AN EMPIRICAL STUDY OF THE EFFECT OF STRATEGIC PLANNING ON YEMENI SME PERFORMANCE.

Abdulmalek YahyaAli Nusair and Professor Mohd Hassan Mohd Osman.
Department of Management, Faculty of Management, UniversitiTeknologi Malaysia, 81310 UTM Johor Bahru, Malaysia.

Manuscript Info

Abstract

Over recent decades the impact of strategic planning on SMEs' performance has been inconclusive, with contradictory conclusions from different studies. Although the conceptual arguments appear to be useful to organizations that practise strategic planning, the outcomes are still ambiguous. As yet, this tool has not been investigated in the context of Yemeni SMEs, especially as Yemen currently experiencing political instability. The present study investigates strategic planning in Yemeni manufacturing SMEs. A questionnaire was employed to collect data, personally administered to a sample of 300 manufacturing SMEs based in four Yemeni governorates. Out of 213 returned questionnaires, 173 were considered appropriate and were subsequently used in the analysis. Partial Least Squares-Structural Equation Modelling (PLS-SEM) techniques were used to test the relationship. The result revealed that strategic planning has no significant impact on manufacturing SMEs' performance.

Introduction:

The current business environment is fast changing and difficult to predict. The global economy affects different sectors worldwide and the introduction of innovation and technology has never been more rapid. Entry into the market has become easier with massive amounts of information available through the development of telecommunications. A firm’s ability to maintain its position in the current business environment therefore challenging. Strategic planning emerged at a time of economic stability and was found to be an efficient tool, organizational performance. Whether this is still true in the current economic and market conditions is disputed. The following section briefly reviews the literature on strategic planning.

Literature review:

Strategic planning is described as a rational planning model following the prescriptive school of strategy (Allred, Addams & Chakraborty, 2007; Rue & Ibrahim, 1998), and it has been related to the strategic management field from its inception (Falshaw&Glaister, 2006). The most important attribute of strategic planning is that it is a formalized process for creating the future of the organization (Moldof, 1993). It is a process that generates a roadmap to the organization where it plans to go.
Planning involves the objective analysis of resources and the external environment within which the company is operating. The process of planning is categorized into two stages: strategy formulation and implementation (Ansoff, 1965; Zandiet al., 2013). The first entails a formal process of strict steps, including situation analysis, whereas the latter entails strategy execution.

The literature also reveals that strategic planning can be viewed along two broad dimensions: planning content or ends, and planning processes or means (O’Regan & Gobadian, 2002; Evered, 2000; Ansoff & McDonnell, 1990; Boyd, 1991; Miller & Cardinal, 1994; Brews & Hunt, 1999). Planning content is the planning process with purpose, objectives and goals varying from firm to firm. On the other hand, planning process refers to the mechanisms that develop the strategic plan and its deployment (Falshaw & Glaister, 2006).

However, there are numerous models of the strategic planning process with different steps and choices. For example, various stages of the strategic planning process have been discussed by Hambrick and Fredrickson (2005), who proposed five stages: definition of mission and vision, definition of objectives or goals, development of strategic analysis, development of strategy and, finally, organizational changes of support. Additionally, Eadie (1983) presented a strategic planning process consisting of five basic activities: environment scanning, resource auditing for the assessment of strengths and weaknesses, setting strategic objectives, formulation of strategies and, finally, allocation of resources and implementation.

From our review of the literature it is clear that different authors suggest different stages of the process. However, the majority of strategic planning process models agree that the process must include some core elements: mission, external and internal scanning, development strategy, development of goals and objectives, action plan, and monitoring. Thus, each firm may adapt the process and preferences that fit its own circumstances. This is supported by Bryson (2004) who cautioned against an organization’s inclination to adopt planning processes as they have been written, as the strategy change cycle, not unlike other planning processes, is a general method which should be modified to be compatible with the specific circumstances of the firm if it is to be effective.

Criticism of strategic planning:
For more than three decades, studies in strategic management have criticized strategic planning, claiming that as a tool it has no actual impact on a firm’s performance, and that results of studies are contradictory (e.g. Ouakouak & Ouedraogo, 2013; Glaister et al., 2008; Al-Shammari & Hussein, 2007; Falshaw & Glaister, 2006; McKiernan & Morris, 1994; Gable & Topol, 1987; Pearce et al., 1987). Mintzberg (1994) for example, argued that strategic planning lacks creativity and innovation and is therefore not appropriate for unstable environments. In addition, Tavakoli and Lawton (2005) criticized strategic planning’s dependence on outdated information which does not normally incorporate the knowledge and experience of front-line staff.

Another criticism of strategic planning is its top-down stream of strategic development and lack of participation of different hierarchical levels, who are considered as implementers of plans but have no voice in the strategic planning process (Heracleous, 2003; Mintzberg et al., 1998; O’Shanassy, 2003; Tavakoli & Lawton, 2005; Wilson, 1994; Guggenberger & Rohlfing-Bastian, 2016; Schaefer & Guenther, 2016). These drawbacks have a negative effect on the quality of strategies developed and, in turn, lead to poor execution of the strategies (O’Shanassy, 2003).

However, the literature shows that the majority of studies were conducted in large organizations and in developed countries (Khan & Khalique, 2014). No single study has been found in the Yemeni context regarding strategic planning, and more specifically from SMEs’ perspective.

Performance:
Performance is a critical and invaluable construct in many strategic management studies (Hubbard, 2000; Joyce & Wodds, 2001). The same studies claim that, despite the many references dedicated to performance, little attention has been dedicated to studies of performance and, as such, performance has remained an ambiguous construct.

Organizational performance is described as the organizational achievement in light of some well laid criteria. There is however a lack of consensus on what actually constitutes a firm’s performance (Brush & Vanderwerf, 1992; Dalton, Todor, Spedolini, Fielding & Porter, 1980; Venkatraman & Ramanujam, 1986). Some researchers have suggested that sales growth “is the most important single indicator” of performance (e.g. Ensley, Carland & Carland,
2000; Chandler & Hanks, 1993; Wiklund& Shepherd, 2009), and Carton and Hofer (2006) agreed that sales growth is the primary measure of growth used in the empirical studies.

Other studies also have suggested customer satisfaction as a non-financial indicator of performance. (Bhatti, Awan &Razaq, 2014) emphasized that manufacturing organizations put more emphasis on customer satisfaction as performance indicators. Higher customer satisfaction improves financial performance by increasing the loyalty of existing customers, reducing price elasticity, lowering marketing costs through positive word-of-mouth advertising, reducing transaction costs, and enhancing the organization’s reputation (Ittner&Larcker, 1998; Neely &Platts, 2005). In another recommendation, Nash (1983) highlighted profitability as one of the factors that measure organizational success and economic growth. Downey and Ireland (1988) argued against this claim by stating that no single profitability measure is suitable for performance measurement and that relying solely on profitability as a measure in the traditional approach is simply insufficient. This is consistent with Carton et al. (2006) who contended that no measure is perfect as each individual measure has strengths and weaknesses. This leads us to believe that multidimensional measures are required to fully encapsulate the concept of SMEs’ performance. The present study therefore employs several subjective performance measurements including sales growth, profitability and customer satisfaction. Conversely, strategic management studies measure business economic performance through perceptual assessments of senior executives or secondary data sources (Venkatraman&Ramanujam, 1986). According to Wiklund and Shepherd (2005), self-reported data provides ample opportunities to test multiple dimensions of performance through comparisons and competitors.

Additionally, subjective measures have been employed in selected multi-item measures of the complete business performance, providing greater accuracy than do quantitative factors (Gupta &Govindarajan, 1984). A subjective measure may maximize the rate or response if objective data is not available or if the organization is unwilling to share it (Dess& Robinson, 1984). A subjective approach may also solve the problem of inaccuracy or it may validate objective data whereby organizations tend to exaggerate or minimize information based on the evaluator’s or performer’s interests. Finally, chief executives’ and top management’s perceptions are suitable reflections of SMEs’ overall performance or effectiveness, as supported by empirical evidence (Changanti, Changanti & Mahajan, 1989; Jaworski&Kohli, 1993).

The Relationship between Strategic Planning and SMEs’ Performance:-
A review of the literature indicated the importance of strategic planning in helping to define the direction of the company, its goals and plans. In addition, strategic planning provides the company with a tool that assists it to analyze its environment and detect its strengths, weaknesses, threats and opportunities. This leads to the best use of scarce resources. In addition, some researchers indicated that strategic planning leads to stimulating strategic thinking and to facilitating and operationalizing strategies. Therefore, many studies found a positive impact of strategic planning on firms’ performance (K’Obonyo&Arasa, 2012; O’Regan, Sims &Galleir, 2008; Glaisteret al., 2008; Al-Shammari& Hussein, 2007; Hopkins & Hopkins, 1997; Rue & Ibrahim, 1998; Ansoff, 1988), while others found no actual impact (e.g.Hoogstra-Klein & Burger, 2013; Saleh, Kaissi, Semaan, &Natafgi, 2013). The latter group found a contradictory relationship between the two variables (Ouakouak&Ouedraogo, 2013; Suklev&Debarliev, 2012; Al-Shammari& Hussein, 2007; Falshaw&Glaister, 2006; McKiernan & Morris, 1994; Gable&Topol, 1987; Pearce et al., 1987). Fredrickson (1983) and Fredrickson and Mitchell (1984) revealed that planning in a turbulent environment is insufficient and often results in rigidity, with the annual planning rituals confining innovative potential as new options are overlooked. These contradictory results generate a research gap and therefore more studies are required in an attempt to explain the actual impact of this important tool. Thus, the following hypothesis is proposed:

Hypothesis: strategic planning has a direct, positive significant impact on SMEs’ performance.

Methodology:--
In quantitative research, data is collected in the form of numbers that are quantifiable and measurable. To achieve this study’s objective, data was collected through the survey method. The survey instrument developed is primarily based on established scales with measurement items which reveal significant reliability and validity, according to the literature.

Measurement of constructs:--
The measures were drawn from existing and validated instruments using a five-point Likert-scale. The strategic planning scale was adopted from Bailey, Johnson and Daniels (2000) with eight items. Performance was measured
through three dimensions: sales growth, profitability and customer satisfaction. In measures adopted from Stella (2012), sales growth is measured by four items, profitability by three and customer satisfaction by three.

Validation of constructs:-
Scale validity was measured through three different types: content, construct and criterion-related validity.

For the content validity an extensive search of the literature was performed in order to establish the most appropriate questionnaire used in previous studies. All the items in the current study were adopted from these empirical studies. In addition, the instruments were examined by academics from two universities to confirm the relevance of the items from their perspective.

Construct validity was established through an exploratory factor analysis and confirmatory factor analysis (see Table 1). At the construct level, the Average Variance Extracted (AVE) was employed for the assessment of convergent validity (Hair et al., 2014). As can be seen in Table 1, the values for the AVE ranged between 0.595 and 0.654, with their related factor loadings. These values are all above the threshold of 0.50 which, according to Hair et al. (2014), within the acceptable range for convergent validity.

**Table 1:** Result of Factor Loading and AVE.

<table>
<thead>
<tr>
<th>Model Construct</th>
<th>Measurement Indicators</th>
<th>Item / Loading</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>Pro1</td>
<td>0.853</td>
<td>0.654</td>
</tr>
<tr>
<td></td>
<td>Pro2</td>
<td>0.881</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pro3</td>
<td>0.676</td>
<td></td>
</tr>
<tr>
<td>Sales growth</td>
<td>Sal1</td>
<td>0.771</td>
<td>0.690</td>
</tr>
<tr>
<td></td>
<td>Sal2</td>
<td>0.856</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sal3</td>
<td>0.846</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sal4</td>
<td>0.847</td>
<td></td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>sat1</td>
<td>0.795</td>
<td>0.664</td>
</tr>
<tr>
<td></td>
<td>sat2</td>
<td>0.864</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sat3</td>
<td>0.784</td>
<td></td>
</tr>
<tr>
<td>Strategic planning</td>
<td>SP1</td>
<td>0.773</td>
<td>0.595</td>
</tr>
<tr>
<td></td>
<td>SP2</td>
<td>0.723</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SP3</td>
<td>0.814</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SP4</td>
<td>0.757</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SP5</td>
<td>0.836</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SP6</td>
<td>0.762</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SP7</td>
<td>0.728</td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td></td>
<td>0.621</td>
<td>0.595</td>
</tr>
<tr>
<td>Max</td>
<td></td>
<td>0.881</td>
<td>0.690</td>
</tr>
</tbody>
</table>

The reliability test was done by composite reliability to test the inter-item consistency for the measurement items. The values of composite reliability of all constructs used in this study are shown in Table 2, and all are above the recommended 0.70 (Hair et al., 1998, 2011).

**Table 2:** Composite Reliabilities of Constructs.

<table>
<thead>
<tr>
<th>Names of Constructs</th>
<th>Composite Reliabilities (CR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRO</td>
<td>0.848</td>
</tr>
<tr>
<td>SAL</td>
<td>0.899</td>
</tr>
<tr>
<td>SAT</td>
<td>0.856</td>
</tr>
<tr>
<td>SP</td>
<td>0.911</td>
</tr>
</tbody>
</table>

PRO= Profitability; SAL= sales growth; SAT= customer satisfaction; SP= strategic planning

**Structural equation modeling:**
Data collected were analyzed using SmartPLS software with maximum likelihood (ML) estimation. ML assumes multivariate normality of data. Thus, we tested normality for multivariate kurtosis and skewness, which indicates
that the data are within the normal range of skewness (+1 to -1) (Hair et al., 2006), and kurtosis within (+3 to -3) (Coakes & Steed, 2003) (see Table 3). Additionally, we performed analyses of multicollinearity by calculating the Variance Inflation Factor (VIF), which should not exceed 10, and the Tolerance Value, which has to exceed 0.1 (Hair, 2010). The test results of 1.320 and 0.758 respectively therefore reflect no multicollinearity issue.

Table 3: Results of Skewness and Kurtosis for Normality Test.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Skewness Value</th>
<th>Std. error</th>
<th>Kurtosis Value</th>
<th>Std. error</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>-0.928</td>
<td>0.185</td>
<td>1.302</td>
<td>0.367</td>
</tr>
<tr>
<td>PE</td>
<td>-0.573</td>
<td>0.185</td>
<td>-0.046</td>
<td>0.367</td>
</tr>
</tbody>
</table>

SP= strategic planning; PE= Performance

Target Population:

The study focuses on testing strategic planning in manufacturing SMEs. The manufacturing sector was targeted because of strong competition both locally and globally, and because it is more susceptible to the effect of disturbed environment. Consequently, careful development of their strategies is needed in order to deal with unpredictable events.

In this study the sample frame adopted is the Yemeni Industrial Directory (2012), published by Yemeni Industrialists Association in collaboration with the Ministry of Industry & Trade, Investment Authority and Brand Marketing and Advertising.

The Directory lists manufacturing firms by geographic region (see Table 4). The number of working factories and production units in Yemen (with four and more workers) is 729, distributed as shown in Table 4.

Table 4: Distribution of factories by governorate.

<table>
<thead>
<tr>
<th>Governorate</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Amana</td>
<td>324</td>
</tr>
<tr>
<td>Sana'a</td>
<td>69</td>
</tr>
<tr>
<td>Taiz</td>
<td>83</td>
</tr>
<tr>
<td>Hodeidah</td>
<td>78</td>
</tr>
<tr>
<td>Hadramot</td>
<td>72</td>
</tr>
<tr>
<td>Aden</td>
<td>86</td>
</tr>
<tr>
<td>Other governorates</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td>729</td>
</tr>
</tbody>
</table>

Source: Yemeni Industrial Directory (2012)

Four main industrial cities (Al Amana, Taiz, Hodeidah and Aden) were selected with a total population of 571 firms as the sampling frame. The next section discusses the size of the sample.

Sampling Techniques:

The sampling techniques available can be divided into two types: probability and non-probability. With probability samples the chance, or probability, of each case being selected from the population is known and is usually equal for all cases. For non-probability samples, the probability of each case being selected from the total population is not known. However, some research may involve both probability and non-probability sampling techniques (Saunders, Lewis & Thornhill, 2009). This research employed both techniques; the selection of governorate was by non-probability techniques, using the convenience approach, while the selection of samples within the selected governorates was by probability-stratified random sampling. The reasons for the former include the high concentration of manufacturing firms in these governorates, and security. Other governorates have witnessed high political unrest, while limitations of time and money prevent surveying all twenty-one governorates in the country. Given this division into a series of strata (governorates), in order to ensure that each of the strata is represented, stratified random sampling was employed (Saunders, Lewis & Thornhill, 2009), and a random sample drawn from each of the governorates.
Sample size:-
The sample size of 234 was determined using Krejcie and Morgan’s method (Table 5).

Table 5- Sample size.

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Population size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Amana</td>
<td>324</td>
</tr>
<tr>
<td>Taiz</td>
<td>83</td>
</tr>
<tr>
<td>Hodeidah</td>
<td>78</td>
</tr>
<tr>
<td>Aden</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td>571</td>
</tr>
</tbody>
</table>

Data Collection Process:-
Hand delivery of the questionnaire to each of the randomly selected firms was employed. The questionnaire was translated into Arabic.

Respondents:-
The study sample comprises Yemeni SME owner-managers, as they are involved in the development and implementation of strategies. This justifies the chosen study sample, based on their key role in setting their firm’s direction. In addition, owner-managers are aware of information regarding strategic planning and their performance level, so they are the most suitable individuals from whom to collect accurate information (Hambrick, 1981).

Responses:-
The total number of responses received was 213, of which 40 were discarded from analysis because they were from large companies with more than 249 employees, and therefore beyond the scope of this study. A few did not complete the questionnaire fully and were not deemed usable for analysis. Consequently, although the targeted number was 252, the usable response was 173 questionnaires, representing 68.5%, which was considered as suitable for analysis. This response rate is good, as Sekaran (2006) considers 30% as acceptable for surveys.

Demographic result:-
Demographic data were analyzed through descriptive statistical measurements (mean, median, percentages). The personal profile of the respondents comprised age, gender, level of education, position in the company and experience. Almost 9 percent of respondents were owners, 30 percent are general and deputy managers, almost 40 percent departmental presidents and 17 percent senior administrators. More than 90 percent are male, and the respondents seem to be well educated, with almost 60 percent holding a bachelor’s degree, more than 17 percent a master’s degree, and more than 6 percent a doctorate. Those who attained only a high school certificate and lower levels were about 11 percent, and with only 4 percent holding a diploma level certificate. Regarding age, the highest category was 41 years and above, constituting almost 42 percent. 36 percent were aged 31-40 and 22 percent 21-30.

Findings:-
The findings of this study indicate that the strategic planning of manufacturing SMEs has no significant impact on the firms’ performance; see Table 6. This result is consistent with past studies that established that strategic planning has no actual impact on a firm’s performance (e.g. Hoogstra-Klein & Burger, 2013; Saleh et al., 2013). According to the literature, the effect of strategic planning on SMEs’ performance is still ambiguous. On one hand, many researchers interpreted the insignificant relationship as being due to the unsuitability of strategic planning in unstable environments. Hoogstra-Klein and Burger (2013) asserted that “whatever the sources of uncertainty, the conventional rational approach to planning does not work in the presence of high uncertainties”. This interpretation could be applied to the current uncertainty in the Yemeni business environment, as the country is experiencing extreme political unrest.

Table 6- Result of Hypothesis Testing.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypotheses</th>
<th>Path coefficient</th>
<th>Std. Error</th>
<th>T.value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>SP → PE</td>
<td>0.090</td>
<td>0.070</td>
<td>1.238</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

The strategic planning (SP) has a direct, positive significant impact on the SMEs’ performance.
The result is understandable, given the Yemeni environment of turbulence, hostility and difficulty in predicting the future, with many ambiguous elements playing a role in establishing the country’s direction. In such a situation, there is a dire need to design a suitable planning framework that fits the context and the rapidly changing environment. SMEs may adopt more than one approach in planning to overcome the limitations of each and to meet the needs of the different circumstances and their own context. Continuous monitoring of an incremental planning approach will be more suitable in this type of environment with a high degree of uncertainty.

Conclusion:
As a practical conclusion to this study, a strategic planning approach is unsuitable in uncertain conditions. The main challenge is how to develop these strategies in a dynamic environment. Depending on a fixed process or inflexible plans is not an ideal recipe, and firms need to think dynamically in such an environment. Moreover, the consequences of unrest and unforeseen developments may result in a less formal planning process with fewer details. This situation will call for more emergent strategies instead of deliberated ones.

References:
44. K’Obonyo, P, Arasa R. (2012). The Relationship between Strategic Planning and Firm Performance. International Journal of Humanities and Social Science, 2(22) (Special Issue); 201-213.
63. Wilson, I. (1994). Strategic thinking isn’t dead—it changed. Long Range Planning. 27(4); 12-24