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EXPLORING THE RELATIONSHIP BETWEEN STRATEGIC ADAPTABILITY AND ENTREPRENEURIAL ORIENTATION: THE ROLE OF STRUCTURE-STYLE FIT

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ABSTRACT

Strategic adaptability and an entrepreneurial orientation (EO) are commonly depicted as desirable organizational qualities. This paper explores the relationship between strategic adaptability and EO as well as the moderating effect of structure-style fit on this relationship. Data collected from 110 manufacturing firms indicate that strategic adaptability is weakly related to EO. However, firms that exhibit greater alignment between their organization structures and top management decision-making styles tend to have more positive strategic adaptability-EO relationships.

INTRODUCTION

Strategic adaptability, or a firm’s ability to adjust its business practices and competitive tactics in response to the perceived efficacy of its strategic actions, can be a strong determinant of organizational performance (Das and Elango, 1995; McKee et al., 1989; Sanchez, 1997; Shimizu and Hitt, 2004). Likewise, the strength of a firm’s entrepreneurial orientation (EO) – that is, the extent to which the firm is concurrently risk taking, innovative, and proactive in its business operations – can have a strong effect on performance (Morris and Sexton, 1996; Wiklund and Shepherd, 2005; Zahra and Covin, 1995). Quite often, the literature on adaptability will link this phenomenon to the occurrence of various forms of innovation (e.g., Tuominen et al., 2004; Chakravarthy, 1992), with adaptability commonly portrayed as a driver of innovation. Inasmuch as innovation is an underlying attribute of entrepreneurial firms (Miller, 1983; Stevenson and Gumpert, 1985), one might expect to find a strong linkage between strategic adaptability and EO. In fact, entrepreneurial firms are often characterized as flexible, agile, responsive, and change-embracing (Cornwall and Perlman, 1990; Miller and Friesen, 1984; Morris, 1998; Pettigrew and Fenton, 2000) – qualities seemingly consistent with the concept of strategic adaptability.

However, strategic adaptability and EO also contain elements or definitional attributes which suggest that these constructs may be weakly linked. Specifically, strategic adaptability, as the term is used here, implies being responsive to strategic outcomes and the effects of prior actions. Reactiveness is the dominant, underlying behavioral tendency of firms that exhibit strategic adaptability. In contrast, EO, by definition, is reflected in proactive behaviors – that is, actions taken in a first-mover or pre-emptive fashion. Thus, the extent to which strategic adaptability and EO are correlated will be determined in part by the ability of firms to exhibit both reactive and proactive behaviors. These two behavioral tendencies could conceivably be manifested in organizations as conflicting, inversely-related phenomena. That is, firms may, in general, exhibit reactive tendencies or proactive tendencies, but not both. This could be the case if different and incompatible organizational capabilities underlie the ability of firms to act reactively versus proactively. A second scenario might be that strategic adaptability and EO are unrelated. This second scenario would imply that being reactive and proactive are independent abilities, such that being proficient at one says very little about a firm’s proficiency at the other. Finally, and consistent with theory that equates adaptability and innovativeness (e.g., Sanchez, 1997; Tuominen et al., 2004) strategic adaptability and EO could be positively associated in practice. For this scenario to occur, firms would need to exhibit a capacity for reactivenes or proactiveness on an as-needed basis and, perhaps, concurrently with respect to different opportunities.
The current paper investigates the relationship between strategic adaptability and a firm’s EO level. The purpose of this paper is to explore the extent to which these two phenomena are related in practice and to investigate the organizational qualities that enable established firms to be simultaneously strategically adaptive and entrepreneurial. A central argument of this research is that both reactive and proactive behaviors are enabled by a common organizational capability that facilitates rapid and informed action. Specifically, both reactivity and proactiveness are behavioral tendencies rooted in a firm’s ability to quickly sense, process, and act on information relevant to new or currently pursued business opportunities. Firms that possess this ability will likely exhibit a stronger relationship between strategic adaptability and EO than firms lacking in this ability.

The premise of this research is that the capacity for rapid and informed action is a function of the goodness-of-fit that exists between a firm’s organizational structure attributes and the decision-making style employed by that firm’s top managers. This is, certain organization structure and decision-making style combinations will likely facilitate a firm’s ability to quickly sense, process, and act on information relevant to new or currently pursued business opportunities, thus enabling those firms to be both strategically adaptive and entrepreneurial. Other structure-style combinations, on the other hand, are expected to be less facilitative of this ability. These theoretically less congruent structure-style combinations are, therefore, expected to be associated with firms that exhibit weaker strategic adaptability-EO linkages.

The organization structure attribute of interest in the current research is the firm’s position on the organicity dimension. Lower positions on this dimension imply the existence of a more mechanistic structure, whereas higher positions imply a more organic structure. The top management decision-making style attribute of interest is the firm’s position on the decision-making technocracy dimension. Lower positions on this dimension imply that a firm’s top managers generally employ an intuitive/experience-based decision-making style. Higher positions imply that top management’s decision-making style is more technocratic – that is, a formal, data-driven process that relies extensively on explicit, quantitative analysis and carefully-planned methods. As will be argued below, a firm’s ability to quickly sense, process, and act on information relevant to new or currently pursued business opportunities is expected to be facilitated by either the combination of organic structures and intuitive/experience-based decision-making styles or the combination of mechanistic structures and technocratic decision-making styles. In short, these theoretically-congruent combinations are expected to create the capacity for rapid and informed action that enables firms to be concurrently strategically adaptive and entrepreneurial.

In summary, the research questions addressed in this study are:
1) What is the relationship between strategic adaptability and EO?
2) Are there particular combinations of organization structure and top management decision-making style attributes that exist in organizations that are able to exhibit both adaptive and entrepreneurial behavior and, if so, what are these combinations?

THEORETICAL BACKGROUND AND HYPOTHESES

The Strategic Adaptability-EO Relationship

Entrepreneurship is characterized by the pursuit of opportunity. Not all opportunities appear in the same form or require the same strategic approach for their exploitation. Consequently, the most entrepreneurial firms may also be the firms best able to modify their strategies in order to pursue diverse opportunities. Perhaps for this reason, the concepts of adaptability and flexibility are common themes in the study of corporate entrepreneurship.
The “entrepreneurial” label is often used in reference to established firms that are concurrently risk-taking, innovative, and proactive in their business operations (Miller, 1983; Morris and Kuratko, 2002). Entrepreneurial organizations have been described as “broadly adaptive” (Muzyka et al., 1995). Khandwalla (1984) specifically included the notion of adaptability in his construct of pioneering innovation management (PI) and found that PI was positively correlated with top managers’ perceptions of a firm as entrepreneurial. Dean and Thibodeaux (1994) defined “adaptiveness” to include a firm’s ability to gauge the implications of changes in its environment and a tendency to abandon previous strategies in order to adjust to the new conditions. In addition to their finding of a positive relationship between adaptiveness and corporate entrepreneurship, the importance of adaptiveness in facilitating firm-level entrepreneurship is further highlighted by their finding that a negative relationship exists between the initial success of strategies and entrepreneurship. These findings suggest that entrepreneurial firms will recognize the need to change their strategies and act accordingly. Barringer and Bluedorn (1999) found planning flexibility, or the relative ease a firm faces in changing its strategic plan as opportunities and threats emerge, to be positively related to a firm’s level of entrepreneurship. These researchers argue that the existence of a flexible planning system may minimize a tendency toward inertia that would prevent entrepreneurial firms from implementing change when it is needed.

An important consideration in the context of the current study is whether strategic adaptability is conceived of as including the possibility of proactive behaviors, rather than simply being limited in a conceptual sense to reactive behaviors. In fact, some scholars have used the terms strategic adaptability and strategic flexibility in manners that allow for the possibility of proactive behavior. For example, in Burgelman’s (1991) discussion of strategic adaptation, the use of internal experimentation processes is stressed. Such processes can result in proactive behaviors that are not simply responses to competitive or market forces. Likewise, Hitt et al. (1998, p. 26) include proactiveness in their definition of strategic flexibility: “the capacity of the firm to proact [italics added] or respond quickly to changing competitive conditions and thereby develop and/or maintain competitive advantage.” By contrast, the present study uses the term strategic adaptability in a more narrow sense and in reference to only responsive or reactive behaviors. To do otherwise and make proactiveness a part of the concept of strategic adaptability as it is a part of the concept EO (Miller, 1983; Lumpkin and Dess, 1996) would create a tautological relationship between these constructs. In short, in the context of this paper, strategic adaptability simply refers to a firm’s ability to adjust its business practices and competitive tactics in response to the perceived efficacy of its strategic actions.

Significantly, even when strategic adaptability is viewed in the current, more restrictive sense, a positive relationship between strategic adaptability and EO may be most likely. It was mentioned above that strategic adaptability and EO may be inversely related or unrelated, depending upon the degree of commonality in the organizational capabilities that enable reactive versus proactive behaviors. Still, the assumption of significant project-related risk, a willingness to engage in product/service innovation, and a willingness to proactively engage competitors will likely be seen as more acceptable options among firms that exhibit a capacity to strategically adapt. This is because such an adaptive capability will enable entrepreneurial firms to correct their paths as they navigate operating domains typically characterized by uncertainty and ambiguity (Miller et al., 1996). Thus, strategic adaptability may enable firms to minimize the possible adverse effects of entrepreneurial initiatives that have not yielded the hoped-for results – a scenario that would invite the concurrent existence of strategic adaptability and EO. This observation leads to the following hypothesis:

**Hypothesis 1: Strategic adaptability will be positively related to EO.**

**Strengthening the Strategic Adaptability-EO Relationship Through Congruent Structure-Decision-Making Style Alignments**

The conceptualization of organization structure used in this study is the mechanistic-to-organic continuum described by Burns and Stalker (1961). Along this continuum, the more mechanistic
organizations are those in which greater importance is attached to line authority than to expertise, specialized jobs have relatively limited access to information about the business overall, vertical communication occurs within the hierarchy, and adherence to formal job descriptions is the norm. Firms with a more organic structure are those in which greater importance is attached to expertise, a network is perceived in which all individuals share an interest in the survival and growth of the firm, knowledge may be located anywhere in the network and is contributed to the common work of the organization, lateral communication resembles consultation rather than command, and adjustment and continual redefinition of individual tasks occurs through interaction with others.

The style variable examined in this study is top management’s approach to decision-making. One conceptualization of decision-making style about which seemingly conflicting recommendations are found in the literature is technocracy, or the relative emphasis placed on formal analysis versus experience and intuition (Khandwalla, 1977; Khatri and Ng, 2000; Schoemaker and Russo, 1993). A technocratic style is heavily reliant on quantitative decision-making tools and characterized by research, systematic evaluation of alternatives, and formal reports. This style is also referred to as rational. At the other end of the technocratic dimension is an intuitive/experience-based style in which decisions are heavily influenced by hunches and feelings that are often based on past experience. Intuitive/experience-based decisions are less likely to result from an explicit logic or to be justified in advance using objective data (Miller and Ireland, 2005).

Theoretically congruent structure-decision-making style combinations – that is, organic structures and intuitive/experience-based decision making styles or mechanistic structures and technocratic decision-making styles – will strengthen the relationship between strategic adaptability and EO because both combinations should facilitate a firm’s ability to quickly sense, process, and act on information relevant to new or currently pursued business opportunities. In doing so, these combinations will enable firms to engage in both reactive and proactive behaviors, thus increasing the likelihood that strategic adaptability and EO will be positively correlated. As a statistical matter, this argument implies that a three-way interaction effect on EO exists among strategic adaptability, organization structure, and top management’s decision-making style. The rationale for such a three-way interaction effect can be described as follows.

In organically-structured firms, strategic adaptability is most positively associated with EO when decisions are made intuitively because the boundary conditions that lead to the development of the effective use of intuition among decision makers are more likely to exist in organically-structured firms than in mechanistically-structured firms (Dane and Pratt, 2004). In particular, the sensitive information processing capacities and open communications channels of organic structures can contribute to the depth and breadth of knowledge that senior executives consider as possible input to decisions. Moreover, the willingness to forgo formal processes and procedures as bases for decision-making in organic structures can lead to greater reliance on hunches or soft data, thus giving managers more opportunity to test and develop their intuitive abilities. Intuitive abilities can strengthen the linkage between strategic adaptability and EO because managers that trust their judgment and do not feel compelled to regularly validate their hunches through quantitative data analysis will be more willing to pursue entrepreneurial initiatives as they are opportunistically adapting their strategies. For these managers, complete, hard data need not be available and supportive of entrepreneurial initiatives prior to their pursuit.

By contrast, in mechanistically-structured firms, strategic adaptability is most positively associated with EO when decisions are made technocratically because, just as organic structures can contribute to the effectiveness of intuitive/experience-based decision-making, mechanistic structures can contribute to the effectiveness of technocratic decision-making. In particular, the norm of strict adherence to procedures and the strong control and personal accountability orientations of mechanistic structures may be reflected in technocratic decision-making styles in which there is great attention to the quality of informational input and process considerations. The concern of managers in mechanistic structures will be that technocratic decision-making is being employed as intended, a fact that sends an implicit message about the likely veracity and value of technocratic decision-making styles when used in mechanistic structures.
Perhaps more significantly, strategic adaptability is often inversely related to the degree to which organizational structure is mechanistic (Cornwall and Perlman, 1990; Englehardt and Simmons, 2002). Therefore, those firms that exhibit strategic adaptability despite having mechanistic structures may do so because their technocratic decision-making styles are seen as providing compelling evidence that adaptation is warranted. Faith in the belief that adaptation is warranted, in turn, may increase an organization’s amenability to pursue novel initiatives, such as those associated with an EO. Collectively, the preceding arguments imply the following hypothesis:

**Hypothesis 2**: Strategic adaptability, organization structure, and top management’s decision-making style will have a three-way interactive effect on EO. Specifically, the relationship between strategic adaptability and EO will be more positive when the organization structure dimension (where low = mechanistic and high = organic) is negatively related to the decision-making style dimension (where low = intuitive/experience-based and high = technocratic).

**METHODS**

**Sample and Data Collection**

The sample for this research was identified using a list of firms obtained from the Southwestern Pennsylvania Industrial Resource Center, a regional economic development organization serving parts of Pennsylvania, Ohio, and West Virginia. The criteria for inclusion in the sample were that the firms be non-diversified business units, operate principally in manufacturing, and have at least 50 employees. These criteria were used to reduce the possibility of interpretational confounds. For example, non-diversified (single or primary industry) firms were used because diversified firms might employ different decision-making styles across their product lines or business units. The selection of manufacturing firms controlled for business sector (agriculture, retail, etc.) influence. Finally, a size minimum was set to control for commonly-observed size related effects on organization structure and firm flexibility (see Mintzberg, 1979).

The total sample consisted of 418 firms. Two questionnaires were mailed to the senior-most executive in each firm who was asked to complete one questionnaire personally and to select another senior executive to serve as a secondary respondent. The secondary respondent data was used for the purposes of corroborating the measures and testing for common method bias. Firms that did not respond to the first mailed request were contacted a second time by telephone one month after the mailing.

Results of t-tests comparing the primary and secondary respondents’ mean scores on each research variable revealed no significant differences (i.e., $p > .10$) between these two categories of respondent. Moreover, a MANOVA test revealed that between-firm differences on the research variables are significantly greater ($p < .001$) than within-firm differences, suggesting that systematic firm-level differences are being captured by the measures, and that primary and secondary respondents within individual firms are perceiving the research variables associated with their firms at a level of similarity that would not be predicted by chance alone.

Usable responses were received from 170 individuals representing 115 firms (i.e., 115 primary respondents and 55 secondary respondents). The organizational response rate for this study is 27.5% (115/418). The current study will focus on 110 firms for which complete data are available on this study’s measures. The 110 firms represent 76 different 4-digit SIC codes with no single 4-digit SIC code represented by more than seven firms. Seventy-two of the firms are privately held and 38 are publicly owned. The average sales revenue, age, and size of the firms in the sample are $123.26 million (SD = $422.10 million), 47.35 years (SD = 30.74 years) and 743.68 employees (SD = 2,374.91), respectively. Seven of the sampled firms reported slightly fewer employees than the 50-employee minimum that was initially used to identify the sample. However, the size of the smallest firms was deemed close enough to the initial cutoff size to warrant their retention in the sample.
The data collected for this study were tested for response bias. These tests supported the conclusion that no systematic differences exist between the early responders, the late responders, and the firms that never responded. Specifically, the number of employees, annual sales revenue, and age reported by all responding firms were compared with these same statistics for the non-responding firms using data obtained from secondary sources such as Ward’s Business Directory of U.S. Private and Public Companies. *t*-test comparisons indicated that these two groups do not differ significantly (i.e., *p* > .10) in size or age. For these basic characteristics, the sample seems representative of the population from which it was drawn. Another set of *t*-tests was used to compare those firms that returned the survey before the follow-up phone call with those that responded only after the follow-up contact. These tests demonstrated no differences (i.e., *p* > .10) between the two groups in terms of the number of employees, annual sales revenue, age, or any of the research variables used in this study.

**Measures**

The following paragraphs describe the measures employed in this research. Table 1 shows the correlation matrix and summary statistics (i.e., means, standard deviations, and Cronbach alpha coefficients where appropriate).

**Entrepreneurial orientation.** EO was measured using the 9-item, 7-point scale proposed by Covin and Slevin (1989), which contains some items adapted from Khandwalla (1976/1977) and Miller and Friesen (1982). These nine items include three items designed to assess the innovation dimension of EO, three items to measure proactiveness, and three to measure risk-taking. As is the case for each multi-item scale in this study, the average of the individual item scores was used as the scale score. Higher overall scores on the 9-item EO scale indicate a more entrepreneurial orientation, while lower scores are indicative of a more conservative orientation.

**Strategic adaptability.** A 4-item, 7-point scale developed expressly for this research was used to measure the concept of strategic adaptability. Firms with low strategic adaptability have low scores on this scale, while highly adaptive firms have high scores on this scale.

**Technocratic decision-making.** A 4-item, 7-point scale developed expressly for this research was used to measure the concept of technocratic decision-making. A low score on this scale indicates that the decision-making style of the firm’s top managers is highly reliant on intuition and lessons generated through experience. A high score indicates a decision-making style that is technocratic, i.e., highly reliant on formal analysis and quantitative decision-making tools.

**Structural organicity.** Khandwalla’s (1976/1977) 7-item, 7-point scale was used to measure the construct of structural organicity. A high score on this scale indicates an organic structure, while a low score indicates a mechanistic structure.

**Control variables.** Five variables were included in this analysis to control for interpretational confounds. The variables are firm size, firm age, relative sales growth rate, environmental hostility and environmental dynamism. Firm size and firm age are included in the analysis because larger and older firms often tend to be more technocratic in their decision-making and more mechanistic in their structures (Fredrickson, 1986; Powell, 1992). Because there is some skewness in the size and age data, the log of these variables is used in the analysis.

An EO is generally assumed to be a growth-oriented strategic posture (Lumpkin and Dess, 1996). Sales growth rate relative to a firm’s industry is a performance measure frequently used in EO research and, in some studies, has been found to be positively related to EO (e.g., Lee et al., 2001; Wiklund, 1999). Additionally, relationships between EO and its antecedents have sometimes been found to be dependent
on the level of firm performance. For example, Covin and Slevin (1988) found that structural organicity is associated with EO for higher performing firms.

The environmental dimensions of hostility and dynamism are included in the analysis because strategic adaptability, organization structure, top management’s decision-making style, and EO have all been found to vary depending on the type of environment a firm faces (e.g., Karagozoglu and Brown, 1988; McKee et al., 1989; Wiklund and Shepherd, 2005). The specific dimensions of hostility and dynamism were chosen for examination because correlations between these two dimensions are generally very modest (e.g., Zahra, 1993), suggesting that different aspects of the environment are being captured in each.

**Analytical Techniques**

The hypotheses were tested using hierarchical regression analysis. Hypothesis 1, a main effect hypothesis, was tested using simple OLS multiple regression analysis. Hypothesis 2 was tested using moderated regression analysis. This latter hypothesis predicts that a firm’s EO is affected by the three-way interaction of the firm’s top management decision-making style, the firm’s degree of structural organicity, and the firm’s strategic adaptability. A negative beta for the three-way interaction term is predicted for Hypothesis 2. Consistent with the method suggested by Allison (1977), all possible two-way interaction terms were entered into the regression equation before the three-way interaction term. In all models, the control variables were entered prior to the other independent variables in order to partial out their effects from the hypothesized relationships. Significantly, correlations among the three independent variables that are the focus of the hypotheses are all modest, ranging from $r = -0.10$ to $r = 0.32$. While multicollinearity does not appear to be a problem within these data, another step was taken to minimize correlations between the independent variables and their interaction terms. Specifically, the independent variables were centered in the manner suggested by Aiken and West (1991) prior to the computation of the interaction terms.

**Tests for Common Method Bias**

To assess any possible effects of common method bias on the results, the sub-sample of firms from which two respondents were available ($n = 55$) was used to test the hypotheses. In this analysis, data furnished by the secondary respondents on the dependent variable (EO) was paired with data furnished by the primary respondents on the independent variables (strategic adaptability, structural organicity, technocratic decision-making, and the control variables). By using data furnished by different respondents to test the hypotheses, any effects of common source bias could be ascertained. The results from this analysis closely approximated those revealed in the complete sample and using only data furnished by the primary respondents. In particular, (1) the standardized beta for the main effect of strategic adaptability on EO was close to zero in both samples ($-.189$ in the mixed-respondent database versus $.088$ in the complete, primary-respondent database) and (2) the standardized beta for the three-way interactive effect of strategic adaptability, structural organicity, and technocratic decision-making on EO was negative and of approximately the same size in both samples ($-7.340$ in the mixed-respondent database versus $-5.116$ in the complete, primary-respondent database). Thus, the pattern of findings does not change significantly when data on each side of the regression equation are taken from different sources.

**RESULTS**

Table 2 presents the results of the regression analysis. Model 1 contains only the control variables and is presented as a base model.
Model 2 is the appropriate column of Table 2 to examine for the purpose of assessing the power of the main effect of strategic adaptability on EO. In this model, the effect of strategic adaptability is tested in the context of the other two independent variables that are needed for constructing the three-way interaction term. The beta coefficient for the relationship between strategic adaptability and EO is not significant. Thus, Hypothesis 1 which predicted a positive relationship between these variables is not supported by this data.

Model 4 contains the three-way interaction term that is the focus of Hypothesis 2. Hypothesis 2 argued that strategic adaptability will exhibit its most positive association with EO when structural organicity and technocratic decision-making are negatively correlated. This prediction is supported by the negative and significant (p < .05) beta coefficient for the three-way interaction of technocratic decision-making, structural organicity, and strategic adaptability. Evidence of this conclusion is offered below.

**DISCUSSION**

The predicted positive relationship between strategic adaptability and EO was not supported by the data. While adaptability as a broad construct is often described as positively related to firm innovativeness (e.g., Miles and Snow, 1978; Tuominen et al., 2004), the more specialized constructs of strategic adaptability and EO examined here have no such relationship. Recognizing that the strategic adaptability scale assesses a firm’s reactiveness whereas the EO scale assesses a firm’s proactiveness, this finding suggests that, in general, these behavior patterns may each have little to do with the other.

A principal finding of the current research is that congruent structure-style combinations—that is, organic structures and intuitive/experience-based decision making styles or mechanistic structures and technocratic decision-making styles—build a stronger and more positive relationship between strategic adaptability and EO, per Hypothesis 2. Both structure-style combinations are internally aligned, with the key structure attributes contributing to the success of the key style attributes, and vice versa. Significantly, these alignments should strengthen a firm’s ability to quickly sense, process and act on information relevant to new or currently pursued business opportunities. As such, these alignments should enable firms to react and proact. They should, therefore, be common among firms that exhibit positive relationships between strategic adaptability and EO. This, in fact, is what was demonstrated in the test of Hypothesis 2.

As an aide to understanding how this conclusion can be reached, Figure 1 illustrates the three-way interaction that exists in the data. As shown in the top plot, strategic adaptability and EO are at their highest joint position when an intuitive/experience-based decision-making style is employed in an organic structure. As shown in the bottom plot, strategic adaptability and EO are at their highest joint position when a technocratic decision-making style is employed in a mechanistic structure. Under any other structure-style combination the correlation between strategic adaptability and EO is not as great.

**Theoretical Implications**

Three principal theoretical implications emerge from the current research. First, while entrepreneurial firms may exhibit strategic adaptability, this capability is not an inherent part of their make-up. Therefore, firms may strategically adapt in response to, for example, environmental turbulence or uncertainty (Oktemgil and Greeley, 1996). They may also exhibit an EO in response to these same conditions (Miles et al., 2000). However, when they do both, it is not because an EO demands strategic adaptability or vice versa. Rather, these are independent behavioral patterns, albeit ones jointly enabled by certain structure-style configurations.

Second, the internal alignment between a firm’s organization structure and decision-making style seems to create a general capability for action, and that capability may facilitate both reactive behaviors
and proactive behaviors. While each type of behavior may require the existence of certain supportive organizational attributes, the existence of fit in a firm’s structure-style alignment can be instrumental in allowing firms to act in either mode as the situation dictates. Consistent with this point, the goodness-of-fit that exists among the elements of an organization’s architecture has often been identified as a key discriminator of firms that take successful strategic actions and those that do not (e.g., Hrebiniak and Joyce, 2001; Powell, 1992).

Third, the current results point to the existence of diverse paths to the achievement of strategically adaptive and entrepreneurial firms. Consistent with the concept of equifinality, the concurrent exhibition of strategic adaptability and EO can occur in the context of more informal and loosely-structured systems of management, as represented by the combination of organic structures and intuitive/experience-based decision-making styles, or in the context of more disciplined and carefully-directed systems of management, as represented by the combination of mechanistic structures and technocratic decision-making styles. Notably, both organizational paths to the facilitation of strategic change are recognized in the literature (see, for example, Miller and Friesen, 1982; Sharma, 1999). Nonetheless, both paths have heretofore not been recognized as possible means to facilitate reactive and proactive behaviors.

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REFERENCES


Figure 1. Three-Way Interaction Plot

Organic Structure

Strategic Adaptability

Entrepreneurial Orientation

Intuitive/Experience-Based Decision-Making Style

Technocratic Decision-Making Style

Mechanistic Structure

Strategic Adaptability

Entrepreneurial Orientation

Intuitive/Experience-Based Decision-Making Style

Technocratic Decision-Making Style
Table 1. Summary Statistics and Correlation Matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>α</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Entrepreneurial Orientation</td>
<td>4.05</td>
<td>1.08</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Technocratic Decision-Making</td>
<td>3.19</td>
<td>1.20</td>
<td>0.78</td>
<td>0.26**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Strategic Adaptability</td>
<td>4.83</td>
<td>0.90</td>
<td>0.77</td>
<td>0.16</td>
<td>-0.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4. Structural Organicity</td>
<td>4.92</td>
<td>1.07</td>
<td>0.84</td>
<td>0.45***</td>
<td>0.01</td>
<td>0.32***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Firm Size (employees)</td>
<td>743.68</td>
<td>2374.91</td>
<td>n.a.</td>
<td>0.12</td>
<td>0.19†</td>
<td>-0.09</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Firm Age (years)</td>
<td>47.35</td>
<td>30.77</td>
<td>n.a.</td>
<td>-0.04</td>
<td>0.05</td>
<td>-0.18†</td>
<td>0.02</td>
<td>0.24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Relative Sales Growth Rate</td>
<td>-0.87</td>
<td>15.56</td>
<td>n.a.</td>
<td>0.20†</td>
<td>-0.05</td>
<td>-0.02</td>
<td>0.18†</td>
<td>-0.03</td>
<td>0.01</td>
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</tr>
<tr>
<td>8. Environmental Hostility</td>
<td>4.30</td>
<td>1.01</td>
<td>0.71</td>
<td>-0.23†</td>
<td>-0.04</td>
<td>0.04</td>
<td>-0.23†</td>
<td>-0.16†</td>
<td>-0.13</td>
<td>-0.12</td>
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</tr>
<tr>
<td>9. Environmental Dynamism</td>
<td>4.01</td>
<td>1.11</td>
<td>0.72</td>
<td>0.21†</td>
<td>0.09</td>
<td>-0.12</td>
<td>-0.02</td>
<td>-0.00</td>
<td>-0.14</td>
<td>0.13</td>
<td>0.12</td>
</tr>
</tbody>
</table>

N = 110

* Firm size and age were logged.

† p < .10
* p < .05
** p < .01
*** p < .001
Table 2. Regression Analysis Results

<table>
<thead>
<tr>
<th>Dependent Variable: Entrepreneurial Orientation</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Firm Size (employees)</td>
<td>0.209</td>
<td>0.148</td>
<td>0.157†</td>
<td>0.156†</td>
</tr>
<tr>
<td>Log Firm Age (years)</td>
<td>-0.171†</td>
<td>-0.104</td>
<td>-0.084</td>
<td>-0.063</td>
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<tr>
<td>Relative Sales Growth Rate</td>
<td>0.155†</td>
<td>0.106</td>
<td>0.085</td>
<td>0.128</td>
</tr>
<tr>
<td>Environmental Hostility</td>
<td>-0.218†</td>
<td>-0.140</td>
<td>-0.108</td>
<td>-0.064</td>
</tr>
<tr>
<td>Environmental Dynamism</td>
<td>0.172†</td>
<td>0.182</td>
<td>0.154†</td>
<td>0.152†</td>
</tr>
<tr>
<td>Step 2: Independent Variables</td>
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<tr>
<td>Technocratic Decision-Making (Tech)</td>
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<tr>
<td>Strategic Adaptability (SA)</td>
<td>0.088</td>
<td>0.037</td>
<td>0.087</td>
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</tr>
<tr>
<td>Structural Organicity (Org)</td>
<td>0.359***</td>
<td>0.359***</td>
<td>0.300***</td>
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<tr>
<td>Step 3: Two-Way Interaction Terms</td>
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<tr>
<td>Tech x Org</td>
<td>-0.221†</td>
<td>-0.220†</td>
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<tr>
<td>SA x Org</td>
<td>-0.124</td>
<td>-0.208†</td>
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<tr>
<td>Tech x SA</td>
<td>-0.017</td>
<td>-0.030</td>
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<td>Step 4: Three-Way Interaction Term</td>
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<tr>
<td>Tech x Org x SA</td>
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<td>-0.214</td>
</tr>
<tr>
<td>Model $R^2$</td>
<td>0.184</td>
<td>0.365</td>
<td>0.414</td>
<td>0.438</td>
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<tr>
<td>Adjusted $R^2$</td>
<td>0.145</td>
<td>0.315</td>
<td>0.348</td>
<td>0.368</td>
</tr>
<tr>
<td>Model $F$</td>
<td>4.700***</td>
<td>7.264***</td>
<td>6.296***</td>
<td>6.299***</td>
</tr>
</tbody>
</table>

a Standardized regression coefficients are reported.

N = 110

† p < .10
* p < .05
** p < .01
*** p < .001