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Sherry Robinson, Editor
Penn State University

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TABLE OF CONTENTS

LETTER FROM THE EDITOR

We are extremely pleased to present the *Academy of Entrepreneurship Journal*, an official journal of the Academy of Entrepreneurship, Inc. The AOE is an affiliate of the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The *AEJ* is a principal vehicle for achieving the objectives of the organization. The editorial mission of this journal is to advance the knowledge, understanding, and teaching of entrepreneurship throughout the world. To that end, the journal publishes high quality, theoretical and empirical manuscripts, which advance the entrepreneurship discipline.

The manuscripts contained in this volume have been double blind refereed. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies.

As editors, we intend to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in differences we find learning; in differences we develop understanding; in differences we gain knowledge and in differences we develop the discipline into a more comprehensive, less esoteric, and dynamic metier.

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ORGANIZATIONAL FINANCIAL PERFORMANCE: IDENTIFYING AND TESTING MULTIPLE DIMENSIONS

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ABSTRACT

This research addresses the measurement of organizational financial performance. Its primary purpose is to provide researchers and managers a better understanding of the implications of selecting the dependent variables that should be used in empirical studies and management practice where organizational financial performance is the criterion of interest. This is the first study that has undertaken to empirically identify both the different distinct dimensions of organizational financial performance and the measures that represent those dimensions. Since no prior research has empirically established the domain of organizational financial performance, this research is by necessity exploratory in nature.

A two-part approach was adopted to address this problem. First, a model of overall organizational performance was inferred from empirical data that included the primary constructs of an organization's financial performance and empirical measures of these constructs. Next, the validity and reliability of the constructs and measures were tested.

The identification of different dimensions and measures of financial performance for both annual and three-year timeframes are unique contributions of this research.

INTRODUCTION

There is little dispute that one of the core purposes of both entrepreneurship and strategic management theory and research is the improvement of organizational performance (Eisenhardt & Zbaracki, 1992; Venkatraman & Ramanujam, 1986). However, there is no consensus regarding the best, or even sufficient, measures of organizational performance.

It has long been reported that different measures of organizational effectiveness and performance have been used in entrepreneurship and management studies with little or no thoughtful discussion of why the measures used in the studies were chosen (Cameron, 1986). Little attention has been paid to the limitations that these measures may impose on the interpretation or generalizability of the results of the research. The most frequently used measures of organizational performance are financial. However, no study has successfully proposed and empirically tested a generalizable multi-dimensional model of organizational financial performance. This is a particularly challenging issue since changing environmental conditions may dictate that different performance dimension priorities exist at different times. For instance, during economic recessions, liquidity may be more crucial than profitability, while during economic booms, profitability and growth may take precedence.

This research examines the multi-dimensional structure of organizational financial performance and seeks to empirically identify distinct financial performance constructs and appropriate measures of those constructs.

THE RATIONALE FOR THIS RESEARCH

The topic of this research is particularly important for several reasons. First, a multi-dimensional model of organizational financial performance has not previously been explicitly studied. However, in 1987, Venkatraman and Ramanujam empirically demonstrated that growth and profitability were distinctly different measures of performance, but did not attempt to propose a specific model for financial performance measurement. In 1996, Murphy, Trailer and Hill examined the dependent measures used in entrepreneurship research and through exploratory factor analysis found nine distinct financial performance constructs among the more than 50 different dependent financial performance variables reported upon. And, in 1998, Robinson empirically tested the relationship between four separate independent variables (stage of the life cycle, industry concentration, entry barriers, and product differentiation) with eight different measures of financial performance used in new venture research and found significantly different results between each independent variable and the eight different dependent financial performance variables. This further demonstrated the existence of multiple dimensions of organizational financial performance. Finally, part of this research involved an analysis of 1,045 articles published in the leading entrepreneurship and management journals between 1996 and 2001. Of these 1,045 articles, 138 purported to use overall organizational performance as the dependent variable. Over 70% of these 138 articles used a financial performance measure as the dependent variable. Further, 46% of these 138 articles used only a single measure, 25% used two measures, and 18% used three measures to represent organizational performance. Overall, a total of 88 different dependent measures were used to represent overall organizational performance in these 138 articles, generally without any support for the validity of the measures utilized. In short, it can be inferred from these statistics that there is no consensus in the entrepreneurship and strategic management research conducted over the 5 years with respect to valid measures of organizational performance. However, it is also clear from this prior research that organizational financial performance is definitely a multi-dimensional construct.

Second, a generalizable and more powerful model for measuring organizational financial performance has significant implications for future research and for reexamining the findings of prior research where less powerful dependent variable measurement models were used. Such a model can help resolve multiple inconsistent theories where differing dependent variables were used.

Finally, a multi-dimensional model of organizational financial performance can significantly improve organizational stakeholders' understanding of the effectiveness of management. It allows for the measurement of value creation and for reasonable comparison across companies that have chosen different routes to creating value.

THE IMPORTANCE OF EFFECTIVE MEASUREMENT

The development of valid operationalizations of the key concepts and constructs used to form of both independent and dependent variables in the models used in entrepreneurship and strategic management research is fundamental to the description and corroboration of theoretical relationships being tested in research, and is the essence of the measurement stream of research. Put differently, the validity of research studies that use arbitrary dependent measures to represent overall organizational performance is highly questionable. Researchers need to know that the effects they are studying will reasonably be represented by the changes in the dependent variables. The use of different measures as proxies for "performance" makes extension from one study to the next dubious. Peter (1979) clearly summed up the importance of construct measurement as follows:

Valid measurement is the *sine qua non* of science. In a general sense, validity refers to the degree to which instruments truly measure the constructs which they are intended to measure. If the measures used in a discipline have not been demonstrated to have a high degree of validity, that discipline in not a science (page 6).

Measurement is the "careful, deliberate, observations of the real world for the purpose of describing objects and events in terms of the attributes composing a variable" (Babbie, 1998:116). For a variable to be clearly and equally understood by many different individuals, it must be accurate, precise, quasi-invariant across observers, provide discrimination from other variables, and be stable over time. As a result, it is problematic that overall organization performance has been "measured" in scores of research studies by dozens of variables that are generally not strongly correlated over time.

PRIOR STUDIES OF ORGANIZATIONAL PERFORMANCE

Despite the importance of accurately measuring organizational financial performance, only seven studies have addressed the question of how organizational financial performance is or should be measured. Perhaps more importantly, none of these studies seem to have significantly influenced how organizational financial performance is actually measured in most of the empirical research that uses this construct as a dependent measure. These seven studies fall into three braod categories. They are (1) Studies that describe the measures actually used in entrepreneurship and strategic management research. These include the research of Brush and VanderWerf (1992), Murphy, Trailer and Hill (1996), and Carton (2004). (2) Studies that focus on the need for multi-dimensional measures of organizational financial performance. These include the research of Rawley & Lipson (1985), Chakravarthy (1986), and Venkatraman and Ramanujam (1987). And (3), studies that seek to determine the "best" measure(s) of organizational financial performance, i.e., Robinson (1996).

Studies of the Measures used in Entrepreneurship and Strategic Management Research

Brush and VanderWerf (1992) examined thirty-four different studies in the entrepreneurship literature that explicitly used firm performance as the dependent variable. They found that thirty-five different measures of performance were used in those studies indicating that researchers perceived many different dimensions of performance and that there was no agreement on what measures actually represent organizational performance. The most frequently used measures of performance were changes in sales, organizational survival, changes in number of employees, and profitability. Brush and VanderWerf state that they did not attempt to sort out the problem of which performance measures to use. However, they note that the fact that 35 different performance measures were used in just 34 studies indicates that more work needs to be done to identify measures that make sense for use across studies.

Murphy, Trailer and Hill (1996) examined the variables used to measure organizational performance in entrepreneurship research in the years 1987 through 1993. They identified 51 articles published in the top entrepreneurship and strategic management journals that explicitly used firm performance as a dependent variable. They found, consistent with Brush & VanderWerf (1992) and Cooper (1993), that there was no consistency in the variables used to measure new venture performance. In total, they identified 71 different dependent variables used to measure performance in the 51 articles.

Murphy et al. then examined 19 financial variables from a sample of 995 public firms with 500 or fewer employees. They found that less than half of the intercorrelations between performance measures were significant, indicating that these variables measured different dimensions of performance. More than 25% of the significant correlations of performance measures were negative. Murphy, et al. concluded that the "…relationship between a given independent variable and performance is likely to depend upon the particular performance measure used." They further concluded "…research finding support for an effect on one performance variable cannot justify the assumption that the effect is similar across other measures of performance (1996: 21)." Their study also found that the performance measures tested failed to meet the requirements of convergent and discriminant validity necessary to validate a one-dimensional performance construct (Campbell & Fiske, 1959).

Murphy et al. performed an exploratory factor analysis on the 19 variables, which yielded 9 factors that explained over 70% of the variance in the performance measures. In an attempt to fully examine the results obtained by Murphy et al., we performed a confirmatory factor analysis of the nine factors identified in their research, using LISREL 8.12 as suggested by Bollen (1989). The covariance data reported in the 1996 study was used as the basis for the analysis. The results of this analysis, reported in Carton (2004), indicated that the factors determined by Murphy et al. did not fit the data. The model yielded Chi-square = 1292 with 127 degrees of freedom ($p<0.0001$), Bentler and Bonnet normed fit index of .727 and a non-normed fit index of .657. This indicates that while the variables did load into factors, these factors may not be supported by the data. This is possible since exploratory factor analysis will force variables into the number of factors specified, even though the factors may not have the best possible fit for the data. Even if the data fit the model, because the analysis was an exploratory factor analysis, there was no theoretical support for the identified constructs. Consequently, the variables within each factor, as determined by the exploratory factor analysis, fail the test for convergent validity using confirmatory factor analysis, and they also did not have any face validity.

Studies of the Multi-Dimensional Character of Organizational Financial Performance

In 1985, Rawley and Lipson examined the relationships among several combinations of performance measures to demonstrate that different common measures of financial performance did not represent the same attributes. Of these comparisons, the only overall performance measures that they found to be related to each other at statistically significant levels were the Q ratio versus cash flow return on investment ("CFROI") adjusted for the Capital Asset Pricing Model ("CAPM") discount rate, and market-to-book value versus return on investment adjusted for inflation. The Q ratio was proposed by Callard & Kleinman (1985) as a substitute for Tobin's Q, and is calculated as the ratio of the value of individual business units divided by the inflation adjusted purchase cost of assets. The other measures that they compared were clearly discriminant and do not measure the same construct. Table 1 summarizes their findings for the S&P 400 companies for the period 1982 through 1984.

Table 1: Summary of Relationships Among Selected Performance Measures from Rawley and Lipson (1985)

Variables Compared	R^2
Price-to-earnings ratio vs. EPS growth	.12
Price-to-book ratio vs. ROE less CAPM cost of equity	.19
Price-to-book ratio vs. Return on capital employed – CAPM cost of capital	.34
Q ratio vs. CFROI less discount rate	.65
Market-to-book ratio vs. ROI less inflation	.71

Chakravarthy's 1986 comparative study of seven "exemplar" firms with seven "maladapted" firms in the computer industry developed an eight variable discriminant function for the two groups. None of the individual profitability measures tested in this research was capable of discriminating between the two groups. The discriminant function developed included multiple dimensions of performance, again indicating the importance of multivariate measures of organizational performance.

Using confirmatory factor analysis ("CFA"), Venkatraman and Ramanujam (1987) empirically examined the degree of convergence across methods of measuring organizational financial performance and in so doing, demonstrated that sales growth, profit growth, and profitability were discriminate measures of different dimensions of organizational financial performance. They selected these measures based upon a review of the different performance dimensions typically used by different disciplines done by Hofer (1983) and Woo and Willard's (1983) findings of key dimensions of performance based upon an analysis of PIMS data. The implication of this finding is that in isolation, none of the three variables individually measure the organizational financial performance construct. Consequently, the findings from a study that uses sales growth to represent organizational financial performance should not be equated to findings from a study that uses either profit growth or profitability to represent business economic performance.

Studies of the "Best" Measure(s) of Organizational Financial Performance

Robinson (1995) examined ten different new venture performance measures to determine which individual measure was the most effective in accurately assessing long-term economic value creation. The ten measures studies were change in sales, sales level, return on sales, return on invested capital, return on equity, return on assets, net profit, earnings before interest and taxes, earnings multiples, and shareholder value created. All ten performance measures were tested individually for their relationship with multiple independent variables that had been found in prior literature to have positive relationships to new venture performance. The shareholder value created measure (also commonly known as return to shareholders) was determined to be the most effective measure for effectively differentiating among new venture strategies, the second most effective measure for differentiating among the structure of the new venture's entered industry, and the most effective measure in differentiating among the interactions between new venture strategies and the structure of the industry the new venture entered. The fact that the different performance measures of overall new venture performance resulted in significantly different r-squares implies that the variables do not measure the same things.

Summary

In summary, it is clear from the prior empirical studies that there has been no consistency in the measures used to represent the construct of overall organizational performance in strategic management or entrepreneurship research. Researchers compound the problem by confusing determinants of performance with measures of performance ENRf8(Cameron, 1986). Further, prior empirical research has demonstrated that there are multiple dimensions to the performance construct. While Robinson (1995) found that return to shareholders was the most powerful individual performance with respect to new venture performance among companies that have undergone initial public offerings, these findings cannot be reasonably generalized to studies that use different samples. In short, there continues to be no conclusive research that has identified a "best" measure of overall organizational performance, nor has a measurement model that accurately represents the construct yet been developed.

PROBLEMS WITH THE MULTI-DIMENSIONAL VIEW OF PERFORMANCE

As noted above, there is no consensus reflected in prior entrepreneurship and strategic management research regarding the best or even a sufficient set of measures of organizational performance. However, most theorists have concluded that organizational performance is multi-dimensional in character - a conclusion that is supported by all seven of the studies that have explicitly addressed some aspects of the question of how organizational financial performance is or should be measured. Given these facts, the question immediately arises: "Why don't more researchers use multi-dimensional measures of organizational financial performance?" Two important reasons are the facts that: (1) performance has often been characterized by the purposes of the research being performed, and (2) there are many different views on the most desirable outcomes of organizational effectiveness. However, there is at least one additional reason for this situation, namely the lack of any reasonably accurate "individual" measures of organizational financial performance. The "best" macro-measure of organizational financial performance in the view of most accounting, entrepreneurship, finance, and strategic management scholars is that of "shareholder wealth creation" (Rappaport 1986). But, none of the traditional individual measures of organizational financial performance is an effective surrogate for "shareholder wealth creation." The "best" of these traditional individual measures is Return on Assets (ROA), and its correlation (R^2) with shareholder wealth has been found to be only 0.10 (Carton & Hofer, 2006), far below anything that could be considered a "statistically significant" relationship.

The primary objective of this research is to address this issue by developing a new multi-dimensional model of organizational financial performance. The secondary objective of this research is to develop a model that is far "more robust" in its ability to "explain" changes in "Shareholder Wealth" creation. In the process, we show that the simultaneous consideration of these multiple dimensions is more appropriate for drawing conclusions about the effectiveness of managerial actions than is considering each individual performance dimension separately.

DEVELOPING AND TESTING A MODEL OF ORGANIZATIONAL FINANCIAL PERFORMANCE: OUR METHODOLOGY

The Macro-Design of This Study

Since no prior research has empirically established the domain of organizational financial performance, this research was by necessity exploratory in nature. The process used in this research to infer a multi-dimensional model of organizational financial performance involved four phases.

First, data on shareholder valuation and other financial performance indices was collected from a sample of 1,500 public companies. These data points were then separated into high, medium, and low performance groups based on both annual and three-year financial performance as indicated by their shareholder returns over the specified period of time since shareholder return Robinson (1995) had found were the most robust measure of organizational performance.

Second, the financial performance measures most commonly used in past research and/or discussed in the entrepreneurship and strategic management literatures were then used to compare the high and low performance groups in order to identify the specific measures that differentiated the two groups at statistically significant levels. Also, each measure that was included in this research was evaluated both with respect to its static value and its change in value over the period of interest in order to determine the relative information content of static vs. change scores.

Third, the financial performance variables (both static measures and change score measures) that differentiated between the high and low performing groups of companies in phase 2 were then grouped into different financial performance constructs.

Finally, the validity of these different financial performance constructs was tested.

Developing Our Sample of 3,819 Data Points

In order to secure data on shareholder valuations, it was necessary to gather data from a sample of publicly owned firms. The population of public companies used for this research was companies in the Standard and Poor's 1500 on December 31, 2002 (a combination of the Standard and Poor's 500, the Standard and Poor's Mid Cap 400, and the Standard and Poor's Small Cap 600 indices). These companies include a wide cross-section of industries, organizational sizes, and organizational ages. Four years of financial data was collected on each of these firms from the Standard and Poor's Compustat® database. [Note that the fourth year was needed to be able to calculate the change scores.] One and three-year performance variables (both static measures and change score measures) were calculated from this data. Our maximum potential sample was, therefore, 4,500 individual firm years of data and 1,500 three-year data points. Any firm-year or firm-period of data that was incomplete was eliminated from the final sample. Also any firm-year or firm-period of data that contained significant outliers was also eliminated from the final sample. The final sample included 2,894 individual firm-years of data and 925 three-year periods of data.

Developing a Sample of High and Low Financial Performing Companies

Next, the individual annual firm years and three-year periods in the sample were classified as having high, medium, or low financial performance based upon their returns to shareholders. A firm was classified as having high financial performance if its return to shareholders was one standard deviation or more above the mean. A firm was classified as having low financial performance if its return to shareholders was one standard deviation or more below the mean. All other firms were classified as having medium financial performance.

A total of 309 firm years were classified as having "high" financial performance, 321 firm years were classified as having "low" financial performance, and the remaining 2,264 firm years were classified as having "medium" financial performance. In the case of three-year period data, a total of 124 three-year periods were classified as having "high" financial performance, 143 three-year periods were classified as having "low" financial performance, and the remaining 658 three-year periods were classified as having "medium" financial performance.

Identifying Financial Measures that Differentiate High and Low Performance Firms

The two samples of high and low performing companies were used to compare 20 of the financial measures most commonly used in past entrepreneurship and strategic management research and from the literatures of these fields using *t* tests to determine if there was a statistically significant difference between the high and low performing companies with respect to each of these 20 measures. [Note: A total of 40 tests were performed since each measure was examined using both static and change score data.]

Those static and change score measures that indicated a statistically significant difference between the groups were retained for further evaluation in this research. Those static and change score measures that did not discriminate at statistically significant levels between the high and low financial performance companies were not utilized further.

Testing Our Multi-Dimensional Model of Overall Organizational Financial Performance

Having identified a set of financial measures that effectively discriminated with a high degree of statistical significance between high, medium, and low performance companies, these measures were grouped into several different financial constructs based on a review of accounting and finance literatures (see Breley, Myers & Marcus, 2001; Copeland, Koller & Murrin, 2000; Penman, 2001). This combination of theoretical financial performance constructs together with the financial performance variables used to represent them became the model of organizational financial performance tested in the next stage of this research.

The validity of these financial performance constructs was tested using confirmatory factor analysis ("CFA") through the use of AMOS 5.0 structural equation modeling software (Bollen, 1989; Venkatraman & Ramanujam, 1987). The CFA framework uses a maximum likelihood approach to providing a statistical analysis of the entire validity of a construct and a decomposition of the measurement variance into its constituent components (Bagozzi, Yi, & Phillips, 1991). The proposed financial performance constructs and their various measures were tested for both discriminant and convergent validity. The financial performance constructs or measures that were not found to be valid were eliminated from our multi-dimensional model of organizational financial performance in order to create a revised multi-dimensional model of organizational financial performance that contained only constructs and measures shown to possess both discriminant and convergent validity.

RESULTS

Financial Measures That Discriminated Between High and Low Performing Companies

This research found that, for annual periods, 35 of the 40 (20 static and 20 change score) financial performance measures tested discriminated between high and low performance companies at $p < .10$, using market adjusted return to shareholders as the basis for classification. For three-year periods, 32 of the 40 (20 static and 20 change score) financial performance measures tested discriminated between high and low performance companies at $p < .10$. Table 2 summarizes the results of the *t* tests for the variables that did and did not discriminate between high and low performance companies for both annual and three-year periods.

Table2: Measures That Discriminate Between High and Low Performing Companies by Construct

Variable	Annual	Three-Year	Annual	Three-Year
Profitability				
Return on Assets	**	**	**	**
Return on Equity	**	**	**	**
Return on Sales	**	**	**	**
Return on Investment	**	**	**	**
EBITDA Return on Investment	**	**	**	**
Operating Margin	**	**	**	**

Table2: Measures That Discriminate Between High and Low Performing Companies by Construct				
Variable	Annual	Three-Year	Annual	Three-Year
Growth				
Growth Rate of Sales	**	**	**	*
Growth Rate of Operating Expenses	**	*	**	**
Growth Rate of Total Assets	**	**	**	**
Growth Rate of Employees	**	*	**	NS
Cash Flow				
Growth Rate of Operating Cash Flow	*	*	*	NS
Operating Cash Flow to Equity	**	**	NS	**
Free Cash Flow to Equity	NS	NS	NS	NS
Liquidity				
Liabilities to Total Assets	NS	NS	NS	**
Survival				
Altman's Z Score	**	NS	**	**
Efficiency				
Asset Turnover	+	NS	**	**
Economic Value				
Residual Income	**	+	**	**
Residual Income Return on Investment	**	**	**	**
Cost of Equity Capital				
Cost of Equity Capital	**	**	**	**
Market				
Price to Book Ratio	**	NS	**	**
** $p < .01$ * $p < .05$ + $p < .10$ NS $p > .10$				

One paradox of management research described by Cameron (1986) was that most empirical studies tend to use measures and methods that explain average performance, while the primary focus should be on understanding what makes firms either very successful or very unsuccessful. It is, therefore, essential to select performance metrics that can discriminate sufficiently among companies that perform at different levels of performance. This research identified 32 annual and 27 three-year financial performance measures that discriminated between high and low performance companies at $p < .01$ with respect to market-adjusted returns to shareholders. Of these measures, those that provided the most information about the return to shareholders referent with respect to the sample of all companies, not just high and low performing companies, should provide the most statistical power for research where shareholder value creation is the phenomenon of interest.

Tests of Our Annual Multi-Dimensional Model

Figure 1 depicts the initial set of financial performance constructs that was tested for both convergent and discriminant validity for annual data. AMOS 5.0 software was used to test whether the annual data fit the proposed model. Constructs with only one observed measure were constrained to exactly equal the value of that measure, as suggested by Bollen (1989). The variance of each construct was constrained to unity so that the parameters for each observed variable could be freely estimated.

The assumptions of structural equation modeling require that the estimated variance of each measure must be positive and the covariance matrices must be positive definite. Three fit indices, as recommended by Arbuckle and Wothke (1999), were chosen to determine if the data fit the model. These three indices included (1) the comparative fit index (CFI; Bentler, 1990), (2) the Tucker-Lewis coefficient (TLI; Bentler & Bonnet, 1980), which is also known as the Bentler and Bonnet non-normed fit index (NNFI), and (3) the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993). Arbuckle and Wothke (1999) suggest that a value of .90 or greater for both the CFI and the TLI indicates a reasonable fit of the data with a model and, an RMSEA value of about 0.08 or lower, but certainly no greater than 0.10 indicates an acceptable error rate for a model. Accordingly, a model that met all three criteria was considered to have an acceptable fit.

A random sample of 150 high performing firms and 150 low performing firms was used to test the model. This annual data did not fit the model as proposed in Figure 1, since the covariance matrix for the constructs that comprise the model was not positive definite. This indicated that there was a specification error in the model or that the sample size was too small (Jöreskog & Sörbom, 1996). Since our sample had 300 observations, it was reasonable to conclude that the model had a specification error.

An examination of the correlations between financial performance variables across financial performance constructs revealed that residual income return on investment (“RI ROI”) was more highly correlated with the profitability construct than with residual income (“RI”) in the economic value construct. The model specification error was eliminated by moving the RI ROI measure to the profitability construct. The revised model had $\chi^2 = 2213.4$ with $df = 334$ and $n = 300$. The CFI for the model was 0.83, the TLI was 0.78, and the RMSEA was 0.14. All three tests indicated that the data did not acceptably fit the model. Accordingly, the financial performance measures included in the model were reexamined to determine which should be kept and which should be excluded from a revised model.

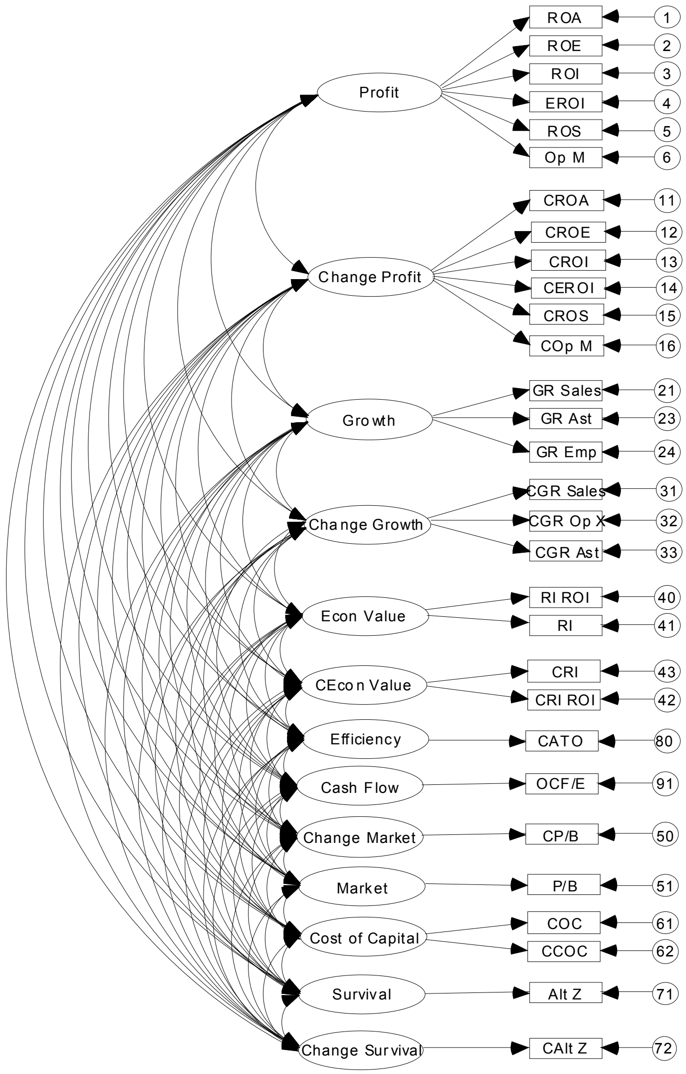

Figure 1 Proposed Constructs and Measures for a Model of Financial Performance for Annual Data

Figure 2 depicts the revised annual model of organizational financial performance that met the tests for convergent validity of the measures with the separate constructs. As a result of these changes in the specification of the model, the data fit the revised ten-construct model. The revised model had $\chi^2 = 405.4$ with $df = 130$ and $n = 300$. The CFI for the revised model was 0.95, the TLI was 0.93, and the RMSEA was 0.08. All three measures indicated that the data fits the model.

Accordingly, the revised model met the requirements of convergent validity (Arbuckle and Wothke, 1999; Bollen, 1989; Jöreskog & Sörbom 1996).

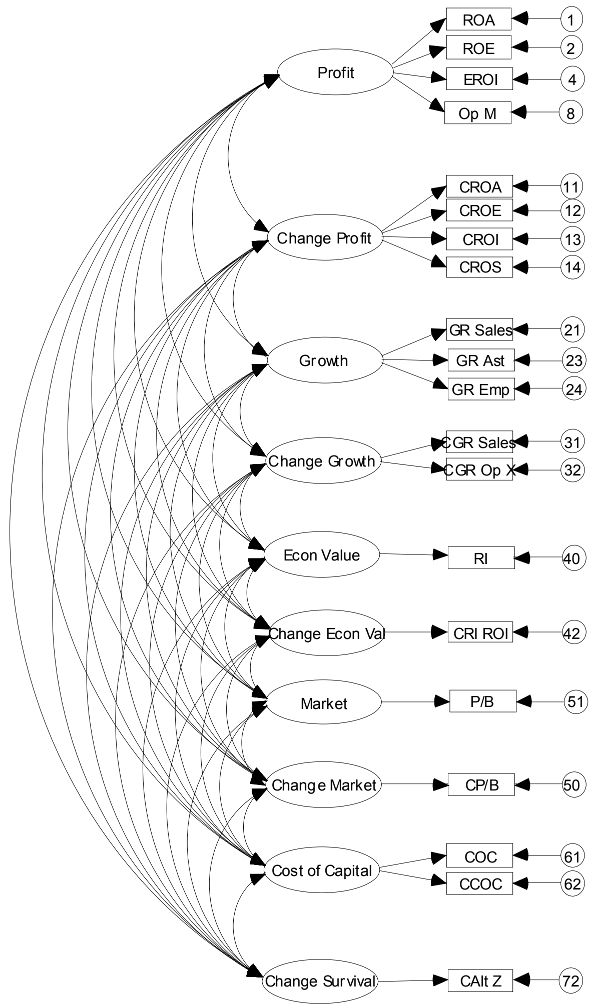

Figure 2 Revised Constructs and Measures for a Model of Financial Performance for Annual Data

Using a confirmatory factor analysis framework, discriminant validity is achieved when the correlations between the separate constructs are statistically significantly lower than unity (1.0) (Bollen, 1989). Any correlations that appeared "high" were tested by setting the correlation between the two constructs equal to unity, and then testing the statistical significance of the change in χ^2 between the two models.

For the revised model, only two constructs, growth and growth change, were correlated in excess of 0.60. Consequently, the correlation between the two constructs was constrained to unity and the model was retested. The result was $\chi^2 = 414.0$ with $df = 131$. The change in χ^2 was 8.6 with $df = 1$ and $p < 0.01$. Thus, these constructs were found to be discriminant for the revised model. All other combinations of constructs had correlations below 0.52, which indicated that all constructs met the requirements for discriminant validity.

In summary, 10 of the original 14 constructs and 20 of the original 30 measures were retained in the annual financial performance measurement model. It was also demonstrated that these constructs were discriminant and that the measures of the constructs met the tests for convergent validity.

Having shown that it is possible to create an annual financial performance measurement model that contains 10 financial performance constructs and 20 financial performance measures that possesses both discriminant and convergent validity, the question naturally arises as to whether this model might be useful in future research. A complete answer to this question is beyond the scope of this paper. The simple answer, however, is YES! In a forthcoming paper, the authors develop a composite annual financial performance measure from this annual financial performance measurement model that explains over 46% of the variance in market adjusted returns to shareholders, a 350% improvement over all existing financial performance measures.

Testing Our Three-Year Multi-Dimensional Model

Figure 3 presents a diagram of the initial set of financial performance constructs and their corresponding measures for three-year data. The convergent validity of the financial performance measures for each financial performance construct was tested using confirmatory factor analysis, as was done with the annual data model.

The three-year data did not fit the proposed multi-dimensional financial performance model. The model had $\chi^2 = 1013.2$ with $df = 307$ and $n = 120$. The fit indices were CFI = 0.81, TLI = 0.74, and RMSEA = 0.14. There were specification errors in the model, as indicated by estimated negative residuals for four measures including ROI, CROI, GR Sales, and COC. Consequently, adjustments to the initial model were necessary, as was the case with the annual data model. Therefore, the financial performance measures included in the three-year model were reexamined in order to determine which should be retained in a revised model.

As a result of the changes made in the model specification, the data fit the revised, 10-construct model depicted in Figure 4. This model had $\chi^2 = 212.1$ with $df = 137$ and $n = 120$.

Thus, the revised multi-dimensional financial performance model met the requirements for convergent validity (Arbuckle and Wothke, 1999; Bollen, 1989; Jöreskog & Sörbom, 1996). As with the testing of the financial performance measurement model for annual data, any correlations between constructs that appeared "high" were tested by setting the correlation between the two constructs equal to unity, and then testing the statistical significance of the change in χ^2 between the two models. Two pairs of constructs appeared to be "highly" correlated. They were (1) the change in profitability and the change in survival and (2) the cost of equity capital and the change in survival.

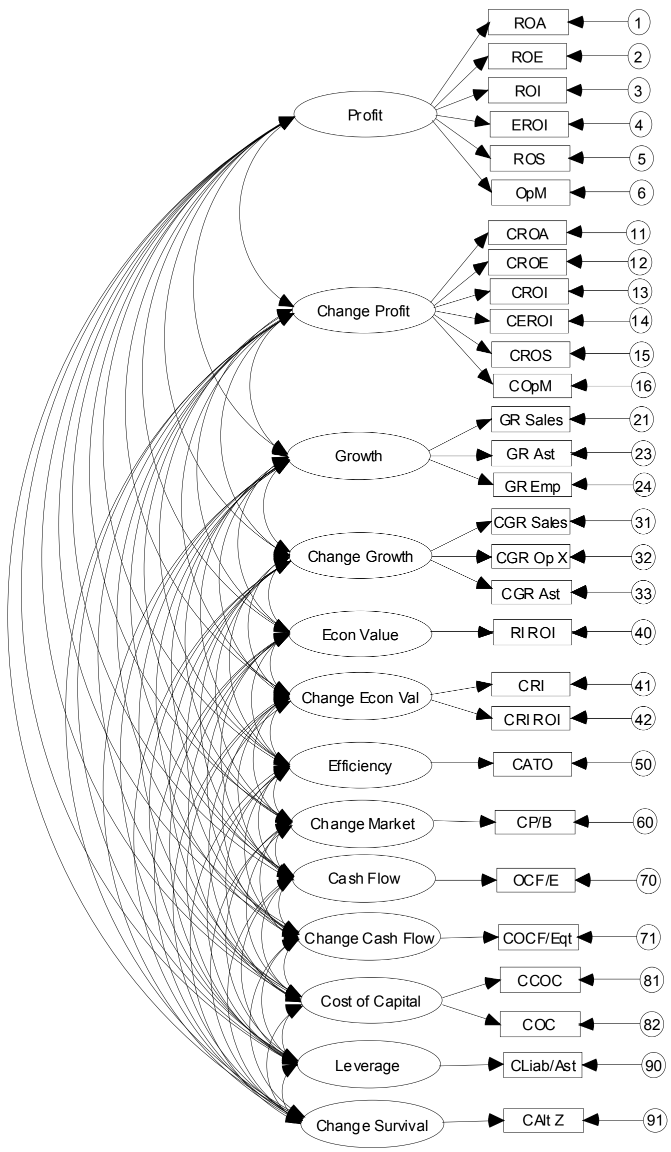

Figure 3 Proposed Constructs and Measurses for a Model of Financial Performance for Three-Year Data

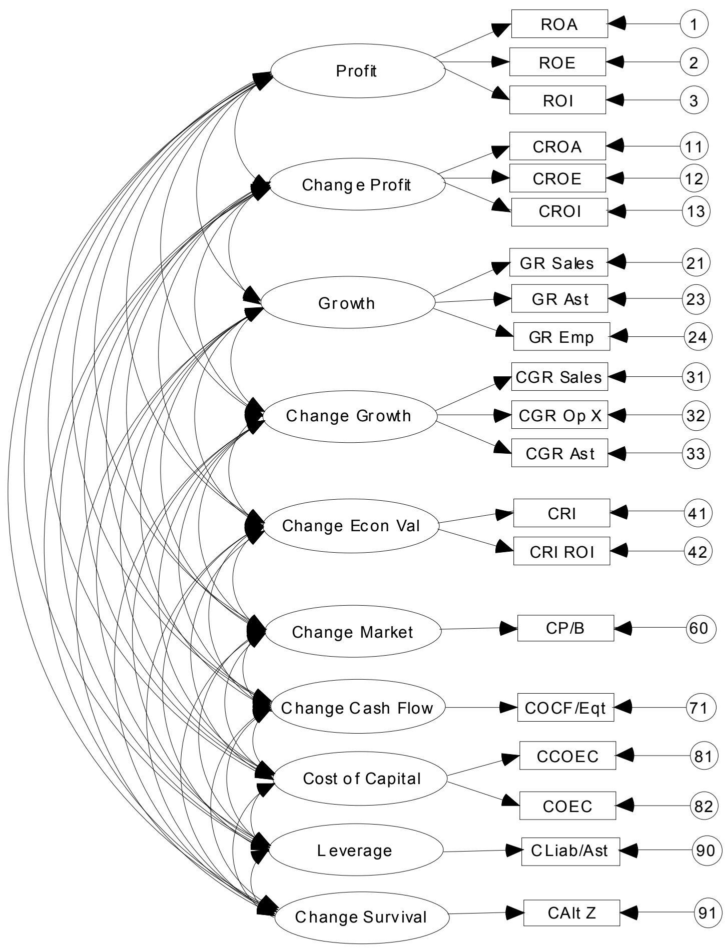

Figure 4 Revised Constructs and Measurses for a Model of Financial Performance for Three-Year Data

First, the correlation between the change in profitability and the change in survival was constrained to unity, and the model was retested. The result was χ^2 = 251.1 with *df* = 138. The change in χ^2 was 39 with $df = 1$ and $p < 0.001$. Therefore, the constructs were deemed to be discriminant. Next, the correlation between the cost of equity capital and the change in survival was constrained to unity and the model was retested. The result was $\chi^2 = 230.0$ with $df = 138$. The change in χ^2 was 17.9 with $df = 1$ and $p < 0.001$. Thus, for the revised model, the constructs were deemed to be discriminant.

In summary, 10 of the original 14 constructs and 20 of the original 30 measures were retained in the three-year financial performance measurement model. It was demonstrated that these 10 constructs were discriminant and that the revised set of 20 financial performance measures of these 10 financial performance constructs met the tests for convergent validity.

Having shown that it is possible to create a three-year financial performance measurement model that contains 10 financial performance constructs and 20 financial performance measures that possesses possess both discriminant and convergent validity, again the question naturally arises as to whether this model might be useful in future research. And again, a complete answer to this question is beyond the scope of this paper, but the simple answer is YES! In the forthcoming paper mentioned above, the authors develop a composite three-year financial performance measure from this three-year financial performance measurement model that explains over 62% of the variance in market adjusted returns to shareholders, a 520% improvement over all existing financial performance measures.

SUMMARY AND CONCLUSIONS

For over fifty years, management scholars have suggested that organizational performance is a multi-dimensional construct. However, this is the first study that has undertaken to empirically identify both the distinct dimensions of organizational financial performance and the financial measures that represent these dimensions. The major contribution of the research described in this paper is the development of two (a one-year and a three-year) multi-dimensional models of organizational financial performance that possess both discriminant and convergent validity. Even more important, though, is the fact that these models can be used to develop composite (one-year and three-year) financial performance measures that correlate with shareholder wealth 350% (the one-year) to 520% (the three-year) better than any measures in current use.

Limitations of this Research

Overall organizational performance is a multi-dimensional construct. This research focused on only one of these dimensions, namely financial performance. The operational and stakeholder dimensions of overall organizational performance were not examined. As a consequence, the relative importance of financial performance to the two other organizational performance dimensions was not examined. A model of overall organizational performance that includes all major performance dimensions might require a different set of financial performance dimensions or different measures of the identified financial performance dimensions because of overlapping information across the higher order constructs.

An additional limitation of the research design was the selection of only two timeframes, one and three years. While these two timeframes are those most frequently used in entrepreneurship and strategic management research, 21% of the empirical studies summarized in this research used other timeframes, most notably single point in time measures and five-year measures. Also, the annual and three-year models of financial performance developed in this research were not the same, implying that different dimensions of financial performance are more or less important at different times. Accordingly, the generalization of the results of this research to other timeframes will require additional testing.

A final limitation of the research design of the study was the omission of risk from consideration in the financial performance model. While financial risk was indirectly included through the calculation of the cost of equity capital, strategic risk was not considered in any way. Bromiley (1990) suggested that risk should be a component of the analysis of organizational performance. However, it should be up to the discretion of the researcher whether it is appropriate to capture the effects of risk as an independent measure or as a component of the dependent measure.

The sample utilized in this study limits the generalization of the findings in several ways. These limitations include: (1) only U.S. companies were included in the sample; (2) only publicly traded companies were included; (3) financial services firms such as banks and insurance companies were disproportionately eliminated from the sample because they did not report sufficient information to calculate the measures tested in this research; (4) only one three-year period was used to develop and test the three-year financial performance model; (5) the annual data was from the same timeframe as the three-year data; (6) one primary source was used to gather most of the financial data; and (7) the three-year sample did not include any companies that went out of business during the three-year period.

Implications for Future Research

This research empirically demonstrated that organizational financial performance is a multi-dimensional construct. Consequently, if the unit of analysis for a study is the entire organization, and if the phenomenon of interest is organizational financial performance, it is incumbent upon the researcher to consider the effects of the independent variables on multiple performance dimensions simultaneously.

However, if only one dimension of organizational performance is examined in a study, then it is inappropriate to claim to be studying the effects of the independent variables on "overall organizational performance". In such situations, it would be more appropriate to specify the specific dimensions of organizational performance being studied, which would provide better context and understanding to readers of the research.

This research identified 10 separate performance dimensions for both annual and three-year timeframes as well as multiple measures of these constructs. The theories being tested should help guide researchers in selecting the dimensions of organizational performance that they should examine. Specifically, those dimensions of organizational performance that are hypothesized to create value for the constituents of interest should be used as the dependent variables. In general, dependent measures representing the phenomenon of interest should be selected with great care and a full explanation for the criteria used for their selection should be provided for users of the research.

Implications for Management Practice

Potentially the most important finding for practioners is the fact that the changes in performance metrics are separate constructs from static measures of performance. Top management already places some emphasis on changes in performance metrics as indicated by the content of the management discussion and analysis (MD&A) sections in annual reports and SEC filings. Typically, changes in performance period-over-period are the primary focus of the MD&A section. However, while changes may be explained post hoc, management planning should focus on actions that will accomplish needed organizational changes.

Those performance metrics that have been shown in this research to discriminate between high and low performing companies should receive the primary attention of management and users of financial statements. Those companies that attain and sustain competitive advantage in the market do not strive to be average. Therefore, the metrics they use to gauge performance should focus on outcomes that set them apart from the competition.

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TENANT FIRM PROGRESSION WITHIN AN INCUBATOR: PROGRESSION TOWARD AN OPTIMAL POINT OF RESOURCE UTILIZATION

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ABSTRACT

The recent popularity of business incubators is evidenced by their explosive growth. Offering experienced and knowledgeable staff members, comprehensive facilities, and below market rent, business incubators are designed to encourage entrepreneurship and innovation. Employing the Resource Base View as underlying paradigm, this study attempts to gain a better understanding of the specific resources that incubators provide to new businesses as they startup. Using a general inductive approach, this examination uses in-depth interviews of thirty informants to identify specific tenant-firm benefit provided by the incubator. Findings suggest an existence of two tenant firm populations, one with coaching / business support needs (growth emphasis), and the other with infrastructure fortifying support needs (cost minimization). A framework is posited that shows an existence of both tenant firm populations, and related implications. By creating a greater understanding of the business incubation process, it is anticipated that this study will improve the effectiveness of business incubator activities, and therefore their contribution to economic growth.

INTRODUCTION

According to the National Business Incubation Association (NBIA) (2007), as of October 2006, there are over 1,400 business incubators in North America (up from 12 in 1980) , with the primary goal of encouraging entrepreneurship and innovation. Of these incubators, 1,115 are located in the United States.

Incubators have been defined as institutions that are designed to link talent, technology, capital, and know-how. Business incubators offer experienced and knowledgeable staff members, comprehensive facilities, and decreased rent in the hope of increasing the number of local jobs and community businesses. Frequently, incubators are set up with the goal of leveraging entrepreneurial talent to accelerate new company growth (Smilor & Gill, 1986). The provision of these resources, in turn, suggests that an incubator is part of a support mechanism helping entrepreneurs achieve their goals of growth and success (McAdam & Marlow, 2007).

Some studies have examined the effectiveness of incubators in terms of office and business support services (Allen & Weinberg, 1988), and there is a need to identify which of these activities are effective and dominant, to evaluate the efficiency of the investment of public resources. For example, one could consider whether cost prominence (subsidized rent, office services, etc.) becomes a more emphasized incubator benefit than business mentoring and planning. Further, one may question whether the public is prepared to entertain medium and long-term tenant firm cost subsidy as the most effective use of public funds. Consequently, a need exists to identify the most significant resource provided by the incubator to their tenant firms - the dominant emphasis of incubator tenancy. This study examines the following question: *What is the dominant emphasis of incubator tenancy and how does it affect incubator effectiveness*?

This study is based on the theoretical precepts of the resource-based view. Building on Penrose's (1959) discourse, firms (or organizations) differ on the heterogeneity of their resources. A firm's capability to achieve continuous profit (i.e., rent) stems from its internal resources, land, labor, and capital. In addition, human and organizational (intangible) assets are hard to copy, which is a potential for competitive advantage (Prahalad & Hamel, 1990). Using an inductive (qualitative) approach, results of thirty in-depth interviews of incubator tenant firm CEOs are utilized to gain a broader understanding of incubator-tenant firm relationship. Following a discussion of prior research, focusing on the resource-based view, entrepreneurship, and incubators, the choice of research design is presented and then the discussion of findings. Findings are incorporated into a conceptual model that is posited as a potential guideline to incubators towards maximization of effectiveness.

REVIEW OF RBV PARADIGM

This paper is based on the theoretical precepts of the resource-based view. The resource-based view (RBV), first advocated by Penrose (1959) in her book *The Theory of the Growth of the Firm,* suggests that a firm's capability to achieve continuous rent (or profit) stems from its internal resources, land, labor, and capital. RBV makes a substantial contribution to strategic management by encouraging managers to focus on the resources in addition to the products of the firm (Wernerfelt, 1984).

There are two approaches in RBV: the process approach and the structural approach. The structural approach focuses on the unique resources possessed by the firm, with the emphasis on market processes. Consequently, this is a focus on rare, inimitable, immobile resources (Barney, 1991; Wernerfelt, 1984), building on the assumption that sustainable advantage is reached through those rare resources. Richardian (physical) resources and land are the focus of consideration, while management skills and competencies are assumed comparable among competitors. The process approach, on the other hand, focuses on internal organizational processes seeking quasi- and efficiency rents. By contrast to the structural approach, this approach assumes that efficiency rents are available within a firm and can become a source of competitive advantage (Miller & Ross, 2003).

If the resources provided to tenant firms by incubators are valuable, rare, inimitable, and non-substitutable (VRIN), they will help firms achieve sustainable competitive advantage (Mian, 1996). Within incubators, however, these resources are provided only temporarily, until the tenant firm develops firm-specific capabilities and competencies building their competitive advantage. Alvarez and Busenitz (2001) argued that entrepreneurship is an integral part of RBV and define entrepreneurship as "the recognition and exploitation of opportunities that result in the creation of a firm that seeks to obtain entrepreneurial rents" (p. 757).

Entrepreneurship, however, is not seen as the activity of starting a new venture, but rather "entrepreneurship is a mechanism by which society converts technical information into these products and services" (Shane & Venkataraman, 2000, p. 219). Stevenson and Jarillo (1990) considered entrepreneurship an approach to management, defining it as a "process by which individuals – either on their own or inside organizations – pursue opportunities without regard to the resources they currently control" (p. 23). It is through this process that entrepreneurship provides for alternate uses of resources leading to a competitive advantage; therefore, entrepreneurship is an intricate part of RBV (Alvarez & Busenitz, 2001; Barney, 2001; Bruton & Rubanik, 2002).

As entrepreneurs engage in the exploitation of new opportunities, they have many obstacles to conquer, especially in the earlier stages of venture development. To this end, the incubator is seen as providing the temporary supporting resources that lead to the development of a firm-specific competitive advantage (McAdam & Marlow, 2007; Zedtwitz & Grimaldi, 2006). Incubators often serve to provide tenant entrepreneurs with basic resources such as copiers, reception and business support, making a nurturing environment available to new start-ups (Mian, 1996).

INCUBATORS

In the past ten years, between 60 and 80 percent of net new jobs have been created by small businesses (Economic Development Administration, 2007; US Census Bureau website, 2007). Knaup (2005) and Headd (2003) found that two-thirds of new businesses survive at least two years and 44 percent survive at least four years. In 2005, there were 671,800 new businesses started, while at the same time 544,800 businesses were shut down (US Census Bureau website, 2007). As discussed, incubators provide various resources to the tenant firm (McAdam & McAdam, 2006). Building on the process approach of RBV, we attempt to evaluate the effectiveness of these resources in supporting tenant firm growth.

As of October 2006, there are presently over 1,400 business incubators in North America (National Business Incubation Association, 2007). The NBIA describes business incubators as programs to assist young companies during their most vulnerable stage, the start-up period. Incubators offer support services and resources, which are essential for survival. Incubation programs also have broader, community related goals – increasing the number of jobs, creating an atmosphere of innovation, preserving companies, supporting local industries, and diversifying the local economy (National Business Incubation Association, 2007). Wiggins and Gibson (2003) established five objectives for incubators to succeed: leadership, clear goals, valuable services, a well thought out selection method, and the resources needed.

Allen and Rahman (1985) suggested that management problems and under-capitalization are the most common reasons for early stage business failure. Business incubators can help with these issues; considering the potential positive results in job creation and lessened chances of business failure, businesses incubators could be instruments leading to success. Business incubators are designed to encourage entrepreneurship and innovation, offering experienced and knowledgeable staff members, comprehensive facilities, and decreased rent. Sherman (1999) included other infrastructure and services as resources, such as development of business plans, marketing plans, management structures, and capital acquisition, as well as access to additional knowledgeable experts, shared equipment, variable working space, and clerical services. Allen and McCluskey (1990) discussed the benefit of an environment that encourages innovation and survival. MultiIncubator staff members can "provide the assistance that fills the knowledge gaps, reduces early-stage operating costs such as rent and service fees, and introduces entrepreneurs to a local enterprise support network" (Allen & Rahman, 1985, p. 13; also see Allen & McCluskey, 1990).

Incubators can be categorized as private (for-profit) or public (not-for-profit), with different goals. Allen and Rahman (1985) found that private, for-profit incubators often emphasize property development. They also recognized that public, not-for-profit facilities, such as those sponsored by the government, focus on creating more jobs and enhancing the local or national economy. Allen and Rahman (1985) recognized educational incubators, both public and private, associated with universities or other schools, as having goals of continuing research and training students.

Initially, incubators emerged in close proximity to universities – mostly as a function of technology transfer. As such, incubators pursue three basic objectives, which are: technology transfer, promotion of entrepreneurship and leading edge research (McAdam & McAdam, 2006). Establishing the effectiveness of incubators, however, has proven to be elusive thus far. For example, incubators are found to contribute relatively few important financial management and professional consulting services (Allen & Rahman, 1985). Colombo and Delmastro (2002), in their study of 43 Italian firms, established only marginal differences between incubator tenant and non tenant populations. On the other hand, Sherman (1999) found that incubators significantly decrease the possibility of failure compared to that of companies not associated with incubators. Further demonstrating the controversy, Peters, Rice and Sundararajan (2004) suggested that an incubator model may have a weakness by removing the initiative from the entrepreneur. In other words, a part of the attraction of entrepreneurship, that is, the challenge, may be reduced in an incubator. Mian (1994, p. 515) argued that incubators "provide an environment conducive to the development of new technology-based firms," a position maintained by a number of other authors and studies (e.g., Campbell, 1989; Rothaermel & Thursby, 2005; Smilor, 1987). While the incubator's goals of job creation and community business creation and sustainability are much needed, it is the entrepreneurs who are the critical factors in the creation of new businesses and, in turn, new jobs (McAdam & Marlow, 2007).

In a survey of 169 incubators, Hansen, Chesbrough, Nohria, and Sull (2000), found that, while many incubators are merely office buildings, those with strong networking had more successful tenants - a success often attributed to partnerships, knowledge sharing, and other relationships. Networking activities include contact with outside authorities, internal and external meetings, access to experts serving as board members, as well as financial incentives (i.e., tenant profit sharing). There is also evidence that, although incubators provide much-needed support for newer entrepreneurial organizations, the tenants who stay at the incubator longer than necessary may actually be worse off (McAdam & Marlow, 2007).

Allen and Rahman (1985) grouped the incubator offerings into three categories: "rental space, shared office services, and business consulting assistance" (p. 12). Peters, Rice & Sundararajan (2004) grouped incubator offerings as infrastructure, coaching, and networking, noting that infrastructure includes physical space and equipment consisting of laboratories, internet lines, and other administrative tools. Allen and Hendrickson-Smith (1986) found that incubator tenants are often charged less for outside services because the supplier hopes to eventually gain additional full paying customers. But, despite these cost savings being financially helpful, Reynolds (1987) and Kazanjian (1988) found that these services alone are not factors in creating successful incubator tenants. The key part of incubator service is the provision of experienced staff members and community contacts for other services needed when starting a new business (Reynolds, 1987; Kazanjian, 1988). For example, it is important to have mentors specializing in business planning, marketing, and legal assistance provided by incubators as well as coaching, which can also consist of instruction and learning seminars (Peters et al., 2004).

Gumpert and Boyd (1984) viewed incubators as places where entrepreneurs could be in the company of other people who had similar circumstances when first starting out. Allen and McCluskey (1990) identified mentors as fellow tenants and knowledgeable professionals from the community who can appreciate what the entrepreneur is encountering, provide information based on experience, encourage the entrepreneur to succeed, and possibly become involved with the entrepreneur as a provider or partner. Peters et al. (2004) also included "administrative, management, financial, legal, and insurance consultants as well as scientists, academicians, prospective customers" (p. 86). The studies all emphasized the development of capabilities and competencies. In fact, it is posited that development of capabilities and competencies are the principal benefits of incubators, as opposed to simply subsidizing costs.

University-Based Incubators

Although university incubators represent approximately 20 percent of all North American business incubators, (National Business Incubation Association, 2007), we still have a limited understanding of how university involvement with incubator tenant firms actually works. A university incubator is a program sponsored by a university to nurture new and small businesses by providing support throughout the early stages of development. Most university incubators provide specialized resources, such as technical or other research capabilities that are not otherwise available to the firm.

A large body of research on incubators emerged in the USA (1985-1995) and has since developed in other countries, such as the UK, France (e.g., Clarysse & Moray, 2004), Canada (e.g., Cooper & Park, 2008), and Australia (e.g., Christian & Michael, 2007), China (e.g., Aruna, Wei, & Tim, 2007), Brazil (e.g., Etzkowitz, Mello, & Almeida, 2005), South Korea e.g., (Sung, 2007), and regions of Eastern Europe (e.g., Abetti, 2006).

The initial research on incubators focused on defining an incubator. More recently, the focus has been on factors leading to effective incubators, with an emphasis on the role of the incubator facility (Hackett & Dilts, 2008; McAdam & McAdam, 2008). According to NBIA (2008), the firm's incubation process is much more important than the incubator facility itself. Studies on the incubation process are sparse. Peter, Rice, and Sundarajan (2004) studied the impact of infrastructure, coaching, and networks on the graduation rates from university incubators. Their study of 14 university incubators in North America indicated that customization of coaching programs and network formations help client companies gain a competitive advantage and encourage their survival. Drawing from RBV and learning theory, Peter, Rice and Sundarajan (2004) suggested that coaching should match governance structure and incubator goals. In-depth interviews with tenants and incubator center directors were suggested as a useful method to identify appropriate resources.

Moray et al.(2005) developed a framework of taxonomies found within European institutions, based on an in-depth analysis of seven cases from 13 European regions. Moray et al. (2005) identified three distinct models for managing the spin-out process (low selective, supportive, and incubator), which require very different resources. They argued that there is a distinction between simple creation of spin-outs and the creation of spin-outs with the ability to generate significant wealth. This model supports some critical assumptions of this paper, including the need for heterogeneous capabilities and resources, and the recognition of complexities involved. This model represents a suitable base to use in understanding the spin-out process within an incubator.

Lichtenstein, Levie, and Hay (2007) tested the validity of the life cycle and stage model in the incubation process and suggested that there is no specific sequence in the stages in the development of business firms. They proposed a new theory that identifies different stages of development with stages defined in terms of an overall business model yielding an arrangement of activities, resources, and structural relationships. Each stage assumes that management attempts to match internal organizing capacity with external market demand in the most efficient manner. This more dynamic approach allows us to better capture the phenomena.

Abetti and Rancourt (2006) agreed that there is no specific set of stages in the incubation process. They conducted three in-depth studies of university incubators in the USA, Ukraine, and Finland and found that there were some similarities and significant differences in the creation, management, and performance of incubators. Their findings suggested that incubators should (a) be located on a university campus to optimize networking, (b) have a full time professional manager, and (c) insist on close linkages between the incubator and the university technology transfer office to speed up commercialization.

The proximity to the university and the approach taken by the university influence the effectiveness of research parks and, by extension, incubators (Link & Scott, 2005). Certain university activities seem to add greater value EN.CITEEN.CITE.DATA(Allen & McCluskey, 1990; Hernandez-Gantes, Sorensen, & Nieri, 1996; Mian, 1994, 1997). Morey and Clarysee (2005) found that establishing the structure for university incubators involves a substantial learning curve for the university, the incubator, the new venture, and the community. No prior research was found that examines optimization of university involvement with incubator tenant firms, and identifies competencies needed for effective university involvement with their incubators. It is likely that management of these incubators will have corresponding dramatic effect on the benefit received by tenant incubator firms. Therefore, effective university involvement should be more likely to lead to increased tenant firm performance.

Networking

The literature defines networking as entrepreneurial resources (Julie Juan, 2005; Peng & Shekshnia, 2001; Ramachandran & Ray, 2006), and we believe that this notion merits a further discussion. Networking is the process of building and managing relationships in the business environment (Hoang & Antoncic, 2003). This network can be utilized to: (1) provide an access to new ideas and resources that support the entrepreneurial process; (2) obtain credibility and reputability through collaborating with reputable partners; (3) share knowledge and promote learning; and (4) provide support from other entrepreneurs going through similar phases.

Networking at incubators provides relationships with vital external consultants such as tax accountants, patent and other lawyers, business consultants, marketing experts, and public relations firms (Adams, Chiang, & Starkey, 2001; Cooper, 1985; Peters et al., 2004). Such relationships can be crucial to the development of the start-up firms because network incubators lay down foundations for these companies to grow their contact lists more quickly amidst different constraints facing entrepreneurs, e.g., time, information, and resources. This networking process improves the efficiency and effectiveness of start-up firms, allowing them to achieve goals and sustain growth

(McAdam & McAdam, 2006). Nevertheless, developing an efficient network demands considerable resources (effort, time, and money), which may require a devoted entity to support the networking process, referred to as "quasi-firms" by Etzkowitz (2003).

Incubator Funding

One of the underlying assumptions of this paper is that the different benefits obtained from incubators are not equivalent. This assumption is balanced on two pillars of thought: (1) public funds are utilized in incubator operations, and (2) public funds are scarce, necessitating resource maximization. Incubator funding is usually from multiple sources.

One obvious source of income for incubators comes from the rent received from tenant firms. Besides tenant rent income, US incubators are funded through government entities, subsidies, universities, private donors, community businesses, foundations, and economic development organizations. For example, Kidwell (2007) interviewed the CEO of the Wyoming Technology Business Center (WTBC) and found out its funding included $5.3 million from the state of Wyoming, $1.6 million from a foundation, $1.6 million from the U.S. Department of Commerce Economic Development Association Administration, and $1.85 million from Federal Housing and Urban Development. The Economic Development Administration (EDA) has an annual investment budget of $300 million and has $5 billion under investment at any given time (Economic Development Administration, 2007), with goals of regionalism, innovation, and entrepreneurship. In North American, sponsors are: universities (25%); government (16%); economic development organizations (15%); for-profit agencies (10%), multiple sponsors (5%), and others (National Business Incubation Association, 2007). The same report shows that only 19% of incubators have no sponsors, implying self-sufficiency.

RESEARCH DESIGN

Our study attempted a better understanding of the present situation at American incubators. We conducted thirty in-depth interviews of publicly funded, university-based incubators. Incubator tenant entrepreneurs were randomly selected, spanning twenty different incubators in nine states of the USA. The use of CEOs or middle managers as single informants is generally the practice in entrepreneurship related research (Allen & McCluskey, 1990; Kwaku, 1996; Nahavand & Chestech, 1988; Pearce, Kramer, Tracy Robertson, & Robbins, 1997; Ruppel & Harrington, 2000). Hambrick (1981) showed that CEO and manager perceptions were closer to objective measures of the same phenomenon than were those of other organizational members. Our methodology used face-to-face and telephone interviews of CEOs of incubators in Alabama, Indiana, Louisiana, California, Oklahoma, New Mexico, New York, Tennessee, Texas, and Virginia.

There were at least two respondents from each state, with most respondents coming from Indiana and Alabama. All reported some type of a working relationship with a local university or a college and claim to foster the development of new technology.

Qualitative methods are often used to develop theory (Creswell, 1994). Qualitative methodology, however, does not lend itself very well to the quantitative manipulations needed for quantitative methodology which may be used in subsequent studies (Schneider, Wheeler, & Cox, 1992). Because the theoretical constructs are not well understood, we employed content analysis methodology (Krippendorff, 1980) of the transcripts and notes of interviews. Content analysis is a methodology that is positioned between quantitative and qualitative methods (Schneider et al., 1992), a procedure of coding information obtained from interviews (Holsti, 1969; Krippendorff, 1980; Schneider et al., 1992). Once the coding is done, data is amenable to quantitative data manipulations (Schneider et al., 1992). This process involves the development of coding themes for the statements made by the participants (Schneider et al., 1992). Schneider et al. (1992) found that content analysis provides results that can be utilized in quantitative data manipulations, such as may be useful for later studies.

To offset potential bias, data was collected and analyzed by one researcher, and then independently re-analyzed by another researcher. Once both sets of analyses were completed, results were further analyzed and synthesized by both researchers. One of the problems encountered in this research was the management of the large quantity of data. Using Peters et al. (2004) groupings discussed earlier, responses were categorized in three groups: infrastructure, coaching/business support, and networking (Appendix A contains the interview protocol).

FINDINGS

Although it has been suggested that the optimal length of stay within an incubator is three years (National Business Incubation Association, 2007), 63.3% of incubator tenants responding have been in an incubator for at least three years. Of these 30 tenants, 50% plan to stay at the incubator for at least five years and 30% plan to stay indefinitely. These statistics appear to support our contention that cost subsidy may be a more significant factor than was previously assumed.
Various aspects of infrastructure support were often the primary answer to the first question: "What are the greatest advantages of staying at the incubator?" We observed that one of the most significant benefits was the low rent of incubator space, often accompanied by many amenities. These amenities or shared services include copiers, conference rooms, computers, a receptionist, and other necessary equipment.

> *"Common resources - admin, copies, computers, space; access to staff - advisors; contacts with accountants, HR, attorneys; helps establish credibility" (Q1)*

“Low cost; networking; services; resources” (Q1)

“Networking; front office staff; accommodations; low cost” (Q1)

“Networking; staff support; less expensive; shared equipment; resources” (Q1)

A number of respondents indicated that coaching and business support are major contributions of the incubator, which supports previous research. More specifically, the answers were focused on marketing, planning, and business plan development as dominant avenues. For example, in answers to question #4 (most valued characteristic of incubator staff), responses included:

“We benefit mostly from activities that increase sales - marketing; understanding taking the product to market; ... depends on what phase you're in ...have only a couple staff who interact with business development” (Q4)

Another answered the same question with the following statement:

“...Would like to see more involvement and help with marketing” (Q4)

In fact, marketing came up in eight interviews, with seven occurrences in questions #3 (activities that would make the incubator more effective) and #4 (valued characteristics of incubator staff). Only once did marketing come up in question #1 (greatest advantages / reasons to stay).

Likewise, planning and business plan development came up in five interviews each, and responses to questions #3 and #4 included:

“... more strategic planning opportunities with director; doors open for tenants” (Q3)

“More help for business - capital funding, action plans; marketing/sales/sales channel help. Entrepreneurs have ideas but don't know what to do...”(Q3)

Interestingly, business plan development came up only once as an answer to question #1 (greatest advantages / reasons to stay).

The term “networking” came up in 19 interviews, of which 15 were responses to question #1 (the greatest advantages / reasons to stay); however, most respondents referred to networking in some form. This suggests that incubators are seen by the tenants as being fairly effective in fostering networking opportunities (Hansen et al., 2000). Of course, a great number of these opportunities may be occurring between the different entrepreneurs residing in the incubator, rather than being a result of any specific activity or engagement of the incubator. The following statements are good examples of the responses received:

> *"You're not alone-other companies encountering similar problems, staff, you can talk to someone immediately; networking; partnerships can be tough-nice to have others around;" (Q1)*

> *"Start up cost low; networking with people with similar experiences" (Q1)*

All thirty respondents listed some type of infrastructure as the greatest advantage of being in an incubator. Further, 21 subjects (70%) noted reduced cost as a primary benefit. Our findings strongly support the suggestion that cost subsidy is perceived as the greatest benefit of incubator tenancy.

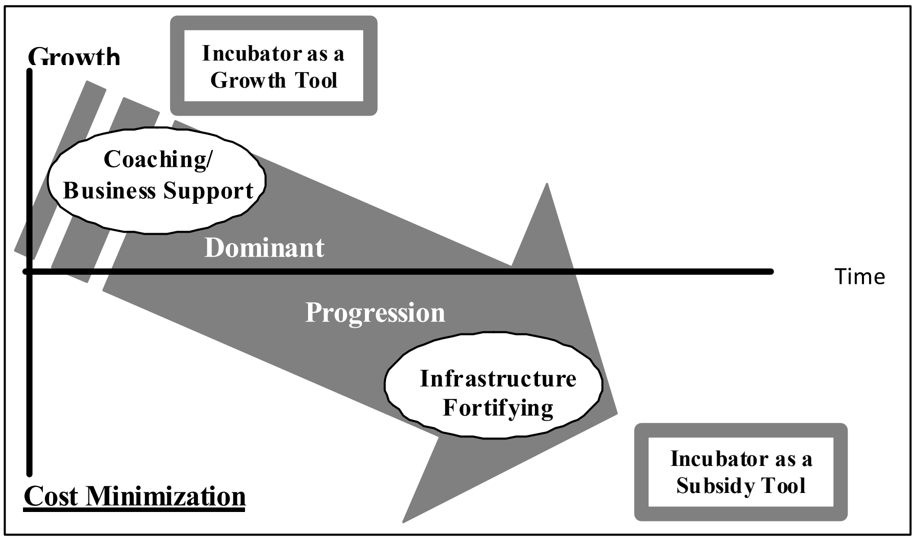
There appear to be <u>distinct</u> twin foci of the tenant firm interviews. Nine CEOs that were interviewed emphasized coaching/business support. These tenants also appeared to focus their energies on growth and expansion (Growth Emphasis). On the other hand, the remaining twenty one CEOs focused on infrastructure fortifying activities, and also appear to embody the cost minimization focus (Cost Emphasis). It is also significant that very few subjects mentioned both infrastructure as well as coaching/business support. The length of incubator time with the first population (coaching / business support) appears to be lower (mean of 26.16 months) than that of the second one (infrastructure focus) (mean of 46.39 months).

Using these emphases, data was examined to see if certain industries or sectors are more likely to have one emphasis rather than another. Contrary to expectations, this study did not produce any evidence to suggest that certain industry sectors have one emphasis as opposed to the other. Although these findings may simply be a function of the sample size, it is also possible that the entrepreneurial nature of tenant firm CEOs may be a factor.

This study also suggests, from the RBV perspective, that incubators provide a different type of a set of resources for their tenant firms. Simply providing resources is not sufficient for competitive advantage. These resources must be rare, inimitable, immobile resources (Barney, 1991; Wernerfelt, 1984). Therefore, the perspective of the RBV agrees with the finding of this study; when an incubator becomes simply a subsidized rental space, it serves little or no benefit to the community. The incubator must provide a resource that the tenant firm cannot find elsewhere (e.g., networking, entrepreneurial synergies, or business advice). Once the incubator tenant firm relationship reaches a point where the only resource it is providing is the subsidy of physical space, then the incubator space can be better utilized by another tenant firm. Rental space is readily available from commercial sources and, because such a resource is no longer rare, it represents inferior resource utilization.

Figure 1 is a summary of the findings from the interviews conducted. Vertical axis of Figure 1 pictorially represents the two clear emphases found amongst the incubator tenant firms. In every interview, one of the two emphases was identifiable (although this observation was not realized until analysis was done). Although growth and cost minimization are positioned on the same axis, they do not represent opposite concepts, but rather two fields of influence.

Figure 1 – Summary of Interview Findings



Another focus of the respondents was the importance of business networking. Almost all the interviews touched upon some element of networking and business contacts. Networking is a benefit achieved through the proximity of different ventures, experts and professionals rather than any specific activity undertaken by the incubator.

As mentioned before, the coaching/business support population, represented by nine tenant firms, emphasized growth of their organization and the search for opportunities that allow future growth. A much larger population of twenty one tenant firms focused on infrastructure fortification, emphasizing cost minimization. Both are pictorially represented in Figure

DISCUSSION

Business incubator activity has become very popular in the USA during the last couple of decades, growing from twelve in 1980 to over 1,400 in 2006. The literature does not conclusively define the benefits of business incubators. Using 30 in-depth interviews, we attempted to clarify constructs involved in incubator based new venture development.

The basic purpose of an incubator is to promote growth of small businesses, so one would assume that this would be the primary goal of incubator tenant firms. However, our results show that only 30% of the respondents had a growth emphasis. In fact, it appears that incubators have become a rent subsidy for the small firms fortunate to reside within them. The length of stay at the incubator is also a concern. As Figure 1 also shows, cost minimizing tenants stay substantially longer within an incubator than do growth oriented firms (26.16 compared to 46.39). This would suggest that public resources are utilized longer by firms that are simply oriented towards minimizing their expenses rather than being focused on growth. We believe that growth is the primary purpose of an incubator.

Our study clearly shows that there are two dissimilar populations of incubator tenants. As researchers continue to probe this interesting topic, they need to control the two populations, which are likely to make skew observations, or perhaps even counteracting findings.

LIMITATIONS AND FUTURE RESEARCH

This study has a number of limitations. First and foremost, the sample size is a significant limitation. Thirty interviews of tenant firms, found at twenty incubators, across nine states raise concerns about the external validity of the findings. However, this is an initial attempt to quantify incubator effectiveness.

This study may also suffer from the social desirability bias, in that participants may be motivated to present a picture that is more favorable than is reality. To address this, all participants were told on a number of occasions that the study is anonymous and that only aggregate data will be used. To enforce this point, no personal data (other than the mail code) was collected.

This study examined incubators in the USA. Funding practices and consequent incubator actions may vary in different political environments. Further, public opinion regarding the use of public funds towards tenant firm subsidy may be different in other countries and cultures, thereby suggesting a variation in optimal tenant activity.

Further research is needed to evaluate some of the conclusions gained in this study. Such research must consider other national entities and environments. Our research indicates a need for further case work and quantitative analysis examining the benefits of different resources provided by incubators to their tenant entrepreneurs.

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THE IMPACT OF PERSONAL CULTURE ON SOPHISTICATED SUCCESSION PLANNING BY OWNER-MANAGERS OF SMEs IN MALAYSIA

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ABSTRACT

The shortage of younger employees to replace retiring baby boomers necessitates the cultivation of capable management executives to assure suitable leaders are ready for appointment. This research study specifically focuses on SMEs in Malaysia to investigate if owner-managers' personal culture would have an impact on the degree of sophistication of succession planning system. Based on the data collected from 105 SMEs and analyzed with SPSS, key findings are that individual culture namely stimulation and conformity have significant relationship with the degree of sophistication of succession management plans. Theoretical and managerial implications are discussed.

INTRODUCTION

With baby boomers coming to an age of retirement and shortage of younger employees stepping up in replacement, business succession planning is vital in cultivating capable management executives who are going to implement strategies and achieve corporation objectives (Huang, 2001). At times of unexpected death or resignation of executives, succession management serves as crucial part of human resources strategy; assuring suitable leaders are ready for appointment. Thus, only with good succession planning can firms ensure long-term business survival (Caudron, 1996). Although the importance of succession planning has been repeatedly expressed, many organizations still do not take business succession planning seriously. A survey done by Caudron reveals surprisingly that only 22% of 502 respondents agreed to the statement "My organization has a well-developed management succession system" (Kur and Bunning, 2002). The scenario is identical in Malaysia. For Malaysian organizations, many focus entirely on hiring and training workforce and neglect succession planning (Fatt, 2004).

On the other hand, individual culture of leaders plays an important role in determining the complexity of a succession planning system of an organization. Ironically, individual culture is rarely investigated in the area of business succession planning. Thus, this leads to the question of does individual cultures have impact on the sophistication of succession planning program in Malaysia SMEs? This study attempts to determine the individual cultures of SMEs, as well as to measure the degree of sophistication of succession planning system employed by SMEs in Malaysia. For this research, only small and medium enterprises (SMEs) in Malaysia are taken into consideration. Classification of an SME in this research follows (Saleh & Ndubisi, 2006): organizations with full time employees not exceeding 150 or annual sales turnover not exceeding RM 25m.

LITERATURE REVIEW

Succession Planning Program

In general, scholars consent that a sophisticated succession system should include these critical elements; a statement of strategic vision (Huang, 2001); a planning database (Pattan, 1986); honest and open communication channel (Shulman, 1991); supportive management staff (Nahorney, 1992); systematic approach in identifying potential succession candidates (McElwain, 1991); rewarding managers for promoting best employees (McElwain, 1991); and participation, feedback and action (Getty, 1993).

Nonetheless, the degree of sophistication of succession planning system varies across business firms (Huang, 2001). Researchers in the past have come out with different items of succession planning systems. It has also been argued that firms in varying sectors will have distinctive succession plan differing in size (Barry and Jacobs, 2006). While studies of succession planning system have been conducted, none have examined the relationship between sophistication of succession system and individual culture. Some areas investigated with succession planning program include human resource outcomes (Huang, 2001; Anonymous, 2002) and organizational performance (Friedman, 1986).

In an empirical study, Sahl (1987) divided succession planning program into 5 stages on the basis of skill or sophistication involved. Friedman (1986) in the other hand characterized succession system into 7 elements. Metz (1998) redesigned and re-modelled the succession planning systems and summarized the key items as shown in Table 1.

Table 1: Key Shifts in Succession Planning Model

From	To
Groom a backup for each position	Develop pools of broadly qualified candidates; have position pools
Specialty disciplines in candidates	More broadly disciplined candidates
Business unit autonomy	More centralization and integration of systems and information
Siloed career growth	Cross-boundary fertilization to develop broader skills and perspectives
Largely human resources driven	Largely line driven

Table 1: Key Shifts in Succession Planning Model	
From	To
Subjective and informal criteria; personality/ image oriented	Strategic competencies and models define success; 360 degree feedback
Technical competence a key factor	Cross-functional management capability; quick learner; manage change
Tolerate marginal performers	Fewer positions for development requires removing marginal blockers
Company directs and controls career	Individual sets career direction
Controlled and confidential process	Input from multiple sources; more open planning and development process
"Promises"	No "Promises"
Focus on training and seminars as primary development vehicle	Sequential job assignments provide primary development experience supplemented by specific training
Take advantage of vacancies to promote candidates	Create assignments for development (e.g., exchanges, trades, special projects)
Promote from within when fully qualified	Promote when about 70% qualified; hire less experienced talent at every entry level
Source: Metz, (1998)	

Huang (2001) investigated the relationship between sophistication of succession programs and human resource outcomes of Taiwan firms. The 10 items used by Huang (2001) in measuring the sophistication of succession system is adopted in this study.

Individual Culture

There are various theories used in defining individual culture including Rokeach Value Survey, Allport and Vernon's (1931) Study of Values, McClelland (1991) Personal Value Questionnaire, Kilmann's insight test (Bilsky & Jehn, 2002) and Schwartz (1994) individual value structure theory. The chosen model for this literature is Schwartz's (1994) individual value structure theory. These values are derived from three universal requirements: biological needs, social needs and welfare needs of groups (Schwartz, 1999). The individual value structure theory has ten distinct value types namely, self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism (see Table 2). Each type is defined in terms of its central goal and the desired end-state to which it is directed (Schwartz, Sagiv & Boehnke, 2000).

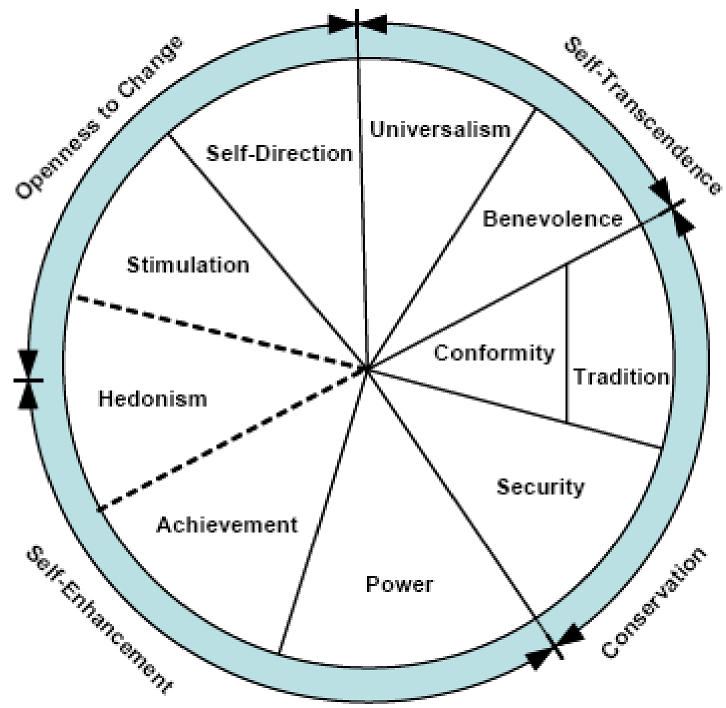
Table 2: Individual Value Structure Theory		
Value Type	Defining Goal	Value Items
Self-direction	Independent thought and action – choosing, creating, exploring	Creativity, Freedom, Choosing own goals, curious, Independent
Stimulation	Excitement, novelty, challenge in life	A varied life, An exciting life, Daring
Hedonism	Pleasure or sensuous gratification for oneself	Pleasure, Enjoying life, Self-indulgent
Achievement	Personal success though demonstrating competence according to social standards	Ambitious, Successful, Capable, Influential
Power	Social status and prestige, control or dominance over people and resources	Authority, Wealth, Social power
Security	Safety, harmony, and stability of society, of relationships and of self	Social order, Family security, National security, Clean, Reciprocation of favours, Healthy
Conformity	Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms	Obedient, Self-discipline, Politeness, Honouring parents and elders
Tradition	Respect, commitment, and acceptance of the customs and ideas that one's culture or religion provides	Respect for tradition, Humble, Devout, Accepting my portion in life, Moderate
Benevolence	Preserving and enhancing the welfare of those with whom one is in frequent contact ("in-group")	Helpful, Honest, Forgiving, Responsible, Loyal, True Friendship, Mature Love
Source taken from: Rice, 2005		

A central feature of Schwartz's theory can also be illustrated and comprised into 4 main sections: Openness to change, Self-Transcendence, Self-Enhancement and Conservation (see figure 1). Comparable value types are in close proximity while competing ones are on opposing sides of the circle (Rice, 2005).

Many studies in the past have applied Schwartz's individual value structure theory in different fields. Schwartz's individual values have been employed to determine the degree of individual culture on the self-perception of employee's creativity in Egyptian organizations. Findings showed that employee creativity is enhanced when self-direction (need for mastery, control and autonomy) is relatively more important to them; whilst stimulation (need for variety) appears to be negatively related to creativity (Rice, 2005).

Another study by Schwartz *et al* (2000) shows the relationship between the ten distinct values and worries (about its self (micro), society and world (macro)). Their study shows that self-transcendence values are associated with low micro worry and high macro worry, whereas self-enhancement values are associated with high micro worry and low macro worry. In 2006, Schwartz also investigated how demographic variables like age, gender and education can impact these 10 values. The results show that people's values are affected by the level of education they attain. Values promoting persistence through higher education include self-direction, achievement, conformity and tradition. Age on the other hand, correlates more positively with tradition and negatively with other values like self-direction, stimulation, hedonism, achievement and power (Schwartz, 2006).

Figure 1: Illustrative of Individual Value Structure Theory.



Source: Rice, 2005

Predicting behaviour with values (Schwartz, 2006), Values and the Implication in work (Schwartz, 1999) and Measurement Equivalence of Value across 21 countries (Spini, 2007) are further studies relating to Schwartz Individual Value Structure. In this research, not all the dimensions were employed. Among the 10 values, only 5 dimensions were selected for this research. The chosen constructs and the reasoning for their selection are presented in Table 3. Since past research continues to ignore the possible impact of individual culture on the degree of sophistication of succession planning, this study attempts to fill this gap by examining this relationship using the relevant individual value types.

Table 3: Dimensions of Individual Culture	
Selected Dimensions	Reasons
Achievement	*Directors with high achievement scores would want better chance of good succession planning development, thus they would take necessary steps to ensure that plan is carried out smoothly.*
Benevolence	With high benevolence culture, potential candidates are more likely to get promoted as the director is willing to overlook minor mistakes. Therefore, higher chance for better succession outcome.
Stimulation *Self Direction*	Flexible, creative and adventurous directors who are more adaptable to constant environment changes are presumed to lead a good outcome in succession planning.
Conformity	Directors with self-restriction and order would follow rules accordingly when it comes to succession planning. Thus highly formalized procedures will be followed.

Past studies support the idea that firms with more sophisticated succession planning systems will experience better organizational performance. Thus, it is assumed in this study that individual culture will have some impact on the sophistication of succession planning program. Using the 5 individual cultures selected above, the following hypotheses were derived:

H_1: *Achievement culture is positively associated with sophistication of succession planning.*

H_2: *Benevolence culture is positively associated with sophistication of succession planning.*

H_3: *Stimulation culture is positively associated with sophistication of succession planning.*

H_4: *Self-direction culture is positively associated with sophistication of succession planning.*

H_5: *Conformity culture is positively associated with sophistication of succession planning.*

METHODOLOGY

The methods for data collection are in-office interviews and drop-off surveys. In-office interviews are classified as person-administered surveys, which help to gain feedback and quality control. Drop-off survey was also used to collect information from the directors, who were not on sit or unable to complete the survey form on the spot.

Table 4: Dimensions and Items of the Variables

Variables	Dimensions	Items
Independent Variable		
Individual Culture	Conformity	Politeness, Honor, Obedience, Self-discipline
	Achievement	Ambitious, Successful, Capable, Influential
	Self-direction	Creativity, Freedom, Choosing own goals, Curious, Independent
	Benevolence	Helpful, Honest, Forgiving, True Friendship, Responsible
	Stimulation	Varied Life, Exciting Life, Daring
Dependent Variable		
Succession planning	Sophistication degree of succession planning	Extent to which procedures of succession and managerial personnel development are formalized
		Extent to which employees and organizational units delegated responsibility for succession planning
		Extent to which auditing and follow-up are exercised in executive review process
		Extent to which higher level management are involved in succession procedure
		Extent to which departmental leaders are being assessed and rewarded for efforts in subordinates nurture
		Extent to which compiling of information on staffs and job position for succession and development purposes are undertaken.
		Extent to which decision for promotion is on personal connections and network ties basis
		Extent to which selection for promotion is on past achievements, experiences and ability basis
		Members of succession planning are viewed as credible and capable in job performance
		Amount of time CEO dedicates to handling succession issues
Adapted from: Huang (2001); Rice (2005); Schwartz (1994)		

Table 4 shows the items for the constructs. The questionnaire incorporates the Schwartz Value Survey (SVS) (Schwartz, 1994) and Rice (2005) to measure the respective individual values. Items were adapted from Huang (2001) to measure sophistication of succession planning. Five-point Likert Scale ranging from (1) strongly disagree to (5) strongly agree was used to measure the items of personal culture. Sophistication of succession planning was measured on another five-point scale ranging from 1 (not at all) to 5 (very large extent).

The list of SMEs in Malaysia was collected from the SMIDEC website, an SME information and advisory centre. Since the majority of SMEs in Malaysia operate in Kuala Lumpur (KL) and Selangor, SMEs located in Selangor and KL areas were the target population for this survey. The samples were selected from the list based on a simple random sampling method.

RESULTS AND DISCUSSION

The descriptive statistics of respondents are summarized below. Demographic data show that the number of male-female respondents is quite evenly distributed. Male respondents represent 49.5% of those surveyed and female respondents represent a slightly higher percentage at 50.5%. Approximately half of the respondents (48.6%) belong to age category of 21-30. Among those surveyed, majority are from the services industry (68%). Number of employees and company's annual turnover are 2 criteria used in the research to define SMEs. Although analysis results show a few respondents do not satisfy both criteria, for company to be classified as SME, at least one criterion has to be fulfilled. Thus, all companies surveyed are qualified as SMEs satisfying either one or both criteria.

Table 5: Profiles of respondents and Firms

Profile	Descriptions	Frequency	Percent (%)
Gender of respondent	Male	52	49.5
	Female	53	50.5
	Total	105	100
Age of respondent	21-30	51	48.6
	31-40	33	31.4
	41-50	12	11.4
	51 and above	9	8.6
	Total	105	100
Primary business activities	Manufacturing	37	4.8
	Services	68	39
	Total	105	100

Table 5: Profiles of respondents and Firms			
Profile	Descriptions	Frequency	Percent (%)
Number of employees	Less than 5	10	9.5
	5 – 50	72	68.6
	51-150	15	14.3
	150 and above	8	7.6
	Total	105	100
Company's annual turnover	Less than RM 1 million	27	25.7
	RM 1 million to RM 5 million	40	38.1
	RM 5.1 million to RM 25 million	28	26.7
	More than RM 25 million	10	9.5
	Total	105	100

A reliability test was conducted to evaluate the Cronbach's Alpha values for all dimensions to ensure items grouping for the respective dimensions have acceptable internal consistency. A summary descriptive statistics of the dimensions and reliability estimates are shown in Table 6.

Table 6: Descriptive statistics and reliability estimates				
Dimensions	Number of items	Mean	Standard Deviation	Cronbach's alpha
Individual culture				
Conformity	4	4.073	0.621	0.812
Achievement	4	3.973	0.627	0.834
Self-direction	5	4.114	0.554	0.826
Benevolence	5	4.200	0.538	0.851
Stimulation	3	3.701	0.613	0.739
Succession Planning				
Sophistication Degree of Succession Planning	15	3.857	0.416	0.855
Note: N = 105				

Lower limit of reliability ($\alpha = 0.60$) identified by Hair, Anderson, Tatham and Black (1998) was used in this study. After performing reliability test, all dimensions for individual cultures and succession planning have alpha coefficient higher than the lower limit of acceptability ($\alpha > 0.60$), suggesting a high level of reliability.

Regression Analysis was used in testing for associations between variables. To test for relationship between individual culture variables and sophistication of succession planning, multiple regression tests was conducted.

Table 7: Relationship between Individual Culture and Sophistication of Succession Planning		
Independent Variables	Beta Coefficients	t-value (p-value)
Self-direction	-0.174	-1.305 (0.195)
Stimulation	0.294	2.628 (0.01)
Conformity	0.27	2.516 (0.013)
Achievement	0.237	1.938 (0.055)
Benevolence	0.108	0.954 (0.343)
Notes: $R^2 = 0.348$; $F = 10.553$; Sig $F = 0.000$ *$p<0.05$		

Table 7 shows the summarized results of the multiple regression analysis for individual culture and succession planning. The results show that 5 dimensions of individual culture collectively contribute significantly to the degree of sophistication of succession planning (F=10.553; p-value=0.000). R^2 value of 0.348 indicates that 34.8% of the variation in succession planning sophistication is explained by individual culture. Table 5 also shows that only 2 dimensions of individual culture (Stimulation, Conformity) are significantly related with sophistication of succession planning while the rest indicate no significant relationship with dependant variable at 5% significance level. Therefore H3 and H5 are accepted whereas H1, H2 and H4 are rejected.

IMPLICATIONS AND CONCLUSIONS

The outcome of this study shows that owner/manager's personal culture is important in explaining the degree of sophistication of succession planning adopted by SMEs in Malaysia. Also, the result builds on past research outcomes concerning succession planning sophistication and its drivers in small and medium-size enterprises. Theoretically, this research confirms that individual culture has a direct impact on the degree of sophistication of succession planning by small firms. However among the dimensions examined, only certain dimensions (i.e. stimulation and conformity) show significant relationship with sophisticated succession planning at 5 percent significance level, while others either show marginal relationship (e.g. achievement) or are not statistically associated with sophistication of succession planning (e.g. self direction and benevolence).

Stimulation is the most important dimension of individual culture that explains sophisticated succession planning in Malaysian SMEs. Stimulation deals with varied, exciting and daring nature of the owner-manager. This means that the degree of sophistication of the succession plan depends on how willing and daring the owner-manager of the SME is. In other words, the extent to which the owner-manager is willing and excited about developing or nurturing his/her subordinates has an impact on how sophisticated his/her plans for succession would be. The notion that many managers are not excited about developing subordinates for fear of losing their place to them has been documented in the succession planning literature. Due to such insecurity, some managers shy away from preparing future leaders early enough resulting in last minute half-hazard training and eventual hand-over to an ill prepared successor. The consequences of this adhoc, non-systemic planning range from (on the job) long learning curve to organizational failure due to incompetent management. Hence, if SMEs wish to deploy a sophisticated succession plan successfully, CEOs should be excited about grooming subordinates in a systematic manner. This endeavour, of course involves an element of risk, which demands some degree of risk-tolerance and willingness to face challenges on the part of the owner-manager. The risk element is regarding the possibility of a groomed and ready successor leaving the organization for a more lucrative appointment elsewhere just before he/she takes over the helm of affairs. This can mean a significant loss to the firm in terms of training costs (incurred on the departing executive), cost of finding a new replacement (and also training him/her), other costs associated with low productivity of the (new) replacement especially during the early stages of assuming office and making the necessary adjustments. On the flip side, the upside of this is that sophisticated succession planning can minimize the risk of costly and lengthy search for a new replacement as more than one successor are usually groomed in a proper sophisticated succession planning system. Thus, altogether, sophisticated succession planning can immensely benefit managers who have it in place.

Another significant cultural dimension is conformity. Conformity deals with politeness, honor, and self-discipline. The import of this outcome is that owner-managers need discipline and respect for subordinates, in order to develop sophisticated succession plans. Politeness towards potential successors and honoring others are key qualities of managers who have sophisticated succession plan in place. They recognize that followers especially those next in hierarchy has what it takes to take over and lead. They see the potential in followers to assume leadership roles and see themselves as dispensable. A key reason why many owner-managers do not plan for succession early enough is to make them indispensable; this may be because of their own insecure. Consequently, they develop either superiority or inferiority complex, which discourages them from identifying potential successors and grooming them. However, polite managers, those that honour others and those that have self discipline, will plan for succession by recognizing subordinates that are leadership materials, groom them and gradually release them into the positions. By the time the incumbent is finally ready to depart, the successor is already familiar with the new position and ready to act independently. This ensures continuity and stability of the enterprise. Hence, CEOs and management executives should recognize the salience of stimulation and conformity factors to successfully instate sophistication into their succession plans.

Achievement has a marginal impact on sophisticated succession planning. Entrepreneurs are known to have a high need for achievement. This achievement need and need for continuity plausibly explains the degree of sophistication of succession planning in SMEs. Great achievers desire continuity of good outcomes, they do not like to live in the past. For them, each day has its own new opportunities to exploit and challenges to overcome. Such achievement motivation is shown in the study as a factor not to ignore why owner-managers of SMEs in Malaysia plan for succession to a sophisticated degree.

However, individual culture dimensions such as benevolence and self-direction show no significant association with sophistication of succession planning, albeit the direction of the estimates are as predicted. This indicates that succession planning can increase with benevolence and self direction, but are not major or significant drivers of the former. Thus, CEOs who are lacking in these values are still able to design a succession planning system of high sophistication.

The findings of this study have implications for personnel in charged of succession planning system development in organizations. Since sophisticated succession planning is allied with good succession outcome, SMEs should put up detailed succession plans. Our study indicates that CEOs of firms that deploy sophisticated succession planning score high in stimulation and conformity and marginally in achievement need. Such virtues should therefore be encouraged among executives and included in executive development programmes.

In sum, succession planning is highly rewarding, in many ways. Depending on the degree of its sophistication, benefits include personnel development; successful delegation of responsibility; executive review, auditing and follow-up; management involvement in succession procedure; assessment and reward for efforts in subordinates nurture; compiling of information on staffs and job position for succession and development purposes; discouragement of nepotism and favouritism; employees motivation through rewarding of achievements, experiences and ability; and so on. These benefits as the study shows will accrue to those owners or managers who have sophisticated succession plans. The study also shows that CEOs who are characterized by stimulation, conformity and achievement motivation tend to do it better.

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NEW STANDARDS AVAILABLE FOR PRIVATE COMPANIES: AT LAST A LITTLE GAAP?

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ABSTRACT

For decades both U.S. practitioners and academicians have recognized a need for a simpler set of financial reporting standards, i.e. a "Little GAAP". To date, regulators have not been willing to provide a second set of standards. Now, for the first time, there may be answer for small firms desiring relief from the onerous reporting requirements of "Big GAAP ". The AICPA now recognizes the International Accounting Standards Board's recent release, International Reporting Standards for Small and Medium Enterprises (IFRS for SMEs), as official audit standards.

This paper will present a discussion of the development for IFRS for SMEs and several illustrations of financial statements prepared according to the new standards. The paper also includes comparisons of the FULL IFRS standards and IFRS for SMEs.

INTRODUCTION

In July 2009 the International Accounting Standards Committee published a single comprehensive standard for non-public companies. This was a culmination of a five year endeavor to address the needs of small to medium sized entities. The Small and Medium-sized Entity Standard (SME) provides a simplified set of rules for companies with no public reporting responsibilities. The entire self contained standard is under 250 pages compared to the International Financial Reporting Standards (IFRS) at over 2500 and US GAAP at over 25,000 pages of detailed guidance. This is the first official 'Little GAAP' ever created that could be used by U.S. entities. In the US the need for a little GAAP has been debated for decades with small firms wanting relief from onerous reporting requirements that large public firms face and regulators not wanting to actually create a second set of US GAAP rules for small firms. In recent years small enterprises have been given limited relief in each new standard but no comprehensive small enterprise standard has ever been created. Now for the first time we actually have an official 'Little GAAP'. As the IASB has been recognized by the AICPA as an official rules maker, their SME standard is an official standard that can be audited against by AICPA members. The simplified nature of the standard should make it of considerable interest to small to medium sized firms seeking relief from onerous reporting requirements in US GAAP. Adoption of the new standards may also service as a transition into full IFRS for those firms where that might be an issue

BACKGROUND

There has been interest in a scaled-down set of reporting standards for non-publicly traded companies for some time. The AICPA's Committee on Generally Accepted Accounting Principles for Smaller and/or Closely Held Business was formed in 1974 and issued a report in August, 1976. In this report, they identified two major issues of concern for smaller businesses, measurement and disclosure matters. While it was decided that measurement issues should apply to both large and small businesses, the committee felt that current disclosure requirements were too costly for smaller enterprises. The AICPA's 1978 Special Committee on Small and Medium size firms issued a report in 1980 that supported different disclosure requirements for small enterprises and stated also that some measurements issues might be scaled down for smaller enterprises. And in 1982, the AICPA's Special Committee on Accounting Standards Overload suggested an adjusted income tax method be used by smaller firms.

In 2005, the AICPA's Private Company Financial Reporting Task force surveyed 3,709 business owners, financial managers, public accounting practitioners, and 301 other stakeholders to determine their opinions on how GAAP met their needs from a cost-benefit perspective and from reporting and user needs. Results of that survey revealed that the respondents perceived a lack of relevance and decision usefulness for non-publicly traded companies. Further, the survey revealed that respondents were in favor of separate sets of GAAP for public versus non-publicly traded companies.

Academicians and practitioners arguments for a simpler set of standards can be found in several published articles. McGill and Arnstein (1974) suggested closely held companies should be exempt from using GAAP. Falk, Gobdel and Naus (1976) published the results of their survey of lending officers and found that disclosures were more important than earnings per share in assessing a company's financial position. Lippitt and Oliver (1983) suggested the possibility of having two sets of standards, i.e. "Big GAAP and Little GAAP." They recognized the need for an organized standard set for smaller businesses and argued that reliance on Other Comprehensive Bases of Accounting (OCBOA) was not acceptable. A more recent article by McCafferty (2004) offers support for reduced disclosures for smaller companies. Baker (2006) suggests what he calls a "tripartite division of GAAP" with full IFRS for public companies, and simpler GAAP standards for SMEs plus a third set for not-for profit and government entities. Though support for a "little GAAP" has been shown by both academicians, and practitioners, to date no set of standards for small and medium-sized enterprises exists. The IFRS for SMEs may fill this desire for a scaled-down GAAP.

The International Standards Committee Board recognized a need for some type of IFRS for small firms. The newly formed International Accounting Standards Board took up the project to develop standards for SMEs. They published the first Discussion Paper in 2004, Preliminary Views on Accounting Standards for Small and Medium-sized Entities. Responses to the discussion paper revealed strong support for IFRS for SMEs. As a result of further study and public meetings, the Board published a questionnaire in April 2005. The questionnaire asked about (1) possible simplifications for recognition and measurements principles, and (2) topics to be excluded from the SME document that were part of the full IFRS.

After further deliberations, the Board issued a revised draft of the discussion memo. In February, 2007, the Board published an exposure draft of their proposed IFRS for SMEs. The focus of the exposure draft was on simplifying the full IFRS principles to meet the needs of smaller, non-public entities. The Board then field tested the SME document provisions in 116 small entities from 20 countries. Major problem areas identified by the field testers included annual re-measurement, disclosure issues, and reference to full IFRSs. After re-deliberations and studying the 172 letters of comment on the exposure draft, the Board issued its IFRS for SMEs in May, 2009 to be effective immediately. Several international organizations have endorsed the new provisions including The World Bank, the International Federation of Accountants, the American Institute of Certified Public Accountants, and the Federation of European Accountants. Deloitte's 2009 survey of private companies reveals that 51% of those surveyed favor separate accounting standards for private and public entities. Other possible reporting models suggested include—

- ♦ U.S. Adapted Version for IFRS for SMEs
- ♦ Full IFRS with differential Reporting Separate
- ♦ U.S. Private Company GAAP-Revised
- ♦ Separate U.S. GAAP-Maintained and Updated in the future

The other models appear more complicated and the IFRS for SMEs may be the better answer for an acceptable Little GAAP.

WHAT ARE SMEs?

In order for the IASB to provide the accounting disclosure requirements for small and medium sized firms, a clear definition of SMEs is important. This will also help auditors to understand the applicability of International Financial Reporting Standards (IFRS) for Small and Medium Entities (SMEs).

According to the IASB, small and medium-sized entities are those that publish general purpose financial statements but do not have public accountability. Thus, banks, credit unions, securities brokers/dealers, mutual funds, and investment banks would not qualify as SMEs because of their public accountability. While individual countries may have developed their own definitions of SMEs, the IASB requires that firms reporting under the IFRS for SMEs must be of the nature defined by the IASB. Subsidiaries of publicly traded companies that use full IFRS may use IFRS for SMEs in their financial statements if they are not publicly traded. Size of the firm is not a factor in determining the SME qualification because no quantitative thresholds are mandated to qualify as a SME.

When a firm uses the IFRS for SMEs, it must include a statement of that fact in its disclosure notes. Compliance with all IFRS for SMES is required unless management deems their use misleading. In that case, a statement must be made describing the particular exception and the reason for the departure.

CONCEPTS AND PERVASIVE PRINCIPLES

The IASB bases the SME standards on their set of concepts and pervasive principles. To determine the appropriate accounting policy, the IFRS for SMEs presents a hierarchy. The first level is the IFRS for SME standards, the second is comprised of definitions, criteria, and concepts stated in the Concepts and Pervasive Principles section of the document.

The qualitative characteristics of financial statement information are similar to the FASBs as set out in the Statements of Financial Accounting Concepts (SFAC). They include understandability, relevance, materiality, reliability, substance over form, prudence, completeness, comparability, timeliness, and the cost/benefit relationship. Two of these, substance over form and prudence are not found in FASBs SFAC. The prudence concept advocates a measure of caution and is similar to the FASB concept of conservatism. Substance over form requires that transactions be accounted to reflect the substance of an economic event and not just its legal form. It is thought to enhance the reliability of reporting. By adhering to these concepts, preparers of financial statements will achieve the objectives set out by the IASB, to provide useful information about the financial position, performance, and cash flows of an entity.

FINANCIAL STATEMENTS

IFRS (SMEs) requires a statement of financial position, a statement of performance, a statement of changes in equity, a statement of cash flows, and disclosure notes containing significant accounting policies and other explanations. The notes must also contain information about the firm's country of incorporation, its legal form, and a description of the nature of its operating activities.

Statement of Financial Position

In identifying an asset, the right of ownership is not required. For example, when accounting for a leased asset, control of the asset is the essential required characteristic. Fair value measurement is permitted or required for (1) investments in associates and joint ventures, (2) investment property measured at fair value, and (3) agricultural assets. Offsetting assets and liabilities is not permitted. Table 1 presents a list of required information to be presented in the statement of Financial Position. Table 2 presents a sample IASB Statement of Financial Position. No sequence of presentation is required. A current-non current presentation is required, except when a presentation in order of liquidity is more relevant. If the liquidity order format is used, the assets/ liabilities must be presented in ascending/descending order. Offsetting assets and liabilities is not permitted except in certain cases such as valuation for inventory obsolescence, and allowance for uncollectible account receivables.

Table 1: Information to be Presented in the Statement of Financial Position

a.	cash and cash equivalents.
b.	trade and other receivables.
c.	financial assets (excluding amounts shown under (a), (b), (j) and (k)).
d.	inventories.
e.	property, plant and equipment.
f.	investment property carried at fair value through profit or loss.
g.	intangible assets.
h.	biological assets carried at cost less accumulated depreciation and
i.	biological assets carried at fair value through profit or loss.
j.	investments in associates.
k.	investments in jointly controlled entities.
l.	trade and other payables.
m.	financial liabilities (excluding amounts shown under (l) and (p)).
n.	liabilities and assets for current tax.
o.	deferred tax liabilities and deferred tax assets (these shall always be classified as non-current).
p.	provisions.
q.	non-controlling interest, presented within equity separately from the equity attributable to the owners of the parent.

Table 2: IASB's Sample Statement*			
XYZ Group			
Consolidated statement of financial position at 31 December 20X2			
	20X2	20X1	20X0
ASSETS			
Current assets			
Cash	28,700	22,075	18,478
Trade and other receivables	585,548	573,862	521,234
Inventories	57,381	47,920	45,050
	671,629	643,857	584,762
Non-current assets			
Investment in associate	107,500	107,500	107,500
Property, plant and equipment	2,549,945	2,401,455	2,186,002
Intangible assets	850	2,550	4,250
Deferred tax asset	4,609	2,912	2,155
	2,662,204	2,514,417	2,299,907
Total assets	3,334,233	3,158,274	2,884,669
LIABILITIES AND EQUITY			
Current liabilities			
Bank overdraft	83,600	115,507	20,435
Trade payables	431,480	420,520	412,690
Interest payable	2,000	1,200	–
Current tax liability	271,647	190,316	173,211
Provision for warranty obligations	4,200	5,040	2,000
Current portion of employee benefit obligations	4,944	4,754	4,571
Current portion of obligations under			
finance leases	21,461	19,884	18,423
	819,332	757,221	631,330
Non-current liabilities			
Bank loan	50,000	150,000	150,000
Long-term employee benefit			
obligations 19 5,679 5,076 5.066			
Obligations under finance leases	23,163	44,624	64,508
	78,842	199,700	219,574
Total liabilities	898,174	956,921	850,904

Table 2: IASB's Sample Statement*			
XYZ Group			
Consolidated statement of financial position at 31 December 20X2			
	20X2	20X1	20X0
Equity			
Share capital	30,000	30,000	30,000
Retained earnings	2,406,059	2,171,353	2,003,765
	2,436,059	2,201,353	2,033,765
Total liabilities and equity	3,334,233	3,158,274	2,884,669

Note: The IFRS for SMEs does not require a statement of financial position at the beginning of the earliest comparative period—hence the shading. It is presented here to aid understanding of the calculations underlying amounts in the statement of cash flows.
*IASB, Illustrative Financial Statements Presentation and Disclosure Checklist, IFRS for SMEs

The following items should be sub-classified and presented either in the statement or in the notes: (1) property, plant, and equipment, (2) trade receivables, (3) inventories, (4) trade and other payables, (5) employee benefit provisions, and (6) certain equity classes. A company with capital stock will also disclose information about the number of shares, par value, rights and restrictions, a reconciliation of outstanding shares at year-end, and shares reserved for options and contracts

Statement of Performance

A company may present its performance results in either (1) one comprehensive statement of income or (2) in two statements, an income statement and a statement of comprehensive income. Offsetting revenues and expenses is not permitted. A change from one format to another is considered a change in accounting policy. IFRS prohibits any presentation of extraordinary items either in the statement of performance or in the notes. Expenses may be presented by either the nature or the function of the expense. Nature includes items such as depreciation, purchases, transportation, employee benefits, and advertising. Functional expenses include cost of sales, administration, and distribution costs. Table 3 contains a list of the minimum required items in the statement of performance under either a single statement of two-statement approach. Table s 4A and 4B present the IASB's sample illustration for statements of comprehensive income and retained earnings.

Table 3: Information to be Presented in the Statement of Comprehensive Income
Single Statement Approach
♦ revenues ♦ expenses either by function or by nature ♦ finance costs ♦ profit/loss on investments in associates/jointly controlled entities ♦ tax expense ♦ single amount showing the total of post-tax profit/loss on discontinued operations and post-tax gain/loss on sale of net assets for that operation ♦ profit/loss(if no other items of comprehensive income exist)
Two-Statement Approach
As above, then Statement of Comprehensive Income begins with last line above, then each comprehensive income item ♦ profit/loss share of other comprehensive income of associates/jointly controlled entities ♦ total comprehensive income Plus separate disclosure of ♦ profit/loss attributed to non-controlling interest and owners of the parent ♦ total comprehensive income attributed to non-controlling interest and owners of the parent.

Table 4A: IASB's Sample Statement*		
Alternative 1 – illustrating the classification of expenses by function		
XYZ Group		
Consolidated statement of comprehensive income and retained earnings for the year ended 31 December 20X2		
	Year 20x1	Year 20x2
Revenue	6,863,545	5,808,653
Cost of Sales	(5,178,530)	(4,422,575)
Gross Profit	1,685,015	1,386,078
Other Income	88,850	25,000
Distribution Costs	(175,550)	(156,800)
Administrative Expenses	(810,230)	(660,389)
Other Expenses	(106,763)	(100,030)
Finance Costs	(26,366)	(36,712)
Profit Before Tax	654,956	457,147
Income Tax Expense	(270,250)	(189,559)
Profit for the Year	384,706	267,588
Retained Earnings at Start of Year	2,171,353	2,003,765
Dividends	(150,000)	(100,000)
Retained Earnings at End of Year	2,406,059	2,171,353

Table 4A: IASB's Sample Statement*
Note: The format illustrated above aggregates expenses according to their function (cost of sales, distribution, administrative etc). As the only changes to XYZ Group's equity during the year arose from profit or loss and payment of dividends, it has elected to present a single statement of comprehensive income and retained earnings instead of separate statements of comprehensive income and changes in equity. *IASB, Illustrative Financial Statements Presentation and Disclosure Checklist, IFRS for SMEs

Table 4B: IASB Sample Statement*		
Alternative 2 – illustrating the classification of expenses by nature		
XYZ Group		
Consolidated statement of comprehensive income and retained earnings for the year ended 31 December 20X2		
	Year 20x1	Year 20x2
Revenue	6,863,545	5,808,653
Other Income	88,850	25,000
Changes in inventories of finished goods and work in progress	3,310	(1,360)
Raw material and consumables used	(4,786,699)	(4,092,185)
Employee Salaries and Benefits	(936,142)	(879,900)
Depreciation and Amortization expense	(272,060)	(221,247)
Impairment of property plant and equipment	(30,000)	-
Other Expenses	(249,482)	(145,102)
Finance Costs	(26,366)	(36,712)
Profit Before Tax	654,956	457,147
Income Tax Expense	(270,250)	(189,559)
Profit for the Year	384,706	267,588
Retained Earnings at Start of Year	2,171,353	2,003,765
Dividends	(150,000)	(100,000)
Retained Earnings at End of Year	2,406,059	2,171,353
Note: The format illustrated above aggregates expenses according to their nature (raw materials and consumables, employee salaries and benefits, depreciation and amortization, impairment etc). As the only changes to XYZ Group's equity during the year arose from profit or loss and payment of dividends, it has elected to present a single statement of comprehensive income and retained earnings instead of separate statements of comprehensive income and changes in equity. *IASB, Illustrative Financial Statements Presentation and Disclosure Checklist, IFRS for SMEs		

Statement of Changes in Equity

The statement of changes in equity should contain the firm's profit/loss, income and expense items contained in other comprehensive income, effects of changes in accounting policy, corrections of prior period errors, and investments by and dividends paid to equity investors. If these are the only changes to equity during the period, then this statement of changes in equity may be combined with the statement of income.

Statement of Cash Flows

A company must present a Statement of Cash Flows using either the direct or indirect method. Information is classified into operating, financing, and investing activities. Unlike the FASB's preference for the direct method, no statement is made regarding a preferred method. Some differences exist between US GAAP and IFRS (SMEs) with respect to the classification of certain items on the Statement of Cash Flows. Table 5 presents an illustration of these differences. Of note are the additional permitted classifications of interest and dividends paid and received, based on the underlying nature of the item. Classification differences seem to represent a more principles based approach to presentation of these items because of the optional treatment for interest expense and payments and for dividends paid and received. A firm must also disclose any significant cash held but not available for use, along with management's explanations for the hold. Non-cash transactions that significantly affect the capital structure of the firm must also be disclosed.

Table 5: Statement of Cash Flows Classification Differences

Transaction	US GAAP Classification	IFRS Classification
Interest Received	Operating	Operating or Investing
Dividends Received	Operating	Operating or Investing
Interest Paid	Operating	Financing or Operating
Dividends Paid	Financing	Financing or Operating
Income Taxes	Operating	Operating unless specifically associated with financing or investing activity

Notes to the financial Statements

Disclosure notes will present information in the following order: (1) statement of compliance with IFRS for SMEs; (2) a summary of significant accounting policies; (3) supporting information for financial statement items; and (4) other necessary disclosures. The notes will include a statement concerning managerial judgments about accounting policy choices and a statement concerning key assumptions regarding future predictions and estimation uncertainties.

MEASUREMENT AND PROCEDURAL ISSUES

The IFRS for SMEs are simpler than the full IFRS in several areas. Fewer disclosures are required and simplification is found in accounting options and in recognition and measurement principles. For example, unlike the full IFRS, the IFRS (SMEs) do not require certain disclosures. Options found in the full IFRS, but not addressed in the SME version include accounting for–

- ♦ Earnings per share
- ♦ Interim reporting
- ♦ Segment reporting
- ♦ Special accounting for assets held for sale

The following topics are the same for full IFRS and IFRS for SMEs: (1) provisions and contingencies, (2) hyperinflation accounting, and ((3) accounting for subsequent events.

Some areas where recognition and measurement simplifications occur include accounting for—

- ♦ Financial instruments---two category classification rather than four
- ♦ Indefinite-life intangible assets such as goodwill—amortized over useful life or 10 years if not determinable and annual impairment tests are not required
- ♦ Investments in joint ventures—cost unless publicly priced
- ♦ Research and development costs-expensed
- ♦ Borrowing costs-expensed
- ♦ Review requirements for assets revaluation-only if indications exist, rather than mandated yearly review
- ♦ Defined benefit pension plans-past service costs and actuarial gains/losses recognized immediately in income
- ♦ Income taxes—guidance on valuation allowance; no recognition threshold
- ♦ Biological assets-fair value if determinable, otherwise cost/depreciation model
- ♦ Equity-settled share-based payment-directors' estimate of fair value if market prices are not available
- ♦ Property, Plant & Equipment-amortized or impaired cost with revaluation not allowed

Table 6 presents additional comparisons of full IFRS with IFRS for SMEs

Table 6 *: Comparisons of Full IFRS with IFRS for SMEs		
	Full IFRS	IFRS for SMEs
Financial Instruments	Financial instruments: Recognition andmeasurement', distinguishes four measurement categories of financial instruments – that is, financial assets or liabilities at fair value through profit or loss, held-to-maturity investments, loans and receivables and available-for-sale financial assets.	There are two sections dealing with financial instruments: a section for simple payables and receivables, and other basic financial instruments; and a section for other, more complex financial instruments. Most of the basic financial instruments are measured at amortized cost; the complex instruments are generally measured at fair value through profit or loss. The hedging models under IFRS and IFRS for SMEs are based on the principles in full IFRS. However, there are a number of detailed application differences, some of which are more restrictive under IFRS for SMEs (for example, a limited number of risks and hedging instruments are permitted). However, no quantitative effectiveness test required under IFRS for SMEs.
Business Combinations	Transaction costs are excluded under IFRS 3 (revised). Contingent consideration is recognized regardless of the probability of payment.	Transaction costs are excluded under IFRS 3 (revised). Contingent consideration is recognized regardless of the probability of payment.
Non-financial assets and goodwill	For tangible and intangible assets, there is an accounting policy choice between the cost model and the revaluation model. Goodwill and other intangibles with indefinite lives are reviewed for impairment and not amortized. Intangible assets', the useful life of an intangible asset is either finite or indefinite. The latter are not amortized and an annual impairment test is required. IAS 40, 'Investment property', offers a choice of fair value and the cost method. IFRS 5, 'Non-current assets held for sale and discontinued operations', requires on-current assets to be classified as held for sale where the carrying amount is covered principally through a sale transaction rather than though continuing use.	The cost model is the only permitted model. All intangible assets, including goodwill, are assumed to have finite lives and are amortized. There is no distinction between assets with finite or infinite lives. The amortization approach therefore applies to all intangible assets. These intangibles are tested for impairment only when there is an indication. Investment property is carried at fair value if this fair value can be measured without undue cost or effort. Assets held for sale are not covered, the decision to sell an asset is considered an impairment indicator.

Table 6 *: Comparisons of Full IFRS with IFRS for SMEs		
	Full IFRS	IFRS for SMEs
Investments in joint ventures	Investments in associates are accounted for using the equity method. The cost and fair value model are not permitted except in separate financial statements. To account for a jointly controlled entity, either the proportionate consolidation method or the equity methods are allowed. The cost and fair value model are not permitted.	An entity may account of its investments in associates or jointly controlled entities using one of the following: The cost model (cost less any accumulated impairment losses). The equity method. The fair value through profit or loss model.
Research and Development Costs	Research costs are expensed as incurred; development costs are capitalized and amortized, but only when specific criteria are met.	All research and development costs are recognized as an expense.
Borrowing costs	Borrowing costs are capitalized if certain criteria are met.	All borrowing costs are recognized as an expense.
Defined Benefit Pension Plans	Under IAS 19, 'Employee benefits', actuarial gains or losses can be recognized immediately or amortized into profit or loss over the expected remaining working lives of participating employees. The use of an accrued benefit valuation method (the projected unit credit method) is required for calculating defined benefit obligations.	Requires immediate recognition and splits the expense into different components. The circumstance-driven approach is applicable, which means that the use of an accrued benefit valuation method (the projected unit credit method) is required if the information that is needed to make such a calculation is already available, or if it can be obtained without undue cost or effort. If not, simplifications are permitted in which future salary progression, future service or possible mortality during an employee's period of service are not considered.
Income taxes	A deferred tax asset is only recognized to the extent that it is probable that there will be sufficient future taxable profit to enable recovery of the deferred tax asset. No deferred tax is recognized upon the initial recognition of an asset and liability in a transaction that is not a business combination and affects neither accounting profit nor taxable profit at the time of the transaction. There is no specific guidance on uncertain tax positions. In practice, management will record the liability measured as either a single best estimate or a weighted average probability of the possible outcomes, if the likelihood is greater than 50%.	A valuation allowance is recognized so that the net carrying amount of the deferred tax asset equals the highest amount that is more likely than not to be recovered. The net carrying amount of deferred tax asset is likely to be the same between full IFRS and IFRS for SMEs. No such exemption Management recognizes the effect of the possible outcomes of a review by the tax authorities. It should be measured using the probability-weighted average amount of all the possible outcomes. There is no probable recognition threshold.

Table 6 *: Comparisons of Full IFRS with IFRS for SMEs		
	Full IFRS	IFRS for SMEs
Investments in associates and joint ventures	Investments in associates are accounted for using the equity method. The cost and fair value model are not permitted except in separate financial statements. To account for a jointly controlled entity, either the proportionate consolidation method or the equity method is allowed. The cost and fair value model are not permitted.	An entity may account of its investments in associates or jointly controlled entities using one of the following: The cost model (cost less any accumulated impairment losses) The equity method. The fair value through profit or loss model.
*Price Waterhouse Coopers, "Similarities and differences-A Comparison of 'full IFRS' and IFRS for SMEs, "2009.		

CONCLUSIONS AND FURTHER COMMENTS

After firms have issued financial statements under IFRS for SMEs, the IASB plans to review the progress and to possibly propose amendments to the pronouncement, taking into consideration any new IFRSs issued during that time. The future will involve the IASB publishing an exposure draft every three years, though this is not a firm commitment. The Deloitte 2009 survey of private companies reveals a need for additional education because many private companies are not aware of the SME standards. Forty-three percent of the survey respondents answered either "no" or "don't know" to the question assessing their awareness of the IFRS for SMEs.

Because IFRS is only mandated for publicly traded firms (consolidated reports only), the actual future use of IFRS for SMEs is unknown. However, because there are tens of millions of private entities and only tens of thousands of public firms, IFRS for SMEs has the potential to be used by far more entities than either full IFRS of US GAAP. Sixty-two percent of the Deloitte survey respondent indicated they would switch to the SMEs standards when required to do so.

In the U.S., the simplified nature of the standard will likely attract many users who object to the complication and corresponding cost of U.S. GAAP. Such use might depend on whether lending institutions allow companies to report under IFRS for SMEs as the AICPA already allows an audit based in IFRS for SMEs. If or when the U.S. moves to full IFRS for publicly reporting entities, IFRS for SMEs will become even more appealing to private U.S. entities and much more acceptable to U.S. lending institutions.

Conversely, US accountants and auditors may agree with IASB member James J. Leisenring, who wrote the Dissenting Opinion on International financial Reporting Standards for Small and Medium-sized Entities." In his dissent, Mr. Leisenring argues that there is neither a need nor a desire for the scaled down version of the full IFRS and instead believes the full version should be the only allowed set of policies and provisions. He bases his arguments on his perceived lack of comparability that would result from an additional set of standards and that such standards would not be consistent with the Constitution of the International Standards Committee Foundation to have a single set of standards.

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STRATEGIC COLLABORATION AND MENTORING WOMEN ENTREPRENEURS: A CASE STUDY

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ABSTRACT

There have been numerous studies indicating that women in business face greater professional isolation, continue to encounter sexual harassment, and are promoted more slowly than men in comparable situations, resulting in lower salaries. These experiences have helped fuel a rise in women's entrepreneurship.

This article presents an instrumental case study of the implementation of a career-focused, team mentoring model, Strategic Collaboration, which was customized to help facilitate the success of women entrepreneurs. The study found that despite the fact that the groups were formed with the sole purpose of helping the women advance their businesses, other benefits also accrued to the women in the form of social networks that were established among them.

INTRODUCTION

In 2002, there were 6.5 million women-owned businesses in the United States, an increase of 20 percent from 1997 (Bureau of the Census, 2002). In this country, women are the primary owners of approximately 30% of privately held firms (Center for Women Business Research, 2004). Small businesses have come to be regarded as the largest source of new job growth in the last decade (Carree & Thurik, 2006).

The surge in the number of women-owned businesses has spawned a growing body of research on women's entrepreneurship (Gundry, Ben-Yoseph, & Posig, 2002). Some scholars speculate that the increase in women-owned businesses in the U.S. and abroad could be the result of continued discrimination and lack of opportunities for advancement in the workplace (Hurley et al., 2008). Numerous studies have documented the issues faced by women in organizations nationwide. Their economic and social status in the workplace remains considerably lower than that of their male counterparts (Chatman & O'Reilly, 2004; Cleveland, Stockdale, & Murphy, 2000; Powell & Graves, 2003). Even with company support, balancing work, family responsibilities, and a personal life remains challenging (Catalyst, 2004), and the women continue to face sexual harassment and questions about their leadership style and abilities (Bell, McLaughlin, & Sequeira, 2002). In part to circumvent these problems, many women have left corporate and public employment to start their own ventures (Weiler & Bernasek, 2001).

Although a significant number of women leave professional occupations to pursue an entrepreneurial career, out of 5 small businesses fail within 4-6 years ((Knaup 2005), and women are more likely than men to discontinue their businesses (Robinson, 2007). Therefore, mentoring has been suggested as one approach that can assist women in achieving greater success rates, and researchers have recommended that more inclusive peer-oriented models be developed (Catalyst, 2002; Hackney &Bock, 2000; Valian, 1999). Typically such mentoring takes the form of formal programs implemented within corporate or public organizations. However, as they work for themselves, women entrepreneurs are not positioned within an organizational network, and therefore rarely benefit from such formal mentoring initiatives.

MENTORING AND ENTREPRENEURSHIP

Entrepreneurship is an original, creative process that flows from identifying the opportunities that change creates, and then exploiting those opportunities (Drucker, 1993). Research suggests that entrepreneurs require flexible, person-centered, informal support systems (Perren and Grant, 2001). Mentoring, then, becomes a vital element for small venture survival.

Mentoring is most often considered to be a dyadic relationship in which the mentor, who is usually the more experienced person, provides workplace guidance and support to a less experienced individual (Haring, 1999; Kram, 1985). Tabbron (1997) describes mentoring as a process that aids an individual's professional growth. It takes a longer perspective, one that generally focuses on the less experienced individual's career development. It differs from coaching, which is focused on more immediate performance. However, more recent research suggests that a mentor is one of a network providing emotional (psychosocial), career (vocational or instrumental), and role-modeling support (Mezias & Scandura, 2005; Wasburn, 2007). Whereas vocational or instrumental support helps develop the career of the protégé by providing support, increased visibility, protection and more challenging work assignments, social or psychosocial support includes counseling, camaraderie and acceptance (Gibb & Megginson, 1993; Kram, 1985; Scandura, 1992). In this study, a mentor is defined as someone who provides guidance, support, knowledge, and opportunities for someone less experienced, usually during a time of transition in the less experienced person's career (Burlew, 1991; Haring, 1999).

There are many positive benefits of mentoring for both protégés and mentors (Ensher, Murphy & Vance, 2000). Mentored individuals report greater job and career satisfaction, better organizational socialization, higher salaries and faster rates of promotion than those without mentors (Eby et al., 2008; Dreher & Cox, 1996). However, there are also a number of unique challenges related to finding the right mentor for potential protégé entrepreneurs. Ensher, Murphy, & Vance (2000) point out that the most experienced mentors may be unwilling to participate due to the intensity of commitment required by their own enterprises, and may view the protégés as potential competitors.

Because mentoring is commonly seen as informal in nature, with mentors and protégés coming together spontaneously, whether or not they are successful is usually attributed to luck. There is some evidence that informal mentoring relationships are more effective than formal ones, which may explain why many organizations are reluctant to create formal programs (Lacey, 1999; Ragins & Cotton, 1999). Since mentors are inclined to seek out younger versions of themselves, and since most mentors are male, women and minorities have been shown to be mentored less frequently than white males. Unfortunately, this situation often results in women and minorities facing more barriers to career advancement (Bova, 2000). Women who do have male mentors often deal with the "gossip factor," which arises when an opposite-sex couple spends time together outside of the work setting (Blake-Beard, 2001; Kalbfleisch, 2000).

Entrepreneurs seek support from mentors for a variety of reasons, including emotional, vocational and role modeling support. Many positive benefits accrue to both entrepreneurial protégés and mentors, such as having others to serve as brainstorming partners and sounding boards (Ensher, Murphy, & Vance, 2000). The use of more seasoned entrepreneurs as mentors should be effective in overcoming the critical early stage learning period when new entrepreneurs have to learn how to handle crises, respond to change, and make strategic decisions (Deakins, Graham, Sullivan & Whittam, 1997).

While mentors play an important role in the collaborative relationship, the role that newer entrepreneurs play is equally important (Bechard and Toulouse, 1991). Cope and Watts (2000) suggest that the primary aim of a mentoring program should be to help the entrepreneur conceptualize critical incidents as learning events, and to enhance the learning experience by encouraging proactive reflection about what happened, why it happened, and how it could be avoided in the future.

STRATEGIC COLLABORATION

Developed by one of the authors, Strategic Collaboration is a facilitated mentoring relationship that combines features of grooming and networking mentoring with elements of Appreciative Inquiry, an approach to organizational innovation that specifically focuses on what gives life to an organization (Author, 2006). Appreciative Inquiry uses positive dialogue to foster future success. It was created as a response to the tradition of action research, which is a deficit model that regards organizations as having problems in need of solution, and then develops an action plan to correct the problems that have been identified (Cooperrider, 1986). Appreciative Inquiry assumes that the language we use creates the reality. Therefore, posing questions that are designed to ascertain what works, rather than what does not work, focuses the ensuing discussion in ways that are then more likely to lead to positive outcomes (Cooperrider & Srivastva, 1987; Hammond, 1986).

Organizations that decide to institute mentoring programs generally choose the Grooming mentoring approach, which involves one mentor and one protégé (Swoboda & Millar, 1986). However, this approach presents numerous potential difficulties. In order to be successful, the grooming mentoring model relies upon the long-term participation of both mentor and protégé. Personality differences, failure to make the goals of the relationship clear, and power differences can seriously hamper a grooming mentoring relationship. If the mentor leaves, the protégé can be left with feelings of rejection and isolation. (Haring, 1993).

Networking mentoring, or peer mentoring, is a nonhierarchical approach that involves creating a community of multiple participants. This type of mentoring creates a context in which women are more likely to flourish (Belenky, 1986; Gilligan, 1982). This person-centered model can be seen as both more flexible and less dependent upon whether or not the participants will remain compatible over a long period of time (Haring, 1993; Swoboda & Millar, 1986). It provides the protégé with an assortment of opinions and guidance, as well as social support (Mitchell, 1999). Participants can choose to leave the network with minimal disruption to the group functioning (Haring, 1999).

There is considerable research suggesting that protégés who have multiple mentors may enjoy increased benefits (Baugh and Scandura, 2000; Packard, Walsh, and Seidenberg, 2004; Ragins & Scandura, 1994; Sandler, 1995). Higgins & Kram (2001) view mentoring as a type of developmental network, i.e., as "the range of social systems (e.g., community, employment, school) from which individuals draw mentoring support" (p. 267).

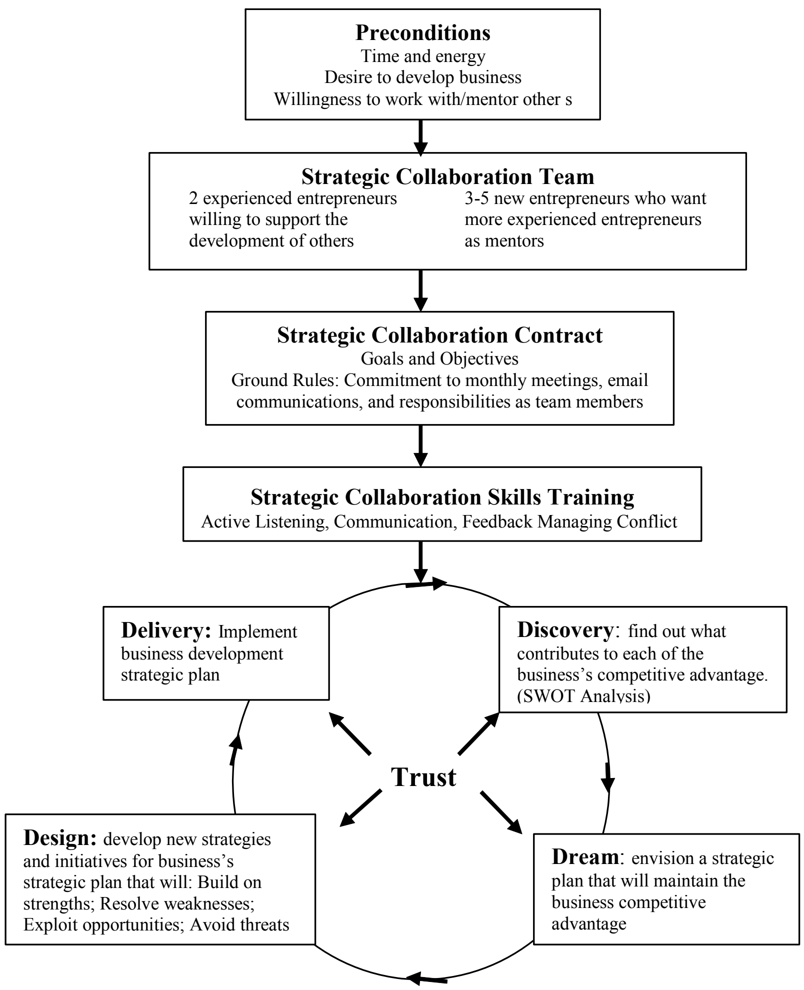
The Strategic Collaboration mentoring model involves both two mentors and a peer support group. This model can be particularly beneficial to women, who tend to prefer collaborative environments (Helgesen, 1995; Maier, 1999). The model has been applied successfully to teams in both business and academe (Author, 2007; Authors, 2006). If properly managed, Strategic Collaboration teams can help to ensure that the protégés are mentored in such a way as to achieve professional success.

What follows is an instrumental case study of a Strategic Collaboration mentoring group composed of women entrepreneurs. The primary goal of the mentoring group was to facilitate each participant's success through the development of a strategic business plan; its secondary objective was the creation of a support group that could remain in place long after the completion of the business plans, thereby providing all the benefits of mentoring described above. After describing the model, the study reports the women entrepreneurs' responses to a mentoring program based on the model, and describes the specific ways in which the participants felt they and their businesses benefited. While the study focuses on women entrepreneurs, the problems they confront are similar to those facing women in organizations both nationally and internationally (Catalyst, 2004; Oakley, 2000; Omar & Davidson, 2001; Valian, 1999). Strategic Collaboration might also be applicable in these contexts.

THE STRATEGIC COLLABORATION MODEL FOR WOMEN ENTREPRENEURS

Strategic Collaboration is customized to suit each group for which it is used. In this case, the focus was on enabling women business owners to create strategic plans for their businesses. As shown in Figure 1, in Strategic Collaboration, a peer group of three to five new business owners is matched with two more seasoned entrepreneurs to create a support structure that offers the guidance and encouragement as they work to build their businesses.

Figure 1: Strategic Collaboration Entrepreneurship Model



The model in Figure 1 incorporates Cooperrider's Appreciative Inquiry. The Discovery phase, as applied to women entrepreneurs, encourages all participants to find out what is unique about their businesses. What contributes to their businesses' competitive advantage? During the Dream phase, team members build upon their businesses' unique qualities identified during the Discovery phase, and determine how those qualities can be used to build a strategic plan with competitive advantage. This stage can be seen as a brainstorming session in which creative ideas are considered and then accepted or rejected on a consensual basis. The Design phase is an opportunity for the mentors and peer group to determine how they can leverage the unique qualities of their businesses through new initiatives in ways that can move their businesses forward in the years to come. In order to complete this phase successfully, some forecasting of the future market needs must be attempted. In the Delivery phase, the strategic plans that were developed in the previous three phases are implemented. Being a dynamic model with a cyclical design, the Delivery phase leads, in turn, to the Design phase, where the unique qualities of their businesses are again considered with a view toward their future, and the process begins again.

Implementation of the Strategic Collaboration model assumes that an organization has provided support and resources for the process. The approach is efficient in that, by using a peer group approach, a few mentors can serve many protégés. The mentors must be experienced business owners with wide-ranging knowledge about what will advance their less experienced colleagues' businesses, as well as a desire to mentor them. The less experienced business owners being mentored must be willing to work intensively with the mentors to develop strategic plans for their businesses. The team must commit to at least one monthly meeting.

Finally, just as in any formal mentoring program, a contract that specifies the goals and objectives the team is to accomplish, and the roles and responsibilities of each team member must be negotiated. A well-structured contract can avoid many of the problems associated with facilitated mentoring that were described previously (Lacey, 1999; Murray, 2001).

It is essential that through each phase of the Strategic Collaboration process described earlier, trust must be created (Bierema & Hill, 2005; Johnsrud, 1990; Kram, 1985). Being part of such a team means that members make themselves vulnerable. Those being mentored must be sure that whatever is said during the mentoring process will be kept confidential by all of the group members (Hunt & Weintraub, 2002). In each of the phases, as conceptualized and labeled in Appreciative Inquiry, a specific goal of the group is accomplished. Therefore, none of the phases should be rushed. Assuming there are monthly meetings, some phases may take 1 month, while others may take 2 or more, depending upon how much conversation is generated around each topic.

The Strategic Collaboration Mentoring Program

In an effort to understand the dynamics and outcomes of Strategic Collaboration for women businesses owners, a Strategic Collaboration mentoring group was formed from members of an

Association of Women Business Owners (AWBO), located in a small Midwestern city. AWBO was established in 1982, and has approximately 100 members. The organization's objectives were to meet to share ideas, offer support, and network with other women business owners. Their mission was to give women an opportunity to concentrate on the managing and planning of their business as a respite from "doing business" by helping members build knowledge and skills as business owners (AWBO, undated).

In fall 2007, the president of AWBO, who had read an article about Strategic Collaboration, contacted the authors. She invited them to present Strategic Collaboration at one of the group's monthly meetings and to facilitate as many groups as the members needed. During the question and answer period following the presentation, AWBO members expressed their strong preference for working with women in businesses that did not compete with one another. The authors agreed, but were concerned about how cohesive the group would be, given their disparate business experiences. Following the completion of the Strategic Collaborative process, data about the group were collected. This research study sought to understand the behaviors and emotional responses of participants in the mentoring context from their own perspectives (Van Manen, 1990); whether the protégés found Strategic Collaboration helpful in advancing their businesses; and what changes the mentors' and protégés' experiences might suggest.

METHODOLOGY

Research Design

An instrumental case study approach was used in the investigation. The approach focuses on a particular case to gain insight into an issue or theory, in this instance the utility of Strategic Collaboration as an approach to mentoring women entrepreneurs. Instrumental case studies are appropriate for developing theories that facilitate understanding of issues such as pervasive problems within organizations (Feagin, Orum, & Sjoberg, 1991; Stake, 1995). In the present study, details of the experiences of the particular mentoring team contribute to the understanding of the uniqueness and complexity of the case. However, this is less important than the fact that the team serves to illustrate the potential viability of Strategic Collaboration to facilitate the career success of women entrepreneurs. While the details of the AWBO project may not be found in the mentoring programs of other business-related groups, the value of the instrumental case study does not depend on being able to defend the typicality of the case (Stake, 1995, p. 4). This study sought to address the richness and complexities of entrepreneurship as part of the women's lives by examining and describing the experiences of women entrepreneurs in a small mid-western city, as well as their interpretation of those experiences.

To illuminate the intricate and complex nature of women entrepreneurship, a multi-method research design incorporating interviews, observations, and survey was used. The use of multiple methods allowed for triangulation as a strategy for securing an in-depth understanding of the phenomenon in question. The combination of multiple methods, documents, perspectives, and observations add rigor, breadth, and depth to an investigation (Fine, Weis, Wessen, & Wong, 2000).

Participants

Six members of the local AWBO chapter elected to participate in the Strategic Collaboration. Since the purpose of the group was career-related and not psychosocial support, no effort was made to ensure compatibility of those who would be working together. To preserve the privacy of the participants, all names were changed and the types of businesses they own were described generically.

Two of the more experienced entrepreneurs, Carol and Susan, agreed to serve as mentors for the Strategic Collaboration group. They had owned businesses for an average of 16 years. Four newer business owners, Laura, Amanda, Francine, and Carla, joined as protégés. The participants' businesses ranged from beauty care to a single-proprietor professional practice. Typically, they did not have employees. They were between the ages of 35 and 60+ years old. Five had university degrees, and two held advanced degrees. It is also important that entrepreneurs consider compatibility in values, rather than assume similarity based on characteristics such as gender, when seeking out mentors. Research suggests that women may be more likely to become entrepreneurs in order more effectively to balance work and family and to overcome the 'glass ceiling' (Deakins, Graham, Sullivan and Whittam, 1998).

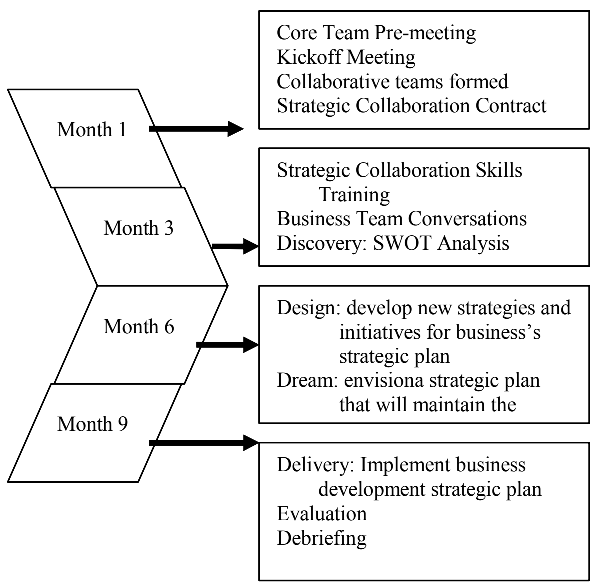
The Strategic Collaboration Process

The researchers attended some of the group's meetings and assumed the roles of "observers as participants" to facilitate the interaction and data collection with the participants (Merriam, 1998). In participant observation, the researchers engage in interaction with the informants (Maranhão, 1986). Observations allow the researcher to discover the inter-networkings of the group. Careful naturalistic observation does not interfere with the people or activities being studied (Angrosino & de Perez, 2000, p. 674.)

To discuss how the model should work and to clarify their roles and responsibilities to the less experienced entrepreneurs, the researchers first met with the mentors, Carol and Susan. They pointed out that Strategic Collaboration was a positive model that emphasizes leveraging existing protégé strengths, rather than correcting their present deficiencies. They then met with the entire Strategic Collaboration team during their initial session. They described the model (see Figure 1), discussed the importance of developing individual strategic business plans, and presented the four-step process necessary to achieve those goals.

The authors also provided interpersonal skills training that emphasized carefully attending to the conversation of others, making certain that the meaning was clearly understood and shared before moving forward; avoiding accusatory language; providing critiques of others' business plans that always have some reinforcing content; and using questions that prompt participants to resolve any disputes that may arise. Finally, they discussed how to negotiate the elements of a Strategic Collaboration contract, including determining the goals and objectives of each business owner, helping the participants see their responsibilities as team members, and committing to regular monthly meetings. The mentoring group met six times during the nine months in which the program was operative. The authors met with the group during for the first two and the last two meetings. Figure 2, below, shows the schedule for the meetings.

Figure 2: Strategic Collaboration Schedule



Data Analysis

The data were analyzed initially using case analysis, which meant organizing the data by individuals for in-depth study. After the case data had been accumulated from the interviews, observations, and strategic business plans, case records were compiled. Each significant line in the records was coded as an event (Miles & Huberman, 1994). Substantive codes in the words of the participants were used. Events were condensed into categories by the constant comparative method, in which each event is compared to every other. Categories were allowed to emerge from the data by "coding up" which involved taking all of the units of data and sorting them into categories of ideas (Gilbert, 1993). Case records were then compared with each other using cross-case analysis, which expanded understanding and explanation. The authors compared and contrasted the various interpretations within the case and across individuals. This entailed comparing themes, metaphors, and explanatory stories across individual cases.

FINDINGS

The findings are based on the data collected over a period of nine months. The data were compiled from interviews and observations during field research, and emails sent to the group as a whole. These data, as well as a detailed account of the entrepreneurial ventures, were used to help understand the outcomes of Strategic Collaboration for the participants.

During the first meeting, the participants described their backgrounds, their work histories, and their businesses. The researchers acted as participant observers. Although this was the first business venture for most of them, several of the women had had some relevant experience, but not necessarily in their chosen fields. The women entrepreneurs indicated that they had entered into business for a variety of reasons (Table 1). The most frequently mentioned were related to independence, self-esteem and self-concept, and availability of opportunity. The women mentioned that they always desired to own their own business, be independent, and earn more money, a theme that emerged many times in later discussions.

Table1: Reasons Indicated By Women Entrepreneurs For Venture Creation

Category	Reasons
Independence	To be independent and–to be one's own boss
	To apply experience gained in long period of employment by others
	To practical use in a business on one's own
	Always wanted to be self-employed
	Was tired of being employed by others
Financial security	To gain financial independence and increase earnings
	To increase my income to support myself and children
	It paid more than my job
Opportunity	An opportunity availed itself
Self-Concept	To be proud of one's achievements, and have something to call her own
	There was nothing to show for one's efforts after being employed by others

The accounts of the participants revealed that the impetus for pursuing an entrepreneurial venture was driven either from negative experiences in the workplace, such as a lack of recognition, or positive experiences such as promotion. During the first meeting, the participants began by sharing some personal stories. They described their lives, their families, and identified some of the struggles they had trying to achieve a balance between their work and their personal lives. They discussed what was unique about their businesses, and what they liked. Being able to do much of their work from home was a plus for Carol, Susan, and Amanda. They also love what they do, particularly serving their clients' needs. For Laura, who has an office practice, and Francine, who works with clients in their homes and offices, the rewards were the interaction with clients/customers, and the completion of the tasks themselves. All of the women were motivated by the impact they believe they have/can have on their clients' lives.

In addition, the women also shared some of their concerns about their ability to be successful, as well as some of the obstacles, both personal and professional, that they believed stood in their way. For example, Amanda knew she needed to be certified. Laura's business required some staff. All of them expressed the need to increase their client base and revenue stream, and Amanda and Francine were concerned that their shyness might be preventing them from being as aggressive as they might in growing their businesses.

Before leaving, the group determined the next meeting date and decided to focus on a SWOT (strengths, weaknesses, opportunities, and threats) analysis in preparation for beginning the discovery phase of the model, in which they were to focus on the unique features of their businesses and the factors that contribute to their competitive advantage. The next day, Carol, one of the facilitators sent several emails to members of the group in the response to the events of the meeting. The first was to Carla, a member who had been absent from the first meeting:

> *We missed you at our first meeting yesterday. We wondered if you got lost and couldn't find us? We would love to meet you and join the group. We introduced ourselves and told the group about our businesses. Our "assignment" for the next meeting is to bring a rough draft of a strategic plan for our businesses. (One of the authors) will send an email to us with a link to a website that has an online tool to help us develop a strategic plan. We set the next meeting for Tuesday, January 15 at 3:30. Will you be able to attend?*

The following day, Carol sent an information email to everyone:

Hello AWBO Collaborators,

I am forwarding this newsletter from Susan Butler. She is a dynamic speaker and a promoter of women. She was the guest speaker at our AWBBO meeting in March 2005 with the message

"Become the CEO of You, Inc." She has strong ties to (the university), coming to our town often to speak to various groups.

Susan sends a monthly newsletter. I don't always have time to read her newsletters, but I've stayed on her email list these three years because I like her encouragement for women. Check out the websites, and if you like her style of motivation, you can sign up for her newsletter.

At the bottom of this newsletter, she lists her speaking schedule. I see she'll be in town several times in the near future.

Only 3 members of the team and the authors attended the second meeting. Bad weather and illness contributed to the poor attendance. Again, the conversation began by discussing what had happened in their lives during the month since the last meeting. We learned that Carla and Laura, who both needed office mates, had moved into office space together. Their businesses complement one another, and they appear to be pleased with the arrangement. Carol brought in an encyclopedia of small business to share.

Since this was Carla's first meeting, she introduced herself. She had been in business for 25 years. She said she likes the business during good times, but it's a struggle now because, given the present state of the economy, people are angry and business has fallen off. She used to have a 6-figure income, but no more.

Laura had completed her SWOT analysis. She saw her strengths as her competitive prices, good business sense and organizational skills, and she loves her clients; her weaknesses were her youth, lack of experience and resources; and her lack of visibility. Her opportunities were tied to being part of a growth industry; her threats came from governmental strictures on her specialty. Her immediate goal was to become more visible.

Following her presentation, the group brainstormed strategies for enabling Laura's business to become better known in the community: Send announcements of new offices to potential clients; create brochures and business cards; create flyers describing her services; give presentations around town for non-profits such as Rotary and the Optimists. Last, she described her mission: Offers (professional) services in her office or in client's home for a flat fee. Vision: Will be the premier (professional) office in the city.

Susan, one of the facilitators, then shared her goals: She would like to double her sales and thereby double her income. She also wanted to present four "hominars" (web-based seminars) to potential clients per month. She will contact prior users of her products to see if she can interest them in starting businesses of their own. Vision: Improve the health status of 100 clients and/or help them open businesses of their own using her products. Opportunities: Boomers are looking for products that will increase their health status.

Later that afternoon, Carol emailed a summary of the meeting to all the group members.

> *Our meeting last Wed. Feb 20 was poorly attended because of weather and illness. Those in attendance were Laura, Susan, and myself. I had written a Strategic Plan for my business, which we went over. Laura and Susan offered suggestions for changes, so I made some revisions. I'm attaching it. If you're interested, it can be an example if you haven't written your own just yet. Just keep in mind that it is really only a first start, and I'm sure it's not a shining example of a perfect strategic plan.*

In order to allow the group to grow and function on its own, the authors did not attend the next few meetings, which comprised the Discovery, Dream, and Design phases. At those meetings, the other members worked on their Strategic Business Plans, offering one another help and advice along the way. After the third meeting, Francine emailed one of the facilitators to say that she was dropping out of the group.

> *I'm not sure I'm on the right track now with my business, and I need some time to re-think where I'm going. I'm just not ready for a group like this. If it had come at another time, I think it would have helped me.*

In May 2008, during the Delivery phase of the model, the researchers met with the team again as they shared their business plans with one another. Some were still works in progress; others were fully fleshed out. Laura, for example, had implemented many of the suggestions given to her at the initial meetings. She had created and disseminated materials about her practice, resulting in several speaking engagements, which had begun to increase her client base. She had also made progress toward hiring the staff person she needed, and had developed a Strategic Action Program, with specific time frames attached. Carol had begun a marketing program in order to reach the earnings goals she had set for herself. At that meeting, all participants were given a questionnaire containing several open-ended questions, which they were encouraged to complete. They were told that the results of the survey would be shared with them if they wished.

Since there were only 5 participants, it was particularly important to ensure anonymity. Therefore, they were assured that no identifying information would go forward. They were asked to characterize the relationship they developed with their mentoring team, to describe their experiences as part of a Strategic Collaboration mentoring team, and to identify what could have improved the process. Responses were received from 4 of the 5 remaining participants

Q: Please describe your experiences as a member of the Strategic Collaboration Team.

Susan: *I watched people change. Amanda is changing by using her coach. Carol is so organized.*

Carla: *I realized that Amanda had passion for what she's doing. I feel I've lost it. This was eye opening. That's what I had when I started my mortgage lending business.*

Amanda: I felt out of my depth in the group. I learned so much. I learned this is a business and I can do it.

Laura: *I feel younger and more inexperienced at AWBO. I never thought I'd be an entrepreneurial (professional) but rather working for someone else. I got strategic plan ideas from the group. I moved to the Westside, sharing an office with Carla. We all learned so much.*

Q: Please describe how being a part of a Strategic Collaboration Team impacted you as a woman business owner.

Susan *I'm the "older woman" of the group and should be the encourager and help people. It's my obligation to mentor women. I'm amazed at Carla's energy and creativity. We can have long-term relationships in business as well as be a support group.*

Carla: *I gained self-realization. I need to attend to the details more and focus on my barn.* Amanda: *I gained a group of women to go to and share if I have a problem. These are people I can bounce ideas off and they'll tell me how to deal with it. It's a small group, so we got to know one another better.*

Laura: *I feel I gained strength from Susan. I learned to set goals, like everyone else. If they can do it, I can do it!*

Q: Please give any suggestions that would improve the Strategic Collaboration Process.

Susan: *I like it as it is and I'm proud of what we've done. I like the Strategic Plans. The groups got us going and helped us structure our meetings.*

Carla: *If I would have had this earlier and clicked, it would have helped. This is so great, business people that had experience and I thought, "me too." Wish I'd known the value of a group earlier.*

Amanda: *Nothing. For me, I live so far and I missed too much. I think about gas prices. I'm SO glad I came!*

Laura: *Sometimes there were only 3 of us, but we got so much out of it. I didn't understand before how powerful women working together can be.*

Although the official period for which the mentoring group was organized was over and the business plans were completed or nearly so, the group made plans to meet during the summer and into the fall, citing their need for continued support and friendship. Most of the members were encouraged about the future growth of their businesses. Being part of the group made Carla realize that she needed a new direction for her life, and that entrepreneurship was not right for her, yet she, too, planned to continue meeting with the group.

Emergent Themes and Outcomes From the Strategic Collaboration

The advice that the participants gave each other had an impact on the newer entrepreneurs. Participants reported that the mentoring relationship had made substantial differences in their ability to achieve their goals. These objectives were concerned with their short-term ability to cope with problems and general management.

Events considered as important in the entrepreneurial mentoring process were identified and summarized. Events were then categorized, and accounts of the individual women were compared with regard to how categories were ordered chronologically, their roles or significance of the categories in the story, and the relationships of the categories with each other. In this way, different patterns or plots were identified and grouped into themes (Miles & Huberman, 1994). The following themes emerged form the case analysis:

Collaboration Networks

In theory, the role of the business adviser/mentor should be important for establishing contacts and encouraging networking. Personal networks consisted of all those persons with whom the entrepreneur had direct or indirect contacts. In the Strategic Collaboration, personal networks included those that were internal to the group and others that were external. Internally, members of the Strategic Collaboration provided support in the forms of encouragement, advice, information, and approval. In an email to Amanda and Francine, Carol offered suggestions for combating the shyness they felt was hampering their businesses:

I was thinking about your revelations yesterday, that you are shy. I have some questions for you to ponder:

Does being shy affect your business?
Would you be able to attract more clients if you were not shy?
Would you get more repeat business if you were not shy?
Have you ever successfully changed some aspect of your personality or behavior?
If you decide that being shy is holding you back, it is possible to change. It is something that you can consciously decide to change. If you change your behavior, it will change your personality. You are both intelligent with lots of life experiences observing how people interact with each other. Just mimic the non-shy people. Or look for a book on the subject.
I hope I don't look too pushy, because this is your own personal issue. I just want to offer questions and ideas for you to consider, as it relates to your new business.

The last email addressed a practical problem that Amanda had experienced when trying to decide on a name for her business:

I was thinking about the subject of your business name. I recall you stated you are not entirely happy with your current name. As I mentioned yesterday, I changed my business name after a year or two of doing business. The first name of my business was (her last name). I realized after awhile that nobody could pronounce or spell my last name

I saw that lots of other (professionals) have catchy names for their businesses, and I decided to make one up for myself. First, I wrote down all the words I like, that say something about me. Then I started playing with combinations of those words, on paper. If you decide you need a new business name, see if it would work for you.

The external networks included partners, suppliers, customers, bankers, distributors, association memberships, family members, and friends. Participants felt that the ABWO provided an excellent networking opportunity through its monthly and annual meetings, seminars, newsletters, emails, and the internet. They felt very strongly that the other members of ABWO who had not taken advantage of the Strategic Collaboration had really missed out on an important opportunity. However, outside of ABWO, the extent of networking among the participants was limited. Participants did not undertake networking in a formal or planned way. Some of them discussed the use of informal networks such as former colleagues/contacts and professional contacts. Participants did not typically seek out opportunities for new business.

Vision

The development of an entrepreneurial career begins with an idea that devolves into a vision (Ncube & Greenan, 2004). The women entrepreneurs were able to see into the future what many others did not see. They had vision, which motivated them to create new ventures. For instance, Susan was very passionate about her desire to help people achieve a better level of heath through the use of her products. She set up her company approximately twenty years ago, and over the years, has seen her business grow and has been gratified by the experiences of her customers. However, the volume of sales had not reached the levels she had anticipated.

Opportunities

Participants shaped circumstances in a favorable way or received the benefit of circumstances being shaped by others. Laura and Carla saw office space that neither could have afforded alone. Pooling their resources, they were able to locate in a desirable area, which both saw as enhancing their potential for growth. Other opportunities for Carla included making use of an underutilized facility to provide unique entertainment for college-age students. She also custom-made unique home decorations.

Challenges

In the creation of a new venture, the participants faced many challenges in the form of competitors, distractions, and growth. They also dealt with problems related to family, education, gender, and lack of extensive networks**.** Sexton (1989) argued that all of these problems impact on women's personalities and their abilities to manage or expand their businesses. Susan struggled working with her partner, as they had very different personalities and work styles. Her partner was much better organized than she was, and she considered herself more of a visionary. However, the mentoring experience they had through Strategic Collaboration had helped overcome or at least help the women to actively seek solutions for some of the hurdles they had experienced or are presently experiencing.

Survival

The survival of an enterprise depended on many factors. General ability, composed largely of education and skills, was required for the successful operation of the business. Specialized ability involved knowledge of a specific trade and leadership skills. Woman's agency, the ability to improvise and innovate, was a required characteristic of women entrepreneurs (Ncube & Greenan, 2004).

The participants developed creative ways of solving problems to survive the challenges they faced. They needed to have perseverance, determination, and resilience (Sagor, 1996). Due to the economic downturn in 2006, Carla's major source of income was drying up at the time the group

DISCUSSION AND CONCLUSIONS

This study examined Strategic was formed. With encouragement and suggestions from the group, she focused her attention on some of her smaller ventures seeking to increase her revenue stream.

The main goal of the Strategic Collaboration was the creation of long term strategic business plans. Sexton (1989) noted that growth in itself is neither inherently good nor bad. It may be a measure of success to some, but not to others. Lack of growth in a small business should not necessarily be viewed as failure, especially when applied to women-owned businesses (Ncube & Greenan, 2004). Growth should be viewed essentially as the result of a choice made by the entrepreneur. Several of the participants expressed concern that if their businesses expanded too much, they would need to hire help. They were reluctant to do this because none of them had managerial or supervisory experience.

Collaboration seemed to work as an approach to mentoring women entrepreneurs with an end in view of improving the likelihood of the success of their businesses and satisfaction with their careers. The Strategic Collaboration mentoring program provided a supportive context that allowed the women entrepreneurs to examine their businesses from a more detached perspective. To operationalize this approach, we followed the advice of Cope and Watts (2000) who recommend finding mentors who have the experience and interpersonal skills to conduct such counselling. Those mentors were able to bring their own professional networks and resources, and put them at the disposal of those they were mentoring.

The Strategic Collaborative mentoring program had some positive outcomes. The most important was providing participants with the opportunity to network and strategize with other women business owners. Also important were the support, encouragement, and friendship they derived from one another.

This study suggests that Strategic Collaboration can benefit participants in the same way as traditional mentoring arrangements, while at the same time avoiding many of the difficulties that often beset those relationships. It provides a supportive peer group, and two more experienced entrepreneurs who can fulfill both career and psychosocial functions. They can answer questions, and provide information and support for women entrepreneurs whose work can be more isolating than that of women who work in organizations.

Future research is needed to determine the extent to which implementation of Strategic Collaboration can be successful in helping other groups of women develop their businesses, and whether similar types of support and friendship will also develop in those groups as well. The model can be customized to meet the needs of any group of women in order to help ensure that these individuals will be well prepared to manage their businesses successfully, now and in the future.

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DOING BUSINESS WITH THE U.S. FEDERAL GOVERNMENT: A SURVEY OF SMALL BUSINESSES ON GUAM

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ABSTRACT

The purpose of this research study was to identify factors that may explain why a significant number of small businesses on the undiversified, island economy of Guam do not pursue contracts with the U.S. Federal Government. The business opportunity provided by Federal contracts creates an equivalent of an industry or economic sector that is between 6% to 9% of the local economy. In addition, this business opportunity offers support to the island economy in its pursuit of renewed economic growth and sustainable and participatory (broad-based) economic development. Through the survey responses collected from participating small businesses, this paper examines factors that may explain the gap that exists between the interests of small businesses on Guam to do business with the U.S. Federal Government (equivalently, to engage in Federal Contracting) and their ability and experience to pursue U.S. Federal Government contracts.

This paper is the first publicly available study of Federal Contracting by small businesses on Guam. As such, it not only contributes to the academic literature but also fills in some previously unanswered questions regarding the availability and analysis of reliable, current and relevant economic data on Guam. It is hoped that this paper will provide policymakers, businesses and communities, both local and international, with an effective tool to plan for future decisions and courses of actions that will aid in Guam's economic development. In particular, this study presents some thoughtful content for those entities providing support to small businesses and how they may enhance their processes to increase the capacity and capability of their clients to successfully pursue business opportunities with the U.S. Federal Government.

INTRODUCTION

Doing business with the U.S. Federal Government, hereafter referred to as "Federal Contracting" is considered to be an attractive opportunity for many businesses. This is particularly true for businesses on Guam, a U.S. territory in the Western Pacific region. Guam is a small island economy that is undiversified and relies heavily on three sectors: tourism, military and the local economy. Like in many other economies, the majority of businesses on Guam are small businesses, defined by the U.S. Small Business Administration as

> "one that is independently owned and operated, not dominant in its field, which also meets the employment or sales standards developed by the Small Business Administration based on the Standard Industrial Classification (SIC) Codes for businesses. In general, the SBA in determining if a concern qualifies as a small business uses the following criteria:
>
> WHOLESALE - not more than 100 employees
> RETAIL or SERVICE - Average (3 year) annual sales or receipts of not more than $5.0 to $21.0 million, depending on business type
> MANUFACTURING - Basically not more than 500 employees, but in some cases to 1,500
> CONSTRUCTION - Average (3 Year) annual sales or receipts of not more than $7.0 to $17.0 million, depending on business type"

Table 1 shows the magnitude of business opportunities created by the U.S. Federal Government. In the aggregate, the amount of contracts awarded by the U.S. Federal Government ranged from $258 billion in fiscal year 2002 to $528 billion in fiscal year 2008. Of these amounts, 0.12% on average was spent on projects on Guam, a figure that is so small and perhaps seemingly insignificant from the U.S. Federal Government's perspective.

However, the view is different from the perspective of a small economy like Guam whose local businesses and community seek opportunities for renewed economic growth and sustainable and participatory development. U.S. Federal contracts for work performed on projects on Guam make up an equivalent of an economic sector or industry that is between 6% to 9% of the Guam economy, depending on which year the local economy is measured.

Annual surveys by the Guam Small Business Development Center (SBDC) have shown that small businesses on Guam are interested in Federal Contracting. In the 2008 survey, 46.3% of the 60 respondents identified "Government Contracting" as an area of counseling interest. From the same survey, 48.2% of the 60 respondents identified "Federal Contracting" as a workshop topic that they would be most interested in.

Despite the level of interest suggested by the above survey, only a minority of Guam small businesses have actually pursued Federal Contracting opportunities as primary or sub-contractors. Relatedly, in a recent Naval Facilities Engineering Command (NAVFAC) Marianas survey of Guam small businesses, only a very small number of these businesses responded to the survey.

Table 1: Contracts Awarded by the U.S. Federal Government

Fiscal Year	Total Contracts Awarded by the US Federal Government (in millions$)	Contracts Awarded for Projects on Guam (in millions$)	Federal Contracts on Guam Projects as % of Total Federal Contracts*	Guam Projects as % of Guam's Economy in 2002**	Guam Projects as % of Guam's Economy in 2007**
2000		246.176718		5.3612%	3.9423%
2001		220.990589		4.8127%	3.5390%
2002	258980	300.810028	0.1162%	6.5510%	4.8172%
2003	297828	521.316011	0.1750%	11.3531%	8.3484%
2004	341013	355.205744	0.1042%	7.7356%	5.6883%
2005	385691	403.530598	0.1046%	8.7880%	6.4622%
2006	426006	422.955562	0.0993%	9.2110%	6.7733%
2007	462592	517.093844	0.1118%	11.2612%	8.2808%
2008	528833	630.121189	0.1192%	13.7227%	10.0909%
Average 2002-08			**0.1186%**	**8.7552%**	**6.4381%**
2009 (partial year)	310621	218.713386	0.0704%	4.7631%	3.5025%

* Authors' own calculated. **Guam's economy is measured using the 2002 and 2007 figures for "Sales/Receipts/Revenues/Shipments", as reported in the U.S. Census Bureau's *Economic Census for Island Areas*. The actual figures were $4,591.828 billion in the year 2002 and $6,244.465 in the year 2007.
Sources: http://www.usaspending.gov and U.S. Census Bureau

In this regard, Table 2 is telling as it gives a breakdown of U.S. Federal contracts on projects on Guam that are awarded to local businesses and non-local (i.e., non-Guam) businesses. On average during the period 2002-2008, local businesses received little more than half of all U.S. Federal contracts awarded for projects on Guam. This figure can also be viewed as a measure of how much business with the U.S. Federal Government is "lost" by local businesses. Of course, the figure does not show the extent to which local businesses pursued (e.g., submitted a proposal) these "lost" businesses but simply did not win the awards. Hence, the figure represents a mix of opportunities to do business with the U.S. Federal Government which were pursued, though unsuccessfully, by local businesses, as well as those that were not pursued or remained untapped. In the first case, it will be interesting to know why local small businesses' attempt at Federal Contracting was unsuccessful and to explore measures that will improve their success in future attempts. In the second case, the question becomes why local businesses, although perhaps interested in Federal Contracting, chose not to pursue or tap these opportunities and what measures will encourage them to do so in the future.

Table 2: Federal Contracts on Guam Projects Awarded to Guam vs. Non-Guam Businesses

Fiscal Year	% Federal Contracts Awarded to Guam Contractors*	% Federal Contracts on Guam Awarded to Non-Guam Contractors**
2000		
2001		
2002	61.13%	38.87%
2003	42.28%	57.72%
2004	48.96%	51.04%
2005	52.57%	47.43%
2006	54.39%	45.61%
2007	60.83%	39.17%
2008	46.16%	53.84%
Average 2002-08	52.3307%	47.6693%
2009 (partial year)	0.0420%	0.0284%

* Data from http://www.usaspending.gov. **Authors' own calculation.

From the above points, there appears to be a disconnect between Guam small businesses' interest in Federal Contracting opportunities and their ability and actual experience in pursuing Federal Contracting opportunities. This study is based on a survey designed to find explanations for the above disconnect. The survey results, analyzed later in this report, will be useful in developing policies and/or approaches to increase the capacity and confidence of small businesses on Guam to pursue Federal Contracting opportunities. This report will be shared with relevant government agencies (GEDA) and small business support agencies (U.S. Small Business Administration (US-SBA), Guam SBDC, Guam Procurement Technical Assistance Center (PTAC), Guam Chamber of Commerce, Guam Contractors' Association).

This study has been conducted by the University of Guam Pacific Center for Economic Initiatives and is funded by the U.S. Department of Commerce Economic Development Administration.

This study contributes to existing efforts to fill in the gaps in availability of periodic and updated business and economic data on Guam. It is hoped that these data will be useful for planning by policymakers, businesses and the local community in general, and in preparation for the military build-up on the island, in particular.

THE SURVEY

Background

The survey instrument was designed in early August 2009. Feedback was received from Guam SBDC and Guam PTAC. Prior to conducting the survey, this study sought the approval of the Committee on Human Research Subjects (CHRS). The application packet was submitted on August 10, 2009 and was approved on August 24, 2009 as CHRS# 09-45. While waiting for the CHRS approval, the survey was set up online at http://www.keysurvey.com/survey/269397/1533. After the survey was approved by CHRS, prospective survey participants were contacted by email. Assistance was received from Guam SBDC, which also facilitated contact with US-SBA, as well as from Guam PTAC, Guam Contractors' Association, and Guam Chamber of Commerce. In addition, an announcement was posted in the University of Guam website, as well as sent out to local media such as the Pacific News Center and the Pacific Daily News.

The Results

This section will highlight the survey results received from respondents who participated in the 2009 Survey of Federal Contracting by Small Businesses on Guam. A total of 84 respondents participated in the survey. Summaries of their responses to the survey questions are presented including a descriptive analysis in accompanying tables. The data in this section will provide a snapshot of the situation under study.

Participants were asked to determine whether their business would be categorized as a small business according to the Small Business Administration's definition of small business. The survey results show that 67 respondents considered their business to be a small business, whereas, 14 indicated their business was not a small business concern (see Table 3).

Table 3: Category of Business

Small Business (using SBA definition)	67	82.72%
Not a small business concern	14	17.28%
TOTAL RESPONSES	**81**	

Those respondents who identified their business as meeting the SBA small business definition were asked to further categorize their small business into the following categories: disadvantaged, women-owned, historically underutilized business zone, veteran-owned, minority institution. Interestingly, most respondents indicated their business to be women-owned, followed by disadvantaged and historically underutilized business zone. The results are found in Table 4

Table 4: Categories Within Small Business

Women-Owned	31	37.80%
Disadvantaged	17	20.73%
Historically Underutilized Business Zone	17	20.73%
Minority Institution	11	13.41%
Veteran-owned	5	6.10%
Service-Disabled, Veteran-owned	1	1.22%
TOTAL RESPONSES	**82**	

Table 5: Type of Business by Industry/Economic Sector

Construction	19	18.10%
Retail Trade	17	16.19%
Professional/Scientific/Technical Service	12	11.43%
Wholesale Trade	9	8.57%
Finance/Insurance	6	5.71%
Real Estate/Rental/Leasing	4	3.81%
Administration & Support	4	3.81%
Transportation/Warehousing	3	2.86%
Manufacturing	3	2.86%
Accommodation/Food Service	3	2.86%
Arts/Entertainment/Recreation	3	0.95%
Not In Business	3	2.86%
Health Care/Social Assistance	2	1.90%
Agriculture/Forestry/Fishing/Hunting	1	0.95%
Educational Services	1	0.95%
Information	1	0.95%
Management of Companies/Enterprises	1	0.95%
Mining	0	0.00%
Public Administration	0	0.00%
Utilities	0	0.00%
Water Management/Remediation Service	0	0.00%
Other Services (except Public Administration)	13	12.38%
TOTAL RESPONSES	**105**	

Participants further categorized their business into the following industry sectors, with the top three most responded sectors being construction, followed by retail trade and then professional/scientific/technical service. A complete breakdown of the businesses by industry section is provided in Table 5. A total of 105 industries were selected. This implies that some respondents may own more than one business and/or participates in more than one industry sector.

Respondents reported approximate annual sales/revenue for their business(es). These amounts are presented in Table 6. While most respondents (32%) approximate their annual sales/revenue to be less than $100,000, the next largest response at 17.28% indicate their business' annual sales/revenue to be over $10 million.

The results of the survey indicate that most participants (39%) have been conducting business on Guam for more than 10 years. A breakdown of participants' length of business operation on Guam is provided in Table 7. More than half of the respondents have been in operation for more than five years.

Based on the responses from survey participants, a little more than half (53.95%) of businesses employ between 1-10 employees on Guam. Results further imply that most small businesses employ less than 100 employees on Guam. These are illustrated in Table 8.

Table 6: Approximate Annual Sales/Revenue

Less than $100,000	26	32.10%
$100,000 to $249,999	10	12.35%
$250,000 to $499,999	5	6.17%
$500,000 to $999,999	8	9.88%
$1 million to $1,999,999	6	7.41%
$2 million to $4,999,999	9	11.11%
$5 million to $10 million	3	3.70%
Over $10 million	14	17.28%
TOTAL RESPONSES	**81**	

Table 7: Length of Business Operation on Guam

1 Year or less	13	15.85%
More than 1 year, but less than 3	14	17.07%
3 to 5 Years	8	9.76%
More than 5 years and less than 10 years	15	18.29%
More than 10 years	32	39.02%
TOTAL RESPONSES	**82**	

Table 8: Number of Employees in Business Operation on Guam

1-10 employees	41	53.95%
11-20 employees	12	15.79%
21-100 employees	10	13.16%
101-250 employees	7	9.21%
251-500 employees	2	2.63%
more than 500 employees	4	5.26%
TOTAL RESPONSES	**76**	

Based on the survey results, 43.37% of participants conduct business online, whereas 56.53% do not conduct business online (see Table 9).

Table 9: Do you do business online?

Yes	36	43.37%
No	47	56.63%
TOTAL RESPONSES	**83**	

Only 18 respondents indicated that they are a home-based business while 65 indicated that they were not a home-based business. Results are illustrated in Table 10.

Table 10: Is your business home-based?

Yes	18	21.69%
No	65	78.31%
TOTAL RESPONSES	**83**	

As illustrated in Table 11, a little over half (56.63%) of the participants in the survey indicated they conduct business with the federal government, whereas 43.37% have never done business with the federal government.

**Table 11: Have you done business with the U.S. Federal Government/
Have you engaged in Federal Contracting?**

Yes	47	56.63%
No	36	43.37%
TOTAL RESPONSES	**83**	

Small businesses that had experience conducting business with the federal government were asked to rate their level of satisfaction using the following responses: highly satisfied, okay, somewhat satisfied, and not at all satisfied. Most respondents (34.69%) reflect a positive business experience with the federal government reporting they were highly satisfied and 44.9% indicating their experience was okay. The results are shown in Table 12. [Note that 47 respondents indicated having experience doing business with the federal government and 49 responses were received in the follow-up question. It is possible that participants may have provided multiple responses.]

Table 12: If your business had engaged in Federal Contracting, what is your level of satisfaction doing business with the U.S. Federal Government?

Highly satisfied	17	34.69%
Highly satisfied	17	34.69%
Okay	22	44.90%
Somewhat satisfied	8	16.33%
Not at all satisfied	2	4.08%
TOTAL RESPONSES	**49**	

Participants who responded "somewhat satisfied" or "not satisfied" with federal government business were asked to indicate reasons for their responses. Participants' responses were spread almost equally among length of time to become eligible as a federal contractor, length of time to receive payment, and poor communication between federal government and one's business. Other reasons provided by participants are included in the table below (see Table 13). Note that only 10 respondents indicated they were somewhat or not satisfied with their business experience with the federal government (see Table 12), however, a total of 21 responses were received (in Table 13). It is possible, in this case as well, that participants provided multiple reasons.

Table 13: If you are somewhat or not satisfied with your experience of doing business with the U.S. Federal Government, why?

Length of time to become eligible as a federal contractor.	5	23.81%
Length of time to receive payment.	4	19.05%
Poor communication between federal government agency and your business.	4	19.05%
ANY OTHERS		
Not primary contractor/worked as sub-contractor	1	4.76%
Would like more interaction between commissaries and local distributors	1	4.76%
Difficult to become 8a certified	1	4.76%
Requirement are sometimes too stiff for some small businesses	1	4.76%
Too much bureaucracy, concern over government employees' performance	2	9.52%
Did not specify	1	4.76%
Not given fair treatment	1	4.76%
TOTAL RESPONSES	**21**	

The survey asked participants to identify what factors may encourage them to pursue federal contracts. Participants offered multiple responses highlighting the following top factors: user-friendly federal government website, followed by easier access to federal government representative assistance, then assistance in applying for certification or registration to conduct business with the federal government and then ease in applying to get certification or registration to do business with the federal government. Other factors recommended by participants are included in Table 14.

DISCUSSION OF SURVEY RESULTS

The goal of this study was to examine what factors may be contributing to the disconnect between the level of interest of small businesses on Guam in pursuing federal contracting opportunities and their ability and actual experience in pursuing federal contracting opportunities. The survey results offer some meaningful information for small business support agencies (such as the Guam PTAC, GEDA, U.S. SBA, SBDC, Guam Chamber of Commerce, and Guam Contractors' Association) and federal government representatives who interact with small businesses.

Table 14: What might encourage your business to pursue business opportunities with the U.S. Federal Government?

User-friendly federal government website.	36	25.00%
Easier access to federal government representative to assist with questions or problems.	35	24.31%
Assistance in applying to get certified or registered to do business with the federal government.	32	22.22%
Ease in applying to get certified or registered to do business with the federal government.	30	20.83%
ANY OTHERS		
Federal government pays unlike the Government of Guam	2	1.39%
Unfair competition with Alaska Native Corporations	1	0.69%
Should expand business with wholesalers who are the locally appointed distributor for U.S. brands	1	0.69%
Need more time to respond to bids and better access to base to survey job site	1	0.69%
Bonding issues/requirements	1	0.69%
User-friendly government	1	0.69%
Improved communication such as on Request for Proposals and available opportunities	1	0.69%
Better information on package rating and recourse	1	0.69%
Concerned that off-island vendors may takeover local opportunity	1	0.69%
Did not specify	1	0.69%
TOTAL RESPONSES	**144**	

Among the 84 businesses who responded to our survey, 47 indicated that they had done business with the U.S. Federal Government. The profile of these 47 businesses is summarized in Tables 15, 16, 17 and 18, which support the following observations:

- They are diverse in business size defined by annual sales or revenue: 24% represent businesses with high annual sales or revenue of $10 million dollars or higher, 15% have low annual sales or revenue of less than $100,000, and almost half have mid-range annual sales or revenue between $500,000 and $5 million (see Table 15).

- They are also diverse in the length of their business experience on Guam. Although 42% of these businesses have been operating on Guam for more than 10 years, 21% have only been in operation between 1 and 3 years, and another 21% have been operation between 5 and 10 years (see Table 16).

- For us and other advocates of small businesses, we are pleased to see that almost half (45%) of the 47 businesses who had Federal Contracting experience have 1-10 employees and 75% have 1-100 employees (Table 17).

- They represent several industries or economic sectors. Although 19% are in the construction business, other sectors making up significant shares of 16% and 14% are "Professional/Scientific/Technical Services" and Retail Trade, respectively. This debunks the view that only construction businesses have an opportunity or experience to pursue Federal Contracting (Table 18).

It is important to highlight that of the 84 participants only 56.63% indicated they had ever done business with the federal government with 34.69% indicating a highly satisfied experience and 44.9% reporting their experience was okay. Considering the 43.37% who never conducted business with the federal government, it is recommended that small business support agencies recognize the following implications resulting from this study:

- Federal contracting opportunities are not limited to construction and engineering projects as perceived with the planned military buildup.

- Federal contracting opportunities are not limited to Department of Defense needs.

- As provided by the Fleet Industrial Supply Center and the General Services Administration, small businesses can provide an array of support services and goods to just about all federal government agencies, similar to what any community would need

These points imply a new market development opportunity for small businesses that have never even attempted to engage in federal contracts and may be seeking ways to expand their respective business.

Table 15: Profile of businesses that have done business with the U.S. Federal Government-Part 1

Annual Sales/Revenue	Frequency	
Less than $100,000	7	15.22%
$100,000 to $249,999	5	10.87%
$250,000 to $499,999	2	4.35%
$500,000 to $999,999	7	15.22%
1 million to $1,999,999	6	13.04%
$2 million to $4,999,999	6	13.04%
$5 million to $10 million	2	4.35%
Over $10 million	11	23.91%
TOTAL RESPONSES	46	

Table 16: Profile of businesses that have done business with the U.S. Federal Government-Part 2

Length of Business Operation on Guam	Frequency	
Less than 1 year	2	4.26%
More than 1 year, but less than 3	10	21.28%
3 to 5 Years	5	10.64%
More than 5 years and less than 10 years	10	21.28%
More than 10 years	20	42.55%
TOTAL RESPONSES	47	

Table 17: Profile of businesses that have done business with the U.S. Federal Government-Part 3

Number of Employees on Guam-based business	Frequency	
1-10	20	45.45%
11-20	7	15.91%
21-100	6	13.64%
101-250	5	11.36%
251-500	2	4.55%
More than 500	4	9.09%
TOTAL RESPONSES	44	

Table 18: Profile of businesses that have done business with the U.S. Federal Government-Part 4

Industry/Economic Sector	Frequency	
Mining	0	0.00%
Retail Trade	9	14.52%
Public Administration	0	0.00%
Health Care/Social Assistance	1	1.61%
Transportation/Warehousing	3	4.84%
Agriculture/Forestry/Fishing/Hunting	0	0.00%
Utilities	0	0.00%
Manufacturing	3	4.84%
Educational Services	0	0.00%
Accommodation/Food Service	2	3.23%
Professional/Scientific/Technical Service	10	16.13%
Information	0	0.00%
Finance/Insurance	3	4.84%
Real Estate/Rental/Leasing	3	4.84%
Construction	12	19.35%
Wholesale Trade	5	8.06%
Arts/Entertainment/Recreation	1	1.61%
Management of Companies/Enterprises	1	1.61%
Water Management/Remediation Service	0	0.00%
Administration & Support	2	3.23%
Other Services (except Public Administration)	7	11.29%
Not In Business	0	0.00%
TOTAL RESPONSES	62	

The reasons offered by the survey participants who reported levels of dissatisfaction provide meaningful feedback for federal government representatives and more importantly, for small business support agencies who interact directly with small businesses. The factors to encourage small businesses to pursue federal contracts provide a basis for addressing potential underlying reasons why small businesses may demonstrate reluctance to do business with the federal government and address potential issues that often lead to levels of dissatisfaction.

Findings imply the following:

- Small business support groups should identify more robust ways to reach small businesses to address their need for assistance in registering or applying for certification to do business with the federal government as well as training on how to access and use the federal government website.

- Need for easier access to a federal government representative and ease in registering or applying for certification to do business with the federal government (or assistance with such) may be an issue arising from only 43.37% of participants doing business online. Future research is suggested to identify reasons why more small businesses are not utilizing online technology.

- Issues of unfair competition with Alaska Native Corporations, federal government not working to expand businesses with local wholesale distributors of U.S. brands, and concern that off-island vendors may takeover local opportunity suggest the need for more fluid communication and transparency among small businesses, local entities that provide support to small businesses and the federal government.

CONCLUSION

Overall, this study provided some meaningful information that paints a different view of the situation on Guam in regards to small businesses – who they are, the industries they represent, their concerns, and their needs. The survey results present some thoughtful content for those entities providing support to small businesses and how they may enhance their processes to meet the needs of their clients. The survey results also highlight areas that the federal government may address to continue enhancing customer satisfaction in the areas of responsiveness, accessibility, timeliness, and convenience. In addition, this survey provides a good indication that most small businesses have had a positive experience with the federal government and those who have not yet engaged should pursue the opportunities offered to them.

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ENTREPRENEURIAL ALERTNESS AND ENTREPRENEURIAL AWARENESS – ARE THEY THE SAME?

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ABSTRACT

Often we find concepts such as entrepreneurial alertness and entrepreneurial awareness in the literature, while the authors do not always make any distinction between them. This study attempts to find out if those two concepts are really the same, or if they differ in their interpretation of the phenomenon of opportunity identification.

It is very unusual for almost all scholars in a particular field of research to agree on a subject to the extent that they do with the belief that the starting point of each and every act of entrepreneurship is the opportunity identification. But here the consensus ends.

There are questions to be asked, such as: why do some people recognize opportunities but not others? How does this identification happen? What is the basis for this identification? Are there ways to increase the potential for identification and thus influence entrepreneurship? Does every opportunity identification end with the establishment of a new venture? How does the opportunity identification influence the venture, if at all? Some of these questions have been answered in different studies but usually on a logical and theoretical basis. The purpose of this study ***is to*** *try to supply empirical answers to a few of those questions.*

INTRODUCTION

Definitions

As in other fields, the answers to questions depend on the way that the variables tested are defined. In this field of research there are different definitions for each variable, and the choice among them is somewhat arbitrary. For example, we have chosen the definition of Shane and Venkataraman, (2000) of entrepreneurship as an activity that involves the discovery, evaluation, and exploitation of opportunities to introduce new goods and services, ways of organizing, marketing, process, and raw materials by organizing efforts that had previously not existed. The same authors define entrepreneurial opportunities as "those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production." (Shane and Venkataraman 2000, p. 220).

The second definition is somewhat problematic, since it defines the entrepreneurial opportunity as a situation, and does not include, for example, social fields of entrepreneurship or causes such as innovation or prior knowledge. On the other hand, it was chosen because of its economic aspects, by which most theories of opportunity identification are driven.

The first scholar to try to understand this phenomenon (although not the first to use the term) was Kirzner (1979). His idea of entrepreneurship is based on what he calls spontaneous learning (p.145) which grows with the awareness of the entrepreneurial vision. Kirzner based his theory on the presumption that every market is in a state of disequilibrium, and is looking for ways to minimize this disequilibrium and move toward some kind of balance. This is a situation that creates a favorable climate for entrepreneurship by pushing toward solutions that might produce this balance. He saw this vision as something that arises from a Crusoe situation. Crusoe had a hunch that he needed to build a boat, and only then did he understand that he possessed the kind of information resources needed to transform his hunch into action (p. 168). Kirzner called the state of mind that enables the hunch, or the *spontaneous learning, alertness*. Kirzner (1985) emphasized the aspect of spontaneity in discovery (p11). This approach found more support from Harper (2003), who contends that entrepreneurship is spontaneously learnt or acquired by the entrepreneur, without deliberately searching for the information gaps that lead to the emergence of opportunities.

The term ‘alertness’ was adopted by the community of scholars, who did not always pay attention to the fact that, for Kirzner, this term is attributed only to the part that is spontaneous (the hunch) and cannot be produced or improved upon (p. 152), and not to the second part, which includes the transformation of alertness into a *resource.* In this study, we will call this resource *awareness*.

Regarding the question of why this kind of activity is carried out by only a limited number of people, Kirzner explains that it is a process built on cognitive elements, such as learning from previous direct or indirect experiences. He argues that some people (i.e., entrepreneurs) possess a special alertness that predisposes them to be extremely sagacious about change: they are quicker to detect its signals; more accurate in sizing up its true significance; quicker to infer the full scope of its implications; and, most importantly, more accurate in uncovering its commercial potential.

Gaglio (2000) promotes Kirzner’s theory by maintaining that this alertness is a matter of the ability to perceive correctly the signals of change, and that this ability will determine the quality of the decision made. On this perception depends the fate of the enterprise. But, at the same time, Gaglio says that perception is not enough and it needs a basis of interpretation, which includes the ability to analyze this perception and decide on the means needed to achieve the desired end. Again, we can attribute this *interpretation* to what we are calling here awareness.

THE SCHEMA

We can assume that the perception part is achieved through a particular schema that characterizes the entrepreneurial mind. A schema is a psychological construct based on cognitive processes such as learning, memorizing, thinking, etc. McClelland (1951) assumes that the schema evolves as a product of socialization. As such, it will influence human behavior and will form some kind of behavioral repertoire. Since people are subject to different forms of socialization, they will build different schemata. This approach was further strengthened by others (Davis & Harveston, 1998; Chrisman et al, 2002) who tried to explain the basis of entrepreneurship as a direct result of family background.

But according to Piaget (1970), the schema is not a static trait. As experiences occur, the new information is used to modify, add to, or change previously existing schemata. This statement gives us the faith to believe that entrepreneurial alertness can be deliberately influenced. According to Anderson (1977):

1. A schema is a knowledge structure.

2. Schemata (the plural of schema), are always organized meaningfully, can be added to, and, as an individual gains experience, can develop to include more variables and more specificity.

3. Each schema is embedded in other schemata, and itself contains sub-schemata.

4. Schemata change, moment by moment, as information is received.

5. They may also be reorganized when incoming data reveals a need to restructure the concept.

6. The mental representations used during perception and comprehension, and which evolve as a result of these processes, combine to form a whole which is greater than the sum of its parts.

These characteristics of schemata can be used as the basis for other observations such as Kelley's (1973), who noted that if perceivers are allowed only a single observation, then they are thought to fill in the "missing" data by following various cognitive schemata with regard to the ways in which causes might combine. On the other hand, the ability of entrepreneurs to learn from previous business ownership experiences can influence the quantity and quality of information that is subsequently collected (Gaglio, 1997). Previous entrepreneurial experience may provide a framework or mental schema for processing information. This entrepreneurial learning goes beyond acquiring new information by connecting and making inferences from various pieces of information that have not previously been connected. Heuristics may be crucial to making these new links and interpretations. Some people habitually activate their mental schema for processing information and can notice it in the midst of an otherwise overwhelming number of stimuli (Gaglio, 1997).

The arguments mentioned here may give us the answer to the next question: Why do some people discover entrepreneurial opportunities while others do not? Maybe it is because people recognize these opportunities as related to their previous experiences, and to the knowledge that they already possess, and this is the way a schema is created. This statement can explain the differences in focusing on opportunities between novice and serial entrepreneurs (Westhead & Wright 1998; Westhead et al, 2005), or among potential entrepreneurs coming from different professional backgrounds.

Among other things, the schema helps the individual in his or her decision-making process by making it faster and easier. Alvarez and Busenitz (2001) maintain that the schema can be viewed in terms of attributes, skills and cognitive characteristics. Examining this process, we will see that it is based on a large number of heuristics developed by an individual in the same way as the schema, and as such suited to the individual. They utilize cognitive models to explain how the heuristic-based logic, which appears to be stronger in entrepreneurs, helps to explain how entrepreneurs think and make strategic decisions (Alvarez & Busenitz, 2001). It must be remembered that heuristics, or "rules of thumb", are mental shortcuts used to help store and process information efficiently.

Palich and Bagby (1995) claim that decision-makers in general, and entrepreneurs in particular, use cognitive heuristics when confronted with large amounts of information. It may be that the use of heuristics in assessing new ventures can lead to higher levels of optimism and lower levels of risk perception, thus predisposing the decision-maker towards entrepreneurial ventures. The schema can explain other things as well. Kirzner (1979), as well as others (Gaglio, 2004), explains that identification of opportunities is caused by a disequilibrium of the regular process of life that will be noted thanks to alertness. But the same identification can be attributed to a schema built on curiosity, as a personality trait that will drive the individual constantly to ask questions about events, even regular ones, and why they happen. We can assume that apples fell from trees before Newton, and that this event was not exceptional and did not create any disequilibrium in the environment, and still, it needed an inventive individual to ask the right question.

New definitions

Based on the studies mentioned here, I would like to define *alertness* as: a concept defining a situation which can be described as a continuous state of being "on call". It appears to be a reaction to a certain kind of stimulus, in the same way that an experienced tennis player will respond to a ball served by his or her adversary in an (almost) instinctive way. On the other hand *awareness* is a more precise process related to a specific opportunity potential, which may or may not develop into a concrete venture. It includes two components: (a) the ability to evaluate the situation requirements according to specific indices that pertain to the particular situation; and (b) the resources that the evaluator possesses in order to respond to these requirements. It seems obvious that without matching the two components, the opportunity identification will remain merely an academic exercise.

On the other hand, there are studies that attribute the establishment of a new venture to a long process of gestation, as in Shaver et al (2001). New businesses are neither created instantly, nor by accident (nor are they begun as "negative" acts with which one might want to find fault). Enough of a process is required to start a business for the action itself to be clearly intentional. A number of studies of the new venture creation process describe individuals persisting in a variety of activities over a period of months, or even years, in order to achieve the creation of a new firm (Carter, Gartner, & Reynolds, 1996; Gatewood, Shaver, & Gartner; 1995). When obstacles arise in connection with any of these activities, the entrepreneur must find ways to overcome them in order to ensure "equifinality" of the outcome. So, in theoretical terms, new venture creation is an intentional act that involves repeated attempts to exercise control over the process, in order to achieve the desired outcome. This is exactly the sort of activity that Malle (1999) has argued ought to be described as "reason-based," and not "cause-based."

As described here, it seems that in order to identify opportunities entrepreneurs need some kind of mental schema, or, as some researchers have called it, "human capital" (Becker, 1975). Some researchers suggest that habitual entrepreneurs with more experience develop an entrepreneurial mindset that prompts them to search for and pursue opportunities, and only the very best of these opportunities (McGrath & MacMillan 2000). According to them, while we must accept that the first part is not given to change through an act or acts of external intervention, the second part (pursuing opportunities) can be influenced and its components may be enhanced in order to achieve a larger measure of opportunity identification. Those statements fall into line with our hypothesis that alertness and awareness are two separate entities. Gaglio and Katz (2001) describe a possibility that while the first part might be due to a chronic alertness schema as the heuristic driving awareness, the existing means-ends framework may be inappropriate, or, in other words, the sources mentioned by Kirzner and others do not exist or are not adequate.

Gaglio (2004) goes even further and notes that in order to make optimal allocation decisions, one needs to know the context or framework that indicates the rules of the game (causal chain), the appropriate resources (means), and the index of value (ends). In real life, this context or means-ends framework is in constant flux, responding to numerous regulatory, economic, social, and technological changes (p.2). These variables pertain more to entrepreneurial awareness, as defined here, than to entrepreneurial alertness. Csikszentmihalyi (1996) suggests that this stage is the most challenging, because it requires entrepreneurs to be brutally honest with themselves; they must assess whether they have merely a good idea, or a truly viable business opportunity. This is the stage where ideas are often tested through feasibility analysis, initial market testing, financial review, and feedback from trusted advisors within the business or personal network. Gartner (1990) goes even further by suggesting that it is entirely possible that for some activities, the contribution of the environment to success may exceed the individual's contribution. But this particular empirical fact does not change the conceptual point: in principle, the act of business creation is an intentional act requiring control, which means that a spontaneous act based on a previously-built schema can be used as a trigger for further activities that must be initiated and controlled by the person. Gaglio (2004) made the same differentiation. She introduced two new terms: *veridical perception,* which requires the entrepreneur to perceive the changing situation accurately and not be susceptible to the kinds of distortion that can arise from the uncertainty that change may produce, and *veridical interpretation,* which involves correctly determining the real causes of the change and correctly inferring their practical, social, and commercial implications, while avoiding the delusion of seeing possibilities where none really exist (p. 535). I would like to explain these terms by noting that the first is what we have called *alertness.* Unfortunately, identifying an entrepreneurship possibility is not enough to create a new venture. The potential entrepreneur must ask himself if he possesses the necessary resources to transfer his vision from planning to performance.

RESOURCES

What are these resources that define the awareness? They include, for example, need for achievement (McClelland, 1961); willingness to bear risks (Brockhaus & Horowirtz, 1986); self-efficacy (Chen et al, 1988); internal locus of control and tolerance to ambiguity (Begley & Boyd, 1987). These (and many other) psychological theories assume that: 1) fundamental attributes of people, rather than information about opportunities, determine who becomes an entrepreneur; and 2) this process depends on people's ability and willingness to take action. These and others are characteristics which are possessed by some people and not by others, and even the possessors differ in their degree. There are other characteristics over which it is important for an entrepreneur to have a certain measure of control, such as risk taking. As Drucker (1994) wrote: "Entrepreneurs … have one thing – and only one thing in common: they are not "risk-takers". They try to define the risks they have to take and to minimize them as much as possible". (p.128). He does not explain how the entrepreneurs minimize their risk, but we can assume that this is done by an experienced evaluation of the alternatives.

The different references discussed here will bring us to the following conclusions:

1. Alertness is based on a previous schema acquired by the individual through cognitive means.

2. This alertness will enable the individual to react and choose certain opportunities from his environment.

3. Awareness will be based mainly on the ability of the individual to evaluate the chosen opportunity.

4. This evaluation will be based mainly on the following factors: (a) is the opportunity feasible? (profitability, risk taking, professionalism, etc.); (b) personality traits (self-efficacy, locus of control, risk taking, etc.); (c) evaluation of his own capabilities; and (d) motivation (does he want to use the opportunity?).

The establishment of a new venture will depend on the existence of these two traits: alertness and awareness. Without the first, he will not discover the opportunity, and without the second, he will not have the power to put his discovery to work. Therefore, the main question will be: are these two parts of a complex, yet single, variable or are they two separate entities where only the connection between them will produce a fruitful result.

RESEARCH DESIGN

Stage 1:

A brochure including 26 opportunities was prepared. The opportunities were chosen from offers appearing in financial newspapers. The result was a rather eclectic collection including conventional opportunities, such as franchising or buying an existing business, and unconventional opportunities such as driving couples in vintage cars on Valentine day.

Stage 2:

Eight (8) experts were chosen and asked to evaluate 4 aspects of each opportunity on a Likert scale from 1 (low) to 5 (high): feasibility, profitability, risk-taking and professionalism. The experts were also asked to state whether each of the opportunities could be considered as such. In order to reach a consensus among the experts, we used the Delphi technique to evaluate the opportunities in the brochure. The results were circulated three times among the experts until a satisfying consensus was reached. Six opportunities for which no consensus could be reached were deleted, and the final brochure included only 20 opportunities.

Stage 3:

Sixty-five (65) graduate students in Economics and Management in their final year of studies took part in the experiment. They were presented with the brochure and asked to evaluate each opportunity on a Likert scale from 1 (no opportunity) to 5 (very good opportunity). In order to find their alertness to opportunity identification, the participants were asked to give the first answer that came to mind. In order to ensure spontaneity, the subjects were given only 15 minutes to complete their task. Most of them finished it before the time given. We could not promise anonymity since we had to connect these results with the ones obtained in stage 4.

Stage 4:

A month after stage 3 was completed, the same students were asked to participate in the next stage. They were presented with the same brochure and asked to complete two questionnaires: in the first one, they were asked to evaluate each opportunity on a Likert scale from 1 (low) to 5 (high) with regard to the same aspects as the experts: feasibility, profitability, risk-taking and professionalism. These aspects were considered in this study as indices of opportunity awareness. The second questionnaire consisted of 4 separate short questionnaires on cognitive traits: self-efficacy, propensity, proactiveness and need for achievement. By the end of this stage, we were left with only 56 subjects. Three members of the original sample did not take part in this stage, and another six were disqualified for partial answers.

The self-efficacy questionnaire included 9 statements reflecting the subject's belief in his ability to change his career situation. There were statements such as: "If I decide on something, I can bring it to a successful end" or "If the need arises, I am prepared to borrow money because I believe in my capabilities". Kronbach's á for this part was 0.88.

Propensity was defined by Learned (1992) as the potential to establish new businesses or new ideas that can serve as a basis for entrepreneurship. This part included 12 statements focused on the readiness of the subject to act toward entrepreneurship, and not just declare his beliefs on the matter. Most of the statements were based on operational activities such as: "The first step would be to consult with an expert" or "If you want to open your own business, you must check whether you have the resources required". Kronbach's á for this part was 0.79.

Proactiveness was defined as the trait of taking the initiative to deal with a problem, or as the antonym of reactiveness. This part included 10 statements focusing on the readiness of the subject to initiate activity, and not to wait and react to something that has already happened. There were statements such as: "When I believe in something, I make it happen" or "I can always identify opportunities long before the others". Kronbach's á for this part was 0.84.

The need for achievement questionnaire included 8 statements referring to the subject's needs in the field of employment and career. There were statements such as: "I am ready to do anything in order to be self-sustaining" or "Only those who are better-off than others enjoy any importance". Kronbach's á for this part was 0.82.

METHOD AND RESULTS

For each one of the opportunity traits, we prepared a list of indices. These indices were achieved by correlating the evaluation of the experts for each trait with the evaluation of the subject for the same trait. In this way, we obtained a list of 56 indices for each of the opportunity traits, corresponding with the 56 subjects. The indices were then correlated with the cognitive traits as abovementioned. The results are presented in Table 1.

Table 1: Correlations between Indices of Opportunity Awareness and Cognitive Traits

	Index of feasibility	Index of profitability	Index of risk-taking	Index of professionalism
Self efficacy Sig. (2 tailed)	.375** .004	.357** .007	.482** .000	.405** .002
Propensity Sig. (2 tailed)	.384** .003	.274* .041	.307* .021	.283* .035
Proactiveness Sig. (2 tailed)	.510** .000	.336* .012	.118 .389	.348** .009
Need for achievement Sig. (2 tailed)	.319* .017	.130 .341	.335* .012	.330* .013

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The correlation between alertness and the four cognitive traits is presented in Table 2, and the correlation between alertness and the indices of opportunity awareness is represented in Table 3. In both cases we did not find any significant correlation.

Table 2: Correlations between Alertness and Cognitive Traits

Need for Achievement	Proactiveness	Propensity	Self-efficacy	
.171 .208	.001 .991	.099 .467	.081 .553	Alertness Sig. (2tailed)

Table 3: Correlations between Alertness and Indices of Opportunity Awareness

	Index of Feasibility	Index of Profit	Index of Professionalism	Index of Risk-Taking
Alertness Sig. (2tailed)	.116 .396	.069 .616	.170 .209	.205 .130

DISCUSSION

The results indicate that there is no relation whatsoever between alertness and the indices of awareness, which means that we are dealing here with two separate variables. We did not find any connection between alertness and the cognitive traits, which means that these traits are not a part of the subjects' schemata that provide the alertness, at least not in our case. The obvious practical conclusion is that if we want to boost entrepreneurship, we need to take care of the two variables - alertness and awareness - separately. The fact that the traits mentioned in this study did not influence alertness as defined here does not mean that alertness is not influenced by the entrepreneur's schema. On the contrary. Many studies show that the children of entrepreneurs have a much greater chance of becoming entrepreneurs themselves (Dyer and Handler, 1994; Heck and Trent, 1999; Anderson et al, 2005; Heck et al, 2006). We can therefore assume that these children formed some kind of entrepreneurial schema as a result of their learning from the most significant others. The question is which traits this socialization embeds.

But the results have further implications. It seems that while different studies (McClelland, 1951; Anderson, 1977; Davis & Harveston, 1998; Chrisman et al, 2002) maintain that the schemata can be changed and enlarged, this may be an arduous process. We could not find any study in the literature on the deliberate enrichment of the individual schemata. There were such studies, but they limited themselves to very defined subjects like enriching schemata of basal reading (Prince & Mancus, 1987), information sciences (Tawil et al , 2001), or in psycho-therapy (Padesky, 1994), Unfortunately the schema needed for entrepreneurial alertness must be much broader in its conception. Most of the studies on this subject show that the schemata are achieved by ongoing experiences, which are accepted as a part of the environment, and are not artificially induced (Schallert, 1982). Anderson (1977) mentioned that learners feel internal conflict if they are trying to assimilate schemata which contradict their previous suppositions. Deep-seated schemata are hard to change and demand a long period of adaptation and assimilation (Piaget, 1970). An individual will often prefer to live with inconsistencies rather than to change a deeply-held value or belief. Further support for this approach can be found in the above discussion regarding entrepreneurs' children.

Additional support for this conclusion from another viewpoint can be found in Hayek (1945) and Kirzner (1997), who maintain that it is information about opportunities, rather than people's fundamental attributes, that determines who becomes an entrepreneur.

It seems obvious that the cognitive traits should be a part of the subjects' schemata. As explained before, the fact that they are not correlated in any way with alertness can be explained only by the assumption that their importance in the alertness schemata is minor or is not embedded to the necessary degree, and therefore their influence is not enough to create the expected effect. Their significant correlation with the awareness indices can be explained by the type of subject taking part in this study. We chose to work with students in the final stages of their study of

Economics and Management, and we can assume that their studies influenced their way of thinking. Although the awareness indices were formulated in a neutral way (e.g. we asked how much professionalism the opportunities demand, and not if the respondents have this kind of professionalism), we can still assume that the subjects went through some kind of projection which placed them in the potential entrepreneur's shoes.

Since this paper began with Kirzner, who represents the Austrian school of thought, it is only fair to present here two more points pertaining to the same theory. The first one, as mentioned by Shane (2000), maintains that since the possession of information that is appropriate to a particular opportunity leads to opportunity discovery, they do not believe that any one individual is more likely than another to become an entrepreneur, across all opportunities. The second, based on the same theory, proposes that this gap can be covered by an active search. This approach finds support in the studies that focus on proactiveness (Kickul & Gundry 2002). And here again, it shows that only if we couple alertness with awareness does entrepreneurship stand a chance. The obvious conclusion for teachers or people wishing to promote entrepreneurship lies in the necessity to promote both of the aspects discussed here in order to try and build new schemas, or at least to change the existing ones, either by increasing the level of traits mentioned here or by minimizing the competing and detrimental traits.

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