

Positioning Automated Customer Relationship Management in the Ambit of Cost Control System and Influence on Performance in Listed Companies in Nigeria

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Abstract

Contemporary studies have highlighted customer relationship management (CRM) as an antidote for company's survival. This study examined how the automated CRM could be positioned to provide real-time data for cost control in relation to customer management to improve performance. Both the primary (questionnaire) and secondary (financial statement) data sources were accessed. A total of 156 respondents drawn from companies listed in the Nigerian Stock Exchange were sampled. Three linear regression models were formulated covering cost control system (CCS), CRM and performance in terms of financial and non-financial (NFP) measures. The results revealed significant influence of CRM – CCS influence on performance, with CRM – CCS explaining about 31% (adj. $R^2=0.031$), of NFP and 20% (adj. $R^2=0.020$), of TGR (turnover growth rate) ($p < 0.05$) variation in performance. This relatively low influence might be due to the poor development of CCS and level of efficient usage of CRM. The study suggested the need for conscious effort to position CRM not only for relationship building but also for provision of real-time data for cost control; while improving on the cost management system.

Keywords

Customer Relationship Management, Cost Control System, Performance, Operational Environment, Contingency

Received: January 31, 2016 / Accepted: February 22, 2016 / Published online: March 18, 2016

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1. Introduction

The operational environment of companies is of great relevance to the success or failure outcomes of its activities. Companies thrive better in an atmosphere of certainty but could also blossom in an environment of uncertainty with adequate risk management strategies. Globally, companies operating environment have become volatile but at varied magnitude, depending on the country.

In Nigeria, company's operational environment is precarious due to economic uncertainties brought about by policies and counter policies, political upheaval and terrorism, that market

forces no longer determine prices. This is coupled with the dwindling international crude oil prices, foreign exchange regime collapse, devaluation of the Naira, unstable capital market and the likes. Okeke (2015) corroborated and cited the Monetary Policy Committee verdict on the state of the Nigerian economy as well as its prospects in the short-to-mid terms, "having seen two consecutive quarters of slow growth... the economy could slip into recession in 2016 if proactive steps are not taken to retrieve growth in key sectors of the economy".

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Decline of company's resources is imminent with this apprehensive verdict. Survival strategies are paramount. Being proactive in evolving or reengineering strategies to cope with the tide should be of great concern to companies. Strategic decisions would vary from companies depending on the business area but there are certain strategies whose dividend can be harnessed by any company that is, in the area of controlling cost. Cost control strategy is not a bread and butter business. It is all encompassing and requires appropriate planning. Most companies consider retrenchment as an immediate option in cost control. This study advocates repositioning of all key areas of companies operation as the first preference in controlling cost. One strategic area is, improving relationships between companies and customers or client or punters that drive home the profit or income. Customer/client relationship as appropriate, assist companies improve on the profitability and maintaining friendlier interactions through individualisation. The customer/client relationship administration has been affected by the evolution in information technology software, appropriately identified as CRM (customer relationship management) to create or adapt new products and services on a timely basis to customers' specific needs (Mitussis, 2006).

To succeed with CRM, companies match products and promotions to present and prospective customers need. Automated CRM has made companies more responsive to the needs of the customer by focusing not simply on the organisation and management of customer information (known as touch point) but also use a variety of data analysis and modelling techniques to discover patterns and relationships in data that may be used to make accurate predictions (known as data mining) (Edelstein, 2010). CRM perfects relationship to maximise customers' value. This process results in improved revenue because of improved ability to respond to each individual contact in the best way, and reduce costs associated with improper allocation of resources. Cost reduction techniques adopted, whether traditional (Drury & Tayles 1994) or contemporary, (Brierley, Cowton & Druru, 2001) would yield desired result. Hyvonen, (2008:26) quoted Ernst and Young chartered accounting firm in the United States in 2003, that: "the traditional cost and management accounting systems are still widely used and that adopting new cost management systems is not a priority in the current economic environment".

Cost management or control systems (CCS) are geared toward ensuring company performance. Cost identification is essential in management decisions as data are mainly collected to assist in planning decisions and control operations with a view to increase efficiency in the measurement of performance.

This study advocates that in maximising customers' value through CRM, costs accrues, particularly costs associated with value addition. Therefore, it is proposed in this paper that when the automated CRM platform produces real-time data for the cost control system data base, it ignites operational decisions for effective performance. The purpose of this paper therefore, is to determine the state of CRM and CCS in listed companies in Nigeria; ascertain the influence of CRM on cost control efficiency; determine whether managers' perception of effectiveness of CRM has influence on company's performance and establish whether CRM within the ambit of cost control can have effect on company's performance; consequently, the following hypotheses were formulated and tested:

H₀₁: Automated CRM has no influence on cost control system efficiency

H₀₂: Managers' perception of effectiveness of CRM does not positively influence company performance.

H₀₃: CRM-CCS efficiency has no effect on company performance.

2. Literature Review

The cost control system operates on cost accounting system designed for the company while CRM operates within the package installed in the system, producing real time data serving as input data for cost control system, fostering overall performance in terms of financial and non-financial indices.

2.1. Cost Accounting System

Cost accounting system is an accounting system designed to provide cost data for identification, measurement, accumulation, analysis, preparation, interpretation and communication to management for planning, evaluating and controlling within the organisation (Reka, Stefan & Daniel, 2008). Cost accounting system can be comprehensive when it forms a basis for understanding the process of cost formation in the company's value chain, in order to analyse and manage cost behavior. Four different stages of integration of cost were distinguished by Kaplan and Cooper (1998): Stage one system: it involves a system which is inadequate for financial reporting; Stage two system: is a financial reporting driven system; Stage three systems: has customized, managerially relevant, but stand-alone system; Stage four system: integrated cost management and financial reporting system. The fourth stage depicts a level where cost and performance measurement information become integrated into the main fabric of organisational reporting and managerial process. This fourth stage is the ideal that companies should strive to achieve.

2.2. Customer Relationship Management (CRM)

CRM is a process that maximises customers' value through on-going marketing activity founded on intimate customer knowledge, established through collection, management and leverage on customer information and contact history (Kotler & Keller, 2007). Customers are the most important aspect of a successful company and should be properly monitored and managed. Though CRM is as old as marketing itself, the introduction of information technology in CRM makes the process more apt. Gupta, (2003) recommends firms to invest in automated CRM through outsourcing as CRM is critical to survival of firms in the 21st century.

CRM has become a vital data input for cost control as automated CRM's platform does the following: increases bounding relationship and customer loyalty. This is vital because a loss of customers confidence and loyalty will lead to loss of repeat purchase leading to reduced sales and increase cost; CRM has updated information of channels and distribution thus reducing cost of sales; CRM evaluates customer's purchase/patronage and thus the contribution toward profitability is determined to avoid irrelevant cost that might be associated with companies budget on non-profitable customers.

2.3. Performance

Performance is common in management research that its structure and definition are rarely explicitly justified; instead its appropriateness, no matter what form, is unquestionably assumed (Arnold, Collier & Sutton, 2000). Companies are heterogeneous in their use of resources and capabilities and as such often prefer reports showing analysis of performance in terms of financial and non-financial. Evidence suggests that large organisations use both financial and non-financial performance measures, but favour financial measures (Malina & Selto, 2004); and some small firms also used both measures as shown from the study of Laitinen and Chong (2006). The study revealed that small Finnish companies focused on profitability, product margins, customer value and liquidity. Small UK companies were similar, giving less emphasis to overall profitability.

The accounting measures are the most common and readily available means of measuring organisational performance. In this study, financial performance was measured using accounting-based and market-based measures: turnover growth rate (TGR), change in pre-tax earnings (PTE) and earnings per share (EPS) were computed from the financial statements of the listed companies, in order to derive the

benefits associated with forward-looking performance report (Fisher & McGowan, 1983; Lev, 2001). For the most part, extant literature indicated that the combination of financial and non-financial indicators sends robust and comprehensive set of performance signals to managers (Ghosh & Wu, 2007).

2.4. Theoretical Perspective

Contingency theory of information technology and the Relationship theory of marketing were considered as framework for this study. Contingency theory of information technology plays a role when assessing the appropriateness of processes (Angerer, 2006). A common proposition among these research works is that the turbulent environment will induce companies to a more extensive use of information systems. It has been argued that in risky environment, information technology application should be more adaptable and more wide-ranging and continuous (Angerer, 2006; Chenhall, 2007). The corollary of this theoretical perspective is to allow customer relationship management application to be wide-ranged, accommodating relevant components that could assess customers overall needs and expectations so that its robustness would be enough to provide information for cost control system.

The relationship theory on the other hand, measures the psychological constructs in relation building such as trust, reliability, satisfaction, commitment that are necessary to strengthen customer relationship. These constructs are said to measure attitudinal outcome in terms of motive or interest behind repeat purchase, share of wallet, referral and other such loyal behavior (Schulman, 2010). This theory is vital as satisfaction, value and quality has been proven in literature to be poor indicators of future customer behavior (Schulman, 2010). The implication of this is that designing costly investment to attract and retain customers should be done with caution as enduring customer relationship has remained elusive. Budgeting for prospective customers would require complex analysis so that relationship is not sacrifice for reduced cost.

2.5. Conceptual Model

The relationship between variables considered in this study can be conceptually presented in the figure below. The arrows are unidirectional, showing that customer relationship management application (in-built application control system), provides information for cost control application in cost accounting system platform, resulting into cost control efficiency for improved financial and non-financial performance.

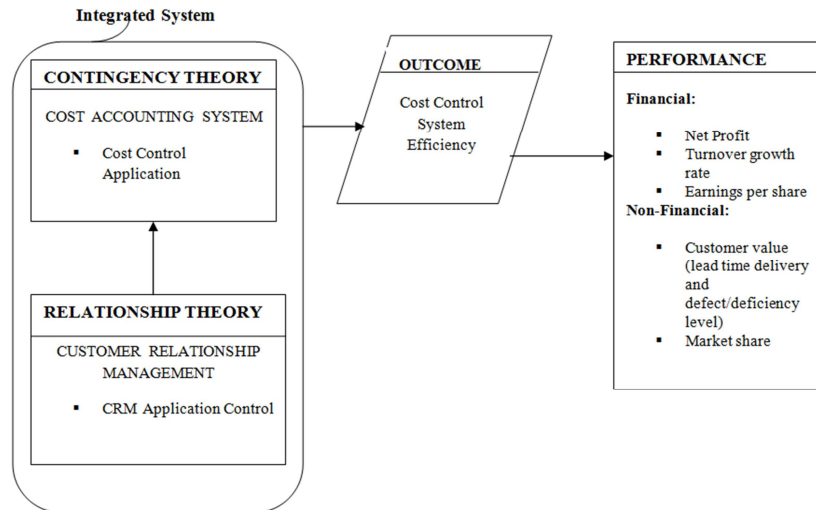


Figure 1. Conceptual Framework on the Influence of Customer Relationship Management Application on Cost Control system Efficiency and Effect on Performance.

Source: Omorogbe & Ogunlusi, 2016

3. Method

The survey design provided primary data to measure non-financial performance while financial performance was measured from financial information contained in the annual reports of companies as secondary source.

The phenomenon of interest in this study is the ability for companies to use Customer relationship management to influence cost control and it is assumed that an ideal period to measure the effect on financial performance is the global melt-down period. Hence, the financial statement of listed companies for 2006-2010 periods in respect of one hundred and three companies listed on the floor of the Nigerian Stock Exchange formed the target of this study. The sample respondents in these companies were the operational managers, selected from accounting and IT resource units. A total of two hundred and six (206) operational managers were administered questionnaire. Of this number, one hundred and fifty-six (156) copies of the questionnaire were duly completed and returned; representing a 76% response rate. The questionnaire incorporated different composite measures of each of the variables relevant to this study.

3.1. Measurement of Variables

The questionnaire incorporated measures of CRM usage efficiency from core components as customer identification, segmentation; customer profiling; communication procedure and feedback response rate. Respondents were to indicate usage efficiency of customer relationship management information input for cost control in their companies on a five-point likert scale. The items scale on usage efficiency were anchored on 1.0 = very bad, 2.0 = bad, 3.0 = good 4.0 =

very good and 5.0 = excellent. The usage efficiency of CRM was measured using an index computed from the responses to the questionnaire items. Four indicators of performance were adopted; three of these were computed from the financial statements of the companies (turnover growth rate (TGR), change in pre-tax earnings (PTE) and earnings per share (EPS) while the fourth measure consisted of self reported non-financial performance (customer value (the difference between realization and sacrifice in terms of lead time delivery and defect/deficiency level and market share) provided on a five-point scale.

The Cronbach’s alpha test was used to determine the reliability of the instruments. The results on Table 1, showed Cronbach Alphas greater than 0.7 for all variables, which indicated sufficient reliability according to Nunnally and Bernstein (1994). *Average variance extracted (AVE)*: AVE is a measure of the amount of variation that a latent or existing construct is able to explain from the observed variables to which it is theoretically related. A compelling demonstration of convergent validity was an AVE of 0.5 or above. The result on Table 2 confirmed the convergent validity that all the AVE figures for the variables are above the compelling level. Although there is no firm rule for discriminant validity, correlation with other latent variables less than 0.7 are frequently accepted as evidence of discriminant validity (Bagozzi & Phillip, (1982).

Table 1. Instrument composite reliability values/ave.

	Items	Cronbach Alpha	AVE	CR
CRM application Utilisation	5	0.807	0.61452	0.915755
Non-financial Perf	3	0.797	0.70301	0.907522
Cost Control system	8	0.766	0.72255	0.90400

Table 2. Correlation between constructs- discriminant validity.

	CRM application Utilisation	Non-Financial perf	Cost control system
CRM application utilisation	1		
Non-Financial perf	.242	1	
Cost control system	.363	.110	1

3.2. Analysis of Data

The study utilised descriptive analysis to measure first, the multi-item variables in the study (See Appendix Table A1), showing the mean and standard deviation and second to obtain evidence on the usage of cost control system and customer relationship management in Nigerian companies. Mean scores calculated for usage efficiency: An index greater than or equal to 4.0 was regarded as high, between 3.0 and lower than 4.0, regarded as moderate while scores below 3.0 were regarded as low level of efficiency/usage. Hypotheses 1- 3 were tested using regression analysis. Hypothesis 1 measured cost control system using equation (i) below. In the case of hypothesis 2, four simple regressions were carried out using each of four performance measures as dependent variable and perception of effectiveness of customer relationship management as independent variable, while applying equation (ii) below. For hypothesis 3, four different multiple regression models as shown in equation (iii) were tested using as dependent variable in each model, each of the four different performance indicators namely: Non-financial performance; Average Pre-tax earnings, Average Earnings per share; and Turnover growth rate and as independent variables.

$$i. CCS_i = \beta_0 + \beta_1 AT crm_i + e_i$$

$$ii. Perf_{i-iv} = \beta_0 + \beta_1 AT crm_i + e_i$$

$$iii. Perf_{(i-iv)} = \beta_0 + \beta_1 crm + \beta_2 ccs + e$$

where:

Perf (i – iv) = 4 performance indicators namely: NFP, PTE, EPS and TGR

CCS_i = cost control system management

β₁₋₂ = the estimated regression coefficients in each model

crm = customer relationship management

ccs = cost control system management

e = the error term in a regression model

4. Major Findings

Objective one was to determine the state of CRM and CCS in listed companies in Nigeria. The state of cost control system

was examined based on the extent of cost accounting system development. It was discovered that 64.7% (See Appendix-Table A2) of companies were in stage two and three of cost system development. With reference to Kaplan and Cooper, (1998) description of stages of cost system development, a moderately developed costing system was found, represented by a total mean score of 3.6534 (See Appendix - Table A3). This result is consistent with earlier findings in Haldma and Laats, (2002) on Estonian manufacturing companies, where the study found 74% of companies surveyed, with undeveloped cost accounting system and had to make changes in different aspect of the accounting systems. Literature has shown that the design of cost accounting system efficiency is paramount to having a functioning cost control (Uyar, 2010).

The presence of Customer relationship management (CRM) either as stand - alone or inbuilt was acknowledged by all the respondents while about 30% of the respondents confirmed usage efficiency as excellent and 44% as very good. The total usage efficiency means scores was 4.01 indicating high CRM application usage.

Automated CRM within the ambit of cost control referred to an inbuilt system that generates data without human intervention useful for cost control. Respondents provided answers to questions on CRM data generation enabling cost savings in the areas of customers’ complaints, speed of delivery, accuracy of delivery and frequency of returns. This provided information for test of hypothesis one.

Test of H₀₁

H₀₁: Automated CRM has no influence on cost control system efficiency

$$CCS_i = \beta_0 + \beta_1 AT crm_i + e_i$$

Table 3. Regression result of crm influence on cost control system efficiency.

	Beta	Stdzd. Beta	P value
Constant	4.646	-	0.000
Customer relationship management	0.747	0.667	0.000
Adjusted R ²	0.242		
F (P value)	15.477 (0.043)		

Dependent variable: Cost control system

The regression on cost control system was found to be statistically significant (p < 0.05), with R² = 0.242; that is;

only 24.2% variation in efficiency of cost control system can be explained by customer relationship management input. The fitness of the model can be explained by F-ratio on Table 3

Test of H₀₂

H₀₂: Managers' perception of effectiveness of CRM does not positively influence company performance.

$$Perf_{i-iv} = \beta_0 + \beta_1 AT\ crm_i + e_i$$

The test of null hypothesis 2 on the relationship between managers' perception of effectiveness of CRM and company performance yielded results indicating that the extent to which managers find the customer information useful has a

significant influence on company's performance. The OLS regression coefficient result as presented in Table 4 indicated that the models are statistically significant (p < 0.05) with all positive beta coefficient showing that each unit increase in the predictor variable (CRM) increased the outcome variable (Performance) in all the four models. The results thus did not support null hypothesis 2 which proposed that managers' perception of effectiveness does not positively influence company performance. Our findings thus generally support Coltman, Devinney and Midgley, (2011), where it was revealed that a positive and significant path between a superior CRM capability and company's performance exist.

Table 4. Regression coefficient results of crm influence applications on performance.

			Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			β	Std. Error	β		
Model 1		(Constant)	1.530	.367		4.169	.000
		CRM	.766	.162	.511	4.728	.013
Model 2		(Constant)	142.601	18.312		7.787	.000
		CRM	3.212	3.043	.030	1.055	.041
Model 3		(Constant)	102.421	19.312		5.303	.000
		CRM	2.512	1.843	.030	1.363	.024
Model 4		(Constant)	107.360	13.723		7.823	.000
		CRM	3.645	3.552	.176	1.026	.028

- 1. a. Dependent variable: Non-Financial Performance
- 2. a. Dependent variable: PTE
- 3. a. Dependent variable: EPS
- 4. a. Dependent variable: TGR

Test of H₀₃

H₀₃: CRM-CCS efficiency has no effect on company performance.

$$Perf_{(i-iv)} = \beta_0 + \beta_1 crm + \beta_2 ccs + e;$$

The relationship between the usage of the customer relationship management application and cost control system on company performance as proposed in Null hypothesis 3 was analysed using 4 multiple regression models. The result as shown in Table 5 revealed that (p < 0.05) the usage of CRM and CCS showed significant effects on performance in terms of NFP, PTE and TGR. The results revealed significant influence of CRM – CCS influence on performance, with CRM – CCS explaining about 31% (adj. R²=0.031), of NFP and 20% (adj. R²=0.020), of TGR (turnover growth rate) (p < 0.05) variation in performance. This relatively low influence might be due to the poor development of CCS and level of efficient usage of CRM. Uyar, (2010), disclosed that a poorly developed cost accounting system cannot anchor cost control. Model 3, having EPS as performance indicator was found not significant. The null hypothesis 3 which stated that CRM-CCS efficiency has no effect on company performance was therefore rejected. It is noteworthy that the highest R² is the model of non-financial performance.

Table 5. Model summaries of relationship between crm-ccs efficiency and four performance indicators.

Model	Dependent variable	R ²	Adj. R ²	β	F	Sig.
i	NFP	.331	.310	.662	35.882	.000
ii	PTE (AV.)	.102	.064	.178	4.214	.002
iii	EPS (AV.)	.045	.048	.067	2.636	.315
iv	TGR	.217	.204	.229	14.081	.000

Predictors: CRM, CCS

5. Conclusion

The evidences revealed that CRM when linked with CCS can influence performance. With about 30% respondents confirming CRM efficiency usage as excellent, there is need to position CRM in the companies. CRM has been shown in the literature to be critical for survival. Consequently, conscious effort is needed by firms to position CRM not only for relationship building but also for provision of real-time data for cost control.

This paradigm is essential as Nigerian economy is sliding towards recession. Companies will be proactive by recourse to the findings of this study; strategic alignment of automated CRM as platform for CCS, thus ensuring customer retention while managing cost effectively for overall benefit of the company.

Research Significance and Potential Impact to Practice

This study on positioning customer relationship management (CRM) within the ambit of cost control system and influence on performance in listed companies in Nigeria advocates customers' value maximisation through CRM, and managing value addition costs for improved company performance. If

the proposition of this study from empirical evidences holds true on the basis of significant alternate hypotheses, then the paradigm will be inevitable for companies. This is particularly necessary in Nigeria, as the economy is gradually loping into recession (Okeke, 2015). Companies should adopt subtle methods as inherent in CRM to pursue prudence and reduce cost.

Appendix

Table A1. Result Relating To The Descriptive Statistics Of The Multi-Item Variables measured in the study.

N	Valid	CRM application utilisation	Cost Control	Non-financial performance	Average PTE (%) (2006-2009)	Average EPS (%) (2006-2009)	Average TGR (%) (2006-2009)
	missing	156	156	156	156	156	156
Mean		0	0	0	0	0	0
Std. Error of Mean		4.0667	3.9736	4.0641	105.5369	128.0299	89.0005
Std. Deviation		0.04936	0.05265	0.05466	6.83505	14.18431	1.77085
Variance		0.61648	0.65762	0.68273	85.36971	177.16196	22.11785
Range		0.380	0.432	0.466	7,287.988	31,386.361	489.199
Minimum		3.60	2.25	4.00	752.50	1,288.33	182.00
Maximum		1.40	2.75	1.00	-253.50	-209.00	52.00

Table A2. Responses on cost control system development

	FREQUENCY	PERCENTAGE
The extent of development of cost accounting system in the firm		
Stage one: inadequate cost information	21	13.47
Stage two: financial reporting driven cost system	54	34.61
Stage three: develop customized, managerially relevant, but stand-alone systems	47	30.13
Stage four: integrated cost management and financial reporting systems	34	21.79
Total Respondents	156	100

Table A3. Mean scores of costing system development in the respondents' firms.

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Moderately developed	101(64.7)	3.2326	0.26227	0.02270	3.2653	3.4783	2.53	3.66
Highly developed	55(35.3)	4.3426	0.40266	0.04421	4.5305	4.6532	4.00	5.00
Total	156(100)	3.6534	0.65762	0.05265	3.8696	4.0776	2.75	5.00

References

- [1] Arnold, V., Collier, P. A. & Sutton, S. G., (2000). The effect of experience and complexity on order and regency bias in decision-making by professional accountants. *Accounting & Finance*, 40: 109-134.
- [2] Angerer, A., (2006). *The impact of automatic store replenishment on performance*. Business and Economics Retrieved on 12th February, 2011 from books.google.com.ng/books
- [3] Bagozzi, R. P., (2007). The legacy of the technology acceptance model and a proposal for a paradigm shift. *Journal of the Association for Information systems* 8(4):244-254.
- [4] Brierley, J. A., Cowton, C. J & Druru, C., (2001). Research into product costing practice: A European perspective. *European Accounting Review* 10:215-256. Retrieved on the 22nd January, 2010 from www.herkules.oul.fr/isbn
- [5] Chen, C., & Chou, S. W., (2009). Environmental factors and conducted factors that influence the ERP benefits. *PACIS proceedings*. Retrieved on 26th June, 2011 from www.pacis.net.org/file/2009/12/paper28 title.
- [6] Chenhall, R. H., (2007). Theorizing contingencies in management control research. C. S. Chapman, A. Hopwood, M.D shields, (Eds.), *Handbook of Management Accounting Research*, Elsevier: Oxford: 805-829.
- [7] Coltman, T., Devinney, T. M., & Midgley, D. F., (2011). Customer relationship management and firm performance. *Journal of Information Technology: Advance online publication*, 25 January; doi:10.1057/jit.2010.39.
- [8] Drury, C. & Taylor, M., (1994). Product costing in UK manufacturing organisations. *The European Accounting Review*, 3: 443.
- [9] Edelstein, H., (2010). *Building profitability customer relationships with data mining*. Retrieved on the 13th May, 2011 from www.crmodyssey.com/ Building-profitable-customer-relationships- with data- mining-pdf.
- [10] Fisher, F. M. & McGowan, J. J., (1983). On the misuse of accounting rates of return to infer monopoly profits. *American Economic Review*, 73: 82-97

- [11] Ghosh, D., Wu, A., (2007). *Relevance of financial and non-financial measures to financial analysts: Experimental evidence*. Retrieved on the 9th June, 2011 from [www.aaahq.org/MAS/MASPAPERS2007/disclosures/Ghosh %20and%20Wu.pdf](http://www.aaahq.org/MAS/MASPAPERS2007/disclosures/Ghosh%20and%20Wu.pdf).
- [12] Granlund, M., (2007). *On the interface between management accounting and modern information technology- A literature review and some empirical evidence*. Tarku School of Economics, *Working Paper*. Retrieved on the 18th June, 2015 from <http://ssrn.com>.
- [13] Gupta, B., (2003). *Business strategy for information technology management*. Retrieved on the 22nd January, 2016 from www.igi-global.com
- [14] Haldma, T., & Laats, K., (2002). *Influencing contingencies on management accounting practices in Estonian manufacturing companies*. University of Tartu, *Faculty of Economic and Business Administration paper* No. 13. Retrieved on the 23rd May, 2015 from <http://www.unitartu.haldmalaats.con.pp>
- [15] Hyvonen, J., (2008). *Linking management accounting and control systems, strategy, information technology, manufacturing technology and organisational performance of the firm in contingency framework*. Retrieved on the 22nd January, 2010 from www.herkules.oul.fi/isbn
- [16] Kaplan R. S. & Cooper, R., (1998). *The Design of Cost Management Systems*. Upper Saddle River, NJ: Prentice Hall
- [17] Laitinen, E. K. & Chong, G., (2006). How do small companies measure their performance? *Problems and Perspectives in Management*, 4(3): 49-68.
- [18] Lev, B., (2001). *Intangibles: Management, measurement and reporting*. Washington: Brookings Institution.
- [19] Malina, M. A. & Selto, F. H., (2004). Choice and change of measures in performance measurement models. *Management Accounting Research*, 15 (4): 441-469.
- [20] Mitussis, D., (2006). *Mapping the re-engagement of CRM*. Retrieved on the 22nd July, 2015 from www.emeraldinsight.com/journals.htm
- [21] Nunnally, J. C., & Bernstein, I. H., (1994). *Psychometric Theory* (2nd ed.). New York: McGrawHill.
- [22] Okeke, M., (2015). Nigeria: Is the economy hitting the trough? *Zenith Economic Quarterly* 11(4): 5-11.
- [23] Philip, K. P., & Keller, K. L., (2007). *Marketing management*. India: Dorlincy Kinderly
- [24] Reka, V. I., Stefan, P. & Daniel, C. V., (2008). *Cost and management systems between cost calculation and performance measurement*. Retrieved on the 22nd April, 2011 from www.steconomie.uoradea.ro/anale/volume/2008/v3-finances-banks.../280.pdf.
- [25] Schulman, K., (2010). Using relationship theory to drive customer retention and acquisition. Retrieved on the 22nd January, 2016 from www.quirks.com
- [26] Uyar, A., (2010). Cost and management accounting practices: A survey of manufacturing companies. *Eurasian Journal of Business and Economics*, 3(6): 113-125.