

International Journal of Finance and Accounting (IJFA)

**EXTENT OF INFORMATION MANAGEMENT ON
EFFECTIVENESS OF DEBT COLLECTION IN COMMERCIAL
BANKS**

PETER KITONGA

EXTENT OF INFORMATION MANAGEMENT ON EFFECTIVENESS OF DEBT COLLECTION IN COMMERCIAL BANKS.

^{1*}Peter Kitonga,

Post Graduate Student, Chandaria School of Business
United States International University

*Corresponding Author's Email: kitongap@gmail.com

Abstract

Purpose: The study aimed to examine the extent of information management on effectiveness of debt collection in commercial banks.

Methodology: The research was carried out through descriptive survey design. The total population of the study was 1118 credit managers/supervisors or branch managers of the 37 commercial banks. A sample size of 118 respondents was selected through random sampling technique, which represents a 10% of the population. The study used both secondary and primary data specifically the study used a questionnaire as the preferred data collection tool. The questionnaire had close ended questions only. Secondary data on the level of Nonperforming loans/Gross loans was also collected. This study used the quantitative method of data analysis. Quantitative methods of data analysis included inferential and descriptive statistics. Descriptive statistics included frequencies and measures of tendency mainly mean. Inferential statistics include correlation and regression analysis. The tool for data analysis was Statistical Package for Social Sciences (SPSS) version 20 program. The results were presented using tables and pie charts to give a clear picture of the research findings.

Results: Results also led to the conclusion that management information system of the bank has been crucial in assisting employees to enhance their performance and productivity. It was possible to conclude that the relationship between information technology management and non-performing loans is negative and significant. The findings imply that information technology has significant negative effect on non-performing loans.

Policy recommendation: it is recommended that staff competence be emphasized in the banks as it has an effect on the overall achievement of effective debt collection practices. Therefore the management is urged to encourage sharing of potentially sensitive information on costs, quality, and productivity on financial performance with other employees.

Keywords: *Information Management, Debt Collection*

1.1 Background of the Study

Olufunso, Herbrand and Lombard (2009) did an investigation into the impact of the usage of debt on the profitability of small and medium enterprises in the Buffalo city municipality, South Africa and concluded that the usage of debt has a significantly negative impact on the profitability of SMEs. The study however did not link debt collection practices and profitability of commercial banks.

Nelson and Kalani (2009) conducted a study on commercial banking crises in Kenya: cause and remedies'. The statement of the problem for the study is many financial institutions that collapsed in Kenya since 1986 failed due to non-performing loans. This study investigated the causes of nonperforming loans, the actions that bank managers have taken to mitigate that problem and the level of success of such actions. Using a sample of 30 managers selected from the ten largest banks the study found that national economic downturn was perceived as the most important external factor. Customer failure to disclose vital information during the loan application process was considered to be the main customer specific factor. The study further found that lack of an aggressive debt collection policy was perceived as the main bank specific factor, contributing to the non performing debt problem in Kenya.

Collection policies and procedures will apply equally to all members regardless of their professional or social standing. It is an object of the bank to be in compliance with applicable national and regional regulations, to follow Board approved procedures and guidelines, to adequately train staff to perform their duties, and to properly document loan files (Rajan, 2005). Under special and pre-authorised circumstances, loan officers may collect loan payments from the field. Under such circumstances, when outside the office, the loan officer should use common sense in accepting payments for delinquent loan. If a decision is made to accept a payment, always provide a receipt for the borrower and get here/his signature verifying the amount (Rajan, 2005).

1.2 Statement of the Problem

Financial institutions have faced difficulties over the years for a multitude of reasons, the major cause of serious banking problems continues to be directly related to lax credit standards for borrowers and counterparties, poor portfolio risk management, or lack of attention to changes in economic or other circumstances that can lead to a deterioration in the credit standing of a bank's counterparties (Gil & Diaz, 1994). In unstable economic environments, interest rates charged by banks are fast overtaken by inflation and borrowers find it difficult to repay loans as real incomes fall, insider loans increase and over concentration in certain portfolios increases giving a rise to credit risk. Bank failures in Mexico were attributed to improper lending practices, lack of experience, organizational and informational systems to adequately assess credit risk in the falling economy (Gil & Diaz, 1994). The same can be said about of banking crisis in Kenya in the 1980s and in Spain in the 1990s. The problem that this study wishes to address is that debt collection is a pertinent managerial problem that if not addressed would lead to lower profitability and in extreme cases bank failure. Do effective debt collection practices really matter to commercial banks? If they do, then they should significantly contribute to profits as high profits are expected to enhance shareholder value.

Several studies have analyzed the effect of debt collection management practices on profitability. Olufunso, Herbrand and Lombard (2009), Nelson et al. (2009) and Musyoki and Kadubo (2011)

analyzed the impact of credit risk management on the financial performance of Banks in Kenya for the period 2000 – 2006 and concluded that default rate, bad debts costs and cost per loan asset have an inverse impact on banks' financial performance, however the default rate is the most important determinant of bank financial performance vis-à-vis the other indicators of credit risk management. The research had a gap since it did not address the effect of debt collection management practices on profitability. Looking at the emphasis that is laid on effective debt collection management in Kenyan commercial banks, the level of contribution of this factor to profits has not been sufficiently analyzed. There is scarcity of studies done on determinants of effective debt collection in Kenyan commercial banks. Most studies on commercial banks have looked at the effect of credit risk management on performance of banks. It is therefore for these research gaps that this study wishes to establish the extent of information management on effectiveness of debt collection in commercial banks.

1.3 Purpose of the Study

1.3.1 To what extent does the extent of information management on effectiveness of debt collection in commercial banks?

2.0 LITERATURE REVIEW

2.1 Empirical Review

2.1.1 Information Management and Effectiveness of Debt Collection

Information management (IM) is the collection and management of information from one or more sources and the distribution of that information to one or more audiences. This sometimes involves those who have a stake in, or a right to that information. Management means the organization of and control over the planning, structure and organisation, controlling, processing, evaluating and reporting of information activities in order to meet client objectives and to enable corporate functions in the delivery of information (Cronin, 1990).

2.4.1 Systems Theory

Systems theory springs from biology and its content are applicable to many fields of study. Systems theory can be defined as a working hypothesis, the main function of which is to provide a theoretical model for explaining, predicting, and controlling phenomenon (Bertalanffy, 1962). One common element of all systems is described by Kuhn (1974) as knowing one part of a system enables us to know something about another part. The information content or a "piece of information" is proportional to the amount of information that can be inferred from the information (Kuhn, 1974). Systems can be either controlled (cybernetic) or uncontrolled. In controlled systems information is sensed, and changes are effected in response to the information. Kuhn (1974) refers to this as the detector, selector, and effector on functions of the system.

2.5: Conceptual Framework



3.0 METHODOLOGY

The research was carried out through descriptive survey design. The total population of the study was 1118 credit managers/supervisors or branch managers of the 37 commercial banks. A sample size of 118 respondents was selected through random sampling technique, which represents a 10% of the population. The study used both secondary and primary data specifically the study used a questionnaire as the preferred data collection tool. The questionnaire had close ended questions only. Secondary data on the level of Nonperforming loans/Gross loans was also collected. This study used the quantitative method of data analysis. Quantitative methods of data analysis included inferential and descriptive statistics. Descriptive statistics included frequencies and measures of tendency mainly mean. Inferential statistics include correlation and regression analysis. The tool for data analysis was Statistical Package for Social Sciences (SPSS) version 20 program. The results were presented using tables and pie charts to give a clear picture of the research findings.

4.0 RESULTS FINDINGS

4.1 Information Management and Effective Debt Collection Practices

4.1.1 Bank has invested in Management Information System

The study sought to find out whether the bank has invested in a management information system which is easy to use. A majority (42.5%) of the respondents agreed and another 31% strongly agreed bringing to a total of 73.5% of those who agreed, 11.5% disagreed and 3.4% strongly disagreed. Only 11.5% of the respondents were neutral. Results are presented in Table 1 below.

Table 1: Bank has Invested in Management Information System

Statement		Frequency	Percent
The bank has invested in a management information system which is easy to use	Strongly disagree	3	3.4%
	Disagree	10	11.5%
	Neutral	10	11.5%
	Agree	37	42.5%
	Strongly agree	27	31.0%

Source: Author (2014)

4.1.2 Management Information System and Minimization of Administrative Costs

The respondents were asked to indicate if the bank has invested in a management information system which has enabled the minimization of administrative costs. A majority (40.2%) of the respondents strongly agreed and 32.2% agreed bringing to a total of 72.4% of those who agreed, 14.9% disagreed, 8% were neutral and 4.6% of the respondents strongly disagreed. Results are presented in Table 4.15 below.

Table 2 : Management Information System and Minimization of Administrative Costs

Statement		Frequency	Percent
The bank has invested in a management information system which has enabled the minimization of administrative costs	Strongly disagree	4	4.6%
	Disagree	13	14.9%
	Neutral	7	8.0%
	Agree	28	32.2%
	Strongly agree	35	40.2%

Source: Author (2014)

4.1.3 Bank Management Information System Compatibility

The respondents were asked to indicate whether the core banks management information system was compatible with other systems, a majority (34.5%) of the respondents agreed and another 29.9% strongly agreed bringing to a total of 66.9% of those who agreed. Only 16.1% of the respondents disagreed while 13.8% were neutral and only 5.7% of the respondents disagreed. Results are presented in Table 4.16 below.

Table 3: Bank Management Information System Compatibility

Statement		Frequency	Percent
The core banks management information system is compatible with other systems	Strongly disagree	5	5.7%
	Disagree	14	16.1%
	Neutral	12	13.8%
	Agree	30	34.5%
	Strongly agree	26	29.9%

Source: Author (2014)

4.1.4 Bank Management Information System Flexibility

The respondents were asked to indicate whether the management information system was flexible enough to supports the growth of the bank, a majority (57.5%) strongly agreed and another 34.5% agreed bringing to a total of 92% of those who agreed. Four point six percent disagreed while 3.4% were neutral. Results are presented in table 4.17 below.

Table 4: Bank Management Information System Flexibility

Statement		Frequency	Percent
The management information system is flexible enough to supports the growth of the bank	Strongly disagree	0	0.0%
	Disagree	4	4.6%
	Neutral	3	3.4%
	Agree	30	34.5%
	Strongly agree	50	57.5%

Source: Author (2014)

4.1.5 Management Information System in Assisting Employees

The respondents were asked to indicate if the management information system of the bank has been crucial in assisting employees to enhance their performance and productivity. A majority (47.1%) of the respondents strongly agreed and another 44.8% agreed bringing to a total of 91.9% of those who agreed, 1.1% disagreed while 2.3% strongly disagreed and another 4.6% of the respondents were neutral. Table 4.18 presents the findings.

Table 5: Management Information System in Assisting Employees

Statement		Frequency	Percent
The management information system of the bank has been crucial in assisting employees to enhance their performance and productivity	Strongly disagree	2	2.3%
	Disagree	1	1.1%
	Neutral	4	4.6%
	Agree	39	44.8%
	Strongly agree	41	47.1%

Source: Author (2014)

4.1.6 Staffs have Time to Chat Informally with Their Colleagues

The respondents were asked to indicate if the staffs usually have time to chat informally with their colleagues. A majority (56.3%) of the respondents agreed and another 5.7% strongly agreed bringing to a total of 62% of those who agreed, 18.4% disagreed while 13.8% strongly disagreed and another 5.7% of the respondents were neutral. Table 4.19 presents the findings.

Table 6: Staffs have Time to Chat Informally with Their Colleagues

Statement		Frequency	Percent
Staff usually have time to chat informally with their colleagues	Strongly disagree	12	13.8%
	Disagree	16	18.4%
	Neutral	5	5.7%
	Agree	49	56.3%
	Strongly agree	5	5.7%

Source: Author (2014)

4.2 Non Performing Loans

Table 4.20 indicates that there was a slight increase of the non performing loans in the year 2011 to the year 2012 and a decline in the following year from 1132735 to 1008214. This implies that the banks had put effective measures on debt collection hence the decline in the number of amount of the non performing loans.

Table 7: Descriptive Statistics for Non Performing Loans

Year	Minimum	Maximum	Mean	Std. Deviation
2011	0	9342775	1008214	1656600
2012	0	10475335	1132735	1796020
2013	0	9342775	1008214	1656600

Source: Author (2014)

4.3 Inferential Statistics

4.3.1 Bivariate Correlation

The correlation results between banks profitability and independent variable are presented. Table 8 displays the results of correlation test analysis between the dependent variable (non performing loans) and independent variables (staff competency, resources and information management) and also correlation among the independent variables themselves. Results on Table 4.21 show that non performing loans is negatively correlated with all the independent variables. This reveals that any negative change in staff competency, resources and information management led to increased number of nonperforming loans in the commercial banks.

Table 8: Bivariate Correlation

Variable		Average NPL	Staff Competency	Resources	Information Management
Average NPL	Pearson Correlation	1			
	Sig. (2-tailed)				
Information Management	Pearson Correlation	-0.212	0.896	0.61	1
	Sig. (2-tailed)	0.049	0.000	0.000	

Source: Author (2014)

4.3.2 Regression Analysis

In order to establish the statistical significance of the independent variables on the dependent variable (non performing loans) regression analysis was employed. The regression equation took the following form.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu$$

Where

Y = Non Performing Loans

X₃ = Information Management

In the model, β_0 = the constant term while the coefficient $\beta_i = 1, \dots, 3$ was used to measure the sensitivity of the dependent variables (Y) to unit change in the predictor variables. μ is the error term which captures the unexplained variations in the model.

Regression analysis was conducted to empirically determine whether staff competency, resources and information management were significant determinant of non performing loans in commercial banks. Regression results in Table 9 show that the coefficient of determination also called the R square is 41.9%. This means that the combined effect of the predictor (information management) explains 41.9% of the variations in nonperforming loans. The correlation coefficient or R of 64.7% indicates that the combined effect of the predictor variables has a strong and positive correlation with non-performing loans.

Table 9: Regression Model Fitness

Indicator	Coefficient
R	0.647
R Square	0.419
Std. Error of the Estimate	1310091

Source: Author (2014)

Analysis of variance (ANOVA) on Table 10 shows that the combined effect of staff competency, resources and information management was statistically significant in explaining changes in non-performing loans. This is demonstrated by a p value of 0.000 which is less than the acceptance critical value of 0.05.

Table 10: ANOVA

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.03E+14	3	3.42E+13	19.939	0.000
Residual	1.42E+14	83	1.72E+12		
Total	2.45E+14	86			

Source: Author (2014)

Table 10 displays the regression coefficients of the independent variables. The results reveal that staff competency, resources and information management was statistically significant in explaining non-performing loans. Regression results indicate that staff competency and non-performing loans had a negative and significant relationship (beta= -3942193, p value 0.000). The findings imply that an increase in staff competency by one unit leads to a decrease in non-performing loans by 3942193units. Results further indicate that resources and non-performing loans had a negative and significant relationship (beta= -1075872, p value 0.049). The findings imply that an increase in resources availability by one unit leads to a decrease in non-performing loans by 1075872units.

Finally, the results indicate that information management and non-performing loans had a negative and significant relationship (beta= -3022081, p value 0.000). The findings imply that an increase in information management by one unit leads to a decrease in non-performing loans by 3022081units.

Table 11 : Regression Coefficients

Variable	Beta	Std. Error	t	Sig.
Constant	7089303	1239821	5.718	0.000
InformationManagement	-3022081	566845.7	-5.331	0.000

Source: Author (2014)

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

Results indicated that majority of the respondents agreed with the statements that the bank has invested in a management information system which is easy to use, the bank has invested in a management information system which has enabled the minimization of administrative costs, the core banks management information system is compatible with other systems, the management information system is flexible enough to supports the growth of the bank, the management information system of the bank has been crucial in assisting employees to enhance their performance and productivity and staff usually have time to chat informally with their colleagues. The relationship between information management and non-performing loans is negative and significant ($r = -0.212$, $p = 0.049$). This implies that an increase in the effectiveness of information management practices influences non-performing loans negatively.

5.2 Discussion

5.2.1 Information Management and Debt Collection Practices

The third objective of the study was to determine to what extent information management affects effectiveness of debt collection in commercial banks. Results indicated that majority of the respondents agreed with the statements that the bank has invested in a management information system which is easy to use, the bank has invested in a management information system which has enabled the minimization of administrative costs, the core banks management information system is compatible with other systems, the management information system is flexible enough to supports the growth of the bank, the management information system of the bank has been crucial in assisting employees to enhance their performance and productivity and staff usually have time to chat informally with their colleagues. The relationship between information management and non-performing loans is negative and significant ($r = -0.212$, $p = 0.049$). This implies that an increase in the effectiveness of information management practices influences non-performing loans negatively.

The findings agree with those in Gupta and Moesel (2007) who investigated the impact of entrepreneurial orientations on a firm's knowledge management practices in its supply chain alliances. They collected needed data from top executives of small and medium-sized high technology firms located in the US. Their findings revealed that entrepreneurial orientations (risk-taking, innovativeness and pro-activeness) are positively related to knowledge creation and acquisition in key customer alliances.

The findings also agree with those in Hui Li et al. (2008) who, examined the relationships among entrepreneurial orientation, knowledge creation process, and firm performance. According to their hypotheses they have concluded that; there is a significant relationship between entrepreneurial orientation and firm performance, there is a significant relationship between entrepreneurial orientation and knowledge creation process and there is a significant relationship between knowledge creation process and firm performance.

5.3 Recommendations

5.3.1 Information Management and Debt Collection Practices

Following study results, it is recommended that investment in Information technology be emphasized in the banks as it has an effect on the overall achievement of competitive advantage. Therefore the organization is urged to invest in management information systems which are easy to use and which facilitate minimization of administration and operational costs. In addition, banks should invest in management information systems that are compatible with other systems as well as the one that support the growth of the bank.

5.3.2 Recommendations for Further Studies

The study recommends that further investigation be done on the effect of staff competency, resources and information management on debt collection practices on other financial institutions. For instance the study can be replicated in other micro financing organizations such as SACCOs and MFIs.

REFERENCES

- Adeosun, O., Adeosun, T., & Adetunde, I. (2009). Strategic application of information and communication technology for effective service delivery in banking industry. *Journal of Social Sciences*, pp 47-51.
- Ahmadzadeh, S. (2007). Identification and prioritization of factors affecting the productivity of employees of the Ministry of Roads and Transportation. M.A Thesis, Tehran University.
- Alaolmaleki, M. (2002). Identify and compare ways of increasing labor productivity in Semnan
- Allen, T. & Morton, M. (2004). Information Technology and the Corporation of the 1990s, New York: Oxford University Press.
- Amit, R.: Shoemaker, P. (1993). Strategic Assets and Organizational rent,” *Strategic management Journal*, 14, 1993, pp. 33-46
- Ann, B., Richard, F., Casey, I. & Morris, K. (2004). Can a Work Organization Have an Attitude Problem? The Impact of Workplaces on Employee Attitudes and Economic Outcomes, CEP Discussion Paper No 636.
- Antikainen, R., Lappalainen, S., Lönnqvist, A., Maksimainen, K., Reijula, K. & Rauva, E. U. (2008). Exploring the relationship between indoor air and productivity. *SJWEH Suppl*, 4: 79–82.
- Armstrong, M. (2000). *Performance Management: Key Strategies and Practical Guidelines*. London: Kogan Page
- Barney, J. (1991). Firm resources and sustained competitive advantage, *Journal of Management*, Vol. 17 pp.99-120.
- Bergenhengouwen, G., Horn, H. & Mooijman E. (1996) Competence development-a Challenge for HRM professionals: core competences of organizations as guidelines for the development of employees. *Journal of European Industrial Training*, 29 (9), 29-35
- Bertalanffy, L. Von (1962A). The Origin of Posts, Italy - Early 15th Century. Supplement to Philatelist and Postal Hystorian, (December).

- Bol, J. C. (2003). *The Determinants and Performance Effects of Supervisor Bias*. University of Illinois at Urbana-Champaign
- Bose, R. (2002). Customer Relationship Management: Key components for IT success. *Industrial Management & Data System* 102, 89-97.
- Boyatzis, R.E. (2007), Competencies in the 21st Century. *Journal of Management Development*, 27 (1), 5-12.
- Buhalis, D. (2004). eAirlines: strategic and tactical use of ICT in the airline industry. *Information and Management*, pp 805-825.
- Buhalis, D. & Law, R. (2008). Progress in tourism management: Twenty years on and 10 years after the Internet: The state of eTourism research. *Tourism Management*, pp 609–623.
- Carneiro, A. (2000). How does knowledge management influence innovation and competitiveness? *Journal of Knowledge Management*, Vol. 4 No. 2, pp. 87-98.
- Central Bank of Kenya. (2012). *Bank Supervision Annual Report 2009*. Central Bank of Kenya, Nairobi.
- Chandran, E. (2006). *Research Methods: A Quantitative Approach with Illustrations from Christian Ministries*. Nairobi: Daystar University.
- Christensen, J. (2000). *IT and business: a history of Scandinavian airlines*, Aarhus University Press, Århus, Denmark.
- Cochran, W. G. (1977). *Sampling Techniques* (3rd ed.). New York : Wiley. ISBN 0-471-16240-X.
- Cooper, D. R., & Schindler, P.S (2007). *“Business Research Methods”*, 9th, edition. McGraw-Hill Publishing, Co. Ltd. New Delhi-India

Cravens, A. (2000). *A Parallel Postsecondary Universe: The Certification System in Information Technology*. Washington, D.C.: U.S. Department of Education.

Cronin, B. (1990). *Information Management from strategies to action*, London; ASLIB;

Darroch, J. (2005). Knowledge management, innovation and firm performance, *Journal of Knowledge Management*, Vol. 9 No. 3, pp. 101-115.

Doganis, R. (2001). *The airline business in the 21st century*, Routledge, London.

Drucker, P. F. (1999). Knowledge-Worker Productivity: The Biggest Challenge, *California Management Review*, 41(2): 79-94.

Elena P. Antonacopoulou, (2008). Employee development through self-development in three retail banks“*Journal of Personnel Review*, Vol. 29 No. 4, pp. 491-508

Enshassi, A., Mohamed, S., Abu Mustafa, Z., & Mayer, P. E. (2007). Factors Affecting Labour Productivity In Building Projects In The Gaza Strip, *Journal Of Civil Engineering And Management*, 245-254.

Gefen, D., & Ridings, C. (2002). Implementation team responsiveness and user evaluation of Customer Relationship Management. A quasi-experimental design study of social exchange theory. *Journal of Management Information Systems* 19(1), 47-69.

Ghebregiorgis, F., & Karsten, L. (2007). Human resource management and performance in a developing country. *International Journal of Human Resource Management*, 18(2), 321-332.

Gholami, R., Emrouznejad, A., and Schmidt, H. (2008). *The Impact of ICT on Productivity of Airline Industry*. Operations and Information Management. Aston Business School.

Gil-Diaz, F. (1994). The Origin of Mexico's 1994 Financial Crisis, *The Cato Journal*, vol.17, No.3, <http://www.cato.org/pubs/journal/cj>. Retrieved January 2014

Goodhue, D. L., Wixom, B. H., & Watson, H. J. (2002). Realizing business benefits through CRM: Hitting the right target in the right way. *MIS Quarterly Executive* 1(2), 79-94.

- Grant, R.M. (1991). The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation, *California Management Review*, 33, 3, pp.114-35.
- Gupta, J. N., Sharma, S. K., & Rashid, M. A. (2009). *Handbook of Research on Enterprise Systems*. U.S.: Information Science Reference.
- Gupta, V. K., & Moesel, D. M. (2007). The impact of entrepreneurial orientation on knowledge management in strategic alliances: Evidence from high-technology SMEs, *Paper presented at the Annual USASBE Conference, Florida*.
- Hall, R. (1993). A framework linking Intangible Resources and Capabilities to Sustain Competitive Advantage, *Strategic Management Journal*, 14, 8, pp. 607-18.
- HayGroup. (2004). Hay Resources Direct. [http://www.hayresourcesdirect.haygroup.com/Competency/Assessments Surveys/Manager_Comp...](http://www.hayresourcesdirect.haygroup.com/Competency/Assessments_Surveys/Manager_Comp...) Accessed January 2014
- Hengst, M., & Sol, H. G. (2001). *The impact of information and communication technology on Inter-organizational coordination: Guidelines from theory*. Informing Science, Special Series on Information Exchange in Electronic Markets.
- Hudson (2008) *Procurement Leaders in a changing world: will they decline or thrive?* Hudson Thought Leadership Series. Retrieved from www.hudson.com. Retrieved February 2014.
- HuiLi, Y., Huang, J.W. & Tsai, M.T. (2008). Entrepreneurial orientation and firm performance: The role of knowledge creation process, *Industrial Marketing Management*, Vol.38, No.4, pp. 440-449.
- Hutton, D. & Moulton, S. (2004) *Behavioral Competencies for Health Care Leaders*. Retrieved From http://www.hhnmag.com/hhnmag_app/jsp/articledisplay.jsp?dcrpath=HHNMAG/PubsNews/Article/data/041005HHN_Online_Hutton&domain=HHNMAG. Accessed February 2014

- Iqbal M. T., Latif W. & Naseer W. (2012). The Impact of Person Job Fit on Job Satisfaction and its Subsequent, Impact on Employees Performance, ISSN2039 2117 Mediterranean Journal of Social Sciences Vol. 3 (2) May 2012
- Itami, H. (1987). *Mobilizing Invisible Assets*, Cambridge, NJ: Harvard University Press.
- Jacobsen, C., Gary, D., Cashman, W. & Tim, J. (2008). *Discovering Computers: Concepts for a Connected World*. Cambridge, Massachusetts: Course Technology.
- Kagaari, J. R. K. & Munene, J. C. (2007). Engineering lecturers' competencies and organizational citizenship behaviour (OCB) at Kyambogo University. *Journal of European Industrial Training*, 31 (9), 706-726
- Kak, A. (2002). Sustainable Competitive Advantage with Core Competence : A Review, *Global Journal of Flexible Systems Management*, Dec.
- Kamau, A. (2009). *Efficiency and Productivity of the Banking Sector in Kenya: An Empirical Investigation*. Unpublished PhD dissertation, University of Nairobi
- Kevin, J. (2006). Information technology and sustained competitive advantage: a resource-based analysis. *MIS Quarterly*, pp 487–505.
- Kilic, H., & Okumus, F. (2005). Factors influencing productivity in small island hotels Evidence from Northern Cyprus, *International Journal of Contemporary Hospitality Management*, 17(4).
- Kothari , C.R (2005). *Research Methodology: Methods and Techniques* (2nd Ed.)
- Kuhn, A. (1974). *The Logic of Social Systems*. Jossey-Bass, San Francisco
- Laudon, C. and Laudon, P. (2007). *Management Information Systems*. New Jersey. Prentice-Hall.
- Lewis, H. (2004). 7 steps to fixing your credit report. Bankrate.com, October 18, 2004.

- Li-Hua, X. & Khalil, P. (2006). Review: the resource-based view and information systems research: review, extension, and suggestions for future research. *Management*, pp.131-136.
- McCall, H., Arnold, V., & Sutton, S. (2008). Use if Knowledge Management systsems and the Impact of the Acquisition of Explicit Knowledge. *Journal of Information Systems*, 22(2), 77-101.<http://dx.doi.org/10.2308/jis.2008.22.2.77>. Accessed January, 2014.
- McClelland, D.C. (1998). Identifying competencies with behavioral event interviews. *Psychological Science*, 9 (5), 331-40.
- McGraw-Hill McLagan, P.A. (1997). Competencies: the next generation. *Training and Development*, 55 (5),40.
- Michael, J.N., Vasanthi, G., & Selvaraju, R. (2006). Effect of Non-Performing Assets on Operational Efficiency of Central-Cooperative Banks, *Indian Economic Panorama*, Vol. 16(3). 33-39.
- Montgomery, J., & Smith, M. (2009). Prospects for personalization on the internet. *Journal of Interactive Marketing* 23(2), 130-137.
- Mulligan, P., & Gordon, S. (2002). The impact of information technology on customer and supplier relationships in the financial services. *International Journal of Service Industry Management* 13(1), 29-46.
- Musyoki, D. & Kadubo, A. S. (2011). The impact of credit risk management on the financial performance of Banks in Kenya for the period 2000 – 2006. *International Journal of Business and Public Management* (ISSN: 2223-6244) Vol. 2(2): 72-80
- Mwega, F.M. (2009). *Global Financial Crisis: Kenya: Discussion series*. Paper 7.[Online]. Available at www.odi.org.uk/resources/download/3312.pdf. Accessed January, 2014
- Nelson, C.R. & Schwert, G. W. (2006). Short-term Interest Rates As Predictors of Inflation on Testing the Hypothesis that the Real Rate of Interest is Constant. *American Economic Review*. 67, p. 478-86.

- Nelson, W.M. & Kalani, V. M. (2009). Commercial Banking Crises in Kenya: Causes and Remedies. *Global Journal of Finance and Banking Issues*, Vol. 3, No. 3, 2008. Available at SSRN: <http://ssrn.com/abstract=1536159>. Retrieved January, 2014.
- Nesbary, D. K. (2007). *Survey research and the world wide web*. Boston: Allyn and Bacon.
- Newbert, S. L. (2007). Empirical research on the resource-based view of the firm: An assessment and suggestions for future research. *Strategic Management Journal*, 28 (2), 121-146
- Ngugi, N., Amanja, D. & Maana, L. (2006). *Capital Market, Financial Deepening and Economic growth in Kenya*. [Online]. Available from: <http://www.csae.ox.ac.uk/conferences/2009-EDiA/papers/513-Isaya.pdf>
- Ngugi, R. W. (2001). An Empirical Analysis of Interest Rate Spread in Kenya. *African Economic Research Consortium (AERC) Research Paper No. 106*.
- Oloo, O. (2009). *The Banking Survey 2009*. Think Business. Nairobi
- Olufunso, F. O., Herstand, G. & Lombard, R. (2009). An investigation into the impact of the usage of debt on the profitability of small and medium enterprises in the Buffalo city, municipality, south Africa. *African journal of Business Management* Vol. 4(4), pp 373-381
- Otote, A. O. I. (2008). Impacts of Environmental Turbulence and Interpersonal Orientation on Nurses Productivity in A Canadian Health-Care Organization, A Dissertation Presented in Partial Fulfillment of The Requirements for the Degree Doctor of Business Administration.
- Palan, R. (2003). *Competency Management: A Practitioners' Guide*. Kuala Lumpur, Malaysia: Specialist Management Resources
- Penrose, E.T. (1959). *The Theory of the Growth of the Firm*, New York, NY: John Wiley.
- Poon, A. (2003). *Tourism, technology and competitive strategies*. Oxford: CAB International.

- Rajan R. G. (2005). The Entry of Commercial Banks into the Securities Business. A Selective Survey of Theories and Evidence. Graduate School of Business, University of Chicago
- Riketta, M. (2008). The Causal Relation Between Job Attitudes and Performance A Meta-Analysis of Panel Studies, *Journal of Applied Psychology* 2008, VOL 93, No. 2 472-481.
- Ruitenbergh, J., & Beer, P.T. de (2012). The impact of attitudes and work preferences on Dutchmothers' employment patterns. University of Amsterdam, AIAS Working Paper 120
- Rumelt, R. P. (1991). How much does industry matter? *Strategic Management Journal*, 12(3): 167-185.
- Russell, I (2004) *People Management and Competency Profiling*. South Yarra, Australia: TestGrid Pty Ltd
- Ryan, G., Emmerling, R. J. & Spencer, L. M. (2009). Distinguishing high-performing European executives: The role of emotional, social and cognitive competencies. *Journal of Management Development*, 28 (9), 859-875
- Ryan, G., Emmerling, R. J. & Spencer, L. M. (2009). Distinguishing high-performing European
- Sinare, E.H. (2008). Credit Reference Bureau In Tanzani And Better Environment For Lenders and Borrowers. World Service Group
- Sonnentag S. & Frese M. (2001), Performance Concepts and Performance Theory.
- Sonnentag S., Volmer J. & Spychala A. (2010), Job Performance, First publ. in: Micro approaches (Sage handbook of organizational behavior; vol. 1) / ed. by Julian Barling, Los Angeles, Calif. [u.a.]: SAGE, pp. 427-447.
- Spencer, L.M. (2003). How competencies create economic value. In L. A. Berger & D. R. Berger (Eds.), *The Talent Management Handbook: Creating Organizational Excellence by Identifying, Developing, and Promoting Your Best People* (pp. 64-84). New York, NY:

- Surry, D., Ensminger, D. & Haab, M. (2005). A model for integrating Instructional technology into higher education. *British Journal of educational Technology*, 36(2), 327-329
- Swift, R. S. (2002). *Accelerating Customer Relationships: Using CRM and relationship technologies*. Upper saddle River. N.J.: Prentice Hall PTR.
- Taheri, S. (2004). Productivity in organizations (overarching productivity), Tehran, NshrhstanPublication.
- Tayyebi, S. J. (2002). Factors affecting labor productivity in view of employees of executive departments, Shiraz University of Medical Sciences in 2001. First National Conference on Human Resource Management in Hospitals.
- Torochim, W. (2006). Deductive and Inductive Thinking. Available: www.social_research_methods.net/kb/dendid.Php
- Trochim, W.M (2006) the research methods knowledge base 2nd Edition.
- Turner, M. A., Varghese, R., & Walker, P. (2008, August 4). PERC. Retrieved October 29, 2008, from PERC Website: www.infopolicy.org
- University of Medical Sciences and Health Services. The first National Conference on Hospital Management.
- Vathanophas V., & Thai-ngam, J. (2007). Competency Requirements for Effective Job Performance in The Thai Public Sector, *Contemporary Management Research* Pages 45-70, Vo. 3, No. 1, March 2007.
- Walters, M. M. (2007). Leadership and Productivity: An Examination of A Leader Member Exchange Model. A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy.