# DEVELOPING A NEW INTEGRATED COLLABORATIVE STRATEGIC MANAGEMENT ACCOUNTING (SMA) FRAMEWORK FOR THE 21<sup>ST</sup> CENTURY – AN EXPLORATORY MODELING

#### Linda Lo

#### **Abstract**

The aftermaths of Enron and Lehman Brothers cases, the financial tsunami and debt crises have triggered much concern about the sustainability of organizational performance. It also prompted the interests of author to study Strategic Management Accounting (SMA) to manifest its strategic role and further development as application discipline for the Accounting profession.

Nevertheless, the gap of defining strategic management accounting has been a debate of no consensus over the last 2 decades and lends itself the call for further research for more lights and understanding of SMA framework. Thus, the objectives of this proposal paper are to explore and propose a new innovative integrated collaborative strategic management accounting framework. It is expected that this new paradigmatic model in strategic management accounting perspective will contribute a good fit in the new literature.

It structures with Introduction, Literature Review, Methodology and Conclusion. Wishfully, it envisages not only as new integrated collaborative development for the 21st century strategic management accounting; but also can be applied for adoption by business organizations to impact performance in the long run.

Key words: Strategic Management Accounting, Management Accounting

JEL Code: M41, M49

#### Introduction

Following the Enron case, the subsequent financial tsunami and collapse of Lehman Brothers in 2008, much attention has been focusing on the corporate financial sustainability that prevents the failure of corporate governance and financial bankrupts. Subsequently, accounting measures and management policies are introduced to strengthen the financial health and in turn organizational performances. This triggers as to how strategic management accounting(SMA) maintains its strategic intent and role in management accounting in contribution to manage its challenges and sustain its impacts

The 6<sup>th</sup> International Days of Statistics and Economics, Prague, September 13-15, 2012

to organizational performance for the 21<sup>st</sup> century.

On the other hand, the long lasting academic debate of no consensus for an unified definition and framework of SMA poses the challenge and questions to its theoretical concept which in turn its adoption and application because of the lack of empirical evidences to justify the SMA significance in organizational performance. This calls for further research in better understanding of SMA which deems to explore its impacts and continuous contributions in response and to the results of prior researchers and academic commentators to follow up research in this dynamic discipline. This proposal paper is intended for this purpose and presented in four sections namely the introduction, literature review, methodology of the development of model and conclusion. The research question is to test for the extent of impacts of the new SMA framework to organizational performance.

In developing the new SMA framework, the premise of modelling the construct elements is to continue upon the prior empirical studies as well as adopting a sense-making approach in design by the author so as to contribute further insights in this regards. Organizational performances are affected by various multi-faceted dimensional factors internally and externally. With these aspects as assumptions and for the purposes of this proposal paper, the strategic formulation of the model is postulated as critical factors in corporate governance, Strategic management instruments, business environment and strategy. The respective elements in this design are namely Risk management, Strategic instruments, Intensity of Competition and Espoused strategy. These independent variables are modeled with two other moderating and mediating variables of the role of strategic management accountant and strategic process such that the outcomes will have impacts on the organizational performance. It is new and innovative paradigmatic because of an integrated collaborative modelling and that research like this has not been done before.

The methodology for this modelling is proposed to have two phases. The development phase will cover mainly a grounded approach of qualitative methods to structure in-depth semi-interviews for 15-20 companies. The alternative or supplementary measures can also be done in focus group or observations. The objective is to identify the most relevant measurement variables and update the current status of SMA in business community which aims to shed more light and meanings for the preparation of testing phase. The testing phase will be mainly quantitative measure in that to present the new model to the financial senior executives and test for significance. The sampling size will be at least 300 and expect to cover a free sample frame of large population of all companies and industries. There will also be experimental sampling using secondary

data. The purpose of this is to test the model for generalizability and reliability in addition to the first hand data. Further longitudinal study of the new model from one to two cases are aimed to test for the extent and impact of the model in the long run.

In conclusion, the expected contributions of this paper is to propose a new theoretical paradigm that attempts to theorize the concept of SMA which may be used to unify the gaps of different perspective and approaches with the new constructs of strategic components. It also fulfil the enthusiasm of a new formal conceptual framework that helps to understand more fully about the strategic construct and role intents which may be useful to apply in particular for the 21<sup>st</sup> century SMA.

#### **Literature Review**

In Smith(2008) article of *Strategic management accounting: how far have we come in 25 years?*, it concludes of no consensus or uniformity in defining SMA. To review the essence of SMA, it was first launched by Simmonds(1981), whom published a paper in the UK professional Management Accounting magazine, in which he argued a strong case for the adoption of strategic management accounting (SMA). Several commentators(Bromwich and Bhimani, 1994; Dixon and Smith, 1993; Roslender, 1995) continued to believe that it was only a matter of time before SMA was adopted widely across industry and that it would emerge as a major force in shaping modern management accounting.

The literatures have grown substantially ever since, nevertheless, it suffers from a relative dearth of empirically based research. It is because substantial literatures were geared towards the debate over the definitions of SMA with no consensus. This still gives a research gap in literatures to propose further investigation in SMA approach and strategic role. In particular, the importance of which, SMA in business applications can be adopted by corporations in developed nations in North America, Europe or even now across the emerging countries. That is the reason why it still has its mission to research and explore its impacts. To highlight the understanding of SMA, it can be interpreted as:

- Simmonds defined it as "the provision and analysis of management accounting data about a business and its competitors, for use in developing and monitoring business strategy" (Simmonds 1981, p.26)
- O Dixon and Smith(1993) sees SMA as lying at the interface of management accounting and strategy.
- A range of techniques have been included under the umbrella of SMA, and some commentators define SMA in terms of its techniques. Shank and Govindarajan (1994) For examples, it refers to target costing, life-cycle costing, strategic cost

analysis, competitor cost analysis, activity-based costing(ABC), activity-based management, attribute costing, life cycle costing and strategic performance measurement systems.

- o It can be viewed strategic as a process planning or design(Lord 1996)
- Roslender and Hart (2002 p. 269) argued that SMA should become "theories and concepts to form a 'marriage of equal partners'". The resultant "brand management accounting" would include performance measures such as market share, market growth and brand strength, and customer profitability reports"
- o making Management Accounting more strategic (Roslender & Hart 2003, p.272) The overall expositions of SMA intend to positioning management accounting to be more strategic in this sense. Hence, the gap of variation in SMA which is still under researched has no universally accepted SMA framework (Coad,1996; Nyamori et al., 2001; Roslender & Hart,2003; Tomkins & Carr, 1996).

Furthermore, it also reveals different perspective in terms of how SMA is delivered to business and professional accountants communities. The North Americans perspective is different from the UK/European in that they focused on applying strategic cost management(SCM) with techniques. Shank and Govindarajan (1994). This is in line with academics; Robert Kaplan, Robin Cooper and John Shank whom take on the positivist approach and urge to improve relevance by adopting strategic tools and techniques such as ABC or balance scorecard. This contrasts with the additional sociological view of Roslender & Hartis(2003) with whom set on the marketing perspective as a new direction in SMA. They see the synergistic relations that are needed to progress SMA as being at the opposite end in spectrum of traditional relationships. These relationships will require accountant managers to abandon their discipline-focused practices in order to adopt greater inter-functional co-ordination, and possibly more toward an area that they term "strategic marketing management accounting"

SMA still evolves and Chenhall(2003) has provided an overview of contingency-based studies of management accounting; which was later further elaborated by Cadez & Guilding (2008). It posits a contingency framework that opens another alternative of SMA. The findings provide support for this framework and that business performance depends on the fit between organizational context and structure. Accordingly, despite the literatures continues with no agreed SMA.

### **Assumptions & Formulation of Design Framework**

Drawing the conclusions from the analyses of literature gap of SMA in strategic components and connotations, it seems problematic in that different SMA definition lacking in an unified conceptual understanding in an agreed framework is a perspective of

modeling. It also reveals the need of an ontological assumption such that it has to recognize the nature of SMA knowledge and reality with which is changing over time and hence its strategic components within the management accounting when applied. The emergent definition of SMA from the literature can be generalized from the strategic intent, that based on the analysis of the business context, with which influences the perspective and approach of SMA accordingly. Based on these premise and analyses, as SMA evolves, there is always the gap that is just fit in the knowledge development and so the issue now is how to model SMA. This is the research objective and expected contributions in a proposed model with strategic intent and aspects in marketing, strategy and nowadays corporate governance. It reflects a gap of an agreed framework and that misses the essential convergence links of strategic factors over the years, namely the concepts of integration with multi-discipline and dimensional knowledge with collaboration amongst all previous researches which can fit into the long term development of SMA. With these regards, it calls for a need to conceptualize a new integrated and collaborative framework that helps to build this understanding from theorizing to practice. As will be illustrated in the following sections with model design, it postulates to resolve the gap variations in interpretations. Hence, the questions herein: What is the alignment of the new integrated collaborative model and to what extent is the effect of new SMA framework has on the organizational performance?

Along this line, rhetorically from a literal sense, SMA with its strategic intent is formulated with its strategic components in positioning management accounting. For instance, the review of accounting and strategic management literatures can be found that organizational performances is affected by business environment, strategy, internal structure, and control system (Lenz, 1980; Gupta and Govindarajan, 1984; Govindarajan and Gupta, 1985; Govindarajan, 1988; Tan and Lischert, 1994; Langfield-Smit, 1997). Furthermore, from a sense-making view of business nowadays, organization performances are affected by various multi-faceted factors from internal and external and so with these aspects as assumptions and rationale, the strategic formulation of the model is postulated to have strategic intents for corporate governance, Strategic management & Accounting instruments, business environment and strategy. The respective critical factors considered in the design are namely Risk management, Strategic instruments, Intensity of Competition and Espoused strategy. Therefore, the modeling of respective dimensional components will be discussed in the following sections and depicted in Figure 1 of the paradigm of an integrated collaborative SMA framework.

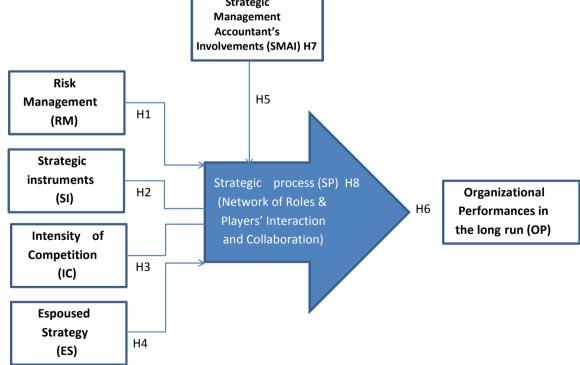
### The Paradigm Of An Integrated Collaborative SMA Framework

For the construct of 4 dimensional factors, it incorporates two elements with competition intensity and espoused strategy for further research adapted from Cadez & Guilding(2008); together with risk management and Strategic instruments proposed here as a new integrated collaborative model. These 4 dimensional strategic factors are seen to be crucial and inter-related dynamic elements in the paradigmatic stage and each of them is explained as follows.

- Risk management(RM) includes environmental uncertainty or market risk, organizational structure and cultures or operational risks, financial risks
- Strategic instruments(SI) refers to techniques or tools such as balance scorecard, activity-based costing, performance management systems, attribute costing and pricing..etc
- Intensity of Competition(IC) denotes competitors accounting, the intensity of global and local competitions.
- Espoused strategy(ES) is defined as how decisions are justified after the facts or strategic management, or when corporations have set in place their corporate, business and functional strategies.

Strategic
Management
Accountant's

Figure 1: The Paradigm of an Integrated Collaborative SMA Framework



Source & adapted from S. Cadez, C. Guilding / Accounting, Organizations and Society 33 (2008) 836-863

- Organizational Performance(OP): it could be financial and non-financials. Performance measurement is based on Hoque & James(2000) & Cadez & Guilding(2008) which comprise: (1) return on investment, (2) margin on sales, (3)capacity utilization, (4) customer satisfaction, and (5) product quality (6) development of new products, and (7) market share.
- Strategic process(SP) it is defined as an integrated collaborative decision making procedure or strategic formulation process in which the extent of the process depends on the company's policy or complexity in practice(such as larger firms would have a formal and longer strategic procedure in time frame whereas medium size firms might have a shorter process instead to consolidate all the strategic data and information) in reaching out a strategic decision. Since the construct has 4 dimensional factor elements in the framework and they are interdependent and interactive from the management's point of view, it infers a network of different roles of players and stakeholders interacting with one another during the strategic process in order to reach a strategic management decision and practice as well as reflecting how they run the company's businesses strategically. The impact of SMA would depend on the quality or the sophistication of the strategic process so that decision outcome would fit in the strategic direction and development of organization. The end products of SMA are outcomes of strategic management accounting decisions that lead to forthcoming business results and organizational performances. During the testing phase, this variable can be considered as control variable when each of the independent factors is tested for the significance. After the independent variables are in place for multiple regressions, it will become a mediating variable when SMAA is not participated in the testing scenery.
- Strategic Management Accountant Involvement(SMAI) The role of the strategic management accountant is also crucial in this strategic process. Strategic Accountants in previous literatures (Chenhall & Langfield-Smith, 1998a; Coad, 1996; Nyamori et al., 2001) can be viewed as proactive in analyzing broader and strategic business management issues rather than those narrowly defined by a financial orientation, and also more customer-oriented by providing greater counsel to internal-clients within the corporations. Therefore, SMAA not only plays the role of proactive advisor, but also be a creative and innovative designer to present a strategic road map to support senior management that leads to the success or sustainability of the company's performance in the long run. Thus, it is essential to test its significance and impacts to the business performances. If so, it

will also impact the professional development and training of strategic management accountants. When SP is tested for significance, the role of SMAA will be treated as a mediating variable. During the 2<sup>nd</sup> stage of testing, it will be considered as moderating variable.

# **Proposed Research Methodology**

The study and modelling an integrated collaborative framework will be divided into phases of development and the testing.

### **Development Phase**

In the development phase, the framework will be designed through Literature Review and qualitative method to determine the measurement of components in the new framework. It starts off with qualitative methods which deemed to be more meaningful and desirable as grounded approach to unlock in-depth knowledge for better understanding before proceeding to the testing phase and regression analyses. The objectives are firstly to identify relevant variables that can be used to develop the hypotheses in testable form since the construct elements are dimensional. Secondly, the variables identified can be further developed for the survey questionnaires during the testing phase. There are 3 types of qualitative methods:

- In-depth interviews considers to carry 15-20 semi-structure interviews. The
  interviewees will be senior executives such as directors, board members or senior
  financial executives. The objective is to understand the perspectives of business
  senior executives of the definition and practice of SMA.
- ii. Alternatively, it can also be done in a focus group where senior business executives and management accountants or financial executives will be invited on-line to focus group meetings. The purpose is to provide a relaxed and convenience right in their offices to participate in the study.
- iii. Observation study- another alternative to observe the existing business communities of how they determine and practice strategic management accounting in an on-site natural setting. It aims to update the actual practice and compare with prior empirical results. It also helps to substantiate more empirical data update to what extent does business sector adopts SMA. This primary data will be collected based on the operationalization of strategic management accounting. In order to standardize the observations, an observation checklist will be prepared. The sample sizes will be 15-30 depending on the availabilities of companies.

#### **Testing Phase**

Quantitative methods will be used for the testing phase. The structural equation model designed as: OP = f(RM, SI, IC, ES, SP, SMAI)

Initially, each of the construct components from the equation will be tested for relationship significance with organizational performance which is mapped to the hypotheses H1, H2,...H8 identified in Figure 1. The model will be presented to least 300 prospective companies via questionnaire so as to capture as many responses as possible and also prepare follow up survey strategy in rounds in order to get the target response rate at least 70% of the sample size.

The regions of sampling will cover UK and/or France, Hong Kong and/or China. The database for the testing will be retrieved from professional bodies such as CIMA, HKICPA, CMA, CICPA and also from trade associations and government trade development offices. All surveys will be sent to senior financial executives such as CFO, CEO, Finance Director, Controller of the companies or equivalent capacity even though it is expected that the medium to large companies will normally have SMA. Essentially, the samplings objective aims to cover as many companies and industries as possible. It is hoped to have a generalized view in the first stage of samplings as well as to reduce sample biasness by including all possibilities from which will eventually make up a free large population.

There will be two samples; one for the testing of new framework using first hand collected data and the other using secondary data as experimental sample for testing the results. The comparison approach attempts to explore more knowledge insight from the differences in samples results and also considers longitudinal analyses based on the past data. All sample data will be randomly drawn from the database and coded prior to the next step of distribution of the questionnaires.

The hypotheses testing will study the impacts of proposed integrated collaborative framework to Organizational Performance. There will be two-step tests with and without strategic accountants' involvements. The dependent variables will be performances in financials and non-financials. Since the 4 independent variables are dimensional, it will have a set of questionnaires to test its significance to performance as well as quantitative measurement criteria in prescribing the tests.

For the data collection, it will take 1 month for the first round to collect the data response. If the response results less than 70%, the 2<sup>nd</sup> round data collection will run for another month to achieve the closest target as possible. Those with no-reply responses will be followed up and investigate the possible reasons of no-response. The expected turnaround time for the first round data collection is 3 months. All the tests results and findings for

the above will be analyzed accordingly.

☐ Qualitative method: Case study

In order to shed more lights from the model in the long run and to substantiate the validity and reliability, it plans to implement the framework in a live case study with 1-2 companies for longitudinal studies. The purpose is to follow through the organizational performance for a period of 3 years term to reveal the impacts of the theoretical framework in practice. This longitudinal study will be considered as part of the contributions to bridge the gap between theory and practice and the follow up is expected to contribute in future research and management accounting theory.

### **Conclusion**

This paper reviews different interpretations of SMA as seem problematic in literatures. It lacks of a unified understanding of a theoretical framework which has been a debate over the last 2 decades. On the other hand, the position of this paper is that it postulates a modeling effect that can dismiss the gap since it recognizes the ontological and epistemological assumptions and premise to proposing a new innovative integrated collaborative SMA framework. It proposes 4 construct elements of dimensional strategic critical factors that are drawn to strengthen corporate governance in control, employing strategic instruments and espoused strategy to combat intensity of competitions; with the integration of two collaborative variables of strategic process and participation of strategic accountant to impact organizational performance.

Hence, the contributions in the concept of modeling firstly incorporates further the essential strategic components adapted from previous research studies with a modified flexibility and feasibility to bridge the gap of variations in contents and perspective. Secondly, the enhancement captures both internal and external settings which accommodate a broader scope of strategic critical factors with dimensional effects to organizational performance. It also creates a more balanced view which author postulates to manifest the dynamics of strategic intent for SMA.

On the application side, it postulates the impacts of the new model to organizational performance as SMA is crucial to the organizational performance; since financial management is the heart and core of the health of the organization operations. Thereby, the expected contributions may also bridge the gap of theory and practice such that it enhances adoptions by organizations with SMA and increases positive impacts. With the essences of this proposal, it will be just wait and see of the testing in next step so that academic researchers and reviewers can feedback and follow up with the testing results.

### References

Accounting Research (2009). Editorial: risk management, corporate governance and management accounting: emerging interdependencies. 20,pp. 2-5

Baines, A. & Smith, L.K. (2003). Antecedents to management accounting change: A structural equation approach. *Accounting, Organizations and Society*, 28, pp.675–698.

Baldvinsdottira, Gudrun; Mitchellb, Falconer & Nørreklit, Hanne. (2010). Issues in the relationship between theory and practice in management accounting. *Management Accounting Research*, 21 pp.79–82

Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, Organizations and Society*, Vol. 33,pp.836-863

Cravens, K. S., & Guilding, C. (2001). An empirical study of the application of strategic management accounting techniques. *Advances in Management Accounting*, 10, pp. 95–124.

Dixon, R. & Smith, D. (1993). Strategic management accounting. *Omega, Vol. 21*, No. 6, pp. 605-18.

Guilding, C., Cravens, K. S., & Tayles, M. (2000). An international comparison of strategic management accounting practices. *Management Accounting Research*, 11, pp. 113–135.

Johnson, T. H., & Kaplan, R. S. (1987). *Relevance lost: The rise and fall of management accounting*. Boston: Harvard Business School Press

Kaplan, R. S. (1984). The evolution of management accounting. *The Accounting Review*, 59, pp. 390–418.

Lord, B. R. (1996). Strategic management accounting: The emperor's new clothes? *Management Accounting Research*, 7, pp.347–367.

Ma, Yi & Tayles, Mike.(2009). On the emergence of strategic management accounting: an institutional perspective. *Accounting and Business Research*, Vol. 39, No. 5, pp. 473–495

Rodgers, Waymond & Guiral, Andrés. (2011) Potential model misspecification bias: Formative indicators enhancing theory for accounting researchers. *The International Journal of Accounting*, 46, pp. 25–50

Roslender, R. and Hart, S.J. (2003). In search of strategic management accounting: theoretical and field study perspectives. *Management Accounting Research*, *Vol. 14*, No. 3, pp. 255-79.

Shank, J. K., & Govindarajan, V. (1992). Strategic cost management: The value chain perspective. *Journal of Management Accounting Research*, 4, pp. 179–197.

Simmonds, K. (1981). Strategic management accounting. *Management Accounting*, Vol. 59, No. 4, pp. 26-30.

Smith, D.& Langfield-Smith, K. (2004). Structural equation modeling in management accounting research: Critical analysis and opportunities. *Journal of Accounting Literature*, 23, pp.49–86.

Smith, K.L. 2008. Strategic management accounting: how far have we come in 25 years? *Accounting, Auditing & Accountability Journal Vol. 21*, No. 2,pp. 204-228

#### **Contact**

Linda Lo
ESC Rennes School of Business, France
2 rue Robert d'Arbrissel CS 76522
35065 Rennes Cedex
linda.lo@esc-rennes.fr