

The Use of Strategic Management Accounting Techniques (SMATs) in Sustainability Performance Measurement for Corporate Governance in Nigeria

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Abstract *The present study was conducted to determine whether the use of strategic management Accounting Techniques (SMAT) is capable of providing Managers with information for sustainability in corporate governance. A survey was carried out using a well-structured questionnaire with questions on five point Likert format. The questionnaire was administered on one hundred and five Management staff specialized in Accounting and management related disciplines across product sector organizations. Primary data was gathered from the one hundred and five respondents and multiple regression technique was used for analysis. Our findings revealed the need for managers to employ strategic management accounting techniques (SMATs) to enable them identify, accumulate and manage social and environment costs of their activities for good corporate governance in Nigeria.*

Key words Strategic management, corporate governance, performance, accounting techniques, sustainability

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1. Introduction

The relationship between strategy and management accounting has commanded considerable attention from management accounting researchers in the last two decades. There are various strategic alternatives for business to follow to reach their primary goals. Considering the sustainability of business in a competitive environment and to have an efficient role in markets, proper strategies should be selected for a successful business operation. The basic targets of competitive strategies are to comply with the market rules of competition and convert these rules into an advantage for the business. While developing their competitive strategies, businesses create a general formula about how to compete, what the targets should be and which policies should be implemented to reach these targets (Ebru and Semra, 2013). Similarly, businesses should also provide developments and innovations in process and management issues to gain a sustainable competitive advantage. In this sense, business managers should tend towards strategic management accounting including the use of management accounting systems to provide information support in strategic decision marketing and control activities (Cinquini and Tenucci, 2010). A business tendency towards strategic management activities and the use of competitive strategies and methods indicate a kind of investment in the long-term performance of the business. The modern day business environment is in a state of flux and unpredictability rigged with multiple challenges, risk and uncertainty among market participants caused by significant changes such as globalization, development in information and communication technology (ICT); growing corporate and social responsibility requirements from corporations, marked by increased environmental and social awareness, and tremendous changes in

product technologies (Egbunike *et al.*, 2014). Therefore, the most important challenge facing management in this information era is on how to obtain needed information necessary for managing production cost, quality and time related issues (Ab-Khadash and Feridun, 2006). This has necessitated that management develop and implement systems capable of obtaining internal and external cost and market information necessary to support strategic decision – making, planning and control for improved organizational success and a sustained market competitiveness (Egbunike *et al.*, 2014). Thus management accounting is that sub accounting system which aims to serve the internal management of the organization and assist them in performing their functions of planning, control, decision-making and performance evaluation in the operational and long range. On the other hand, Johnson and Kaplan (1987) observed that traditional management accounting systems are inadequate in fulfilling this role (Shah *et al.*, 2011). They stated that the focus of traditional management accounting is too late, too aggregated and too distorted to be relevant for managers planning and control decisions. Ramljak and Rogoslic (2012) observed that the focus of traditional management accounting on financial information neglecting the operational environment of the business where decisions are made and implemented is a major weakness of the system in modern day business contextualization. They further noted that much of the domain of conventional management accounting appears to be more associated with tactical than strategic management.

It is noted that organizations can respond to this state of flux by developing and installing innovative management systems which continuously reflect the growing complexity of the business environment and monitor organizations own strategic responses to such complexity (Abdul Rahman *et al.*, 2012). The need to include non-financial (qualitative) information and that obtained from the operational environment of the business in order to ensure a successful implementation of the company's strategy gave rise to development of the strategic management accounting techniques. Strategic management accounting techniques (SMATs) is specific to the extent that it connotes the integration of external with internal financial and non-financial information (Rehana, 2011). It is postulated that sustainability is a multi-faceted construct requiring performance across three dimensions (social, economic and environmental) management accounting tools that is strategically poised in capturing and rendering the needed information (i.e. social information, economic information and environmental information) to management would enable the absorption and utilization of such information for holistic management of performance across the three dimensions.

2. Objectives of study

The main objective of this study is to determine the use of strategic management accounting techniques (SMATs) on sustainability performance measurement for corporate governance.

The specific objectives of this study will be focused on:

- To determine whether the use of strategic management accounting techniques in corporate governance would provide managers with information for social performance measurement and management.
- To examine whether the use of strategic management accounting techniques in corporate governance would provide managers with information for economic performance measurement and management.
- To investigate whether the use of strategic management accounting techniques in corporate governance would provide managers with information for environmental performance and management.
- To evaluate whether the success achieved from the use of strategic management accounting techniques in corporate governance would provide managers with information needed for sustainability performance measurement and management.

3. Research questions

The following research questions were raised for this study.

- To what extent does the use of strategic management accounting techniques in corporate governance provide managers with information for social performance measurement and evaluation?
- To what extent does the use of strategic management accounting techniques in corporate governance provide managers with information for economic performance measurement and evaluation?

- Does the use of strategic management accounting techniques in corporate governance provide managers with information for environmental performance measurement and evaluation?
- Does the success achieved from the use of strategic management accounting techniques in corporate governance provide managers with information needed for sustainability performance measurement and management?

4. Statement of hypotheses

The following Null hypotheses were formulated for the study.

Ho₁: The use of strategic management accounting techniques in corporate governance would not provide managers with information needed for environmental performance measurement and evaluation.

Ho₂: The use of strategic management accounting techniques in corporate governance would not provide managers with information needed for economic performance measurement and evaluation.

Ho₃: The use of strategic management accounting techniques in corporate governance would not provide managers with information needed for social performance measurement and management.

Ho₄: The success achieved from the use of strategic management accounting techniques in corporate governance would not provide managers with information needed for sustainability performance measurement and management.

5. Literature review

5.1. Theoretical frame work

Most of the literatures regarding strategic management accounting were at the conceptual levels. Egbunike *et al.*, (2014) sees strategic management accounting as the monitoring and analysis of management accounting information of the enterprise and its competitors in order to develop and control strategy. Strategic management accounting expresses the use of management accounting system to provide information support to business managers in strategic decisions and control activities (Ebru and Semra, 2013). The chartered Institute of management Accountants (CIMA, 1991), strategic management accounting data relating to business strategy particularly the relative levels and trends in real costs and prices, volumes, market share, cash flow and the demands on a firm's total strategic management Accounting (SMA) is growing, there is still limited consensus with respect to what constitutes SMA (Roslender and Hart, 2003; Bhimani and Langfiel 2007; Cadez and Guilding, 2007 and Cadez, *et al.*, 2008). They focused on two distinct yet complementary dimensions of SMA. These are firstly adoption of strategically oriented management accounting techniques and secondly accountant's participation on in strategic management processes. In their study, they supplemented Guilding *et al.*'s (2000) distillation of 12 SMA techniques with four more techniques concerning primary and customer accounting. These techniques have two major orientations namely environmental (outward looking) and or long-term (forward looking).

The following strategic management accounting techniques are considered in the current literature's of strategic management accounting (Ramljak *et al.*, 2012; Shah *et al.*, 2011 and Cinquini *et al.*, 2006).

- *Attribute Costing*: This is referred to as costing of specific product features attributes which appeal to customers (Ramljak and Rogosic, 2012). These attributes are viewed as cost object (Cinquini *et al.*, 2006 and Egbunike *et al.*, 2014).

- *Activity Based Costing*: Based on the identification of activities performed by the company which are considered the causes of indirect costs in the company (Ramljak *et al.*, 2012 and Egbunike *et al.*, 2014).

- *Benchmarking*: This requires the comparison of company performance to that of an ideal standard with the goal of improvement in organizational practices.

- *Competitive position monitoring*: This requires obtaining information on competitors' performance such as sales, market share volume and unit costs and company performance with these in order to control and formulate strategy (Cinquini and Techucci, 2006 cited in Egbunike *et al.*, 2014).

- *Competitor Cost Assessment*: This relies solely on cost information from competitors (Egbunike *et al.*, 2014).

- *Competitor performance appraisal based on published financial statements*: This approach requires obtaining and analyzing competitor information from published financial statement that is available for use (Egbunike *et al.*, 2014).
- *Customer Accounting*: This includes all the practices directed to appraise profit, sales or costs deriving from customers or customer segments (Cinquini and Tenucci, 2006).
- *Integrated Performance Measurement Systems*: The systems combine financial and non-financial measures i.e. quantitative and qualitative factors in defining corporate performance (Egbunike *et al.*, 2014).
- *Quantity Costing*: This technique classifies and monitors costs as deriving from quality prevention, appraisal, internal and external failures, environmental and safety costs (Cinquini *et al.*, 2006).
- *Life Cycle Costing*: The technique calculates costs associated with a product during its entire life cycle. This corresponds to the market life of the product i.e. introduction, growth, maturity and decline (Egbunike *et al.*, 2014).
- *Strategic Pricing*: The technique regards the use of competitor information such as competitors' reactions to price changes, price elasticity, economics of scale and experience in the pricing process (Egbunike *et al.*, 2014).
- *Strategic Costing*: This technique involves relating cost accounting systems in the organization to corporate strategy which leads to the development of strategic costing tools. Moreover, at the heart of this system there is competitive advantage that can be achieved through product positioning and market penetration (Egbunike *et al.*, 2014).
- *Value Chain Costing*: This involves all the activities performed from the design stage to the distribution stage of the product. Also, it shows that accounting theory and information technology (Kirli *et al.*, 2011).
- *Target Costing*: This is determined by deducting from the selling price a desired profit margin, the product design is then altered to contain the target cost.
- *Social Management Accounting*: This approach facilitates the identification, recording and measurement of social cost information for internal decision making (Petcharat *et al.*, 2010).
- *Environmental Management Accounting*: It is concerned with the identification, compilation, estimation and analysis of environmental cost information for better decision making within the organization.

5.2. Empirical review

There are limited studies in the literature investigating the relationships between strategic management accounting technique and performance (Ebru and Semra, 2014). Cheball and Langfield-Smith (1997) carried out a study with the largest businesses in Australia and observed significant relationships between SMAT and business performance. Cadez and Guilding (2008) indicated a weak relationship between the usage of SMAT and 7-Dimensional performance of the top 500 Slovenian businesses. Sener and Dirlik (2012) investigated the relationship between SMAT usage and the perceived performance of the top 1000 businesses in Turkey and observed a medium level relationship between them. Cinquini and Tenucci (2006) in a study of large sized Italian firms identified the intensity of usage among Italian companies. The following techniques were ranked highest with mean scores above 3. Attribute costing customer accounting: strategic pricing, competitive position monitoring, competitor performance appraisal based on published financial statements, strategic costing and quality costing. The techniques that have mean scores below 3 were competitor cost assessment, Target Costing, Bench marking, Value chain costing, integrated performance measurement and life cycle costing.

Abdul Rahman *et al.* (2012) provided a case study of SMA application with specific reference to benchmarking practice on three private hospitals located in the Northern region of Peninsula Malaysian namely Orange Hospital, Red Hospital and Purple Hospital. The study shows that Orange Hospital adopts both internal and external benchmarking techniques, pricing, costing policy, procedures and standard operating procedures were used in the hospital benchmarking process. All these areas were benchmarked with other internal and external counterparts to achieve standard practices and coordination among all group members (Egbunike *et al.*, 2014).

The results of the interview session with the staff of Red Hospital (a no-for-profit Hospital) revealed that bench marking was not considered a simple task thus attention should be geared towards key areas that require improvement. The Purple Hospital acknowledged that benchmarking activity is an area that is under explored since the practice merely involves informal discussions with other hospital in Penanay Finance manager of the hospital confirmed that the hospital made unsatisfactory attempt to understand how this management accounting technology works and it's useful to assist the hospital in implementing better managerial practices (Abdul Rahman *et al.*, 2012). In a study of 400 Croatian large sized companies, Ramijak and Rogosic (2012) observed that Activity based costing, Quality costing, Target costing and balanced score card hence the frequency of 40%, 39.4%, 25.8% and 15.2% respectively. And that life cycle costing and environmental costing hence the least frequency of 9.1% and 6.1% respectively. Moreover, the result of two or more SMATs will have a positive effect on cost control and reduction improvement.

A study on the importance of four strategic management accounting concepts using 20 respondents from 4 Romanian companies revealed that

- i. Value chain Analysis has a mean score of 3.64.
- ii. Activity Based costing has a mean score of 3.50
- iii. Continuous improvement has a mean score of 3.73 and
- iv. Balanced Score cards have a mean score of 3.25.
- v. Balanced score cards has a mean score of 3.25.

The result indicated that certain constrain and difficulties in the use of strategic management accounting techniques have a weighted mean score of 3.17. The most significant constrain was the high cost associated with the use of these methods compared with traditional methods. It was also found that many benefits can be derived by Romanian companies from the application of strategic management accounting techniques (Hussein and Hamza, 2012).

6. Research design and methodology of research

Questionnaire was administered on one hundred and five (105) respondents to ascertain the perception of accounts on Strategic Management Accounting Techniques (SMATS). The questionnaire was divided into sections A, B, C and D. section A was designed to provide information on the relevance of SMATS on environmental information. Section B was to provide information on the relevance of SMATS on economic information. Section C was to provide information on the relevance of SMATS on social information and section D was to provide information on the opinion of respondents on the application of SMATS in the provision of information for sustainability performance measurement.

The questions were structural using the five point Likert scale format.

7. Model Specification

(a) For Null hypothesis "Ho₁".

$$Y = a + BX_1 + BX_2 + BX_3 + BX_4 + M \quad (1)$$

Where y is corporate environmental performance measurement

X₁ = Environmental Cost identification

X₂ = Environmental Cost accumulation

X₃ = Environmental Cost management

X₄ = other product related environmental costs.

(b) For Null hypothesis Ho₂:

$$Y = a + BX_1 + BX_2 + BX_3 + U \quad (2)$$

Where y is Economic information areas

X₁ = product profitability assessment.

X₂ = market positioning

X₃ = identification of quantifiable and non-quantifiable product costs.

(c) For Null hypothesis H_{03}

$$Y = a + BX_1 + BX_2 + BX_3 + BX_4 + U \quad (3)$$

Where y is corporate social performance measurement

X_1 is Social Cost identification

X_2 = Social Cost accumulation

X_3 = Social Cost management

X_4 is other product related social costs.

(d) For Null hypothesis “ H_{04} ”

$$Y = a + BX_1 + BX_2 + BX_3 + U \quad (4)$$

Where y is corporate sustainability requirement

X_1 = SMATS and proactive Environmental management

X_2 = SMATS and proactive social management

X_3 = SMATS and proactive economic management.

8. Findings

8.1. Test of Hypothesis One

Analysis result for hypothesis H_{01} , in section A.

Table 1. Descriptive statistics

	Mean	Deviation	N
Corporate Environmental performance Measurement is a multi-faceted activity that help managers to implement techniques capable of capturing information from diverse areas of corporate Environmental performance	21.0000	24.27962	5
The implementation of strategic management Accounting techniques would enable the identification of Environmental costs related to products Development	21.0000	26.53300	5
The implementation of strategic management Accounting techniques would enable the management of environmental costs associated with product development.	21.0000	23.81176	5
The implementation of strategic management Accounting techniques would enable the management of environmental costs associated with product development.	21.0000	21.69101	5
Strategic management accounting techniques are also capable of measuring the environmental impact of other corporate activities such as Gas flaring, Greenhouse Emissions Emanating from Corporate Industrial Activities.	21.0000	24.75884	5

Source: Authors' SPSS Ver. 21 Output

Table 2. ANOVA

Model	Sum of squares	df	Mean square	F	Sig.
Regression	2357.969	3	785.990	25183.293	.005 ^b
Residual	.031	1	.031		
Total	2358.000	4			
Regression	2358.000	4	589.500		C
Residual	.000	0			
Total	2358.000	4			

Source: Authors' SPSS ver.21 Output

The ANOVA table showed a statistically significant F- value of 25183.293 (Sig. 005<0.5), our decision rule is therefore: if F- calculated > F-critical, Reject the Null hypothesis, otherwise accept. Since 25183.293>215.7- Reject the Null hypothesis.

8.2. Test of Hypothesis Two

Analysis Result for hypothesis Ho₂ in section B.

Table 3. Descriptive Statistics

	Mean	Std. Deviation	N
The Application of strategic Management Accounting techniques directed at product assessment (such as life cycle costing) would provide managers with the needed information for the determination of costs and revenues associated with product Developers.	21.0000	20.73644	5
The Application of strategic management Accounting techniques would enable managers to strategically position their products in market by employing techniques such as competitor cost and performance appraisal.	21.0000	26.78619	5
Employing the use of integrated performance measurement systems (such as the B) in the corporate managerial process would enable the determination of other non-quantifiable factors capable of influencing corporate performance.	21.0000	25.67100	5
The Application of strategic management Accounting techniques would provide management with information needed for assessing customer behaviour, product pricing etc. which serve as economic Decision areas for managers.	21.0000	23.83276	5

Table 4. ANOVA (for Ho₂)

Model	Sum of square	df	Mean square	F	Sig.
Regression	1719.492	3	593.164	1127.458	.022 ^b
Residual	.508	1	.508		
Total	1720.000	4			

Source: Authors' SPSS Ver. 21 Output

The ANOVA table showed a statistically significant F-value of 1127.458 (Sig.022^b < .05) our decision rule is therefore: if F-calculated > F-critical –Reject the Null hypothesis; otherwise accept. Since 1127.458> 215.7- Reject the Null hypothesis.

8.3. Test of Hypothesis Three

Analysis Result for Hypothesis Ho₃ in section C.

Table 5. Descriptive Statistics

	Mean	Std. Deviation	N
Corporate Social Performance measurement is a multi-faceted Activity that requires managers to implement techniques capable of capturing information from diverse areas of corporate social performance.	21.0000	25.61250	5
The implementation of strategic management Accounting techniques would enable the identification of social costs related to products Development	21.0000	26.52357	5
The implementation of strategic management Accounting techniques would enable the management of social costs associated with product development.	21.0000	27.39526	5
The implementation of strategic management Accounting techniques would enable the management of social costs associated with product development.	21.0000	26.02883	5
Strategic management accounting techniques are also capable of measuring the social impact of other corporate activities such as Gas flaring, Greenhouse Emissions Emanating from Corporate Industrial Activities.	21.0000	26.63644	5

Source: Authors' SPSS ver.21 Output

Table 6. ANOVA (for Ho₃)

Model	Sum of square	df	Mean square	F	Sig.
1 Regression	2622.420	3	593.164	1127.458	.031 ^b
Residual	1.581	1	.508		
Total	2624.000	4			
2 Regression	2624.000	4	656.000		
Residual	.000	0			
Total	2624.000	4			

Source: Authors' SPSS Ver. 21 Output

The ANOVA table above showed a statistically significant F-value of 553.257 (sig. 031^b < .05). Our decision rule is therefore; if F-calculated > F- critical – Reject Null Hypothesis, Otherwise accept. Since 553.257 > 215.7- Reject the Null Hypothesis.

8.4. Test of Hypothesis Four

Analysis Result for hypothesis “Ho₄” in section D.

Table 7. Description Statistics

	Mean	Std. Deviation	N
To meet up with corporate sustainability requirements managers require the implementation of tools and techniques capable of capturing (quantifiable and non-quantifiable) information from social, environmental and economic performance areas of the organization.	21.0000	24.16609	5
The Application of strategic management Accounting technique directed at providing environmental information on corporate Activities would ensure a radical response by management on environmental cost handling and management.	21.0000	26.11513	5
The Application of strategic management accounting techniques directed at providing social information on corporate activities would ensure a radical response by management on social cost handling and management.	21.0000	25.61250	5
The Application of strategic management accounting techniques directed at providing economic information on corporate activities would ensure a radical response by management on economic cost handling and management.	21.0000	26.51415	5

Source: Authors' SPSS ver.21 Output

Table 8. ANOVA (for Ho₄)

Model	Sum of square	df	Mean square	F	Sig.
Regression	2335.866	3	778.622	5789.906	.010 ^b
Residual	.134	1	.134		
Total	2336.000	4			

Source: Authors' SPSS ver. 21 Output

The ANOVA table above showed a statistically significant F-value of 5789.906 (sig.010^b < .05), our decision rule is therefore; if F-calculated > F- critical – Reject the Null Hypothesis, otherwise accept. Since 5789.906 > 215.7 – Reject the Null Hypothesis.

9. Discussion of findings

The respondents believed that:

- Corporate environmental performance measurement is a multifaceted activity that requires managers to implement techniques that are capable of capturing information from diverse areas of corporate environmental performance. Such finding complies with result of (Egbunike *et al.*, 2014).

- Corporate social performance measurement is a multifaceted activity that requires managers to implement techniques that are capable of capturing information from diverse areas of corporate social performance. This complies with result of (Egbunike *et al.*, 2014).
- The application of strategic management accounting techniques (SMATS) directed at product assessment would provide managers with information they need for the determination of costs and revenues that are associated with product development. This is in agreement with the results of Egbunike, *et al.*, (2014).
- The use of strategic management accounting techniques (SMATS) would enable managers to strategically position their products in the market by employing techniques such as competitor and customer oriented techniques, competitor cost and performance appraisal and integrated performance measurement systems, such as BSC, in the corporate managerial process would enable managers to determine other non–quantifiable (quantitative) factors capable of influencing corporate performance. Such findings comply with the results of Cadez and Guilding (2008); Sener and Dirlik (2012) Egburu and Semra (2013) and Egbunike *et al.* (2014).
- The application of SMATS would provide management the information they need for assessing customers behavior, product pricing etc. which is an economic decision areas for managers. This complies with the result of Egbunike *et al.* (2014).

10. Conclusions

The importance of strategic management accounting techniques in measuring multidimensional aspects of performance is rapidly increasing. Strategic management accounting techniques in industries are taking new shapes commensurate with the market competitiveness and accumulate strategic and financial information for decision making. This study is therefore to establish a complicated series of connections between the application of strategic management accounting techniques and the provision of information for sustainability performance (Social, Environmental and Economic Cost and performance information) for managerial decision making.

11. Recommendations

- a. Managers should use SMATS to enable them identify, accumulate and manage the social costs of their business organization.
- b. The use of SMATS will enable managers monitor and analyze the economic performance of their organization.
- c. Corporate organizations should carry out detailed analysis of their activities to determine the information needs of managers in other to guide the adoption and implementation of any technique in the strategic management accounting toolbox. Finally, the adopted tools should be consistently monitored and ensure that the needs of the mangers are met.

References

1. Abdul H., M.H, and Hamza, S. (2012). Strategic management Accounting Techniques in Romanian Companies: An Emperical study. *Studies in Business and Economics*, 126-140.
2. Abdul R., K.I, Azhar, Z, Abdul R., H.N, and MohdDaud, H.N. (2012). Strategic Management Accounting and Bench marking Practices in Malysian. *Journal of Applied Sciences Research*, 8(3), 1665-1671.
3. Abushaiba, I.A and Zainuddin, Y. (2012). Performance measurement system design, competitive capability, and performance consequences conceptual like. *International Journal of Business and Social Science*, 3 (11), 184-193.
4. Akenbor, C.O. (2011). Strategic Management Accounting and Competitive Advantage in the Manufacturing Industry: A study of selected Manufacturing Firms in Nigeria. *Unpublished Doctoral (PhD) Thesis*, Department of Accountancy, Nnamdi Azikiwe University, Awka.
5. Al-Khadash, H.A and Feridun, M. (2006). Impact of strategic Initiatives in Management Accounting on corporate Financial Performance: Evidence from Amman Stock Exchange. *Global Transitions*, 4 (4), 299-312.

6. Almaryani, H.A.H., and Sadik, H. (2012). Strategic Management Accounting Techniques in Romanian Companies: Some survey Evidence. *Procedia Economics and Finance*, 3, 387-396.
7. Bromwich, M. (1990). The case for strategic management accounting: The role of Accounting Information for Strategy in Competitive Markets. *Accounting Organizations and Society*, 15 (1), 27- 46.
8. Cadez, S. and Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, Organizations and Society*, 33(7), 836 - 863.
9. Clinuini, L, and Tennuci, A. (2010). Strategic management accounting and business strategy: a loose coupling? *Journal of Accounting and Organizational change*, 6(2), 228-259.
10. Ebru, A., and Semra, A. (2013). Effects of competitive strategic management Accounting Techniques on perceived performance of Business. *Australian Journal of Business and Management Research*, 3, 30-39.
11. Egbunike F.C., Ogbodo C.Y. and Onyali, C.I. (2014). Utilizing Strategic Management Accounting Techniques (SMATs) for Sustainability Performance Measurement. *Research Journal of Finance and Accounting*, 5(13), 140-153.
12. Henri, J.F. (2006). Management control systems and strategy: A resource-based perspective. *Accounting, Organizational and Society*, 31,529-558.
13. Naranjo-Gil, D. and Hartmann, F. (2007). Management accounting systems, top management team heterogeneity and strategic change. *Accounting, Organizations and Society*, 32,735-756.
14. Nyamori, R.O., Perera, M.H.B. and Lawrence, S.R. (2001). The concept of strategic change and implications for management accounting structure, and strategic behavior. *Journal of Marketing*, 69,49-65.
15. Ramijak, B., and Rogoslic, A., (2011). Strategic management accounting Practices in Croatia. *The Journal of International Management Studies*, 7 (2), 93-100.
16. Roslender, R., and Hart, S. (2003). In search of strategic management accounting: Theoretical and field study perspectives. *Management Accounting Research*, 14, 255-279.
17. Shah, H., Mall, A., and Malik, M.S. (2011). Strategic Management Accounting: A Messiah for management Accounting. *Australian Journal of Business and Management Research*, 1(4), 1-7.
18. Simmonds, K. (1981). Strategic Management Accounting, *Management Accounting*, 59(4), 26-30.