The Interactive Effects of a Comprehensive Strategic Approach and Entrepreneurial Orientation on Small Business Performance

Ralph I. Williams Jr.,
Middle Tennessee State University

Scott C. Manley
Midwestern State University

Joshua R. Aaron
Middle Tennessee State University

Francis Daniel
Belmont University

ABSTRACT

Entrepreneurial orientation and strategic planning have each long been thought to enhance firm performance in small and medium enterprises. However, conceptually these two strategic approaches are based on seemingly conflicting assumptions. Entrepreneurial orientation (EO) is the extent to which firms are innovative, proactive, aggressive, and risk taking, while strategic planning focuses on the extent to which firms methodically study, assess, plan and implement strategic initiatives. We build on past research suggesting a higher-order construct, a firm’s comprehensive strategic approach (CSA) – consisting of goal setting, strategic planning, and financial ratio analysis – is more impactful on performance than strategic planning alone. Further, this study examines CSA and EO in small businesses. We find that EO enhances firm performance and firms engaging in CSA are less likely to exhibit EO. However, the firms that are able to strike the delicate balance of exhibiting EO in the presence of an overall CSA outperform those engaging in EO or CSA alone. The results clear up some confusion in past research findings and provide evidence of a prescriptive need for both EO and CSA concurrently.

Keywords: Entrepreneurial Orientation, Small Business, Strategic Planning

JEL Codes: L21, L25, L26, M10, M13
Introduction

Entrepreneurial orientation (EO) is the extent to which firms are by norms and culture innovative, proactive, aggressive, and risk taking. Those characteristics and behaviors are increasingly important in today’s fast paced and turbulent business environment. There is an underlying assumption that firms with an EO are flexible, nimble, and responsive to the environment.

Strategic planning, on the other hand, focuses on the extent to which firms methodically study, assess, plan, and implement strategic initiatives. The underlying assumption here is that an adherence to the predetermined process leads to less flexibility but more stability. In this paper, we examine a higher-order construct, a firm’s comprehensive strategic approach (CSA), consisting of goal setting, financial ratio analysis, and strategic planning. CSA was established by Williams Jr. and colleagues (2018) as a more impactful construct than its component parts in isolation. If strategic planning is a methodical approach, one would expect strategic planning plus goal setting plus financial ratio analysis to be even more so.

The research conundrum is that both EO and CSA have been shown to positively impact firm performance. How can this be? Are they really two ends of a spectrum? Is there a possibility of coexistence?

To investigate these issues, we organize the manuscript as follows. First, we establish the link between CSA and firm performance as well as the link between EO and firm performance. Next, we discuss the competing nature of the EO and CSA approaches, specifically relying on the work of Mintzberg to highlight the inherent difficulty in executing both EO and CSA simultaneously. Then, we explore the potential benefits for firms that are able to strike the delicate balance of employing an EO in the presence of an overall CSA. We test our hypotheses using a survey instrument we developed and distributed to firms in the printing industry. We conclude by discussing research and practical implications.

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Literature Review

Comprehensive Strategic Approach and Firm Performance

Although one would expect strategic planning to positively affect small business performance, research on the planning/performance relationship has produced mixed results (Brews & Hunt, 1999; Ensley, Carland, & Carland, 2003; Heriot & Loughman, 2009; Honig & Samuelsson, 2012; Robinson & Pearce, 1983; Robinson & Pearce, 1984; Pearce, Freeman, & Robinson, 1987; Powell 1992; Schwenk & Shrader, 1993). Seeking to provide small business leaders guidance as to what management practices link with strategic planning and, together, enhance firm performance, Williams Jr., Manley, Aaron, and Daniel (2018) explored the relationship between a higher-order component (a comprehensive strategic approach - CSA) and firm performance. Higher-order components incorporate more than one dimension (an exogenous construct or lower-order component) (Hair, Hult, Ringle, & Sarstedt, 2017; Wetzels, Odekerken-Schröder, & Van Oppen, 2009).

Williams Jr. and colleagues (2018) included three dimensions in their CSA higher-order component: strategic planning, goal setting, and financial ratio analysis. Goal setting’s natural link with strategic planning – planning includes establishing strategies to achieve goals – and goals setting’s potential positive effect on small business performance (Brinkmann, Grichnik, & Kapsa, 2010) prompted its inclusion in CSA. Financial ratios analysis involves examining economic results in proportions or multiples, which potentially reveals more information than from numbers presented in income statements and balance sheets (Delen, Kuzey, & Uyar, 2013; Thomas & Evanson, 1987). Given financial ratio analysis may help small business leaders understand their firm’s current fiscal position, aid decision outcome assessments, and provide related performance targets (Patrone, 1981; Isberg, 1998), financial ratio analysis was included in CSA.
Interestingly, when Williams Jr. and colleagues (2018) explored the relationship between the individual dimensions (strategic planning, goal setting, and financial ratio analysis) and performance, only goal setting had a statistically significant relationship with firm performance. However, the results indicated strategic planning, goal setting, and financial ratio analysis, together, formed a higher-level construct (CSA), and CSA was found to have a statistically significant positive relationship with small business performance.

Although previous findings indicated a positive relationship between CSA and firm performance, to frame the discussion in the present work, that hypothesis is included here. Therefore, we include this hypothesis:

H1: There is a positive relationship between CSA and firm performance.

Given the aim in the present paper is to expand the study of CSA by exploring EO’s effects, the next section examines EO.

**Entrepreneurial Orientation**

Entrepreneurial Orientation reflects a firm’s strategic posture towards entrepreneurship or the process through which it pursues its entrepreneurial goals (Covin & Slevin, 1989; Lumpkin & Dess, 1996). In the thirty-five years since it was introduced (Miller, 1983), the EO construct has been extensively studied and refined. EO represents a persistent strategic mindset and an organization culture that facilitates a firm’s entrepreneurial disposition (Hughes & Morgan, 2007; Wiklund & Shepherd, 2003, 2005). As such, EO is considered distinct from entrepreneurship, which provides the ‘content’ to EO’s process and generally takes the form of a new entry – accomplished by entering new or established markets with new or existing goods or services (Burgelman, 1983; Lumpkin & Dess, 1996). Although scholars have published a large amount of research on EO, it appears the topic continues to garner much interest (Covin & Lumpkin, 2011).
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Lumpkin and Dess (1996) proposed five EO dimensions: autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness. *Autonomy* reflects the freedom individuals in a firm have to think creatively, make decisions, and champion ideas. *Innovativeness* points to a firm’s willingness to engage new ideas, embrace creativity and experimentation, and seek new products, services, or processes. Firms demonstrating innovativeness look past present beliefs or approaches to find opportunities for improvement or entry. *Risk taking* is a firm’s willingness to accept uncertainty and make resource commitments in the context of risk. Firms that demonstrate a forward-looking, first-mover approach reflect the *proactiveness* dimension. Instead of reacting to the environment, proactive firms seek to shape the setting in pursuit of first mover advantages. Contrasting proactiveness’ focus on market opportunities, *competitive aggressiveness* refers specifically to how a firm approaches its competitors. A competitively aggressive firm takes direct and intense actions aimed toward surpassing its competitors. “In gist, EO refers to a firm’s strategic orientation and it is usually seen as the extent to which a firm innovates, takes risks to compete aggressively, and acts autonomously and proactively” (Vij & Bedi, 2012, p.2). Lumpkin and Dess (1996) further suggested that while all five dimensions are key to understanding the EO concept, the dimensions may manifest in different combinations and may vary independently depending on a firm’s specific situation.

**The effect of entrepreneurial orientation on performance**

Conventional wisdom suggests a positive direct relationship between EO and firm performance. Given the dynamic environment many businesses find themselves competing in today, having a strategic orientation that prominently features norms of creativity, innovation, and proactive behavior would seem to offer much more of a competitive advantage (Wiklund & Shepherd, 2003, 2005). Yet, despite three decades of investigation, the nature of EO’s direct impact on firm performance is far from settled (Montiel Campos, Parellada, Valenzuela, and Revista, 2015; Covin & Lumpkin, 2011). Part of the disparity could result from differences in how various EO constructs are operationalized and measured.
across studies. Indeed, some studies utilize a 3-dimension model for EO, and others apply the above-mentioned five (Vij & Bedi, 2013). Others suggest that the size of the EO-performance effect is dependent on factors internal and external to the organization (Miller, 2011; Montiel Campos et al., 2015). That said, multiple studies have found a positive relationship between EO and firm performance (e.g., Boso, Story, & Cadogan, 2013; De Clercq, Dimov, & Thongpapanl, 2010; Engelen, Gupta, Strenger, & Brettel, 2015; Stam & Elfring, 2008; Wang, 2008), and a meta-analysis of 51 studies found a strong correlation between EO and firm performance (Rauch, Wiklund, Lumpkin, & Frese, 2009). Despite the challenges discussed above, the preponderance of evidence seems to favor a positive EO-performance relationship.

Therefore, we present this hypothesis:

\[ H_2: \text{There is a positive relationship between entrepreneurial orientation and firm performance.} \]

**Why companies engaging in CSA may not engage in EO.**

As stated earlier, CSA includes goal setting, strategic planning, and financial ratio analysis. But do leaders who consciously and deliberately set goals, plan their firm’s strategy for obtaining those goals, and evaluate performance with financial ratios (that is, CSA), tend to employ EO? Henry Mintzberg in multiple papers proposed reasons why strategic planning might inhibit innovation, or as applied here, entrepreneurial orientation. In considering whether small businesses that engage in CSA may not engage in EO, this section applies Mintzberg’s propositions.

In 1971, Mintzberg and McHugh (1985) began an extensive study of the National Film Board of Canada (NFBC), describing NFBC as an adhocracy – an adaptable and flexible organization that lacks bureaucratic policies, procedures, and a formal organizational structure. Mintzberg and McHugh (1985) painted NFBC’s strategic planning approach as one greatly contrasting Frederick W. Taylor’s "one best way" management thinking. Yet this adhocracy, even in the context of changing consumer tastes and the expansion of television, was successful in choosing, developing, promoting, and distributing film.
products; generally, the organization performed well. Mintzberg and McHugh (1985) attributed NFBC’s success to their emergent strategic approach. NFBC’s strategic intentions did not form a predetermined direction; their strategic direction in the organization’s dynamic environment evolved as opportunities were unveiled. This contrasted a deliberate strategic approach in which direction is formed by predetermined strategic intentions. From Mintzberg and McHugh’s (1985) narrative, it appears NFBC applied EO’s five dimensions. Mintzberg and McHugh’s (1985) research produced this premise: the lack of predetermined, strategically-planned, directions allowed NFBC to successfully seek opportunities, creatively develop responses, and build an organization where innovation was the norm, which is an entrepreneurially-oriented organization. Further, they suggest strategic planning may have inhibited development of organization norms consistent with EO.

A bit later, Mintzberg (1987a) proposed, “...strategy itself is a concept rooted not in change but in stability – in set plans and established patterns” (p 20). In another paper that year, Mintzberg (1987b) reinforced his point by stating, “Strategy is not about adaptability in behavior but about regularity in behavior, not about discontinuity but about consistency. Organizations have strategies to reduce uncertainty, to block out the unexpected...” (p. 29). Further, Mintzberg (1987b) added that deliberate strategy provides leaders a “sense of being in control” (p. 29), protects a firm from distraction, and limits leaders’ peripheral vision – all of which are contrary to engaging in EO. And of course, there is Mintzberg’s (1987b) famous quote: “Setting oneself on a predetermined course in unknown waters is the perfect way to sail straight into an iceberg” (p. 26). The implications from Mintzberg and McHugh’s (1985) research of the NFBC and Mintzberg’s (1987a, 1987b) statements are that strategic planning may inhibit EO, and companies that engage in EO typically tend to let their strategic directions evolve.

Related to these positions, Lumpkin and Dess (1996) proposed that organizational type (organic [decentralized and informal], or mechanistic [centralized and formal]) moderates the relationship between EO and firm performance; that is, organic firms perform better when applying EO. One could
assume organic organizations would take a less formal strategic planning approach, and mechanistic firms would take a more formal approach, possibly including CSA. Further, findings indicate firms engaging in strategic planning are less innovative (Benner & Tushman, 2002; Jansen, Van Den Bosch, & Volberda, 2006; Song, Zhao, Arend, & Im, 2015; Song, Im, Bij, & Song, 2011; Arend, Zhao, Song, & Im, 2017). From these findings and the scholars’ thoughts and propositions presented above, we present this hypothesis:

\[ H_3: \text{Comprehensive strategic approach and entrepreneurial orientation are unrelated.} \]

**CSA and EO’s Interactive Effect on Firm Performance**

Although Mintzberg often wrote of deliberate strategic planning’s potential to limit flexibility and innovation (EO), he did acknowledge the potential benefit of engaging both emergent and deliberate strategy (Mintzberg & McHugh, 1985). A firm’s leaders may engage in strategic planning, goal setting, and financial ratio analysis (CSA), but they may also develop a culture that incorporates EO’s five dimensions. Although CSA may introduce inflexibilities, the efficiencies created by CSA may allow a firm more resources to respond to opportunities (Song et al., 2015). Adler and Borys (1996) proposed that employees may interpret strategic planning process as coercive or enabling. Moreover, through imbedding an exploratory and innovative mindset, strategic-thinking leaders (those who engage in CSA) may develop an EO culture that with CSA enhances firm performance. Indeed, a culture embracing EO may reflect good strategic leadership (Lumpkin & Dess, 1996).

Further, combining CSA and EO is consistent with the **SWOT** analysis approach, which focuses on review of internal attributes (Strengths and Weaknesses) and external factors (Opportunities and Threats) (Barney, 1991; Helms & Nixon, 2010). When business leaders engage in the CSA elements – goal setting, strategic planning, and financial ratio analysis – more than likely, they consider the internal strengths and weaknesses of their firm. When EO is present, a firm’s team members seek new products,
services, or processes in an innovative manner; they have the autonomy to champion ideas, proactively seek first mover advantages to shape the environment, and aggressively seek to overwhelm competitors (Lumpkin & Dess, 1996). Thus, when business leaders develop an EO culture in their firms, focusing on the external environment becomes a norm. Therefore, businesses that engage in both CSA and EO, consistent with SWOT, analyze both their internal and external environments. Therefore, interaction of CSA and EO, one would think, enhances performance. Indeed, there is research that generally supports the contention that EO in combination with strategic planning leads to better performance outcomes than either alone (Kohtamäki, Kautonen, & Kraus, 2008; Bachmann, Engelen, & Schwens, 2016; Deligianni, Dimitratos, Petrou, & Aharoni, 2016). Therefore, we present this hypothesis:

H₄: Both comprehensive strategic approach and entrepreneurial orientation are positively associated with firm performance when the relationships are tested simultaneously.

EO as a Moderator of the Relationship between CSA and Firm Performance

From the resource-based model, a firm’s resources include knowledge, which is an intangible asset, that helps in the forming and execution of effective strategies leading to competitive advantage (Barney, 1991; Wiklund & Shepherd, 2003). Knowledge produced through CSA – goal setting, strategic planning, and financial ratio analysis – has the potential to direct business leaders to effective strategic directions. Because of the idiosyncratic nature of businesses and the individuals who lead them, the knowledge produced in CSA that is unique to the firm could provide a valuable, rare, and imitable resource. When business leaders experience casual ambiguity, they have trouble discerning the connections among strategic actions and outcomes (Barney, 1991). Given the nature of the three CSA elements – setting goals, determining strategy to achieve those goals, and measuring performance related to goal achievement in a manner deeper than simple financial statement analysis – knowledge generated through CSA may reduce ambiguity, producing another knowledge resource. These points
from resource-based theory add support to our first hypothesis, that a positive relationship exists between CSA and firm performance.

However, considerations from the resource-based model also support the potential for presence of EO to enhance the positive relationship between CSA and firm performance. Related to the VRIO model (Barney, 1995), CSA has the potential to produce knowledge that is Valuable, Rare, and Inimitable. Additionally, engaging in an EO culture relates to the last element of the VRIO model, Organization, which provides the appropriate configuration to leverage resources and capabilities. Again, a business with an EO culture will proactively seek opportunities, will support team members’ exploration and championing of ideas, will seek to shape the environment, and will aggressively move against competitors. An Organization that espouses an EO culture will enhance performance benefits of the Valuable, Rare, and Imitable knowledge produced by CSA; therefore, we present this final hypothesis:

\[ H_5: \text{Entrepreneurial orientation positively moderates the relationship between comprehensive strategic approach and firm performance.} \]

**Research Methodology and Sample**

The purpose of this study is to examine the relationship between a comprehensive strategic approach, entrepreneurial orientation, and firm performance. For the ultimate dependent variable of interest we used a self-reported perceptual measure of firm performance, which is consistent with prior research (Eddleston & Kellermanns, 2007). Self-reported measures such as these are typically highly correlated with absolute measures of firm performance (Shepherd & Wiklund, 2009; Honig & Samuelsson, 2012). We asked respondents to use a 7-point Likert scale to assess their firms’ performance relative to their competitors in eight areas that taken together represent overall firm financial performance. Cronbach’s Alpha for firm performance was 0.933. These and all other measures are included in the appendix.
Comprehensive strategic approach is a higher order construct consisting of strategic planning, goal setting, and the use of ratio analysis (Williams Jr. et al., 2018). Survey items developed by Williams et. al (2018) had previously been adapted from earlier research (e.g., Eddleston, Kellermanns, & Sarathy, 2008; Gould, 1979; Kellermanns & Eddleston, 2006; McMahon & Davies, 1994; Powell, 1992; Robinson & Pearce, 1983; Thomas & Evanson, 1987). Cronbach’s Alpha for strategic planning, goal setting, and ratio analysis were 0.859, 0.828, and 0.780, respectively. Cronbach’s Alpha for the second order construct comprehensive strategic approach was 0.812.

Consistent with prior research, we adopted the scale items previously developed by Hughes & Morgan (2007) to assess our subject firms’ entrepreneurial orientation. Entrepreneurial orientation is a second-order construct consisting of five dimensions: risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy (Covin & Wales, 2011; Hughes & Morgan, 2007; Lumpkin & Dess, 1996). Cronbach’s Alpha for the five dimensions were 0.749, 0.845, 0.759, 0.749, and 0.852, respectively. Cronbach’s Alpha for the second order construct entrepreneurial orientation was 0.925. Consistent with prior research (Gibson & Cassar, 2002; Risseeuw & Masurel, 1994), we controlled for firm size with both sales and employment levels. The path coefficient for size in sales was 0.059 (t = 0.972, p = 0.331), and the path coefficient for size in employees was 0.018 (t = 0.285, p = 0.776). Thus, neither control was statistically significant.

Data Collection

The questionnaire was administered online by Qualtrics® to companies who are members of Printing Industries of American (PIA), a national trade association. Printing companies are an appropriate sample for this study for a number of reasons. Most printing firms that are PIA members are small businesses, with an average of 47 employees. Due to recent changes in technology and the emergence of desktop publishing, printing companies offer a range of products and services that are unique to each firm. Thus, printing companies are quite diverse. Finally, there is a wide range of financial
performance among PIA member firms; 25% of PIA member firms earn a net profit of 10% of revenue or
greater, with the remaining 75% operating at or just below breakeven (Williams et al., 2018).
We surveyed 3,238 members of PIA and received 231 usable responses, providing a 7.13% response
rate. The sample size in this study exceeded the minimum recommended level of 147 for this research,
assuming a statistical power of 0.80 and considering the model specification, significance level, and
anticipated R² value (Hair, et al., 2017). Respondents were company executives and senior firm
managers at or above vice-president level. The average number of full-time employees for our sample
was 44, and sales averaged $9,347,189.

Methodology

Because this research is exploratory and the focus of the structural model is predictive, partial
least squares structural equations modeling (PLS-SEM) was utilized (Hair, Hult, Ringle, & Sarstedt, 2017).
PLS-SEM is also the preferred approach based upon hierarchical modeling constraints (Hair, et al., 2017)
and is better suited for studies in which the phenomenon under consideration is evolving or in which the
theoretical framework is not well developed (Hair et al., 2017; Patel, Manley, Hair, Ferrell, & Pieper,
2016). PLS-SEM is increasingly used in management and marketing research (Hair, Sarstedt, Pieper, &
Ringle, 2012; Hair, Sarstedt, Ringle, & Mena, 2012; Henseler, Ringle, & Sinkovics, 2009). PLS-SEM is also
the preferred approach when the purpose of the research is theory development or extension, and
when composite-based measurement models are being used as in this study (Astrachan, Patel, &
Wanzenried, 2014).

The model was examined using SmartPLS (Ringle, Wende, & Becker, 2015). To assess the model
and ensure adequate sample size, the procedures specified by Hair, Hult, Ringle, and Sarstedt, (2017)
were applied. The measurement model included twenty seven measures of the eight exogenous
constructs (strategic planning, goal setting, and ratio analysis for CSA, and autonomy, competitive
aggressiveness, innovativeness, proactiveness, and risk taking for EO), eight measures of overall firm
performance, and two control variables. The full measurement model, including the measurement and structural model results, is shown in Figure 1.

**Results and Analysis**

The outer model was examined first. As shown in Table 1, composite reliability ranged from 0.845 to 0.968, exceeding the minimum requirement of 0.70 (Hair, Black, Babin, & Anderson, 2010). The outer loading for the variables EO_10, EO_16, and REL_PERF_4 were 0.698, 0.688, and 0.640, respectively. Loadings for all of the other indicators exceeded the minimum standard of 0.70 (Hair et al., 2010). Also shown in Table 1, the average variance extracted (AVE) for the constructs ranged from 0.576 to 0.781, thereby demonstrating convergent validity by exceeding the minimum standard of 0.50 (Hair et al., 2010). The constructs were also evaluated using confirmatory tetrad analysis (CTA) as specified by Hair and colleagues (2017), and the results confirm that all of the indicators in the measurement model are appropriately specified as reflective.
Figure 1 Full measurement and structural model with results
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Table 1: Reliability and Average Variance Extracted

<table>
<thead>
<tr>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
<th>Cronbach’s Alpha</th>
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<tbody>
<tr>
<td>Strategic Planning</td>
<td>0.914</td>
<td>0.781</td>
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<tr>
<td>Goal Setting</td>
<td>0.897</td>
<td>0.744</td>
</tr>
<tr>
<td>Ratio Analysis</td>
<td>0.870</td>
<td>0.691</td>
</tr>
<tr>
<td>Comprehensive Strategic Approach</td>
<td>0.853</td>
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</tr>
<tr>
<td>Autonomy</td>
<td>0.891</td>
<td>0.576</td>
</tr>
<tr>
<td>Competitive Aggressiveness</td>
<td>0.855</td>
<td>0.664</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>0.861</td>
<td>0.674</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>0.906</td>
<td>0.764</td>
</tr>
<tr>
<td>Risk Taking</td>
<td>0.857</td>
<td>0.666</td>
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<tr>
<td>Entrepreneurial Orientation</td>
<td>0.935</td>
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<tr>
<td>Firm Performance</td>
<td>0.945</td>
<td>0.685</td>
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</table>

Following the guidelines established by Hair and colleagues (2017), discriminant validity was evaluated using two approaches. The square roots of the AVEs for the nine constructs were higher than the inter-construct correlations, thereby demonstrating initial discriminant validity according to the Fornell-Larcker criterion (1981). The heterotrait-monotrait (HTMT) criterion (Henseler, Ringle, & Sarstedt, 2015) also demonstrated discriminant validity, with the constructs exhibiting ratios of less than 0.85. Thus, discriminant validity was established.

Having confirmed all of the constructs as reliable and valid, the structural model results were assessed next. The bootstrapping option in SmartPLS was executed using 1,000 subsamples to assess the significance levels of the path coefficients (Hair et al., 2017). Table 2 shows the path coefficients and their significance levels; hypotheses test results are also shown. An analysis of the path coefficients and significance levels shows that hypotheses one through four were supported while hypothesis five was rejected.
Table 2: Structural Model Results and Hypotheses

<table>
<thead>
<tr>
<th>Structural Relationships</th>
<th>Path Coefficient(s)</th>
<th>T Statistic(s)</th>
<th>P Values(s)</th>
<th>Hypothesis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSA is positively related to firm performance</td>
<td>0.360</td>
<td>6.486</td>
<td>0.000</td>
<td>H1</td>
<td>Supported</td>
</tr>
<tr>
<td>EO is positively related to firm performance</td>
<td>0.377</td>
<td>7.008</td>
<td>0.000</td>
<td>H2</td>
<td>Supported</td>
</tr>
<tr>
<td>EO is unrelated to CSA</td>
<td>0.000</td>
<td>0.121</td>
<td>0.904</td>
<td>H3</td>
<td>Supported</td>
</tr>
<tr>
<td>CSA &amp; EO are positively related to firm performance (when tested simultaneously)</td>
<td>0.269, 0.239</td>
<td>4.156, 3.765</td>
<td>0.000, 0.000</td>
<td>H4</td>
<td>Supported</td>
</tr>
<tr>
<td>EO positively moderates the relationship between CSA &amp; firm performance</td>
<td>-0.027</td>
<td>0.752</td>
<td>0.418</td>
<td>H5</td>
<td>Not supported</td>
</tr>
<tr>
<td>Size (employees) is related to firm performance</td>
<td>0.059</td>
<td>0.972</td>
<td>0.331</td>
<td>Control</td>
<td>Not significant</td>
</tr>
<tr>
<td>Size (sales) is related to firm performance</td>
<td>0.018</td>
<td>0.285</td>
<td>0.776</td>
<td>Control</td>
<td>Not significant</td>
</tr>
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</table>

To provide more insight into relationships between the various constructs under consideration, the $f^2$ (effect size) and $Q^2$ (blindfolding) were examined. The effect sizes of the predictive constructs (comprehensive strategic approach and entrepreneurial orientation) of 0.045 and 0.055, respectively, are small (Cohen, 1992). At the same time, the $Q^2$ of 0.077 indicates a small to medium predictive relevance for the model (Hair et al., 2017). Table 3 shows the means, standard deviations, and Pearson’s correlations for all of the constructs included in this study.
Table 3: Descriptive Statistics and Pearson’s Correlations of Study Variables

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<th>Mean</th>
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<tr>
<td>Strategic Planning</td>
<td>16.59</td>
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<td>Goal Setting</td>
<td>14.73</td>
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<tr>
<td>Ratio Analysis</td>
<td>1.16</td>
<td>1.20</td>
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**Significant at the 0.05 level.
***Significant at the 0.01 level.
Discussion

As we state above, entrepreneurial orientation and strategic planning have each long been thought to enhance firm performance in small and medium enterprises. Our study provides further support that these overall approaches do, indeed, enhance firm performance.

Hypothesis 1 predicts that a firm’s comprehensive strategic approach – consisting of goal setting, strategic planning and financial ratio analysis – will positively impact firm performance. This hypothesis was supported. SMEs often face resource constraints to a greater degree than their large firm brethren. As such, it is even more crucial that SMEs engage only in the activities that “pay off”. The results of hypothesis 1 suggest that engaging in a comprehensive strategic approach is a worthwhile use of time for top managers of SMEs.

Hypothesis 2 suggests that an SME with an entrepreneurial orientation will enjoy improved financial performance. This hypothesis was also supported. The extent to which firms allocate time, energy, and funds to being innovative, risk-taking, aggressive, proactive, and fostering an environment of autonomy among their employees, will help them outperform those competitors who exhibit less EO. This is a particularly interesting finding with respect to small businesses and the need to innovate. Given the liabilities of smallness and newness often attached to SMEs, one could make arguments for or against smaller firms taking on additional risk. Our results suggest they should and will be rewarded for doing so.

While H₁ (CSA) and H₂ (EO) are both interesting findings on their own, there is inherent difficulty firms may have striking the balance of a CSA and EO. Fundamentally, these two approaches seem to contradict. A CSA is one that is well thought out and based on much analysis. An EO is often one that is willing to make the leap despite evidence suggesting that such a leap is risky. Hypothesis 3 predicts that CSA and EO will be unrelated. Not surprisingly, we find them to be unrelated in our sample.
Hypothesis 4 examines the impact of a firm that is able to do both simultaneously, suggesting that both CSA and EO will be positively associated with firm performance. This hypothesis was also supported. This is in line with our expectations and seems to fit with a business’ ability to analyze both their internal and external environments as is necessary in a typical SWOT analysis. If engaging in a CSA is good for a firm and exhibiting characteristics of an EO is good for a firm, one would expect the interaction of CSA and EO to enhance firm performance, and it does.

Hypothesis 5 suggests that EO positively moderates the relationship between CSA and firm performance. We formed these expectations around the notion that a CSA is likely to lead to knowledge creation that is valuable or rare and such knowledge could be even more profitably utilized when created within an embedded EO culture. In other words, we proposed the relationship between CSA and firm performance is enhanced when EO is present. We did not find support for H5.

**Limitations and Conclusion**

We understand our study has limitations. We examined only one industry (printing businesses). While we believe the printing industry is certainly an appropriate context to test these constructs, we know that generalizability cannot be established by analyzing only one industry. Future research should utilize additional types of businesses. Our study is also limited to a survey from 2017. It would be interesting to see how the impacts of these constructs evolve over time in a more longitudinal approach.

We believe our study makes an important contribution to the literature on small business strategic approaches and their impacts on firm performance. First, we expand on research suggesting that strategic planning, goal setting and financial ratio analysis need to be part of a firm’s overall comprehensive strategic approach, providing evidence that using a CSA leads to better financial performance. Second, we also find that a firm exhibiting an entrepreneurial orientation, despite the seeming contradiction in overall orientation, can also expect enhanced performance. Third, we establish that while both CSA and EO are good for an SME, they are indeed distinct concepts. Finally, we suggest
and find that firms that strike the delicate balance of engaging in both CSA and EO will be rewarded even more.
The Interactive Effects of a Comprehensive Strategic Approach and Entrepreneurial Orientation on Small Business Performance

References


The Interactive Effects of a Comprehensive Strategic Approach and Entrepreneurial Orientation on Small Business Performance


Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research, 18*(3), 382-388.


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Appendix – Survey Items

Financial Performance
On a 7-point Likert scale where 1 = much worse, 2 = worse, 3 = slightly worse, 4 = about the same, 5 = slightly better, 6 = better, and 7 = much better, participants were asked to rate the performance of their businesses on each of the following items over the last year:

1. Relative to my competitors, my business' growth in sales is...
2. Relative to my competitors, my business' growth in profitability is...
3. Relative to my competitors, my business' growth in market share is...
4. Relative to my competitors, my business' growth in number of employees is...
5. Relative to my competitors, my business' return on equity is...
6. Relative to my competitors, my business' return on total assets is...
7. Relative to my competitors, my business' net profit margin (return on sales) is...
8. Relative to my competitors, my business' ability to fund growth from profit is...

Comprehensive Strategic Approach

Strategic Planning
One a 7-point Likert scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, and 7 = strongly agree, participants were asked to respond to the following statements:

1. We have a strategy for achieving our business goals.
2. We have a plan for our business.
3. We know what we need to do to reach our business goals.

Goal Setting
1. We have broad, long-range goals known to all managers.
2. We have specific, short-term goals known to all managers.
3. In our company's strategic process, we emphasize formulating goals and targets to be achieved in the competitive environment.

Ratio Analysis
Using a categorical measure where 0 = no and 1 = yes, participants were asked to respond to three statements:

1. Each year, we participate in the PIA Ratio Studies.
2. Each year, we benchmark our performance to the PIA Ratio Studies results.
3. Each year, we use the PIA Ratio Studies in making strategic decisions.
Entrepreneurial Orientation  
On a 7-point Likert scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, and 7 = strongly agree, participants were asked to respond to the following statements:

**Innovativeness**
1. We actively introduce improvements and innovations in our business.
2. Our business is creative in its methods of operation.
3. Our business seeks out new ways to do things.

**Proactiveness**
4. We always try to take the initiative in every situation (e.g., against competitors, in projects, and when working with others).
5. We excel at identifying opportunities.
6. We initiate actions to which other organizations respond.

**Risk Taking**
7. The term "risk taker" is considered a positive attribute for people in our business.
8. People in our business are encouraged to take calculated risks with new ideas.
9. Our business emphasizes both exploration and experimentation for opportunities.

**Competitive Aggressiveness**
10. Our business is intensely competitive.
11. In general, our business takes a bold or aggressive approach when competing.
12. We try to undo and out-maneuver the competition as best we can.

**Autonomy**
13. Employees are permitted to act and think without interference.
14. Employees perform jobs that allow them to make and instigate changes in the way they perform their work tasks.
15. Employees are given freedom and independence to decide on their own how to go about doing their work.
16. Employees are given freedom to communicate without interference.
17. Employees are given authority and responsibility to act alone if they think it to be in the best interests of the business.
18. Employees have access to all vital information.