Journal Homepage: -www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/18866
DOI URL: http://dx.doi.org/10.21474/IJAR01/18866

RESEARCH ARTICLE

THE IMPACT OF STRATEGIC MANAGEMENT PRACTICES ON SMEs PERFORMANCE: A FIELD RESEARCH IN THE SMALL AND MEDIUM-SIZED ENTERPRISES OPERATING IN FOOD INDUSTRIAL FIELD IN ARAB PUBLIC OF EGYPT

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Manuscript Info

Manuscript History
Received: 10 April 2024
Final Accepted: 14 May 2024
Published: June 2024

Key words: -
Strategic Management, Strategy Formulation, Strategy Implementation, Strategy Evaluation, Small and Medium-Size Enterprises, Performance

Abstract

The main objective of this study was to examine the impact of strategic management practices on the performance of small and medium-sized enterprises operating in food industrial field in Arab Public of Egypt. A well-structured questionnaire was administered on a targeted sample of 550 senior managers in small and medium-sized enterprises operatig in food industrial field in Arab Public of Egypt. Multiple regression analysis was conducted to assess the impact of strategic management practices on the performance. The study concluded that there is positive and significant relationship between the main independent variable Strategic Management Practices and the dependent variable the Performance of Small and Medium-sized Enterprise.The study recommended that the small and medium-sized enterprises' senior managers should incorporate strategic management practices into their activities so that better performance can be realized.

Introduction: -

The term SMEs is used to denote micro, small and medium enterprises (Maximilian, 2013). They have become a vibrant and dynamic sector of the world economy (Ali Qalati et al., 2021). And they are increasingly recognized as important drivers of economic growth, productivity, innovation and employment, and are widely accepted as a key aspect of economic dynamism (Hisrich, 2014).

However, because of high vulnerability to market forces, the failure rate of SMEs is very high. and the SMEs survival is threatened by the volatile environment wherein they operate. (Otieno et al., 2017)

Therefore, with increasing challenges in the business environment, SMEs managers must have the ability to adapt and restructure the business to address constraint facing them and need to adopt superior strategic management practices (Pillania, 2008)

This study therefore attempts to contribute to the existing body of empirical studies on the relationship between strategic management and performance of small and medium-sized enterprises.

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Literature Review: -

Strategic management

Strategic management process is the full set of commitments, decisions and actions needed for a firm to achieve strategic competitiveness and earn above average returns (Krishina & Rao, 2003).

According to (Fred, 2005), strategic management is the process and approach of specifying an organization's objectives, developing policies and plans to achieve and attain these objectives, and allocating resources so as to implement the policies and plans.

Also, (Jeffrey and Caron, 2012) stated that the strategic management is a process through which organizations analyze and learn from their internal and external environments, establish strategic direction, create strategies that are intended to move the organization in that direction, and implement those strategies, all in effort to satisfy key stakeholders

Strategic management offers companies to add value, create, find, reinforce, and overcome its competitive position, indicating what actions must be adopted to achieve this position.

Whereas (David, 2011) defined strategic management as the art and science of formulating, implementing, and evaluating cross-functional decisions that enable an organization to achieve its objectives

SMEs need to maintain and improve their achievement and performances by strategically planning and implementing from now and of course with control measures. However, the practice of strategic management aids this long-term preparation and achievement of strategic intents (Saka, 2020).

According to (Chang and Huang, 2006) the Strategic management process consists of three stages: formulation of the strategy, implementation of the strategy, and evaluation of the strategy.

Strategy Formulation

Any company, regardless of the size, kind of industry, business segment, or country where its activities are developed, must have aclear approach to formulate strategies.

Strategy formulation refers to creating the vision, translating vision into the mission, and establishing long-term objectives, and identifying and setting strategic options to strengthen the competitive position of the firm (Elbanna, S. et al., 2018). The strategy formulation involves analyzing the organizational environment in which it operates, then developing a series of strategic decisions of how the organization will compete (Abosede et al., 2016).

The formulation of strategies allows companies to stand out the addresses or course of action in the future, indicating the action guidelines, marking a behavior in time, defining the internal management of the company with the objective of placing the organization in the best competitive environment to achieve the success(Guillermo et al., 2020) , (Hill, 2014) expose that the strategy is the result of a formal process of planning and the most important role in this corresponds to the senior manager.

Strategy Implementation

Strategy implementation is an integral component of the strategic management process and is viewed as the process that turns the formulated strategy into a series of actions and then results to ensure that the vision, mission, strategy and strategic objectives of the organization successfully achieved as planned (Thompson &Strickland, 2003).

Strategy implementation is a process by which strategies and policies are put into action through the development of programs, budgets, and procedures (Wheelen & Hunger, 2006). It depends on ensuring that the organization has a suitable structure, the right resources, and competence (skills, finance, technology, etc.), right leadership, and culture (Rao, 2015)

Strategy implementation can influence the whole texture of a company including its performance, (Zaidi et al., 2018)

Strategy Evaluation

Strategy evaluation and monitoring aims at improving the management outputs by reviewing the effects of the formulated strategies (Ramadan & Borgonovi, 2016).

According to (Uhl and Gollenia, 2016) the strategic evaluation consists of measuring the impact that has had the strategic planning, opening the possibility of taking the necessary corrective actions.

(David, 2011) suggested three basic activities for evaluating strategies: Examining the underlying bases of an organization's strategy, Comparing expected results with actual results, and taking corrective actions to ensure that performance conforms to plans (Cooper et al., 2017) state that 75% of the companies that have a formal process of measurement of performance (46% of all the companies surveyed) use BSC as main method of strategic evaluation. Approximately, 60% of the big North American companies and 53% of the companies in the whole world use BSC (Rigby and Bilodeau, 2009). The construction of BSC is made in seven steps: analysis of the vision and mission, internal and external analysis of the organization, key factors of the success, relation of the diagram of causes and effects between the factors, definition of the strategic objectives, election of the KPI, and elaboration of the BSC (Hamid, 2018)

According to (Haynes et al., 2017), the processes to evaluate strategies are specifying the processes and the most important results to supervise and evaluate for measuring them in an objective way; establishing performance standards that make the difference between what is acceptable and what it is not; and compare the real performance with the expected one and apply the pertinent corrective actions.

Organizational Performance

The term "performance" implies to do or carryout, it refers to accomplishment of a given task measured against present standards of accuracy, completeness cost and speed (Carton, 2014).

Organizational performance is the achievement of an organization with respect to some criterion like quantified objectives or profitability (Otieno, 2017).

(Phillips, 2000). advocates the need for more systematic research aimed at revealing the true nature of strategic management in SMEs and their relationship to the marketing and financial performance

Strategic Management Practices and SMEs Performance

Strategic management practices assist the SMEs to address the challenges through the understanding of their operating environment, develop strategies to undermine the threats in the environment, and grab the opportunities of the environment and it leads to performance and growth (Sopha & Kwasira, 2016)

(Thompson, 2001) and (Wheelen & Hunge , 2012) argued organizations succeed if their strategies are appropriate for the circumstances they face.,(Agwu, 2018) also states that SMEs are engaging in the strategic formulation have witnessed more growth in sales, high capital returns, better profitability margins, superior growth of staff, global business enhancement, and there are few chances of failure in the business arena.

Therefore, the success of strategic management practices and hence the growth/performance of SMEs depends to a large extent on the effectiveness of strategy formulation, strategy implementation, and strategy evaluation (Ali & Qun, 2019)

Research Hypotheses

Based on the previous literatures the study has developed these hypotheses:

1. There is a significance relationship between Strategy Formulation (SF) and Performance of SMEs (PSMEs).
2. There is a significance relationship between Strategy Implementation (SI) and Performance of SMEs (PSMEs).
3. There is a significance relationship between Strategy Evaluation (SE) and Performance of SMEs (PSMEs).

Research Methodology: -

A descriptive research design was adopted to collect the data and analyze the findings to establish the impact of strategic management practices on the performance of small and medium enterprises. All 7219 small and medium-

sized enterprises operating in food industrial field in Arab Public of Egypt were included in the population of interest.

The sample size was determined according to the following equation:

$$n = N\left[\frac{\frac{Z^2 pq}{e^2}}{N-1+\frac{Z^2 pq}{e^2}}\right]$$

- By applying the previous formula, researcher found that the sample size is at least 554 companies. The questionnaire was distributed to the companies' senior managers of the targeted companies. The questionnaire was designed for the target managers, then distributed to a sample of them. The collected questionnaire was checked to exclude incomplete or conflicting questions. The researcher has obtained 600 valid questionnaires.
- This study use Structural questionnaire designed by (ooakacem and saous)- with slight modifications to fit the context- was used to gather information from respondents.

The structured questionnaire divided into two sections and data collected are as follows:

- The first section includes the statements used to survey the individual'sopinions about the independent variable, Strategic Management Practices (SMP) that represented by Strategy Formulation (SF), Strategy Implementation (SI), Strategy Evaluation (SE).
- The second section includes the phrases that were used to survey the individual's opinions about the dependent variable, Performance of Small and Medium Enterprise (PSMEs).
- The research instrument was structured in five (5) Likert scale measurement, ranging from 1 for strongly disagree to 5 for strongly agree**.**

The questionnaire contains 32 statements, divided into four variables. The researcher set up the study variables to reflect the research axes by calculating the weighted mean of the responses to the statements that pertain to each variable. The target of calculating the weighted mean is to convert the collected data from Ordinal Data into Ratio Data; so, one can apply the parametric techniques to analyze the data such as Pearson's coefficient of correlation, regression analysis …etc. The following figure shows the study variables and the suggested estimated models:

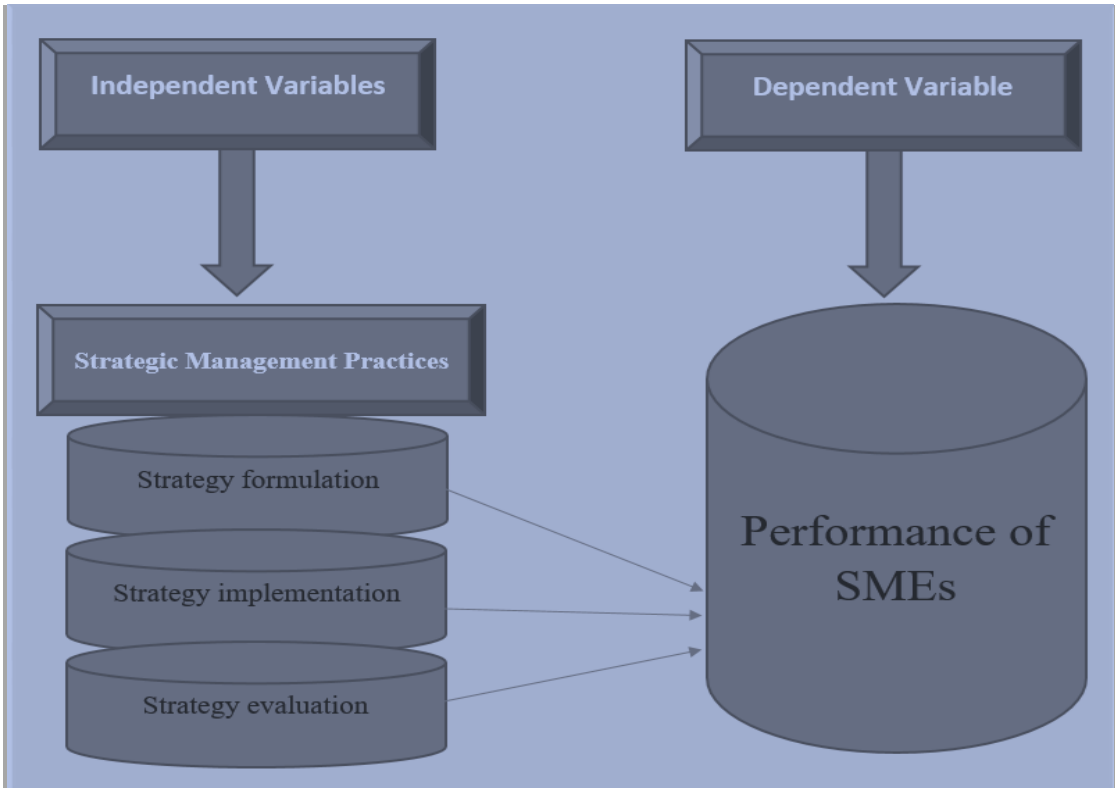

Figure 1: - The relationships between the study variables and the suggested models.

Data Analysis and Results: -

Data analysis for this study was carried out with the use of multiple regression analysis in statistical analysis program STATA 9.02 to test the impact of independent variable strategic management practices on the performance of small and medium- sized enterprises.

Reliability and Validity test

To ensure the reliability of the questionnaire, a pilot study was carried out with 75 respondents, and a reliability test was there after conducted using the Cronbach's alpha test. (Sekaran and Bougie, 2009)

Table 1: - Cronbach's Alpha and Validity coefficients for each variable.

Variables and symbols	Cronbach's Alpha	Validity
StrategyFormulation (SF)X_1	0.980	0.995
StrategyImplementation (SI)X_2	0.977	0.989
StrategyEvaluation (SE)X_3	0.978	0.990
Strategic Management Practices (SMP) X	0.977	0.989
Performance of Small and Medium Enterprise (PSMEs)Y	0.989	0.989
Minimum value	0.977	0.989

From Table (1); the minimum value of Cronbach's Alpha coefficient was 0.977, and the minimum value of Validity coefficient was 0.989. So, the researcher has statistical evidence with 95% confidence level that the reliability and the validity of the data collected are accepted. Therefore, the statistical analysis and tests hypotheses will be based on collected data set.

Test of normality:

To apply the parametric analysis (correlation and regression), the following assumptions must be met:

1. Normality: Data in each group should be normally distributed (Shapiro–Wilk Test).
2. Equal Variance: Data in each group should have equal variance (Levene's Test).

The following table shows the results of normality test for each study variable and the value of Levene's test statistic for all study variables.

Table 2: - Results of Shapiro–Wilk Test and Levene's test.

Tests of Normality and equal variance	Shapiro-Wilk Statistic	P-value
StrategyFormulation (SF)X_1	0.997	0.537
StrategyImplementation (SI)X_2	0.987	0.532
StrategyEvaluation (SE)X_3	0.993	0.342
Strategic Management Practices (SMP) X	0.997	0.059
Performance of Small and Medium-sizeEnterprise (PSMEs)Y	0.984	0.062
Levene's Test	0.987	0.552

From Table (2); it's clear that all P-value of Shapiro–Wilk Test are greater than 0.050, which indicate that all study variables are normally distributed with equal variance. Also, P-value of Levene's Test is greater than 0.050 which gives statistical evidence that all study variables have equal variances.

Correlation between study variables:

To test the hypothesis, the researcher analyzed the Pearson's correlation coefficient between each pair of the study variables, and the researcher reached the following:

Table 3: - Correlation Coefficient between independent and dependent variables.

Independent Variables/ Dependent variable		Performance of Small and Medium -size Enterprise (PSMEs)Y
StrategyFormulation (SF)X_1	R	51.70%
	Sig. Value	<0.001
StrategyImplementation (SI)X_2	R	75.70%
	Sig. Value	<0.001
StrategyEvaluation (SE)X_3	R	80.60%
	Sig. Value	<0.001

From Table (3); it's clear that the Sig. value of the dependent variable and each independent variable is smaller than the significance level 0.05; so, the researcher has statistical evidence that there is a significant and positive relationship between the dependent variable and the independent variables with confidence level 95%.Also, Pearson's correlation coefficient was estimated to discover the relationships between the main independent, and the dependent variable as shown in the following table.

Table 4: - Correlation Coefficient between main independent and dependent variable.

Variables		(SMP)X
(PSMEs) Y	R	82.10%
	Sig.	<0.001

From table (4); there is a positive and significant relationship between the main independent variable Strategic Management Practices (SMP) X and the dependent variable Performance of Small and Medium-sized Enterprise (PSMEs)Y.

Regression Analysis

Regressionanalysis is a statistical tool for the investigation of relationships between variables. Usually, the investigator seeks to ascertain the causal effect of one variable upon another (Alan, 1993). The following table shows the summary of analysis of variance for each estimated regression models (refer to Table I in appendix).

Table 5: - Summary of Analysis of variance of regression models for each independent variable.

Models	Dependent Variable	Independent variables	R^2	Sig.
Model 1: Y = f(X)	(PSMEs) Y	Strategic Management Practices (SMP) X	67.40%	<0.001
Model 2: Y = f(X_1)	(PSMEs) Y	StrategyFormulation (SF)X_1	26.70%	<0.001
Model 3: Y = f(X_2)	(PSMEs) Y	StrategyImplementation (SI)X_2	57.30%	<0.001
Model 4: Y = f(X_3)	(PSMEs) Y	StrategyEvaluation (SE)X_3	65.00%	<0.001

From Table (5); the researcher has reached the following results**:**

Model 1: There is statistical evidence with a confidence coefficient of 95% that the main independent variable (SMP) X significantly affects the main dependent variable (PSMEs) Y, as the coefficient of determination reached 67.40% and the Sig. value of this model was smaller than 0.001.

Model 2: There is statistical evidence with a confidence coefficient of 95% that the main independent variable (SF) X_1significantly affects the main dependent variable (PSMEs) Y, as the coefficient of determination reached 26.7٠% and the Sig. value of this model was smaller than 0.001.
Model 3: There is statistical evidence with a confidence coefficient of 95% that the main independent variable (SI) X_2significantly affects the main dependent variable (PSMEs) Y, as the coefficient of determination reached 57.30% and the Sig. value of this model was smaller than 0.001.
Model 4: There is statistical evidence with a confidence coefficient of 95% that the main independent variable (SE) X_3significantly affects the main dependent variable (PSMEs) Y, as the coefficient of determination reached 65.00% and the Sig. value of this model was smaller than 0.001.

The coefficient of each regression model, standard error, t-statistic and 95% confidence interval each parameter are listed in Appendix Table I, Table II. From this table the estimated regression models are listed below:

$$\underbrace{\text{PSMEs}}_{(R^2=67.40\%)} = \underbrace{-0.554}_{(<0.001)} + \underbrace{1.139\text{SMP}}_{(<0.001)} \quad (1)$$

$$\underbrace{\text{PSMEs}}_{(R^2=26.70\%)} = \underbrace{0.850}_{(<0.001)} + \underbrace{0.713\text{SF}}_{(<0.001)} \quad (2)$$

$$\underbrace{\text{PSMEs}}_{(R^2=57.30\%)} = \underbrace{0.642}_{(<0.001)} + \underbrace{0.839\text{SI}}_{(<0.001)} \quad (3)$$

$$\underbrace{\text{PSMEs}}_{(R^2=65.00\%)} = \underbrace{0.739}_{(<0.001)} + \underbrace{0.795\text{SE}}_{(<0.001)} \quad (4)$$

Discussion: -

The study examined the relation between strategic management practices and SMEs performance in food industrial field in Arab Public of Egypt. It revealed that there is a significant and positive relationship between strategic management practices in small and medium-sized enterprises operating in the food ndustrial field in Arab Public of Egypt and the performance.

It was found that all the three study's hypotheses are supported, that is strong correlation have been found, for Strategy Formulation (ß= 0.713, R2=26.70%, p < 0.001), Strategy Implementation (ß= 0.839, R2=57.30%, p< 0.001), Strategy Evaluation (ß= 0.795, R2= 65.00%, p < 0.001). and overall strategic management practice (ß= 1.139, R2= 67.40%p < 0.001).
The results show that there is a statistically significant correlation between strategic management practices and the performance, as the correlation coefficient recorded a significant positive correlation between strategic management pracices and the performance (82.10%) as shown in Table No 4, which is Significant correlation at a significant level (0.001), and accordingly, this result, confirms the existence of a positive significant correlation between strategic management practices , and the performance.
The results show that the regression model is significant (F= 1154.557, p < 0.001).

Conclusion and Recommendation: -

The study investigated the impact of strategic management on SMEs performance.

It was concluded that the adoption of strategic management practices has impact on the SMEs performance. strategy formulation, strategy implementation, strategy evaluation, and overall strategic management practices have a very strong positive relationship with SMEs performance. This implies that if small and medium-sized businesses use strategic management, their performance will improve.

The SMEs should be aware of competitors and scan their environment, develop strategies, implement and evaluate it (i.e. should be strategic) to improve their performance.

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Appendix

Table I:- Coefficients of Regression models, SE, t-statistic, 95% confidence intervals.

Model 1: Y = f(X)						
Models	Coefficient	Standard Error	T-Statistic	Sig.	LL	UL
Intercept	-0.544	0.121	-4.493	<0.001	-0.782	-0.306
SMP (X)	1.139	0.034	33.979	<0.001	1.073	1.204
R-Squared	67.40%					
Model 2: Y = f(X1)						
Intercept	0.850	0.189	4.498	<0.001	0.479	1.222
SF (X1)	0.713	0.050	14.268	<0.001	0.615	0.811
R-Squared	26.70%					
Model 3: Y = f(X2)						
Intercept	0.642	0.107	5.987	<0.001	0.431	0.853
SI (X2)	0.839	0.031	27.384	<0.001	0.779	0.900
R-Squared	57.30%					
Model 4: Y = f(X3)						
Intercept	0.739	0.088	8.360	<0.001	0.566	0.913
SE (X3)	0.795	0.025	32.221	<0.001	0.747	0.844
R-Squared	65.00%					

Table II:- Analysis of variance of regression models for each independentvariables.

ANOVA model 1: Y = f(X) common model for the independent variables						
Source	DF	R^2	Sum of Squares	Mean Square	F-Ratio	Sig.
Model	1	67.40%	240.930	240.930	1154.557	<0.001
SMP (X)	1	67.40%	240.930	240.930		<0.001
Error	558	32.60%	116.440	0.209		
Total	559	100.00%	357.370			
ANOVA model 2: Y = f(X_1) common model for the independent variables						
Source	DF	R^2	Sum of Squares	Mean Square	F-Ratio	Sig.
Model	1	26.70%	95.529	95.529	203.579	<0.001
SF (X_1)	1	26.70%	95.529	95.529		<0.001
Error	558	73.30%	261.841	0.469		
Total	559	100.00%	357.370			
ANOVA model 3: Y = f(X_2) common model for the independent variables						
Source	DF	R^2	Sum of Squares	Mean Square	F-Ratio	Sig.
Model	1	57.30%	204.898	204.898	749.864	<0.001
SI (X_2)	1	57.30%	204.898	204.898		<0.001
Error	558	42.70%	152.472	0.273		
Total	559	100.00%	357.370			
ANOVA model 4: Y = f(X_3) common model for the independent variables						
Source	DF	R^2	Sum of Squares	Mean Square	F-Ratio	Sig.
Model	1	65.00%	232.439	232.439	1038.184	<0.001
SE (X_3)	1	65.00%	232.439	232.439		<0.001
Error	558	35.00%	124.931	0.224		
Total	559	100.00%	357.370			