of Compliance, Identification, and Internalization on Prosocial Behavior.'' *Journal of Applied Psychology* 71 (3): 492-499.

Pappas, J. M., K. E. Flaherty and B. Wooldridge. 2004. ''Tapping into Hospital Champions: Strategic Middle Managers.'' *Health Care Management Review* 29: 8-16.

Polanyi, M. 1967. *The Tacit Dimension.* New York, NY: Doubleday and Company.

Reichers, A. R. 1985. ''A Review and Reconceptualization of Organizational Commitment.'' *Academy of Management Review* 10 (3): 465-476.

Robinson, S. L. 1996. ''Trust and Breach of the Psychological Contract.'' *Administrative Science Quarterly* 41: 574-599.

Rousseau, D. M. 1997. ''Organizational Behavior in the New Organizational Era.'' *Annual Review of Psychology* 48: 515-546.

Schuler, R. S. and S. E. Jackson. 1987. ''Linking Competitive Strategies with Human Resource Management Practices.'' *Academy of Management Executive* 1 (3): 207-219.

Steiger, J. H. 1998. ''A Note on Multi-sample Extensions of the RMSEA Fit Index.'' *Structural Equation Modeling* 5: 411-419.

Tierney, P. and S.M. Farmer. 2002. ''Creative Self-efficacy: Its Potential Antecedents and Relationship to Creative Performance.'' *Academy of Management Journal* 45 (6): 1137-1150.

Van de Ven, A. H. and M. S. Poole. 1995. ''Explaining Development and Change in Organizations.'' *Academy of Management Review* 20 (3): 510-540.

Weick, K. E. 1995. *Sensemaking in Organizations.* Thousand Oaks, CA: Sage.

Weiss, H. M. and R. Cropanzano. 1996. ''Affective Events Theory: A Theoretical Discussion of the Structure, Causes and Consequences of Affective Experiences at Work.'' *Research in Organizational Behavior* 18: 17-74.

Womack, J. P. and D. T. Jones. 1996. *Lean Thinking.* New York, NY: Simon and Schuster.

Wooldridge, B. and S. W. Floyd. 1989. ''Research Notes and Communications Strategic Process Effects on Consensus.'' *Strategic Management Journal* 10 (3): 295-302.

Wright, P. M. and S. A. Snell. 1998. ''Toward a Unifying Framework for Exploring Fit and Flexibility in Strategic Human Resource Management.'' *Academy of Management Review* 23 (4): 756-773.