

Leadership and Internal Control Modelling: A Qualitative Analysis of Conceptual Model & External Validity Practiced by SME Directors

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Abstract: This article outlines the details of an empirical study into the perceptions of Small to Medium-sized Enterprises (SME) Directors regarding the concepts in conceptual model and the interpretation of these concepts. The results of the testing of external validity of the conceptual model primarily indicate that in selecting the determinants for effective and efficient changes in behaviour, the SME directors specifically chose to utilise two concepts of leading. These two concepts are characteristics of a businessperson, namely leadership style and commitment. The scientists primarily chose the combination of leadership style and communication. The study is based on a pre-test conducted with five scientists (5) and testing conducted with nineteen SME Directors by way of in-depth interviews. This study supports the external validity of the conceptual model applied. In the opinions of the scientists formed the concepts of leading the independent determinants for the Internal Control (IC), according to the COSO ICIF (1992), through the behavioural beliefs. However the SME directors recognise the direct causal relationship between their concepts of leading and IC components. The choices of IC components by the SME directors were Risk Assessment, Control Activities and Information & Communication Principles. The selected IC components can affect the efficiency and effectiveness of the enterprise. The scientists choose two aspects of the COSO ICIF (1992) concepts, i.e., RA/Risk Assessment and ICP/Information & Communication Principles. These two COSO 1992 components can affect, according the scientists, the efficiency and effectiveness of business activities. On the basis of the choices of SME directors and scientists and the visual display of the most recent concepts, we can see by which manner and which concepts from the conceptual model, work in a conceptual model. This study can be described as an exploratory study, consisting of qualitative in-depth interviews.

Key words: external reliability; leadership in the SME sector; effective leadership style; COSO ICIF 1992

JEL codes: G, G02

1. Introduction

The study into attitudes regarding external validity and the impact of the concept in a conceptual model tested the sustainability of the selected processes in a conceptual model for leaders within the SME sector. It is also particularly interesting to note the manner in which the interpretation of the concepts of leading was established by directors of small to medium-sized enterprises. This study provides more knowledge and insight into the clarity regarding the impact of the concept in a conceptual model that illustrates the method of an

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effective leader as a sequential process of effective and efficient behaviour. On the basis of the analysis of the external validity of the conceptual model and in-depth interviews, this will be further investigated.

This study shows the discussions during recent years regarding the internal control systems and the importance of different internal control components (De Koning, 2009; Purdy, 2010; Gupta, 2008; Lindow & Race, 2002) and clarify the methods behind an effective leadership style to the efficiency and effectiveness of business activities. There are different views about the definition of Internal Control and implementation in companies and a solid internal control structure, and in particular monthly internal financial reporting, is essential for any business, as emphasised in the article by Henry in the framework of the identification of organisation risks (Henry et al., 2010).

The four components of the COSO framework (Control environment, Risk assessment, Information and Communication and Monitoring) are based on the way in which the management directs the organisations, while according to Lindow (Lindow & Race, 2002) the managing of risks is a significant aspect for the success of the organisations. In evaluating the internal control components of section 404(a) SOX, using the COSO 1992 framework, it is observed by management that there is no excessive use of COSO components, because there is an absence of management vision and a “risk-based” perspective in COSO 1992 (Gupta, 2008).

Currently, in the discussions regarding the importance of the internal control components, two main views can be distinguished, as follows:

- The Theory/Principle-based view developed by Koning, Power that is based on the perception against the risk management as a base for internal control system of the company (De Koning, 2009; Purdy, 2010; Power, 2009);
- The Empirical/Evidence based view based on the empirical research and distinguishes the various important internal control components (Gupta, 2008; Lindow & Race, 2002; O’Leary et al., 2006).

The indications of possible discrepancies in attitude of the process of leading in conceptual model and in respect of COSO 1992 internal control components caused me to undertake an explanatory study in the form of in-depth interviews. A total of five and eighteen in-depth interviews were held with:

- five researchers in the field of internal control and
- eighteen practising SME directors.

On the basis of a pre-test conducted with scientists and the interviews conducted with SME directors, the external validity of the conceptual model relating to leaders in the SME sector was assessed. Primarily, the focus was on the interpretation and selection of the most important concepts and relationships by the test subjects themselves.

The main question posed in the study is as follows:

- In which manner do the concepts presented in the conceptual model work (i.e., external validity)?

In Chapter 2 of this article, the first aspect discussed relates to the definition of the internal control concept in the literature and according COSO ICIF (1992). In Chapter 3, the conceptual model is presented and discussed. Subsequently, in Chapter 4, the assessment of the external validity of the conceptual model by scientists and SME directors has been discussed.

The results of the exploratory research have been incorporated in tables and diagrams with additional explanations. Chapter 5 completes this article with the final conclusions and further discussion.

2. Internal Control—The Concept

The Internal Control issues are going about the systematic measures as reviews, checks and balances, methods and procedures instituted by an organization to conduct its business in an orderly and efficient manner, to

detect errors/fraud, to ensure accuracy and completeness of its accounting data and adherence to its policies and plans, to safeguard its assets and resources, to produce reliable and timely financial and management information. It is also the plan of organization and all the methods and measures used by a business to monitor assets, prevent fraud, minimize errors, verify the correctness and reliability of accounting data, promote operational efficiency, and ensure that established managerial policies are followed. Internal control extends to functions beyond the accounting and financial departments.

A number of different definitions over the time have been given for the term “Internal Control” within the teaching of accountancy, from Structure Studies and Administrative Organisation through to Administrative Information Provision (Hartman, 1995; De Koning, 2004).

In modern literature, a distinction is also made between the limited term as expressed in Dutch literature “Financial Control” and the more broadly interpreted term “Internal Control”:

- Financial Control: more restricted, more limited definition comprising the examination of the financial information for reliability (De Koning, 2004),
- Internal Control: broader definition that as well as relating to the assessment of information, also includes an assessment of decisions and implementation of business activities (efficiency and effectiveness) (Vaassen, 2000).

The Russian Corporate Governance code (“КОДЕКС КОРПОРАТИВНОГО ПОВЕДЕНИЯ”, hereinafter КОДЕКС) was published on 5 April 2002 gives the definition of the term Internal Control as referring to control of the business and financial activities including the planning and the duly appointed bodies within the company (“КОДЕКС”, <http://www.fcsn.ru/ru/>).

CoCo adds further nuance in respect of control, and defines control as “effective control”: “Control is what makes an organization reliable in achieving its objectives. Control is effective to the extent that it provides reasonable assurance that the organization will achieve its objectives. Or, stated another way, control is effective to the extent that the remaining risks of the organization failing to meet its objectives are deemed acceptable.” (CoCo, The Canadian Institute of Chartered Accountants, 1995).

COSO define internal control as—“a process, effected by an entity’s board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operations; reliability of financial reporting; compliance with applicable laws and regulations.” (COSO, 1992).

According to the COSO definition, internal control is made up of several different components “Internal control consists of five interrelated components:

- control environment,
- risk assessment,
- control activities,
- information and communication,
- monitoring” (COSO, 1992).

The definition of Internal Control in COSO ERM is converted into a broader definition of Internal Control, namely the definition of Enterprise Risk Management, of which Internal Control is an integral part (COSO 2004).

The COSO ICIF (1992) definition is the most complete and most extensive description of internal control in the organisation. In particular the following elements of the control environment of COSO determine the quality of internal control:

“the integrity, business ethics and expertise of the employees, the style of management, the way in which authorities and responsibilities are directed by the management, and the dedication and development of the personnel, the attention paid by the management to the business and the extent to which they direct the business, the so-called “tone at the top”. (Prujm, 2009)

On the basis of the exploratory study into the interpretation of the concept of internal control in the literature, the explanation of conceptual model and than the interpretation of the external validity of the conceptual model was firstly tested.

Subsequently, on the basis of the results of in-depth interviews, the theme of the leading concepts in relation to internal control issues in question was revealed. Finally, a review was conducted of the aspects of effective leadership in the light of the results of an external validity by SME directors.

3. The Conceptual Model, Method and Sample

3.1 Introduction

In this study, the external validity of the conceptual model was tested on the basis of a pre-test conducted with scientists (5) and businesspersons/directors of small to medium-sized enterprises (19). In Chapter 3.2 and 3.3, explanation has been given of the external validity method and the content of the sample. Next is the explanation of the basic concepts of the conceptual model in 3.4. Subsequently, in Chapters 4.1 and 4.2, the details have been outlined of the testing conducted by scientists and businesspersons of the external validity of this conceptual model.

3.2 External Validity Method

The entire study relates to the detailing of the concepts in the conceptual model by experts from the actual enterprises (i.e., D/MS's, CEO's and CFO's). In-depth interviews were conducted with the participating test subjects regarding the conceptual model. Each participant was asked to answer the questions posed regarding each concept in the proposed conceptual model and regarding the relationships between the various concepts. After having discussed all of the concepts included in the conceptual model, the participants were asked to circle the most important concepts and to indicate the relationship/causality between the concepts by way of drawing (directional) arrows (Groenland, 2009; 2011; see also Heckman, 1979; 2004; 2009).

Study questions regarding external validity:

Table 1 Study Question & Study Sub-questions regarding External Validity

Study Question	Sub-questions
In which way do the concepts presented in the conceptual model work?	In which way are the relationships between the concepts in the conceptual model interpreted and detailed by scientists?
	In which way are the relationships between the concepts in the conceptual model interpreted and detailed by the businesspersons/directors?

3.3 Sample SME Directors

Below, the characteristics of the directors interviewed have been incorporated into two tables and a figure.

Table 2 Characteristics of the Directors in the Qualitative Study

	D/MS	CFO	CEO	Total
Male	4	5	3	12
Female	2	2	2	6
Total	6	7	5	18

Table 2 explanation: In total, 18 SME directors were interviewed, of whom 12 participants were males and 6

participants were females. In the group, directors/major shareholders, a total of 6 participants were interviewed, i.e., 4 males and 2 females. In the group, CFO's, a total of 7 participants were interviewed, i.e., 5 males and 2 females. In the group, CEO's, a total of 5 participants were interviewed, i.e., 3 males and 2 females.

Table 3 Characteristics of the Directors in the Qualitative Study

	No. of Directors	No. of Employees	Average Age	Ownership
D/MS	6	19	49	77.5
CFO	8	9	43	0.3
CEO	4	8	46	3

Table 3 explanation: This table details how many directors of each category were interviewed, the average age of the group interviewed within each category (i.e., D/MS (director/major shareholder), CFO, CEO) and the average total percentage of enterprise ownership in each category.

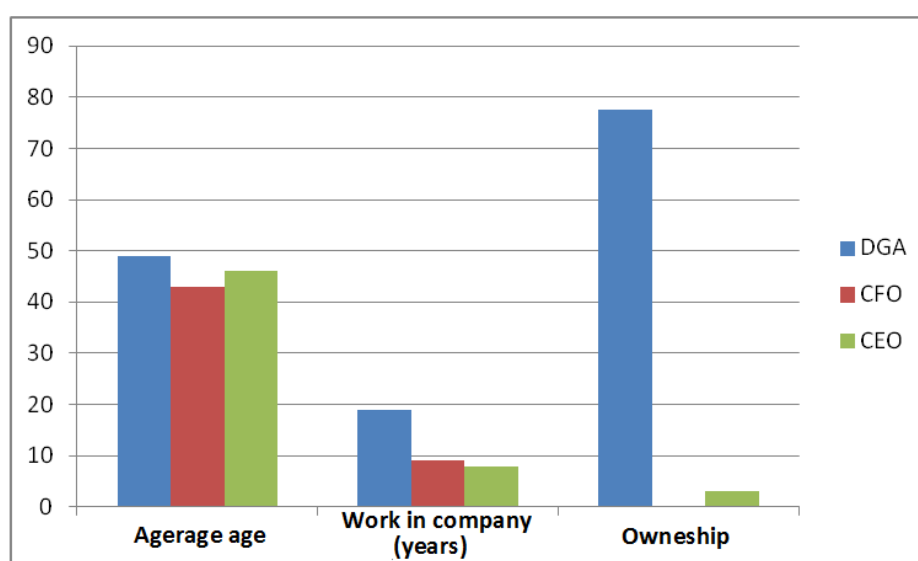


Figure 1 Age/Years Employees/Ownership/D/MS's, CFO's & CEO's

3.4 Basic Concepts: Complete Conceptual Model

The conceptual model was established on the basis of the *COSO* framework and *The Theory of Reasoned Action* "TRA" model developed by *M. Fishbein & I. Aijzen* and it illustrates the structure and level of detail of the internal control measures selected by the CEO or the CFO. The analysis of the results of the interviews, together with the theoretical framework of the *Fishbein & Aijzen* model and components of the *COSO Internal Control—Integrated Framework* "ICIF" (1992) led to the drafting of the questions for the survey research for this component.

The conceptual model consists of four components, as follows:

- BASIC/Input CONCEPTS (characteristics of the enterprise/businessperson)
- PSYCHOLOGICAL/MENTAL (*Fishbein & Aijzen*, TRA model concepts)
- BEHAVIOUR/BUSINESS ACTIVITIES (investment behaviour and *COSO* 1992 components)
- YIELDS/Revenues (efficiency/effectiveness and satisfaction)

Below, the complete conceptual model has been visually incorporated in a figure:

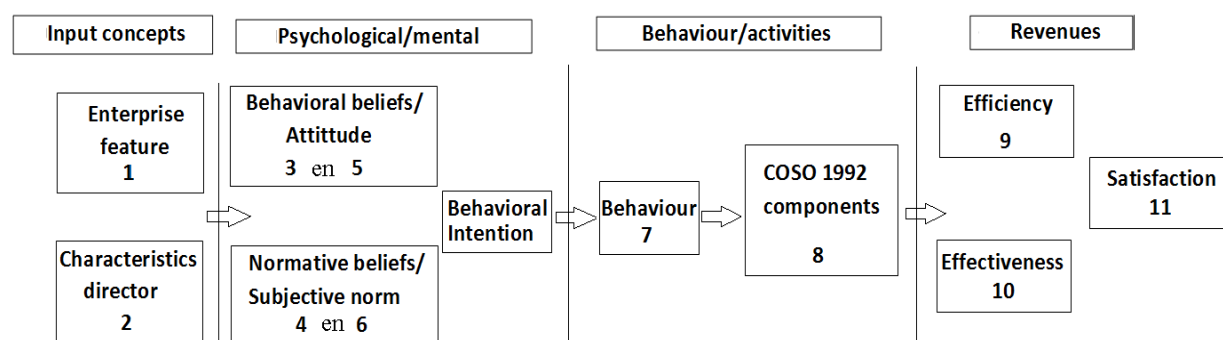


Figure 2 The Complete Conceptual Model

Figure 2 explanation—components of the conceptual model

The complete conceptual model includes the following terms/concepts: main characteristics of the company (1), characteristics of the person (2), beliefs/evaluations (3), normative beliefs (4), attitude (5), subjective norm (6), behaviour (7), business activities (8) (i.e., Control Environment Principles (CEP), Risk Assessment (RA), Control Activities (CA) and Information & Communication Principles (ICP)), efficiency (9), effectiveness (10) and satisfaction (11).

The components, psychological/intellectual and behaviour/business activities, relate to the concepts from the model in the perspective of the CEO/CFO and are the concepts from the model according to the theory of Fishbein & Aijzen regarding behaviour and behavioural intentions (Fishbein & Aijzen, 1975).

In *The Theory of Reasoned Action* (Fishbein & Aijzen, 1975; 1980), it was proposed that attitude (own beliefs, the convictions of an individual) and subjective norm (the views of others and evaluation of the level of cooperation provided by the director) lead to intention and ultimately to specific behaviour, i.e. actual actions.

Business activities are components of the *COSO ICIF* (1992) internal control system and the *COSO* framework, “*Internal Control over Financial Reporting, guidance for small public companies in 2006*”, i.e., CEP (Control Environment Principles), RA (Risk Assessment), CA (Control Activities) and ICP (Information & Communication Principles).

Yield “efficiency and effectiveness” is one of the objectives included in the *COSO ICIF* (1992). The objectives formulated for internal control of enterprises according to *COSO* are efficiency & effectiveness of business processes, to ensure the reliability of the financial reporting and to ensure compliance with laws and regulations (*COSO ICIF*, 1992). The “satisfaction” regarding the efficiency and effectiveness forms the last concept in the complete conceptual model.

The full version of the conceptual model, in which each concept was illustrated separately, was presented to the study participants (see Appendix 1, The Qualitative Study Conceptual Model).

4. External Validity of Conceptual Model

4.1 External Validity by the Scientists

In this study, a pre-test of the external validity was conducted by the scientists. Thereafter, the external validity of the conceptual model was tested by way of the qualitative in-depth interviews with the directors. The objective of the pre-test and the testing of the conceptual model was to gain more knowledge and insight into the choice of concepts and the relationships between these concepts. The results of this study will be used in further

research for the formulation of questions for concepts in a questionnaire in survey research.

Below, the choice of concepts from the conceptual model by scientists has been incorporated in a table.

Table 4 Pre-test Choice of Concepts by Scientists

	Enterprise Businessperson Characteristic 1, 2	Psychological Intellectual 3, 4, 5, 6	Behavioural & Business Activities 7, 8	Result 9, 10, 11
1	2A	3A / 3B / 4A / 5 / 6	7 / 8B / 8C	9 / 10 / 11A / 11B
2	2A / 2B / 2C	3A / 3B / 4A / 4B / 6	8D	10 / 11B
3	N/A	3A / 3B	8A / 8B / 8C / 8D	9 / 11A
4	2A / 2B	N/A	8A / 8B / 8D	N/A
5	1B	N/A	8D	9 / 10

Explanation of pre-test choices of concepts by scientists

Following the presentation and discussion of the conceptual model, the participants were asked to indicate which of these concepts they considered to be the most important, by way of circling the relevant concepts using a marker. These concepts have been incorporated in the table above. Subsequently, the participants were asked to indicate the causal relationships between the selected concepts, by drawing directional arrows. Following the pre-test assessment, the following concepts showed dominant pattern distribution:

- Basic Concepts:
Businessperson characteristics, namely leadership (2A) and communication (2B)
- Psychological/Intellectual:
The director's own opinion and assessment (3A & 3B)
- Behavioural/Business Activities:
Communication (8D) and risk management (8B)
- Yields/revenues:
Efficiency (9), effectiveness (10)

Following the pre-test with the scientists and discussion of the causal relationships between the concepts that they chose, the conceptual model was amended and has been illustrated in Figure 3 below.

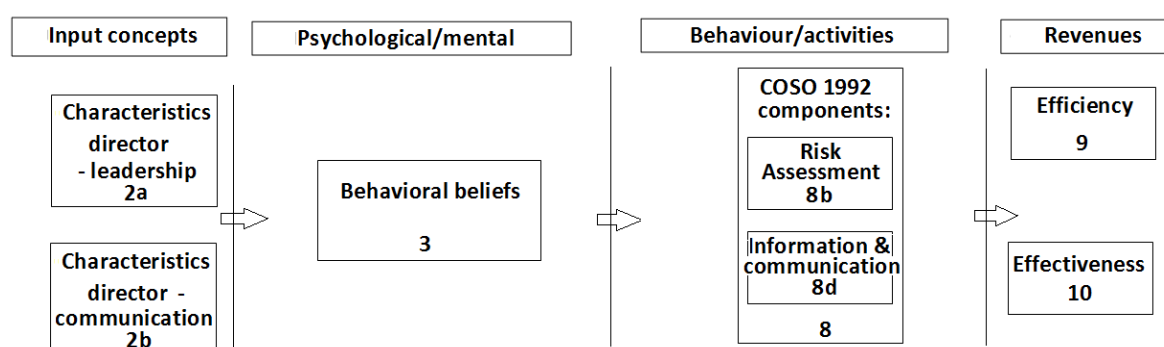


Figure 3 Pre-test Conceptual Model by Scientists

Figure 3 explanation of pre-test conceptual model by scientists

On the basis of the request to indicate the causal relationships between the selected concepts, it was apparent that the leadership and communication concepts were independent determinants for forming particular convictions

and objectives in the enterprise. Subsequently, there were causal relationships recognised between the formed convictions and two aspects of the *COSO ICIF* (1992) concepts, i.e., RA/Risk Assessment and ICP/Information & Communication Principles. These two COSO 1992 components can affect the efficiency and effectiveness of business activities.

4.2 External Validity by SME Directors

4.2.1 Qualitative Study Explanation—Choice of Concepts by SME Directors

During the main study, namely the qualitative research (in-depth interviews), the SME directors (19) were asked to circle the most important concepts and to indicate the relationships between the concepts by drawing directional arrows.

Following the presentation and discussion of the conceptual model, the participants were asked to indicate which of these concepts they considered to be the most important, by way of circling the relevant concepts using a marker. These concepts have been incorporated in the table above. Subsequently, the participants were asked to indicate the causal relationships between the selected concepts, by drawing directional arrows. Following the pre-test assessment, the following concepts showed dominant pattern distribution:

- Basic Concepts:
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- Psychological/Intellectual:
The director's own opinion and assessment (3A & 3B)
- Behavioural/Business Activities:
Communication (8D) and risk management (8B)
- Yields:
Efficiency (9), effectiveness (10)

Following the pre-test with the scientists and discussion of the causal relationships between the concepts that they chose, the conceptual model was amended and has been illustrated by SME directors. Below, the choice of concepts from the conceptual model by SME directors has been incorporated in a Figure 4.

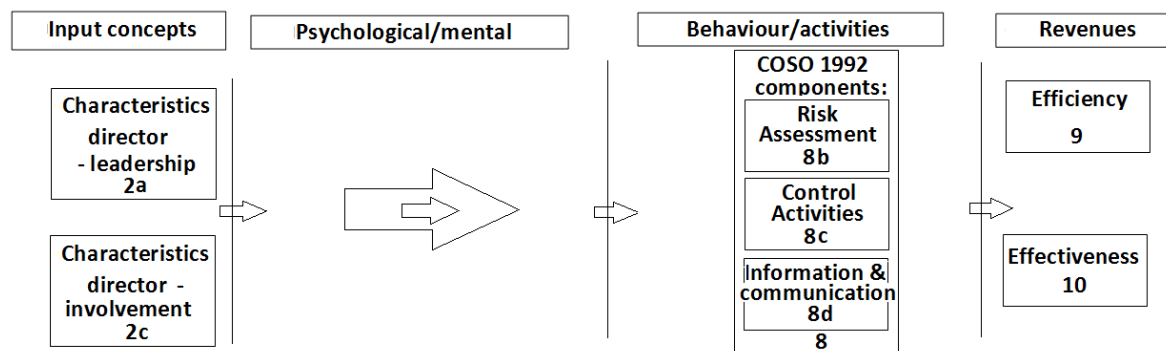


Figure 4 Qualitative Study of the Conceptual Model by SME Directors

Figure 4 explanation: pre-test conceptual model by SME Directors

On the basis of the question to select the most important concepts and to indicate the causal relationships between the selected concepts, it was clearly apparent that the choice of the “leadership” and “commitment” concepts was located to the left side of the conceptual model. These formed the independent determinants for the Internal Control (IC), according to the *COSO ICIF* (1992). The choice of IC components by the SME directors

was Risk Assessment, Control Activities and Information & Communication Principles. The selected IC components can affect the efficiency and effectiveness of the enterprise. On the basis of these choices and the visual display of the most recent concepts, we can see by which manner and which concepts from the conceptual model, according to the SME directors, work in a conceptual model.

The results of the testing of external validity of the conceptual model primarily indicate that in selecting the determinants for effective and efficient changes in behaviour, the SME directors specifically chose to utilise two concepts. These two concepts are characteristics of a businessperson, namely leadership style and commitment. The scientists primarily chose the combination of leadership style and communication.

In the last Chapter, the details of conclusions and discussion have been outlined, together with the explanation of the internal control components in relation to leading concepts (businessperson characteristics) and other concepts from the conceptual model.

5. Conclusion & Discussion

The study outlined in this article was an exploratory study regarding the details of the concept of internal control and testing of the external validity of the conceptual model by scientists and SME directors.

Initially, the concepts that were selected from the conceptual model by both professional groups and the determinants of behaviour (behaviour/business activities) were reviewed. Thereby, it was apparent that the concept, 'businessperson characteristics' was specified in the following manner:

- Primarily, the scientists selected *leadership style* and *communication*
- Primarily, the SME directors selected *leadership style* and *commitment*

Furthermore, the SME directors skipped specifying the process of the stimulation of particular behaviour (psychological in part) from the conceptual model, whilst the scientists selected the option, belief/evaluations. In the eyes of the SME directors, the IC components that contribute to effective and efficient management/leadership are: Control Activities, Information & Communication Principles and Risk Assessment. The scientists attached little value to the Control Activities, whereby this concept was not included in the pre-test of the study and the conceptual model.

However this study was undertaken among a limited group of scientists (5) (pre-test) and (18) SME directeurs with non-random selection by qualitative in-depth interviews, but there are good results concerning to the representativeness of the study of the validity of conceptual model in the practice of SME's and as a basis for the future quantitative research.

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