Ilhame Hakmaoui 1 Abdellatif Loukili

Article info: Received 01.05.2017 Accepted 07.08.2017

UDC - 005.6DOI - 10.18421/IJQR11.04-07

GLOBAL PERFORMANCE MANAGEMENT: CASE OF SMALL AND MEDIUM-SIZED BUSINESSES IN MOROCCO

Abstract: During these last few years, researchers focus more and more on global performance management, as businesses should own more sophisticated systems that will enable them manage their global performance. Many studies have been led to establish an "overview" of the practices adopted by companies. In Morocco, these practices are still unknown. Thus, it would be interesting to investigate these practices at the level of Moroccan SMBs. Through the results of a study that covered 97 Moroccan SMBs, this paper tackles the practices of global performance management demonstrates that they are diverse by presenting a typology and it aims at explaining how organizational factors influence these practices.

Keywords: global performance, global performance Management, stakeholders

establishing

1. Introduction

Today the economic image of the company is gradually challenged to integrate social and environmental stakes. In this regard, the performance of a company is no longer limited to the achievement of economic benefits or the creation of shareholder values: this requires the disposal of both of its economic, social and environmental aspects. Therefore, it is necessary to consider a wider dimension; all is about the overall performance. Performance management tools must be adapted to social and environmental aspects of the global performance, considering the urge on businesses to "report" on their societal and financial performance. Many studies have been carried out, with the common aim of

research at this level.

sophistication

This study has two objectives: The first is the description and analysis of global performance management practices adopted by managers of Moroccan SMBs according to their level of sophistication. The second leads to the evaluation of the links between organizational contingence factors and the

global

an overview

performance management practices of the business. Most of these studies were held in

a senior business of a developed country.

However, facts concerning the practices of

global performance in small and medium-

sized businesses in a developing country,

like Morocco, are still unknown, this make

us ask many questions. Considering the

importance of SMBs for the Moroccan

economy, our study aims to provide the

explanations elements about the practices of

global performance management of SMBs,

and contribute in minimizing the lack of

of

performance

¹ Corresponding author: Ilhame Hakmaoui email: ilhamehakmaoui@gmail.com



management systems of SMBs implanted in Morocco, also, to understand to what extent could these factors stimulate and affect the sophistication of global performance management systems in this type of businesses. For this purpose, SMBs located in different regions of Morocco have been subject to an empirical study.

2. Literature review

Since the early 1990s, performance management systems have been the subject of several studies on their adaptation to organizational strategies (Lorino, 1991, Malo and Mathé 2000, Mavrinac and Siesfeld 1998, Bollecker 2001), Mathieu, 2000). These systems have been developed to evolve traditional performance measurement techniques and to manage global performance.

Although several theoretical works have searched to conceptualize these themes of global performance management, the debate in the literature is still far from being complete. There is a general agreement that the global performance management of companies is not yet well established yet and the practices are still relatively rare. Thus, Germain and Gates (2007, p. 11) note that "the global performance management is a little widespread practice in companies. This finding argues in favor of the idea that the issue of social responsibility remains today confined to external communication objectives.".

Among the reasons for the difficult of global performance management practices, the concept of global performance is central. It remains a vague and confused concept. Pesqueux (2004, p.3) "the asserts that notion of performance as the materialization of organizational performance includes all the ambiguity of heterogeneous evaluations and heteronomous injunctions to autonomy".

Despite this, some companies have recently ventured on this tortuous path by adopting managerial practices for an integrated control of the global performance. The examples of Shell and Novo Nordisk which have set up the Sustainability Balanced Scorecard argue in this direction (Bieker, 2002, Zingales and Hockerts, 2003). Or the case of the navigator, theorized by Edvinsson Malone (1997)and implemented by Skandia AFS (Edvinsson and Malone, 1999) shows the growing interest of certain companies in this kind of practices aiming to manage a global performance.

Similarly, Berland and Loison (2005) describe the management instrumentation used to manage and measure the global performance of the Rhodia group. This instrumentation is based on three main managerial tools (audit, performance indicators and dialogue policy), which the Group's managers are trying to integrate into the company's global management system.

Finally, and more recently, Meysonnier and Rasolofo (2008) discussed the specificities of a control system set up in a social housing society to manage global performance. They conclude that this system, in particular the specific activity of the organization studied, concretely incorporates the objectives of social responsibility in the same way as the financial objectives.

According to the existing literature, performance management systems have been the subject of many analysis within the frame of senior business. However, little attention has been paid to the practices of SMBs (Reid and Smith, 2000; Chenhall, 2003), as they are faced with the uncertainty and complexity of their environment, as well as large organizations, Market requirements, the need for innovation, etc. Schmitt, Julien and Lachance (2002) also point out that SMBs, in view of their specificities, have mostly to solve problems that arise from complex situations. All these issues form a context in which performance measurement systems are particularly adapted (Gosselin and Dubé, 2002).



3. Materials and methods

3.1. Theoretical framework and research hypothesis

3.1.1. What SMBs and what is the purpose of studying SMBs?

The first problem encountered in such a study of global performance management practices is the choice of SMBs. To classify SMBs, in one hand, some quantitative criteria were considered: the value of the assets, business revenue and its staff. Yet, the last one is the criterion the most considered. On the other hand, qualitative criteria like the level of independence that could be used to refine the definition of the SMB. In our study, we selected the Moroccan industrial SMBs, excluding very small businesses that have less than 10 employees, and businesses with more than 200 employees and subsidiaries or divisions of companies. This choice is justified by their importance for Moroccan economy: the weight of the SMBs represents 98% of national economic and productive network. They occupy more than 50% of payroll in the private sector. The share of SMBs in all sectors is estimated at over 90%.

3.1.2. Broad approach of global performance management system of Moroccan SMBs

Given the growing attention granted by companies to social and environmental

issues, economic performance is not sufficient to estimate the performance of a company. Economic representation is replaced by a more comprehensive approach, taking into consideration societal dimensions.

(Reynaud, 2003) have defined the global performance "the aggregation of economic, social and environmental performances" (Dohou and Berland, 2007).In addition, performance is "global" when the company attempts to satisfy the expectations of shareholders and other stakeholders, (Pluchart, 2011).

Recently there is a need of information concerning the social and environmental aspects to manage the global performance. analyses concerning performance management practices have been carried out within the framework of senior companies, namely in France (Meyssonnier and Rasolofo-Distler 2008, Berland and Essid 2009). However, the practice of SMBs has seldom been studied especially in Morocco where the businesses and large organizations are confronted to new social and environmental obligations. In our study, our primary objective is to give a classification global performance of management systems of Moroccan SMBs by degree of sophistication. To do so, we designated many variables, to determine the degree of technical sophistication of global performance management system. The variables considered are shown in Table 1.

Table 1. Acronyms of sophistication variables of the global performance management system.

Variables	Code
Frequency of the use of global performance management system	FU
Intensity of the use of global performance management system	IU
The importance of the use of global performance management system	IMU
Degree of the use of global performance management system	DU
Diversity of the field of application of global performance management system	DCA
Usefulness of global performance management system	DUT
Degree of openness of the business to its stakeholders	DOEPP
Diversity of indicators of global performance management system	DI
Degree of sophistication of global performance management system	DS



3.1.3. Elements determining the sophistication of global performance management systems of Moroccan SMBs: Researched model

Our second objective is to explain to what extent and under what conditions global performance management practices differ, and to evaluate the links between organizational factors and the sophistication of global performance management systems of SMBs operating in Morocco. Based on our literature review, we can say that researchers use the contingency theory to answer such questions. In fact, it contributes to the understanding of the company's

managerial practices. Finally and according to this theory, one cannot ignore the organizational traits to explain management practices.

In our case study, we are going to determine the influence of ten organizational factors on the sophistication of global performance systems, which are the age of the company, size, ownership structure, type of business, strategy, perceived uncertainty of the environment, computerization, economic performance, the level of export and localization. The hypothesis shiwn in Table 2 have been assumed.

Table 2. Research hypotheses

H1: The larger the size of SMB, the more the global performance management system is sophisticated.	H6: The more uncertain and complex the SMBs environment, the more the degree of sophistication of global performance management system is high.
H2: Older SMBs have more sophisticates global performance management systems by comparison to recent SMBs.	H7: The more the strategy of SMBs tends to prospection, the more comprehensive is its global performance management system.
H3: Global performance management systems of industrial SMBs are more sophisticated than those of commercial SMBs or those of SMBs providing services.	H8: The economic performance level is high as a far as the system of global performance system is sophisticated.
H4: Global performance management systems of non-familial SMBs are more sophisticated than those of familial SMBs.	H9: The export level is high as a far as the system of global performance system is sophisticated.
H5: The more advanced the level of information, the more sophisticated is the global performance management system.	H10: There is a link between la localization and the level of sophistication of global performance management systems.

3.2. Operationalization of variables

In this part, we will gradually present the operationalization of variables and data collection method.

3.2.1. Operationalization of variables

3.2.1.1. The operationalization of variables

characterizing global performance management system (dependent variables)

Global performance management system is characterized by its degree of sophistication, in our study; we shall characterize it according to relative variables shonw in Table 3.

International Journal for Quality Research



Table 3. The sophistication of global performance management system

Variables	Measuring Item		
Frequency of use	Measured on a scale of 1 to 5 increasing from daily to annual use.		
Intensity of use	Measured on a scale of 1 to 5 increasing from a very low to a very high use.		
Importance of use	Measured on a scale of 1 to 5 going from trivial to primordial utilization.		
Diversity of application field	Five items representing the situation of potential use of global performance management system on a scale of 1 to 5.		
Usefulness degree	Measured through items on a scale of five points on the degree of pertinence and the satisfaction of the indicators of global performance management system and the contribution of global performance system in improving societal performance.		
Openness degree of the business to stakeholders	Measures the attitude against 5 items on the position of the company according to the expectations and the interests of stakeholders.		
Diversity of Indicators	Measured by 4 items on a scale of 5 points on the degree of integration of economic, social, environmental and integrated indicators (the junction of three levels: economic, social and environmental).		

3.2.1.2. Operationalization of organizational contingency variables (independent variables)

Operationalization of organizational contingency factors are shown in Table 4.

Table 4. Operationalization of organizational contingency factors

Variables	Operationalization			
Age of the company	Years of activity of the company			
Size	Number of permanent employees and seasonal employees in the company			
Ownership structure	Family (one shareholder or related shareholders), non-family (unrelated shareholders) (Lavigne, 1999)			
Type of activity	Industrial business /Trade /Services			
The strategy	Measuring the attitude against 6 actions to products and markets on a 5 point scale: a low score corresponds to a profile type "defender" and a high score in a profile type "Prospector" (Bergeron, 1996)			
Perceived uncertainty of the environment	Measured through five items on a five-point scale upon the dynamism of economic, technologic and environment, the predictability of competitor activity and customer tastes and marketing policy review: A low score represents a common and stable environment and high score reflects a dynamic and complex environment (Germain, 2000)			
Computerization	Measured on a scale of 1 to 5, ranging from "unused" to "used" in various business activities			
Economic Performance	Measured on a scale of 1 to 5, ranging from very low to very high level			
Level of exportation Measured on a scale of 1 to 5, ranging from very low to very h level				
Localization	Measured on a scale of 1 to 5, ranging from zero to very high on the degree of business commitment to adopt strategies that are environment-friendly and strategies that respect human rights.			



3.2.2. Data collection and sample characteristics

To probe research hypothesis, an empirical research has been performed within the frame of a PhD thesis through a questionnaire filled by managers of small and medium-sized businesses all over the Moroccan national territory. We have developed a questionnaire based on our inspiration from similar studies derived from literature review, after that it was tested by a sample of six SMBs Moroccan managers. This step was so important and gave us different information which helped us in final the version of the drafting questionnaire. The period data collection lasted from October 2015 to April 2015, with 97% completely filled questionnaires, including 66 businesses which affirm that they are using a global performance management system. Our research hypothesis are tested through these businesses.

3.2.3. Characteristics of the observation site

The empirical study was carried out with entities with 10 and 200 employees, taking into account the definition of small and medium-sized enterprises proposed by Marchesnay (1992). The general characteristics of the SMBs in the sample are presented in Tables 5, 6, 7 and 8.

Table 5. The distribution of firms by sector of activity

Type of activity	Number of companies
Industrial	70
Commercial	20
Services	7

Our sample is divided into three categories of SMBs; the first category concentrates half of the SMBs in the sample, which has between 101 and 200 employees. The other two categories are distributed almost equally among the rest of the SMBs: the second

category contains SMBs where the number of employees varies between 10 and 50, and the third category is between 51 and 100 employees. The smallest SMB has 10 employees and the largest, 200 employees.

Table 6. Distribution of enterprises by number of employees

	*
The size of the company	Number of companies
From 10 to 50 employees	22
From 51 to 100 employees	22
From 101 to 200 employees	53

Table 7. The distribution of firms by age

Age of the company	Number of companies
From 1 to 10 years	22
From 11 years to 20 years	48
More than 20 years	27

Young SMBs accounted for almost 22% of the sample, while the medieval companies were the most important, accounting for more than 49% of the sample. The youngest company is only one year old and the oldest is 70.

Table 8. The ownership structure of companies

The ownership structure of the company	Number of companies
familial	39
non-familial	58

It is very interesting to take ownership structure into account as a structural variable of the SMB. The SMB and the family business are often confused; All SMBs are not family businesses, family SMBs account for almost 40% of the sample and family SMBs account for almost 60% of the sample.



4. Results

4.1. Reliability of measures

In general, evaluating the reliability of measurements involves finding the same results through double-checking, by measuring the same phenomenon several times by the same measuring instruments with different researchers and in different times. The reliability of multi-item research measuring instruments is ensured by Cronbach's alpha. The Table 9 shows calculation results, using SPSS software, alpha for variables used to measure the degree of sophistication of the global performance management system.

The calculated coefficients are very satisfactory, they are all well above the minimum level, they are above 0.953. All the retained variables have good internal consistency. Therefore, we can take the figure of the scores of these variables as a synthetic measure of the degree of global performance management system sophistication.

Table 9. Cronbach's alpha

Variables	Number of Items	Cronbach's Alpha
Degree of utilization	3	0,981
Diversity of application field	5	0,971
Usefulness degree	3	0,971
Degree of openness of the business on stakeholders	6	0,985
Diversity of Indicators	4	0,953
Sophistication degree	21	0,931

4.2. Validity of measures

Assessing the validity of measures consists of determining whether the designed scales converge as predicted by the theory. In our study, we will calculate the Pearson's correlation coefficient between the items, variables, dimensions and global score of sophistication (Table 10).

Table 10. Different Correlations according to the Pearson test

		DU	DCA	DUT	DOEPP	DI	DS
DU	Pearson's Correlation	1	0,650**	0 ,707	0,880**	0,778**	0,904**
	Sig.(bilateral)		0,000	0,000	0,000	0,000	0,000
DCA	Pearson's Correlation	0 ,650**	1	0,919**	0,843**	0,840**	0,827**
	Sig.(bilateral)	0,000		0,000	0,000	0,000	0,000
DUT	Pearson's Correlation	0,707**	0,919**	1	0,817**	0,758**	0,782**
	Sig.(bilateral)	0,000	0,000		0,000	0,000	0,000
DOEPP	Pearson's Correlation	0,880**	0,843**	0,817**	1	0,895**	0,943**
	Sig.(bilateral)	0,000	0,000	0,000		0,000	0,000
DI	Pearson's Correlation	0,778**	0,840**	0,758**	0,895**	1	0,918**
	Sig.(bilateral)	0,000	0,000	0,000	0,000		0,000
DS	Pearson's Correlation	0,904**	0,827**	0,782**	0,943**	0,918**	1
	Sig.(bilateral)	0,000	0,000	0,000	0,000	0,000	

^{**.} The correlation is significant at the level 0.01 (bilateral)



The coefficient of Pearson correlation between sophistication and other variables is very high. Therefore, we can deduce that the managers of SMBs have succeeded to implant a sophisticated organization within global performance management system.

4.3. The demonstration of types of global performance management systems

After verifying the reliability and validity of measurements, we will try to identify a classification to achieve a more concise overview of global performance management system structure. First, a principal component analysis (PCA) is performed on variables that built the variable score. In a second stage: a hierarchical clustering is performed to determine the types of existing management systems.

4.3.1. The tests of the quality of factor analysis

During the analysis of main components, we calculate the value of two tests, which will allow us to prove whether it is possible to subject the data to factor analysis: Bartlett's test and Kaiser-Meyer-Olkin measure of sampling adequacy (MSA), commonly called KMO test (Table 11).

Table 11. Results of the two tests of the quality of factor analysis

- quanty of factor unarysis		
Kaiser-Meyer-Olkin measure of sampling adequacy		0,957
Chi-squared approximation		3236,887
Bartlett's ddl		210
Bartlett Signification		0,000

In this case, Bartlett's test shows a good quality of analysis because his value is very important (3236.887) while being very significant at the same time (p=0.000). The KMO test (0.957) is marvelous, and

therefore, we can deduce that there is an adequacy between data and factor analysis.

4.3.2. Quality of representation of variables

To verify the results of this analysis in principal components, we examine the quality of representation of variables used in the analysis. The Table 12 shows the quality of representation of all the variables composing the sophistication of management system; we notice that there is no variable that shows a value less than 0.5 in order to be excluded.

Table 12. Quality of representation

Variables	Extraction
FU	0,895
IU	0,859
IMU	0,875
DCA	0,814
DUT	0,931
DOEPP	0,907
DI	0,901

In order to complete these results and to determine the types of global performance management system, we create a hierarchical ascending classification on a sample of 66 people based on the retained variables. Due to this classification, we identified two types of management systems.

4.4. Validation of hypothesis

The second part of the study consists of identifying the organizational factors that are capable of influencing the practices of global performance management. After choosing research variables we have determined the relations between them in term of hypothesis that we will probe. The impact's results of ten organizational factors on the sophistication of the global performance management system of businesses are shown in Tables 13 and 14.



Table 13. Impact of structural variable on the sophistication of global performance management system

N :Hypothesis	Variable	Result of the correlation, Spearman's coefficient	Hypothesis test
H1	Size	0,722** (sig 0,000)	Validated
H2	Age	0,202 (sig 0,104) NS	Rejected
H5	Computerization	0,682** (sig 0,000)	Validated
Н6	Environment	0,854** (sig 0,000)	Validated
Н7	Strategy	0,852** (sig 0,000)	Validated
Н8	Economic Performance	0,874** (sig 0,000)	Validated
Н9	Exportation	0,915** (sig 0,000)	Validated
H10	Localization	-0,224 (sig 0,070) NS	Validated

^{**.} The correlation is significant at the level 0.01 (bilateral). Ns. Non-significant

Table 14. The impact of structural variables on the sophistication of global performance management system

N :Hypothesis	Variable	Result of Chi-squared test	Hypothesis test
Н3	Type of activity	15,562>Value of Chi-squared is critical =0,85(sig 0,000)	Validated
H4	Ownership structure	15,562>Value of Chi-squared is critical =6,79(sig 0,000)	Validated

5. Discussion

5.1. The types of global performance management systems

The first type is characterized by a sophisticated moderately management system. It concerns 38 SMBs that have moderately elaborated management system with a sophistication average score of 54.36 on a total sophistication score of 105. It is the most common type of the sample. In some kind of situations, some managers of SMBs insufficiently process available data. The management system is an average in terms of structure, specialization and skills. The second type is characterized by an elaborated or a highly sophisticated management system: It concerns 28 SMBs that have elaborated or highly sophisticated management system with high percentages, namely an average sophistication score of 89.07 on a total sophistication score of 105. The SMBs have an elaborated global performance management system in terms of use and organization. These businesses gave importance to the expectations, the needs of their stakeholders, and they are responsive to their concerns. These SMBs often have all the attributes that have been retained to evaluate the sophistication degree of the management system.

5.2. Structural and practical factors of global performance management in SMBs

5.2.1. The influence of the size on the sophistication of the management system

The hypothesis H1 is validated, as there is a significant link between the size and the sophistication of the management system, our result concurs with the major part of the previous researches (Chapellier, 1994, Germain, 2000). (Nobre 2001) shows that the sizein creasing leads to a diversification of management tools of the business. We can explain this result by the fact that the



increase of the size of the business leads to the increase of the field of control, the manager of the SMB must develop the global performance management system in order to manage as well his/her business.

5.2.2. The influence of the company's age on the sophistication of the management system

The result of the correlation shows that there is no significant relationship between the company's age and the sophistication of the management system, the H2 hypothesis is rejected, this result has been confirmed by previous studies that failed to establish a link between the age of the company and its management system (Chapellier 1994).

5.2.3. The influence of the type of business activity on the sophistication of the management system

The H3 hypothesis is confirmed, as the practices of global performance management of industrial SMBs are more sophisticated than those of trade and services SMBs. This result confirms the results of other researchers that have established a relation between the type of business activity and its management practices (Germain, 2000). This result can be explained by the fact that industrial businesses, differ from trade and services companies, as they require the implantation of a more sophisticated management system with more indicator in order to monitor their productivity.

5.2.4. The influence of the ownership structure on the sophistication of the management system

The H4 hypothesis is validated, as the test demonstrates that there is a significant link between "ownership structure" variable and the sophistication of global performance system. This result shows that presence of foreign shareholder has a positive influence on the sophistication of global performance management system. Several researchers have succeeded to demonstrate that there is a link between ownership structure and the management variables (Joffre and Wickam, 1997, Lavigne and St Pierre 2002).

5.2.5. The influence of the computerization on the sophistication of the management system

The H5 hypothesis is validated, as computerization is a crucial factor for the sophistication of global performance system. This result concurs with the empirical validation of researcher that established a link between computerization and management systems (Chapellier, 1994; Germain, 2000). Since the introduction of computerization in the activities of SMBs improves the development of global performance management system.

5.2.6. The influence of Perceived uncertainty of the environment on the sophistication of the management system

The H6 Hypothesis is validated; the SMBs that are active in an uncertain and complex environment have more sophisticated global performance systems. This result concurs with a great number of researches that show the significant influence of the perceived uncertainty of the environment on the management systems of the business. Because in an uncertain environment, the **SMB** must adopt a sophisticated management system that allows the business to confront this environment, to decrease its uncertainty and to efficiently manage its global performance.

5.2.7. The influence of the strategy on the sophistication of the management system

The H7 hypothesis is validated, as prospecting SMBs seeking new markers and aiming at improving their production by developing new products have more sophisticated management systems, by



comparison to conservative SMBs. According to (Dubé and Gosselin 2002) prospecting business would adapt their performance measuring systems to their strategy. They would opt for advanced performance measures that take into consideration customers, products and quality. This result in conformity with several previous researches (Miles and Snow 1978).

5.2.8. The influence of the economic Performance on the sophistication of the management system

The H8 hypothesis is validated, as the choice of economic performance as a factor is justified by the fact that the lack of financial means is part of the obstacles that prevents the businesses from adopting sustainable development. Our curiosity has given useful results, as economic performance turned out to be a factor that affects the sophistication of global performance management system.

5.2.9. The influence of the level of exportation on the sophistication of the management system

The H9 hypothesis is validated. The higher is the level of exportations, the more sophisticated is the global performance management system. This results explained by the fact that exporting SMBs are confronted international with an competition and the SMBs that are active at international level adopt sophisticated management systems that allows them to stay in competition at the international level and to do business with new foreign clients and to compete with foreign businesses.

5.2.10. The influence of the localization on the sophistication of the management system

The H10 hypothesis is refuted, as the choice of the localization as factor comes from the

following observation: In some regions, local actors pressure the SMBs to engage in sustainable development, which pushes the SMBs to develop their management system to monitor and manage their global performance. However, the localization does not appear to be a crucial factor for the sophistication of global performance management system.

6. Conclusions

The study confirms, first of all, that the global performance management systems are of considerable importance for a large majority of managers: very few managers dispense with the production and the use of global performance measurement practices, 31 SMBs do not use a management system, 38 SMBs have moderately sophisticated management systems and 28 SMBs have highly sophisticated management systems. In the end, the practices of management of the global performance of Moroccan SMBs managers seem to be quite similar to those described in the literature by Western companies. The evolution of the Moroccan economic context, which has become more complex, more competitive and uncertain since the opening of the markets, seems to have led SMBs managers to develop their management systems to manage their business.

The analysis of the relationships between management practices and organizational factors reveals that organizational characteristics, and in particular the size of firms, whether or not they are exporters, the type of strategy they adopt and perceived uncertainty of the environment. computerization, economic performance, type of activity, ownership structure, age of the company are, to a certain extent, related to the practices of management of the global performance of Moroccan SMBs, But the localization of the company does not have any impact on these management systems.

Caution must, therefore be exercised in



interpreting and assessing our findings given the limitations of the study. Firstly, they are linked to the choice of the questionnaire as a method of data collection. Secondly, there may be a gap between the responses of SMBs managers and the reality of performance management practices within their companies. These limits clearly indicate some directions of extension for our research, it would be interesting to conduct a study to verify whether the behavioral elements that have a relationship with the personality of the SMBs manager can influence the practices of the management of the global performance, This study would allow a better representation, a better perception of the phenomena studied and this will be the object of the next works.

Acknowledgments: This research was supported by the University Sidi Mohamed Ben Abdellah, High School of Technology, Fez. Morroco.

References:

- Berland, N., & Loison, M.C. (2005). Responsible Care et management durable: comportement volontaire ou réaction adaptative? Généalogie et pratiques dans l'industrie chimique. *Actes du 26ème congrès de l'AFC*.
- Berland, N., & Essid, M. (2009). RSE, systèmes de contrôle et pilotage de la performance globale. *In La place de la dimension européenne dans la Comptabilité Contrôle Audit* (pp. CD-ROM).
- Bieker, T. (2002). Managing corporate sustainability with the Balanced Scorecard: Developing a Balanced Scorecard for Integrity Management. *Oikos PhD summer academy*.
- Bollecker, M. (2001). Systèmes d'information différenciés et contrôle des services opérationnels (Thèse de doctorat). Université Nancy.
- Chapellier, P. (1994). Comptabilités et systèmes d'information du dirigeant de PME: essai d'observation et d'interprétation des pratiques (Doctorat en sciences de gestion). Montpellier: Université de Montpellier II.
- Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28(2-3), 127-168.
- Dohou, A., & Berland, N. (2007). Mesure de la performance globale des entreprises. *Actes du Congrès Annuel de l'Association Francophone de Comptabilité*, Poitiers, France, Mai 2007.
- Dubé, T., & Gosselin, M. (2002). Influence de la stratégie sur l'adoption des mesures de performance en vigueur dans le système de comptabilité de gestion. 23 ème congrès de l'Association Française de Comptabilité, Toulouse, 16 et 17 mai.
- Edvinsson, L., & Malone, M. S. (1997). *Intellectual Capital: Realising Your Company's True Value by Findings its Hidden Brainpower*. New York: Harper Collins Publishers.
- Edvinsson, L., & Malone, M. S. (1999). Le capital immatériel de l'entreprise. Paris: Maxima Laurent du Mesnil Editeur.
- Germain, C. (2000). Contrôle organisationnel et contrôle de gestion: la place des tableaux de bord dans le système de contrôle des petites et moyennes entreprises (Doctorat de Sciences de Gestion). Bordeaux: Université Montesquieu-Bordeaux IV.
- Germain, C., & Gates, S. (2007). Le niveau de développement des indicateurs de responsabilité sociale dans les outils de pilotage de contrôle de gestion: une analyse des pratiques des entreprise. Actes du 28 ème Congrès de l'AFC, Poitiers.

International Journal for Quality Research



- Gosselin, M., & Dubé, T. (2002). Influence de la stratégie sur l'adoption des mesures de performance en vigueur dans le système de comptabilité de gestion. *Communication présentée au XXIII e Congrès de l'Association française de comptabilité*, Toulouse, 16 et 17 mai.
- Joffre, P., & Wickam, S. (1997). Les atouts des entreprises moyennes. *Revue Française de Gestion*, 116(Novembre-Décembre), 64-70.
- Lavigne, B., & St-Pierre, J. (2002). Association entre le système d'information comptable des PME et leur performance financière. 6 ème Congrès international francophone sur la PME, Montréal.
- Lorino, P. (1991). Le contrôle de gestion stratégique: la gestion par les activités. Paris: Dunod.
- Malo, J.-L., & Mathé, J.-C. (2000). L'essentiel du contrôle de gestion. Les Éditions d'organisation.
- Marchesnay, M. (1992). La PME: une gestion spécifique? *Problèmes économiques*, 2276, 26-32.
- Mathieu, P. (2000). Insaisissable productivité? *Direction et Gestion*, 186(novembre-décembre), 13-22.
- Mavrinac, S., & Siesfeld, A. G., (1998). La délicate mesure de l'immatériel. *L'Expansion Management Review*, décembre, 31-38.
- Meyssonnier, F., & Rasolofo-Distler, F. (2008). Le contrôle de gestion entre responsabilité globale et performance économique: le cas d'une entreprise sociale pour l'habitat. *Comptabilité Contrôle Audit, 14*(2), 107-124.
- Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman, H. J. (1978). Organizational strategy, structure, and process. *Academy of management review*, *3*(3), 546-562.
- Nobre, T. (2001). Méthodes et outils du contrôle de gestion dans les PME. *Finance Contrôle Stratégie*, 4(2), 119-148.
- Pesqueux, W. (2004). La notion de performance globale. *5ème forum international sur La Performance Globale de l'Entreprise*, Université Tunis Carthage, 1er 2 Décembre 2004.
- Pluchart, J-J. (2011). Le management durable de l'entreprise. Arnaud franel editions.
- Reid, G. C., & Smith, J. B. (2000). The impact of contingencies on managerial accounting systems development. *Management Accounting Research*, 11(4), 427-4.
- Reynaud, E. (2003). Développement durable et entreprise: vers une relation symbiotique. *Journée AIMS, Atelier développement durable*, ESSCA Angers.
- Schmitt, C., Julien, P.-A., & Lachance, R. (2002). Pour une lecture des problèmes complexes en PME: approche conceptuelle et expérimentation. *Revue Internationale PME*, 15(2), 35-62.
- Zingales, F., & Hockerts, K. (2003). Balanced Scorecard and Sustainability: Examples from Literature and Practice. *INSEAD working paper 30, CMER*, Fontainebleau, France.



Ilhame Hakmaoui

Sidi Mohammed Ben Abdallah University BP., High School of Technology **FEZ**

Processes, Renewable

Energies and Environment Laboratory

2427, Road Immouzer, Fez

Morocco

ilhamehakmaoui@gmail.com

Abdellatif Loukili

Sidi Mohammed Ben Abdallah University BP.,

High School of Technology FEZ

Processes, Renewable

Energies and

Environment Laboratory 2427, Road Immouzer,

Fez

Morocco

aloukili203@gmail.com