

The Moderating Role of Leader Skills on the Relationship between Strategic Management and Global Performance: An Empirical Study

Fakher Jaoua¹ & Taoufik Radouche²

¹ Department of Business Administration, College of Economics and Administrative Sciences, Imam Muhammad Ibn Saud Islamic University in Riyadh, Saudi Arabia

² Department of Management, Higher Institute of Management, University of Sousse, Tunisia

Correspondence: Fakher Jaoua, Department of Business Administration, College of Economics and Administrative Sciences, Imam Muhammad Ibn Saud Islamic University, 11432 Riyadh, P. O. Box: 5701. Saudi Arabia. Tel: 966-538-151-827. E-mail: fakher_jaoua@yahoo.fr

Received: May 31, 2014

Accepted: June 26, 2014

Online Published: July 25, 2014

doi:10.5539/ibr.v7n8p59

URL: <http://dx.doi.org/10.5539/ibr.v7n8p59>

Abstract

The focus of this paper is on the reality of strategic management in Tunisian companies. More specifically, it is suggested that the leader skills have an effect not only on the choice of the adoption of strategic management, but also on the contribution of strategic management to firm performance. It performs an empirical investigation into the moderating effect of leader skills on the relationship between strategic management and global performance. Data from representative survey of 276 Tunisian SMEs involved in the upgrading program revealed direct effect of managerial and entrepreneurial skills of the leader but no effect of technical skills and management sector on the strategic management. More the leader masters managerial and entrepreneurial skills, the more likely strategic management is to be adopted. It revealed also the absence of moderating effect of leader skills on the relationship between strategic management and global performance. Strategic management does not explain the variation of global performance based on leader skills. However, results show that only strategic management has a direct effect on the global performance, which means that only the strategies defined by strategic management lead to high performance whatever the leader skills.

Keywords: strategic management, leader skills, global performance, Tunisian SMEs, structural equation model

1. Introduction

Nowadays, the importance of the strategic management for an enterprise becomes evident, specifically Tunisian SMEs which are confronted in recent years to a high level of competitiveness. Indeed, since the accession of Tunisia to the World Trade Organization and the signing of the free trade agreement with the European Union in 1995, the challenge of international competition and survival of the company is more stated. Thus, Tunisian SMEs operate in a context of profound and radical changes that require them to break with the culture of protectionism and move towards market culture. This change is radical in so far as at the time of protectionism the concept of strategic management has no meaning at least the majority of Tunisian companies, whereas today it is the guarantor of its competitiveness. Based on this observation, and in line with previous researches, this research aims to study the impact of the leader skills on the choice of the adoption of strategic management and its influence on the contribution of strategic management at the global performance. It attempts to answer the following question: "Does the leader skills influence the adoption of strategic management and affect the contribution of strategic management to global performance?" The central hypothesis of this research is rooted in the place of leader in the strategy formulation and its implementation, assuming that his skills play a moderating role in the relationship between strategic management and global performance.

Our main motivation is summed up in our desire to know, explain and measure the impact of strategic management on the global performance taking into consideration the effect of leader skills, and this in the context of Tunisian SMEs. The moderator effect of leader skills may help researchers delve deeper into the relation between strategic management and global performance. The specific aims of the research are multiple:

- 1) Analyze whether the Tunisian SMEs adopt strategic management;
- 2) Draw a portrait of Tunisian SMEs that adopt strategic management and those that do not;

- 3) Identify the effect of leader skills on the adoption of strategic management by Tunisian SMEs;
- 4) Evaluate the effect of leader skills on the contribution of strategic management in the performance of Tunisian SMEs.

2. Literature Review

2.1 Strategic Management

Since its introduction in the 50s, the concept of strategic management played a vital role in companies. It is essential to describe development and survival of businesses through this concept. Introducing a definition of strategic management is not straight forward since researchers do not agree on a universally accepted definition due to the interchangeability of related concepts such as strategy, strategic management, business policy, strategic decisions, strategic processes, and many other concepts more or less close to the first of this series (Mintzberg, Ahlstrand, & Lampel, 1998). According to Koenig (1996), this interchangeability may cause negative consequences to the extent that it becomes a generator of misunderstandings and conflicting results, which translates into reproducibility and generalization. Many books and researches consider the strategic management as a field of research representing multiple realities. Contrary to this general sense, experts provide considerable details, considering the strategic management as a field of application that integrates specific dimensions.

Different authors have viewed strategic management differently. Some viewed it as decision-making; while others considered it as the set of activities related to the formulation and implementation of strategies to achieve organizational goals. The early definition of strategic management was provided by the American business historian, Ansoff (1972) who defined strategic management as: develop strategies, organize skills of the company and organize the implementation of these strategies and skills. In the context of construction, Sharplin (1985) defines strategic management as the formulation and implementation of plans and the carrying out of activities relating to the matters which are of vital, pervasive or continuing importance to the total organization. In the other hand, according to Glueck and Jauch (1984) strategic management means a stream of decisions and actions which lead to the development of an effective strategy or strategies to help achieve business goals.

Different contributions highlight significant dimensions of strategic management (Hunger & Wheelen, 2003; Ansoff, 1984; Hussey, 1984). They show that the latter is concerned with the design, preparation and conduct of collective action by developing strategies to guide the development of the company. The first dimension appears directly, since the term strategy is embedded in the concept of strategic management. Indeed, the strategies can be imposed by the environment, which may condition the management. The management then determines the success of the implementation of strategic choices. The two concepts are inseparable, and the strategy appears both as the result of strategic management and the object of conduct. Strategic management is therefore a matter of formulation as implementation strategies. It is a process by which strategists formulate, implement and monitor corporate strategies (Coulter, 2002; Hill & Jones, 2001). It includes formulation, implementation, evaluation and control (Hunger & Wheelen, 2003). It also can be defined as the art and science of formulating, implementing, and evaluating cross-functional decisions that enable an organization to achieve its objectives (Epstein & Roy, 2007). Thus, strategic management is a process that helps business strategies to better target the efforts of members of the company towards the achievement of organizational goals.

In the same line, Avenier (1988) provides a fundamental contribution to strategic management by defining it as a process that aims to ensure a tight coupling between strategies and operations through the decentralization of strategic thinking, by the involvement of people who will be responsible for implementing the developed strategies. Several definitions support this tendency to place the members of the company at the heart of strategy formulation. Illustratively, "*The strategy is a decentralized organizational exercise that involves all employees (or at least the middle and upper management) of the organization and not just the general direction*" (Dobers, 1997, p.38). Chakravarthy (1997) assume that the analysis is too often affair consultants, planners and other experts. The business strategy should be developed by the employees themselves.

This new vision indicates that the strategic management represents a bridge between the formulation and implementation of the strategy, rather than treating them separately, and this through the integration of members of the company in strategic thinking. It allows direct the evolution of the company through the two inseparable phases which are formulation and implementation. Strategic management is different compared to strategic planning by the inseparability phases of strategy formulation and implementation.

In contrast with strategic planning, the articulation between formulation and implementation of the strategy and this through the integration of operational in strategic thinking. In strategic planning, the result of strategic thinking is an action plan designed by planners who will then "sell" it to the operational managers responsible for

its implementation. In strategic management, these are decisions for action that are developed by those who have to implement them. They are therefore less likely to generate resistance to their application and be misinterpreted as frequently happens in the case of decisions taken in the context of strategic planning.

In conclusion, according to Avenier (1988), we define strategic management as a decentralized strategy process, marking the link between strategy formulation and implementation through the participation of different hierarchical levels in strategic thinking. This definition captures two main elements which are in the heart of strategic management:

- a. Fixing strategies both internally (on the resources and core competencies of the company) and externally (relating to transactions between the company and its environment);
- b. Integration of individuals of non-equivalent hierarchical status in the formulation of strategies.

2.2 Relationship between Strategic Management and Performance

The company performance is often a topic studied in management science. According to Goodman and Pennings (1977), it is an essential element in the analysis of organizations and we can't have a theory of organizations that did not include this concept. Strategy specialists share the same opinion considering the performance as an essential element of the Charter of strategic management (Carroll & Vogel, 1987; Hambrick, 2004; Chakravarthy & Doz, 1992). In this perspective, researches on the question of the relationship between strategic management and performance, are seeking to identify the success factors or causes of firms failures. In general, all these studies had as a goal to find the right style of management that contribute to the performance of the company. Most contributions argued that the causes of failure of firms, especially SMEs, are a direct result of the lack of strategic direction. They are more concerned with short-term goals and short-term results rather than long-term goals or long-term results. Very often, activities are daily, which leads to deal with everyday problems and ignore the environment, eclipsing any strategic thinking. However, through the work of famous scientists like Alfred Chandler, Igor Ansoff, Peter Drucker, Michael Porter and Henry Mintzberg, the concept of strategic management has become central in the organization and management in achieving a better performance. It should facilitate the company's growth and enable it to increase its performance and competitiveness (O'Regan & Ghobadian, 2005; Porter, 1996).

In the case of SMEs, the intensification of competition in almost all industries leads SMEs towards strategic management in order to occupy a better competitive position (Larsen, London, Weinstein, & Raghuram, 1998). At this level, several researches have shown that companies using thoughtful strategies have better results than those who did not (Berman, Wicks, Kotha, & Jones, 1999; Kargar, 1996; Brinckmanna, Grichnik, & Kapsa, 2010). The essence of strategy development means for a company to provide strategic direction to the company in order that it can achieve its vision and mission. The adoption of a clear strategic growth path then allows companies to ensure consistency, compatibility and strategic continuity changes incurred by the company.

2.3 Moderating Role of Leader Skills

The leader was treated in abundance by the literature describing him as a business builder occupying an important place in the strategy formulation and also for its implementation. Because of his position, his work is extremely complex and varied as the different elements are multiple, interrelated and influences each other. It is he who sets the strategic orientation involving the future of his business, ways of structuring necessary for success, modifications along the way, and satisfactory levels of performance (Hambrick & Mason, 1984; Ginsberg & Venkatraman, 1985; Venkatraman & Camillus, 1984). Many researchers such as Mintzberg (1973), Sweeney, Soutar, and Johnson (1999), Yukl, Walls, and Lepsinger (1990), Hart and Quinn (1993), and Russell and Stone (2002) in their typology of the roles of leader, confirm the importance of the strategy for the leader by classifying strategic activity in the first rank. It is identified inside and outside of the organization as primarily responsible for the strategy, and it is to whom that SMEs will depend on his survival.

In this perspective, many researchers have focused in the relationship between the leader and the development of business through the study of what he does (Verstraete, 1999, Schmitt 2003, Chandler & Jansen, 1992; Herron & Robinson, 1993). They demonstrate that the leader influences strongly the development and sustainability of the company by his personal traits but also by mobilizing his skills in the exercise of his functions. He uses, according to his psychological profile, skills as resources used in the action. The researches of Bayad, M. Arcand, and G. Arcand (2002), and Loué and Baronet (2008) have demonstrated that the leader skills are the best predictors of firms performance. In the same direction, other researches turned to the study skills of the leader, arrived at results which indicate that leader skills are more directly related to the performance of companies (Lorrain, Belley, & Dussault, 1998; Gartner, 1988). More precisely, technical skills and management sector,

leader skills, and entrepreneurial skills seem to be an important factor in the success of any business (Bayad et al., 2002). Given the importance of leader skills in strategy formulation and its implementation, it seems natural to suggest that: 1. The decision to adopt or not to adopt the strategic management is a conscious choice that results from leader skills. 2. The relationship between strategic management and firm performance may also vary depending on leader skills. Therefore, the well established role of leader skills leads us to the following hypotheses:

H1: The adoption of strategic management depends on the leader skills.

H1.1: More the leader masters technical skills of management and sector, the more likely strategic management is to be adopted;

H1.2: More the leader masters managerial skills, the more likely strategic management is to be adopted;

H1.3: More the leader masters entrepreneurial skills, the more likely strategic management is to be adopted.

H2: Leader skills influence the contribution of strategic management to the global performance.

H2.1: The more the technical skills and management sector are mastered by the leader, the more likely is strategic management to have a positive effect on the global performance;

H2.2: The more the managerial skills are mastered by the leader, the more likely is strategic management to have a positive effect on the global performance;

H2.3: The more the entrepreneurial skills are mastered by the leader, the more likely is strategic management to have a positive effect on the global performance.

2.4 Conceptual Model

In order to apprehend the reality of adoption by companies of strategic management, precisely why do some firms adopt strategic management while other firms don't do it, we propose a theoretical model that focuses on three variables: strategic management, leader skills and global performance. From the literature review, we wish to test two relations (see Figure 1). The first relationship seeks to verify that the choice of the adoption of strategic management is influenced by the leader skills. The second relationship aims to examine the existence of a causal link between the achievement of the global performance and strategic management, taking into consideration the leader skills.

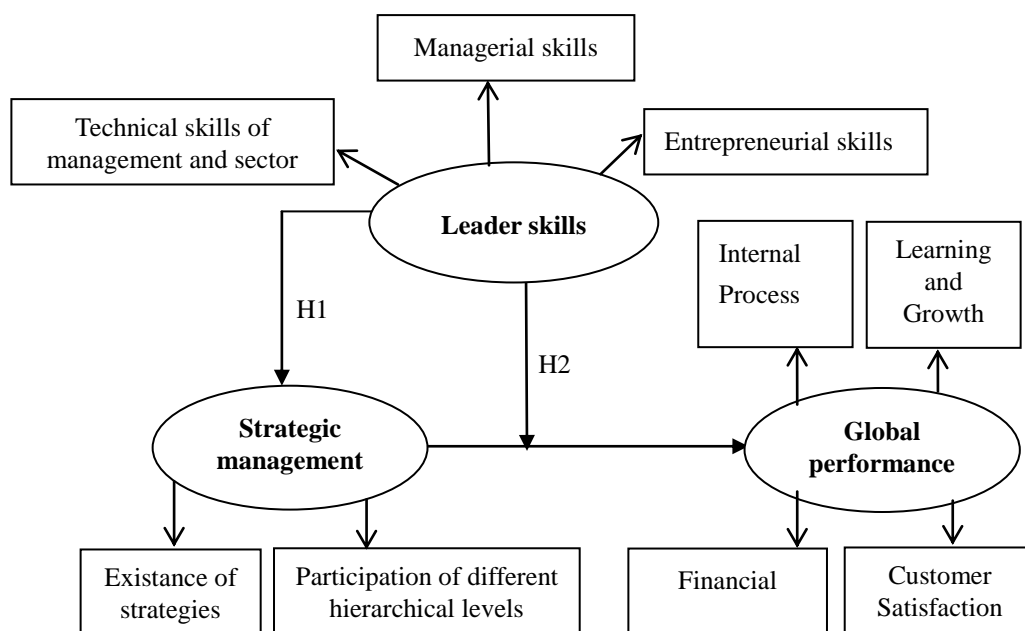


Figure 1. Conceptual model

3. Methodological Framework

In order to test the proposed model and hypotheses, it is important to pay attention to the choice of the sample, data

collection, measures of the concepts used, and methods of hypotheses test.

3.1 Sample of Research

To test the research hypotheses, a quantitative data collection was conducted among a representative sample of 276 SMEs involved in the upgrading program. The sample is stratified by industry (see Table 1). The choice of this population is motivated by four reasons. First, Tunisian companies involved in the upgrading program (PMN) should correspond to the required profile for the program which requires any company wishing to participate and to formulate strategies. Second, these companies belong to different sectors where the states of the environments are different, allowing to understand various aspects of such environments. Third, the population covered by our research is easily identifiable because of the originality of the concept of strategy in at least the majority of Tunisian companies, and the lack of research examining the practices of Tunisian companies in the formulation of strategy. Fourth, the study of the strategic process, and the factors influencing its evaluation, is a particularly sensitive issue for businesses.

Some precisions must be mentioned. First, according to the classification adopted by the PMN, the SME is a company with a total investment of less than 3 million Tunisian Dinars. Second, to build a representative sample we applied the law of Bernoulli: $n = (1.96)^2 \times N / (1.96)^2 + L^2 \times (N-1)$, with $L=10\%$. Third, because of the absolute refusal or incomplete or unsuccessful promises of questionnaires, we excluded from the sample companies from the following sectors: Leather and Footwear Industry (LFI), Chemical Industry (CHI), and Materials Construction Ceramics and Glass Industry (MCCGI).

Table 1. Research sample

	AFI	VI	MI	TCI	Total
Population (SME ²)	300	329	326	1143	2098
	n_1	n_2	n_3	n_4	N
Percentage n_i / N	14,30%	15,68%	15,53%	54,48%	100%
Sample ($n / N = 13,16\%$)	40	43	43	150	276
	n_1	n_2	n_3	n_4	n
Percentage n_i / n	14,49%	15,60%	15,60%	54,35%	100%

Note: AFI=Agro-Food Industry; VI=Varied Industry; MI=Mechanical Industry; TCI=Textile and Clothing Industry.

3.2 Data Collection

The conceptual model and the hypotheses developed to test the relations were empirically tested in a survey research; a pre-test questionnaire was performed to validate its content. Following the suggestions and comments received from participants, some changes and adjustments were made. The final questionnaire was addressed to Directors of SMEs.

3.3 Measurement of Variables

For each variable, we use Likert scales of items ranging from 1 = strongly disagree to 5 = strongly agree.

3.3.1 Measurement of Strategic Management

With reference to the definition of strategic management that was adopted in this research, two key variables were used that constituted its essence: the existence of strategies, and strategic thinking shared between individuals of non-equivalent hierarchical status. Participation is defined as the usually sense of taking part, the work of making together, act together, to cooperate in an action requiring multiple actors. In this sense, strategic management is measured through three dimensions according to Calori and Atamer (1989): Information, Consultation and Initiation. Information means that the decision is made by the leader. Subordinates are informed of the reasons, after taking decision by the leader. Consultation means that the decision is taken by the leader after consulting one or more subordinate. Initiation means that the decision is the result of a consensus between leader and one or more subordinate.

3.3.2 Measurement of Leader Skills

Leader skills are measured through three dimensions according to Bayad et al. (2002): Technical skills of management and sector, managerial skills, and entrepreneurial skills. Technical skills of management and sector

include abilities to manage the operations, finance, human resources, marketing and sales, and the laws and government regulations. Managerial skills include ability to develop a business strategy, coordinate and organize the activities of the company, manage staff, solve problems, control the activities, and negotiate. Entrepreneurial skills include abilities to identify business opportunities, develop a business vision, create and manage business network, and manage work.

3.3.3 Measurement of Global Performance

Global performance in this study is schematized by the balanced scorecard (Kaplan & Norton, 1996). As a model of strategic performance management, the characteristic of the balanced scorecard and its derivatives are a mixture of financial and non-financial measures. In its simplest form, the balanced scorecard breaks performance monitoring into four interconnected perspectives: Financial, Customer Satisfaction, Internal Process, and Learning and Growth. Financial perspective covers the financial objectives of an organization and allows managers to track financial success and shareholder value. Customer perspective covers the customer objectives such as customer satisfaction market. Internal process perspective covers internal operational goals and outlines the key processes necessary to deliver the customer objectives. Learning and Growth perspective covers the intangible drivers of future success such as human capital, organizational capital and information, capital including skills, training, leadership, organizational culture, system and databases.

3.4 Hypothesis Test

To test the research hypotheses, a structural equation model is used to analyze the causal relationships between strategic management, leader skills and global performance. The application of this model requires a two-step process: validation of models for measuring and testing the structural model (Anderson & Gerbing, 1988; Kline, 2005).

3.4.1 Test Method of Direct Links

The first hypothesis H1 considering the choice of adoption of strategic management is influenced by leader skills. It focuses on a direct causal link between leader skills (independent variable) and strategic management (dependent variable). To test the direct effect of leader skills on strategic management, two rules must be respected (Kline, 2005). First, the significance of the postulated links. It has traditionally been studied in relation to the normal probability distribution. Each unstandardized regression coefficient is divided by its standard deviation, giving the value T from which it is possible to calculate a level of likelihood associated. The threshold most commonly accepted social science is 5%, which corresponds to an absolute minimum value of T 1.96. Second, once a causal link is deemed significant, it is essential to consider the value of the regression coefficient in a first time to see if its sign corresponds to the direction assumed for the effect. Then, in a second time, it is also interesting to look at the magnitude of the regression coefficient to see the strength of causal links.

3.4.2 Test Method of Indirect Links

The second hypothesis H2 envisages a moderating effect of leader skills on the relationship between strategic management and global performance. It covers an indirect causal link between strategic management (independent variable), the global performance (dependent variable) and leader skills (moderating variable). To test the moderating effect of leader skills, the process of Ping (1995) is the best known and recommended approach for its simplicity and robustness (Cortina, Chen, & Dunlap, 2001; Moulder & Algina, 2002). It is to perform hierarchical regressions incorporating new variables created by multiplying the scores of the independent variables and scores of moderating variables (Cohen & Freund, 2005; El Akremi, 2005).

4. Preliminary Analysis

Before discussing the results of the preparatory work of the database, it is essential to conduct a cluster analysis to classify the firms in our sample according to the degree of adoption of strategic management. The second step discusses the results of the validation phase of our measuring instruments. It consists to present the results of the analysis in two stages (exploratory and confirmatory), performed in SPSS 18.0 and AMOS 8.0 software. The first is exploratory without a priori specification of the relationship between latent variables and their indicators, in order to test a predetermined structure. These analyses will test the psychometric properties of the scales related variables in our research model.

4.1 Cluster Analysis

To measure the degree of adoption of strategic management by the companies surveyed, a hierarchical cluster analysis was conducted by using the method "Two-Step Cluster" SPSS 18.0. The likelihood distance and the optimization criterion BIC (Bayesian Information Criterion) were used as criteria groupings. The results identified

two classes which characteristics are shown in Table 2. Class 1 named "strong adoption of strategic management" is the largest (170 companies) representing 61.6 % of the sample. The other one named the "low adoption of strategic management" class 2 is smaller (106 companies) which represents 38.4% of the sample. These two classes are distinguished by 10 criteria in order of importance (see Table 2).

Table 2. Results of the cluster analysis method "Two-Step Cluster"

Criteria in order of importance	Class 1	Class 2
	(n = 170)	(n = 106)
1. Existence of financial strategy	100%	77,4%
2. Participation of middle managers	100%	15,3%
3. Participation of senior managers	31,2%	100%
4. Form of participation of senior managers: Consultation/Initiation	18,2%	84%
5. Form of participation of middle managers: Consultation	73,6%	12,8%
6. Existence of personnel strategy	100%	36,8%
7. Existence of commercial strategy	100%	36,8%
8. Form of participation of middle managers: Information	26,4%	87,2%
9. Existence of production strategy	100%	22,6%
10. Existence of supply strategy	31,2%	61,3%

In Class 1, all companies have strategies (financial, personnel, sales, and production) and only 31.2 % of companies have supply strategy. 31.2% of companies refer to senior managers, and all companies refer to middle managers for formulation of these strategies. These companies are therefore appealing to middle managers as senior managers. The participation of senior managers for 18.2% of companies focuses on both the consultation and initiation. While the participation of middle managers is limited to consultation for 73.6 % of companies and to information for 26.4 % of companies. Per consequent, companies are open for the integration of middle managers in strategy formulation. These are associated with strategic choices, being consulted. Their role is not limited to providing their superiors the information needed to strategy formulation.

In Class 2, companies have strategies in different proportions (77.4 % for the financial strategy, 61.3 % for the supply strategy, 36.8 % for personnel strategy, 36.8 % for commercial strategy, and 22.6 % for the production strategy). This shows the lack of strategies for most of these companies. 15.3 % of companies refer to middle managers and all companies refer to senior managers for strategy formulation. Therefore these companies refer more to senior managers than middle managers. Senior managers' participation of 84% of companies is focused on both the consultation and initiation. However, the participation of middle managers on the consultation is 12.8% of the companies, and on the information is 87.2% of companies. In these companies, the strategy is primarily for senior managers with a low willingness to involve middle managers. Indeed, senior managers participate by being consulted and having a opinion in strategic choices. While middle managers primarily play as a source of information and they are less consulted in the formulation of strategies.

4.2 Test and Reliability of the Measurement Model

The validation of measuring instruments includes studying the dimensionality of scales and the mobilized internal consistency, convergent and discriminated validity.

4.2.1 Exploratory Factor Analysis

The examination of the dimensionality of the scales is performed by an exploratory factor analysis (EFA) carried out with SPSS 18.0 software. It is performed on the sample of research (276 SMEs). The reliability of the scales, which is to study their internal consistency, was assessed by Cronbach's alpha and Jöreskog's Rho. Table 3 summarizes the results obtained following the procedures to purify our scales. Only two scales measuring technical skills of management and sector, and entrepreneurial skills proved to be sufficiently homogeneous to match our initial expectations. However, two items have been eliminated from the measurement scale of the managerial skills.

Table 3. Reliability test of leader skills

Symbol	Dimensions	Number of items	Cronbach's Alpha	Jöreskog's Rho
TECHSKIL	Technical skills of management and sector	5	0,903	0,923
MANASKIL	Managerial skills	6; (4)	0,683; 0,863	0,857
ENTRSKIL	Entrepreneurial skills	4	0,908	0,927

4.2.2 Confirmatory Factor Analysis

The examination of the dimensionality of the scales is also done by a confirmatory factor analysis (CFA) which has been dealt with through AMOS 8.0 software. It covers only the 170 SMEs in class 1 "strong adoption of strategic management". The criteria for convergent and discriminant validity are applied to mobilized scales. The results show that for each construct, all absolute index, incremental and parsimony meet the standards of good fit and show an acceptable fit of the model (see Table 4).

Table 4. Confirmatory factor analysis test

	χ^2/ddl	GFI	AGFI	RMR	RMSEA	NFI	CFI	pvc
TECHSKIL	2,87	0,95	0,89	0,039	0,062	0,97	0,98	0,708
MANASKIL	2,24	0,97	0,93	0,038	0,073	0,97	0,99	0,608
ENTRSKIL	2,17	0,99	0,98	0,049	0,024	0,99	0,98	0,763
Thresholds (Russel & Stone, 2002)								
	<2 see <5	>0.9	>0.8	→ 0	<0.08	>0.9	>0.9	>0.5

4.2.3 Discriminant Validity

The study of discriminant validity is the last stage of testing validity and reliability of measurement instruments. The result of comparison between the two models is summarized in Table 5. The difference test of chi-square is significant. Indeed, the difference between the two values is NMIC 931.741 for a difference of degree of freedom of 91. This difference is significant according to the test of Chi-square. Also, it was noticed that the fit of the model (Mu) is significantly better than the model (Mc). It can be concluded that the discriminant validity of the different latent variables included in the overall model is established.

Table 5. Difference test of Chi-square for discriminant validity

Unconstrained model (Mu)		
$\chi^2 = 2197,508$	ddl = 1339	RMSEA = 0,048
Constrained model (Mc)		
$\chi^2 = 3129,249$	ddl = 1430	RMSEA = 0,065
Comparison Mc-Mu		
$\Delta\chi^2 = 931,741$	$\Delta ddl = 91$	P < 0,001

The internal construct validity (convergent and discriminant) and reliability have been established, it is possible to approach the test of the research model (Russel & Stone, 2002).

5. Results

After having validated measurement instruments, the research hypotheses are confronted with the survey data.

5.1 Adjustment of the Structural Model

Analysis of adjustment indices presented in Table 6 shows that the structural model fits the empirical data perfectly. In addition, analysis of modification indices and the residue matrix indicates no changes can substantially improve the adjustment. In addition, the model explains a significant part of the variance of most

endogenous variables (see Table 6). This part even reaches 82% for the entrepreneurial skills dimension, and above 70% for the remaining variables in the model. These results allow accepting the model in its initial specification and turning to the interpretation of the estimated parameters to check its consistency with the hypotheses of the research. It starts with validating assumptions for direct causal links before considering later assumptions about indirect causal links or moderating effects.

Table 6. Adjustment of the structural model

Part of variance explained								
TECHSKIL 70%			MANASKIL 76%		ENTRSKIL 82%		GLOPPERF 76%	
Adjustment indices								
χ^2	ddl	χ^2/ddl	GFI	AGFI	RMR	RMSEA	NFI	CFI
225,986	88	2,56	0,98	0,83	0,068	0,059	0,89	0,91
Thresholds								
-	-	<2 voir <5	>0,9	>0,8	→ 0	<0,08	>0,9	>0,9

5.1.1 Testing of Direct Effect (H1)

The results of causality analysis show that H1 is partially confirmed as two sub-hypotheses (H1.2, H1.3) are confirmed and one is not (H1.1). Indeed, managerial skills have positive and strong direct effect (5%) on the adoption of strategic management. Similarly, entrepreneurial skills have positive direct effect, but less strong (5%) on the adoption of strategic management. However, technical skills of management and sector have no significant effect on the adoption of strategic management.

Table 7. Testing the direct effect of the environment on the strategic management

	Standardized regression coefficient	S.E	C.R	P	Significance
SM ← TECHSKIL	0,034	0,097	0,347	0,729	NS
SM ← MANASKIL	0,900	0,165	8,979	0,001	S
SM ← ENTRSKIL	0,329	0,048	4,167	0,002	S

As shown in Table 7, the direct effect of managerial skills (MANASKIL) on strategic management (SM) is very high with structural effect value of 0.900. The standardized structural coefficient of MANASKIL on SM is associated with a low standard error (0.165) and a non-zero critical ratio (8.979), which indicates that the managerial skills has a strong positive effect on strategic management (H1.2 is confirmed). In addition, the direct effect of entrepreneurial skills (ENTRSKIL) on strategic management (SM) is slightly higher and significant (structural effect value of 0.329) with low standard error (0.048) and non-zero critical ratio (4.167). The entrepreneurial skills have so a positive effect on strategic management (H1.3 is confirmed). However, the direct effect of technical skills of management and sector (TECHSKIL) on strategic management (SM) is estimated with structural effect value of 0.034 with low Student's t (C.R= 0.347<1.96). The probability of being wrong in admitting H1.1 is 72.9% (p = 0.729). This threshold is widely greater than 5%, per consequent the hypothesis H1.1 is rejected.

5.1.2 Testing of Moderating Effect (H2)

Following the application of the approach Ping (1995), testing the moderating effects of the three dimensions of the leader skills on the relationship between strategic management and global performance are summarized in Table 8. The results show the absence of moderating effect of different dimensions of the organizational structure in the relationship between strategic management and global performance. Indeed, on the one hand, each dimension " technical skills of management and sector ", " managerial skills " and " entrepreneurial skills " has no effect on the global performance ($\gamma = 0.129$, Student's t = 2.023), ($\gamma = 0.289$, Student's t = 3.547), ($\gamma = 0.461$; Student's t = 5.027). Only the strategic management has a positive effect on the global performance ($\gamma = 0.187$, Student's t = 2.582). On the other hand, the products (strategic management x technical skills of management and

sector) (strategic management x managerial skills) and (strategic management x entrepreneurial skills) does not appear to have a significant effect ($\gamma = 0.136$, Student's $t = 0.276$), ($\gamma = 0.095$; Student's $t = 0.813$), ($\gamma = 0.065$, Student's $t = 1.012$). The coefficient of determination for the global performance is equal to 52.44%. It is considered good. These results show that the dimensions "technical skills of management and sector", "managerial skills" and "entrepreneurial skills" have no direct or indirect effects on the global performance. It is only the strategic management which explains the global performance. That's when all the sub-hypotheses H2.1, H2.2, and H2.3 are rejected, and therefore H2 is rejected.

Table 8. Moderator effect of leader skills

Dependent variable	Independent and moderating variables, and interaction effects	Regression coefficients	Student's t-test	Significance
GLOBPERF (Adjusted R ² = 52,44%)	SM	0,187	2,582	S
	TECHSKIL	0,129	2,023	S
	SM x TECHSKIL	0,136	0,276	NS
	MANASKIL	0,289	3,547	S
	SM x MANASKIL	0,095	0,813	NS
	ENTRSKIL	0,461	5,027	S
	SM x ENTRSKIL	0,065	1,012	NS

6. Discussion and Implications

The results of the analysis of the structural model led us to partially accept the hypothesis of the existence of an effect of leader skills to the adoption of strategic management. Indeed, we found a significant effect of each dimension "managerial skills" and "entrepreneurial skills" on the adoption of strategic management. While the third dimension "technical skills of management and sector" has no effect on the adoption of strategic management. First, these results could be explained by the fact that the professional and technical experience of the leader dictate priorities and the allocation of tasks and determine their level of involvement in various tasks related to the management and operation of the company except tasks of structuring strategic directions of its enterprise. Indeed, technical skills of management and sector that has the leader solve operational issues, practical and often complex in nature, related to the design and manufacture of products, without allowing the design of solutions to the problems of conducting its business in the long term. Many authors share this explanation (Bayad et al., 2002; Chandler & Jansen, 1992; Gravel et al., 2011). Indeed, they believe that the technical skills involve interventions particularly involving methods, procedures, processes or techniques. They therefore serve to prevent, identify or solve problems operating the business (Gravel, Rheume, & Legendre, 2011). Bayad et al. (2002) suggest that because of the multiplicity of activities of business leader, technical and management skills in the sector are not sufficient to ensure business continuity. Chandler and Jansen (1992) share the same opinion considering that the job of the leader is composed of several activities that vary depending on the technological, social and legal framework of the developed project and survival firm. So, to do his job, the leader must mobilize his expertise by sharing it between different functions. Managerial and entrepreneurial skills are needed to determine the strategy of the business and technical skills are required to lead its implementation. Second, the absence of relationship between the technical and management skills of the sector and the adoption of strategic management could be justified by recourse to the services of consultants. This is true for 76% of our sample firms that use external experts to formulate their strategies.

On the other side, the empirical results don't support the hypothesis that the leader skills have effects on the contribution of strategic management to the global performance. This result is explained by the lack of effects observed previously between strategic management and technical skills and management of the sector. Thus, the global performance knows no changes in its relationship with strategic management whatever the skill level of the leader. These results lead to relativize the importance of skills of the leader on the relationship between strategic management and global performance. However, the empirical results demonstrate the existence of direct effects of each dimension of the leader skills on the global performance. This result is quite consistent with the literature on entrepreneurship. Indeed, it is well established that the leader skills prove predictors of performance (Bayad et al., 2002), and the performance differences between firms are due to the different skills of

heads of business. Specifically, technical, managerial and entrepreneurial corporate chef is an important factor in the future success of the company (Lorrain et al., 1998).

Moreover, the empirical results show a causal relationship between strategic management and global performance. Therefore, the adoption of strategic management appears to some extent as a mechanism to achieve greater global performance. Strategic management likely led the company to deal with strong competitive positions allowing it to improve its global performance. This is due to the quality of formulated strategies and / or the effectiveness of their implementation is the result of the participation of organizational actors of different hierarchical levels in the formulation of corporate strategy. "*The ownership of the strategy, so the success of the implementation is only possible if those who must implement this strategy contribute significantly to its formulation*" (Hafsi & Toulouse, 1994, p. 75).

In sum, we can conclude that there is no moderating effect of leader skills on the contribution of strategic management to the global performance. However, the skills of leader and strategic management have just as casual relationships with the global performance.

7. Conclusion

Our study sought to shed light on the strategic management practices of SMEs in testing its impact on the global performance, while taking into account the moderating effect of the leader skills. The findings show that the adoption of strategic management is influenced directly and strongly by two dimensions of the leader skills: managerial skills, and entrepreneurial skills. Each of these dimensions will lead companies to opt for the adoption of strategic management. While technical skills of management and sector have no effect on the adoption of strategic management. It appears that more the leader masters managerial and entrepreneurial skills, the more likely strategic management is to be adopted. The findings show also the absence of the moderator effect of leader skills on the relationship between strategic management and global performance. It appears that the contribution of strategic management to the global performance is not dependent on leader skills. The leader skills only have a direct effect on the global performance. In this case, it is possible that the strategies developed by the company, which are the product of strategic management, are winning strategies. Their creative or realistic kind could be the causes of global performance, whether the leader skills.

Despite that our research contributes to address the lack of research presented at this level and to enrich and deepen our understanding of the problem studied, it has some limitations. The first limitation concerns the nature of the measures used to understand the variables in the conceptual model. In fact, subjective measures were used by which the respondent who is the director evaluates the behavior of its business and reported it in the questionnaire. There may be a gap between what is said and reality, linked to the risk of bias affecting the desirability responses provided by the participants in our survey. That is why it would be desirable to re-test our research model using objective measures and subsequently capture the variation between results from subjective measures and those from objective measures. The second limitation concerns the external validity of this research. Indeed, although the sample was carefully taken to be representative of the population, it is not possible to generalize the findings of this research on all Tunisian companies involved in the upgrading program, and this because of the absence of the three sectors of the final sample (LFI, CHI, and MCCGI). Therefore, these findings can be generalized only to the four sectors surveyed (AFI, VI, MI, and TCI). It would therefore be very useful to repeat this research, by integrating the three areas that are lacking.

These limitations represent opportunities to advance in our efforts to understand the relationship between strategic management and global performance. On the whole, our results are informative and encouraging that will stimulate further research at the interface of strategic management and global performance. The first avenue for future research that may be proposed regarding improving the explanation of the adoption of strategic management. In fact, our conceptual model integrates a single explanatory factor that is the leader skills. To improve the explanation of this behavior, it would be interesting to enrich our validated model by incorporating other causal variables such as the environment and the organizational structure, which, according to several researchers, to determine the behavior and development of companies. The second avenue for future research concerns the external validity of this research. Indeed, it should, in the context of further work to re-test our model in different contexts, to check whether our results are generalizable or not. Thus, the use as research field of international companies operating in Tunisia or public agencies, would conclude on the generalizability of our results. The third promising avenue of research relates to the methodology. It is to study the explanatory framework of strategic management using a comparative approach between firms that adopt strategic management and those that do not adopt. This approach would deepen the understanding of the adoption of the practice of strategic management, and to identify other explanatory factors. The fourth line of research concerns

the participatory approach in the strategy formulation. Indeed, the validated model does not specify the process or the process adopted by companies for the participation of hierarchical levels in the formulation of corporate strategy. Issues such as the skills of participants, number of participants, the selection of participants, conditions of participation, are required. Thus our research will stimulate reflection on all these points, followed by empirical investigations to measure their impact on the practice of strategic management, and therefore improve our understanding of the contribution of strategic management to the global performance.

References

- Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Procedure. *Psychological Bulletin*, *103*, 411–423. <http://dx.doi.org/10.1037/0033-2909.103.3.411>
- Ansoff, H. I. (1972). The concept of strategic management. *Journal of Business Policy*, *2*(4), 3–9.
- Ansoff, H. I. (1984). *Implanting strategic management*. New York: Prentice Hall.
- Avenier, M. J. (1988). *Le pilotage stratégique de l'entreprise*. Paris: Presses du CNRS.
- Bayad, M., Arcand, M., & Arcand, G. (2002). Le regroupement stratégique des pratiques mobilisatrices de gestion des ressources humaines. *Gestion*, *2*, 121–137.
- Berman, S. L., Wicks, A. C., Kotha, S., & Jones, T. M. (1999). Does Stakeholder Orientation Matter? The Relationship Between Stakeholder Management Models and Firm Financial Performance. *Academy of Management Journal*, *42*(3), 488–506. <http://dx.doi.org/10.2307/256972>
- Brinckmanna, J., Grichnik, D., & Kapsa, D. (2010). Should entrepreneurs plan or just storm the castle? A meta-analysis on contextual factors impacting the business planning–performance relationship in small firms. *Journal of Business Venturing*, *25*, 24–40. <http://dx.doi.org/10.1016/j.jbusvent.2008.10.007>
- Calori, R., & Atamer, T. (1989). *L'action stratégique: Le management transformateur*. Paris: Les Editions d'Organisation.
- Carroll, A. B., & Vogel, H. (1987). A three dimensional conceptual model of corporate social performance. *Academy of Management Review*, *4*(3), 345–377.
- Chakravarthy, B. S. (1997). A New Strategy Framework for Coping with Turbulence. *Sloan Management Review*, *8*(5), 69–82.
- Chakravarthy, B., & Doz, Y. (1992). Strategy Process Research: Focusing on Corporate Self-Renewal. *Strategic Management Journal*, *13*(13), 5–14. <http://dx.doi.org/10.1002/smj.4250131003>
- Chandler, G. N., & Jansen, E. (1992). The founder's self-assessed competence and venture Performance. *Journal of Business Venturing*, *7*, 223–236. [http://dx.doi.org/10.1016/0883-9026\(92\)90028-P](http://dx.doi.org/10.1016/0883-9026(92)90028-P)
- Cohen, A., & Freund, A. (2005). A longitudinal analysis of the relationship between multiple commitment and withdrawal cognitions. *Scandinavian Journal of Management*, *21*, 1–23. <http://dx.doi.org/10.1016/j.scaman.2004.06.004>
- Cortina, J. M., Chen, G., & Dunlap, W. P. (2001). Testing Interaction Effects in LISREL: Examination and Illustration of available procedures. *Organizational Research Methods*, *4*(4), 324–360. <http://dx.doi.org/10.1177/109442810144002>
- Coulter, M. K. (2002). *Strategic Management in Action*. New Jersey: Prentice Hall, Upper Saddle River.
- El Akremi, A. (2005). Analyse des effets linéaires, non linéaires et d'interaction par les méthodes d'équations structurelles sous Lisrel. In P. Roussel & F. Wacheux (Eds.), *Management des Ressources Humaines: Méthodes de recherche en sciences humaines et sociales* (pp. 297–324). Paris, De Boeck.
- Gartner, W. B. (1988). Who is an Entrepreneur? Is the Wrong Question. *American Journal of Small Business*, *12*(4), 11–32.
- Ginsberg, A., & Venkatraman, N. (1985). Contingency perspectives of organizational strategy: a critical review of the empirical research. *Academy of Management Review*, *10*(3), 421–434.
- Glueck, W. F., & Jauch, L. R. (1984). *Business policy and strategic management*. USA: Mc Graw-Hill.
- Goodman, P. S., & Pennings, J. M. (1977). *New Perspectives on Organizational Effectiveness*. San Francisco: Jossey-Bass.
- Gravel, S., Rheaume, J., & Legendre, G. (2011). Strategies to Develop and Maintain Occupational Health and

- Safety Measures in Small Businesses Employing Immigrant Workers in Metropolitan Montreal. *International Journal of Workplace Health Management*, 4(2), 164–178. <http://dx.doi.org/10.1108/17538351111143321>
- Hafsi, T., & Toulouse, J. M. (1994). Acquisitions et fusions: les choix stratégiques en conflit avec leur mise en œuvre ? *Revue Internationale de Gestion*, 19(1), 75–86.
- Hambrick, D. C. (2004). The Disintegration of Strategic Management: It's Time to Consolidate Our Gains. *Strategic Organization*, 2(1), 91–98. <http://dx.doi.org/10.1177/1476127004040915>
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: the organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193–206. <http://dx.doi.org/10.5465/AMR.1984>
- Hart, S. L., & Quinn, R. E. (1993). Roles executives play: CEOs, behavioral complexity and firm performance. *Human Relations*, 4, 543–574. <http://dx.doi.org/10.1177/001872679304600501>
- Herron, L. A., & Robinson, R. B. (1993). A structural model of the effects of entrepreneurial characteristics on venture performance. *Journal of Business Venturing*, 8, 281–294. [http://dx.doi.org/10.1016/0883-9026\(93\)90032-Z](http://dx.doi.org/10.1016/0883-9026(93)90032-Z)
- Hill, L., & Jones, G. R. (2001). *Strategic management theory: an integrated approach*. Boston, Houghton Mifflin Co.
- Hunger, J. D., & Wheelen, T. L. (2003). *Essential of Strategic Management* (3rd ed.). New Jersey, USA: Prentice Hall.
- Hussey, D. E. (1984). Strategic Management: Lessons from Success and Failure. *Long Range Planning*, 17(1), 43–53. [http://dx.doi.org/10.1016/0024-6301\(84\)90165-1](http://dx.doi.org/10.1016/0024-6301(84)90165-1)
- Kaplan, R. S., & Norton, D. P. (1996). *The Balanced Scorecard*. The Harvard Business School Press.
- Kargar, J. (1996). Strategic planning emphasis and planning satisfaction in small firms: An empirical investigation. *Journal of Business Strategies*, 1, 42–64.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York: The Guilford Press.
- Koenig, G. (1996). *Management stratégique: paradoxes, interactions et apprentissage*. Nathan, Paris.
- Larsen, H. H., London, M., Weinstein, M., & Raghuram, S. (1998). High flyer management development program – organizational rhetoric or self-fulfilling prophecy? *International Studies of Management and Organization*, 28(1), 64–90.
- Lorrain, J., Belley, A., & Dussault, L. (1998). *Les compétences des entrepreneurs: élaboration et validation d'un questionnaire (QCE)*. CIFEPME, Nancy-Metz.
- Loué C., & Baronet, J. (2010). *Entrepreneur's skills, qualitative and quantitative validation of a model of entrepreneurial competence*. Babson College entrepreneurship Conference, June 2010, Lausanne- Suisse.
- Mintzberg, H. (1973). Strategy-making in three modes. *California Management Review*, 16(2), 44–53. <http://dx.doi.org/10.2307/41164491>
- Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998). *Strategy Safari: A guided Tour through the Wilds of Strategic Management*. New York: Free Press. Retrieved from http://www.academia.edu/1895549/Strategy_safari_A_guided_tour_through_the_wilds_of_strategic_management
- Moulder, B. C., & Algina, J. (2002). Comparison of Methods for Estimating and Testing Latent Variable Interactions. *Structural Equation Modeling*, 9(1), 1–19. http://dx.doi.org/10.1207/S15328007SEM0901_1
- O'regan, N., & Ghobadian, A. (2005). Innovation in SMEs: the impact of strategic orientation and environmental perceptions. *International Journal of Productivity and Performance Management*, 54, 81–97. <http://dx.doi.org/10.1108/17410400510576595>
- Ping, R. (1995). A Parsimonious Estimating Technique for Interaction and Quadratic Latent Variables. *The Journal of Marketing Research*, 32, 336–347. <http://dx.doi.org/10.2307/3151985>
- Porter, M. E. (1996). What Is Strategy? *Harvard Business Review*, November-December, 61–78.
- Russell, R. F., & Stone, A. G. (2002). A Review of Servant Leadership Attributes: Developing a Researchable Model. *Leadership & Organization Development Journal*, 23(3), 145–157. <http://dx.doi.org/10.1108/01437730210424084>
- Schmitt, C. (2003). La science allemande du droit dans sa lutte contre l'esprit juif. *Cité*, 14, 173–180.

<http://dx.doi.org/10.3917/cite.014.0161>

Sharplin, A. (1985). *Strategic Management*. USA: McGraw-Hill.

Sweeney, J. C., Soutar, G. N., & Johnson, L. W. (1999). The role of perceived risk in the quality value relationship: A study in a retail environment. *Journal of Retailing*, 75(1), 77–105. [http://dx.doi.org/10.1016/S0022-4359\(99\)80005-0](http://dx.doi.org/10.1016/S0022-4359(99)80005-0)

Venkatraman, N., & Camillus, J. (1984). Exploring the concept of fit in strategic management. *Academy of Management Review*, 9(3), 513–525.

Verstraete, T. (1999). *Entrepreneuriat: connaître l'entrepreneur; comprendre ses actes*. L'Harmattan, Collection Economie et Innovation.

Yukl, G., Walls, S., & Lepsinger, R. (1990). Preliminary Report on Validation of the Managerial Practices Survey in Measures of Leadership. In K. E. Clark & M. B. Clark (Eds.), *West Orange*. NJ: Leadership Library of America.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).