

Research article

EFFECTS OF KNOWLEDGE MANAGEMENT STRATEGIES ON ORGANIZATIONAL PERFORMANCE: A CASE OF REAL ESTATE MANAGEMENT FIRMS IN NAKURU TOWN

FRIDAH GITONGA MAKENA

DEPARTMENT OF BUSINESS ADMINISTRATION
EGERTON UNIVERSITY

DANIEL ONWONGA AUKA

DEPARTMENT OF BUSINESS ADMINISTRATION
EGERTON UNIVERSITY

RICHARD O. AKUNO NYANG'AYA

DEPARTMENT OF ACCOUNTING & MANAGEMENT SCIENCE,
EGERTON UNIVERSITY

E-mail: danielauka@yahoo.com



OPEN ACCESS

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

ABSTRACT

The purpose of this study is to determine the effects of knowledge management strategies on organizational performance of real estate management firms in Nakuru town. knowledge management of innovation in the banking sector is key in today's competitive environment in strategic decision making . knowledge management leads to the growth of real estate firms . the study involved 12 real estate management firms out of the 18 firms registered firms in Nakuru town. Purposive sampling techniques were used to select 3 respondents; the director, the accountant and the marketing officer from each of the 12 firms. The sample of the study was thus made up of 36 respondents. The

employees of real estate management firms questionnaire was used to gather data. Correlation and regression were used to analyse data on the relationship between knowledge management and the organizational performance of real estate management firms. The results indicated that knowledge management influences the performance of real estate management firms. The results of the study reinforce the need for real estate management firms develop strategies that would promote effective use of knowledge management strategies and enhance their organizational performance .

KEY WORDS : Knowledge Management, Explicit Knowledge, Knowledge Acquisition, Knowledge Evaluation, Knowledge Processing, Knowledge Sharing, Organizational Performance, Real Estate Management Firms

INTRODUCTION

The concept of knowledge management

Knowledge management is defined as the systematic process of identifying, capturing and sharing knowledge people can use to improve social development outcomes. Knowledge differs from information and data in that knowledge is complex and contextual, created as part of an interactive process, essentially a human attribute, value laden, and connected to action to be relevant. Knowledge is created in the minds of people and is difficult to capture and record. Experience has shown that the means to capture complex knowledge most effectively is to provide platforms that facilitate knowledge sharing.

According to (Murry, 2005), Knowledge Management is ‘the process of selectively applying knowledge from previous experiences of decision-making to current and future decision-making activities with the express purpose of improving the organization’s effectiveness.’ This definition encompasses the goals of knowledge management broadly into : (1) identify critical knowledge; (2) acquire critical knowledge in a knowledge base or organizational memory; (3) share the stored knowledge; (4) apply the knowledge to appropriate situations; (5) determine the effectiveness of using the applied knowledge; (6) adjust knowledge use to improve effectiveness. ‘Knowledge Management’ in the current context is a collection of activities, processes and policies which enable organizations to apply knowledge to improvement of effectiveness, innovation and quality.

By utilizing knowledge management during the strategic management process, management could make effective decisions that will assist an enterprise to gain greater market share and to compete successfully against local and international competitors (Kruger, 2010). To be successful in the management of knowledge as an asset, it is of fundamental importance to recognize that knowledge assets, just as any other asset of the enterprise, should be managed in the context of the overall business.

Traditionally many enterprises have taken an *ad hoc* approach to managing knowledge, resulting in work duplication, inconsistent work practices and loss of important organizational knowledge when employees retire or leave the company (du Plessis et al, 2006). The link between knowledge management and the business strategy is viewed as the crux for successful knowledge management in any enterprise. Thus Nonaka and Takeuchi (1995) state “the most crucial element of corporate strategy is to conceptualize a vision about what kind of knowledge should be

developed and to operationalize it into a management system for implementation". Strategy can be viewed as an instrument that the enterprise must excel at to ensure its survival in a competitive environment (Kruger, 2010). According to Yang (2007) knowledge sharing and knowledge integration are key factors in achieving a competitive advantage.

Performance is a measure of how well an organization achieves appropriate objectives (Stoner et al, 2002). The expected outcomes of effective knowledge management lead to improved organizational effectiveness, improved productivity, a way to capture strategic practices, improved decision making, a more innovative organization, source of competitiveness and improved performance. Some of the performance measures that may be used are productivity, profitability, liquidity, market share and costs (Hatch, 1997).

Knowledge within the business context can fall within the spectrum of tacit (implicit) knowledge and explicit (codified) knowledge. Tacit knowledge is stored in people's heads and is difficult to share. Explicit knowledge is captured or stored in an organization's manuals, procedures, databases, and is therefore, more easily shared with other people or parts of an organization. Organizational knowledge is a mixture of explicit and tacit knowledge and the role of knowledge management (KM) is to unlock and leverage the different types of knowledge so that it becomes available as an organizational asset (Hall et. al., 2002).

Statement of the Problem

Interest in knowledge management (KM) has risen steadily since the 1990s to a point where many firms regard it as a key element of their operations and strategies. Firms are embracing the importance of managing knowledge if they want to remain competitive. Many companies are beginning to actively manage their knowledge and intellectual capital (Zack, 1999). Garud and Kumaraswamy (2005) argue that knowledge has emerged as a strategically significant resource for the firms. Therefore knowledge creation and transfer have become key factors to gain and sustain a competitive advantage (Sambamurthy & Subramani, 2005). Organizational performance is therefore a key issue among many firms and therefore linking KM to organizational performance in real estate setup could make a strong business case in convincing business strategists about the need to adopt a KM strategy in their business environment. However, the extent to which knowledge management can impact organizational performance in the real estate in Kenya has not been studied. Thus the main aim of this study was to examine the effect of knowledge management on organizational performance of Real Estate Management firms in Nakuru Town.

Main Objective of the Study

The main objective of the study was to investigate the effects of Knowledge Management Strategies on Organizational performance of Real Estate Management Firms in Nakuru Town.

Specific Objectives

The study was guided by the following specific objectives :

- i) To determine the effect of knowledge management systems on organizational performance
- ii) To determine the effect of knowledge acquisition strategies on organizational performance
- iii) To determine the effect of knowledge processing strategies on business performance

- iv) To determine the effect of knowledge sharing strategies on organizational performance
- v) To determine the effect of knowledge evaluation strategies on organizational performance
- vi) To establish the combined effect of knowledge acquisition, processing, sharing strategies and evaluation strategies on organizational performance .

Research Hypotheses:

This study tested the following hypotheses;

- i. There is no significant relationship between knowledge management systems and organizational performance of Real Estate Management firms in Nakuru town
- ii. There is no significant relationship between knowledge capture and acquisition strategies and organizational performance in Real Estate Management firms in Nakuru town
- iii. There is no significant relationship between knowledge processing strategies and organizational performance in Real Estate Management firms in Nakuru Town
- iv. There is no significant relationship between knowledge sharing strategies and organizational performance in Real Estate Management firms in Nakuru Town
- v. There is no significant relationship of knowledge evaluation strategies and organizational performance in Real Estate Management firms in Nakuru Town
- vi. There is no significant effect of combined components of knowledge management strategies on organizational performance in Real Estate Management firms in Nakuru Town

LITERATURE REVIEW

The adoption of KM strategies leads to higher levels of performance. Choi and Lee (2003) showed that explicit knowledge and tacit knowledge oriented strategies resulted in higher performance. Keskin (2005) argued that the impact on organizational performance is higher with explicit-oriented strategy than the tacit-oriented one. Explicit knowledge is formal, systematic knowledge that can be codified, written down and passed on to others in documents or general instructions. Explicit knowledge is thus formalized, accessible, transmittable and shared in formal systematic language. Explicit knowledge can be embodied in a code or a language, and as a consequence, it can be easily communicated and shared (Hall et. al., 2002). The code maybe words, numbers or symbols.

Tacit knowledge, on the other hand includes professional know-how and expertise, individual insight and perspectives, and creative solutions that are often difficult to communicate and pass on to others. Hall et. al., (2002) observe that tacit knowledge is acquired by experience, learning by doing, sharing experiences, by observation and imitation. Tacit knowledge maybe held by an individual or it may be diffused throughout an organization. They also point out that an organization's culture is an example of diffused tacit knowledge and an individual's assimilation of organization's culture is an example of the transmission of tacit knowledge from a group to an individual. Tacit knowledge (as opposed to explicit knowledge) is much more difficult for competitors to imitate. Thus it is more valuable and more likely to lead to a sustainable competitive advantage (Kogut et. al., 1992). Alavi and Leidner (2001) concluded that there are five key processes extant in KM: knowledge creation, knowledge storage, knowledge and retrieval, knowledge transfer, and knowledge application. Each of these processes is supported by one or more ICT technologies, and each contributes to one or more knowledge application tasks.

The Real Estate Market

Real estate investment offers the investor with a rental income from the users of real estate, they can also benefit from capital appreciation. Real estate investment can provide an investor with greater returns through financial leverage; it is also an inflation hedge and its value keeps on appreciating into the future (Yang & Ye, 2010).

A survey conducted by Hass Consultants in association with CFC Stanbic bank in the year 2010 revealed that the Kenyan real estate sector has been vibrant for the past decade between the years 2000 to 2010. The market's resilience is in sharp contrast to international property markets; it has also survived the local and international recession unscathed. The report also revealed that capital gains from Kenyan properties far outstrip gains from US and UK properties. There has been also an increase in rental prices which are unlikely to return to the past levels in the short run. This has eventually made the Kenya real estate market to be the winner in the international property investment amidst the indebtedness in the Western countries (Mwithiga, 2010).

The property market in Kenya has grown rapidly and become an important source of economic growth. Over the last ten years between the years 2000 to 2010, those who invested in real estate earned higher returns compared to those who traded at the Nairobi Stock Exchange (NSE), meaning that for profitable long-term investments, the property sector holds key. The Kenyan banks have realized this lucrative sector and are offering mortgage products to attract Kenyans. Many middle class Kenyans now prefer to purchase their own homes rather than be tenants (Mwithiga, 2010).

Armonat and Pfnuer (2004) stated that the common sources of market information on real estate performance are real estate indices. An index is a statistical measure of changes in a representative group of individual data points. This paper will use the property index as the basis for measuring real estate returns. The property index will use aggregated prices on a quarterly basis rather than the market value at a particular point in time. Gelner (1993) concluded that such temporal aggregation contributes to both a lower return volatility and a lower beta with the stock market.

Compared with the U.S.A. and other developed markets, Kenya's real estate industry is less experienced and immature. The Kenya real estate market lacks the following forms of real estate investments. Aggregation vehicles which Aggregates the investors and serve the purpose of giving investors collective access to real estate investments (Oshrat and Margaret, 2011). This comprises; Real Estate Limited Partnerships (RELPs) and Real Estate Investment Trusts (REITs). Undertaking investments through REITS provides investors with an opportunity to take part in large-scale commercial real estate projects without having to invest large amounts of money in illiquid investments. The most common way in which investors in Kenya held real estate assets is majorly through mortgage financing such as free and clear equity and leveraged equity (Wangechi, 2010).

Knowledge management and Organisational Performance

Performance is the measure of how well an organization achieves appropriate objectives or how efficient and effective an organization is (Stoner et. al., 2002). Performances are set up so that the deviance between the actual

and intended outcome is identified. After that the necessary analysis is instituted to determine the source of the deviance and possible courses of action to remedy it.

Businesses are tending to rely less on financial measures (which are based on Accounting Standards) such as, profit, return on investment, and return on assets, alone to assess overall corporate performance (Wheelen et al 2002). Measures that focus solely on financial performance are seen as less appropriate to deal with the issues which confront organizations now (Ahn, 2001). "Sole reliance on financial measures of performance does not arguably reflect the importance of current resource decisions for future financial performance. Though some firms recognized the importance of non-financial performance measures many years ago (e.g., General Electric in the 1950s), growing international competition and the rise of the TQM movement have widened the appeal of non-financial performance measures".

In this era of intense competition, both worldwide and domestic, business firms of all sizes and varieties have become more and more concerned with the market-share figures they achieve in the marketplace. From our personal experience, some managers appear interested as much, if not more, in market shares as profit or returns on investment. Market shares command the attention of business managers as key indices for measuring the performance of a product or brand in the marketplace. Many individuals in business indeed keep a close watch over day-by-day changes in market shares, so much so that market-share movement to them is almost synonymous to market information.

To the extent that market share is used as market performance index, it is clearly desirable for the individuals concerned to have thorough knowledge of the processes which generate market-share figures and to be able to analyze the impact of their own actions on market shares, as well as their profit implications. Lacking such knowledge, one might be tempted to oversimplify the cause-and-effect relationships between market shares and marketing variables, or to equate market shares to profitability (a not unusual tendency even among seasoned businessmen) and fall into deadly traps of blindly competing for market shares for its own sake.

One of the key benefits of introducing KM practices in organizations is its positive impact on organizational performance. According to Fugate et al. (2009), results collected in a logistics operations context prove the existence of a strong positive relationship between a KM process and operational and organizational performance. Still, it is not well understood how different knowledge management strategies affect organizational performance. Choi et al. (2008) show that combining the tacit-internal-oriented and explicit-external-oriented KM strategies indicates a complementary relationship, which implies synergistic effects of KM strategies on performance. The results of the study conducted by Zheng et al. (2009) suggest that KM fully mediates the impact of organizational culture on organizational effectiveness, and partially mediates the impact of organizational structure and strategy on organizational effectiveness.

The goals and expected outcomes of an organization with effective knowledge management include improved organizational effectiveness, improved productivity, and a way to capture best practices, improved decision making, becoming a more innovative organization and a source of competitiveness and improved performance. Soo (2002)

points out that the impact of knowledge management systems on performance relates primarily to the organization's ability to innovate- either through improved processes or improved products and services.

It is widely accepted that increasing the amount and the quality of knowledge sharing within firms is crucial to creating higher levels of innovation (Kaser et. al., 2002). New knowledge that drives product and process innovation really always comes out of the exchange of party formed ideas that trigger new insights. Thus knowledge management increases the innovative performance of firms. Indeed, a firm that effectively uses its knowledge assets knows more about its customers, products, technologies, markets and their linkages, and should perform better. Penrose (1959) argues that companies having superior knowledge are able to coordinate and combine their traditional resources and capabilities in new and distinctive ways, providing more value for their customers than their competitors. Soo et al. (2002) explain that while knowledge itself is difficult to measure and the precise accounting for the use of intellectual capital is in its infancy stages, it does have a clear impact on business outcomes.

Knowledge creation and use are critical if firms are to have a competitive advantage. In the knowledge- based view of the firm, an organization's ability to create and utilize knowledge is viewed as the sure source of lasting competitive advantage (Grant, 1991; Kogut et. al., 1992 and Spender 1996). The knowledge-based theory views firms as distributed knowledge systems, which means that they are composed of knowledge embodied individuals and their social interactions. The knowledge-based theory of the firm postulates that knowledge is the only resource that provides sustainable competitive advantage, and therefore the firm's attention and the decision-making should focus primarily on knowledge and the competitive capabilities developed from it. The key contribution of the knowledge based view of the firm and knowledge management literature is the insistence that knowledge can be managed as an organizational resource that in turn, hopefully, constitutes competitive advantage (Choo et. al., 2002). Soo et al. (2002) assert that the capacity to manage human intellect and to transform intellectual output into a service or a group of services embodied in a product is fast becoming the critical executive skill of this era.

The value of knowledge results from the way in which the firm combines its knowledge and capabilities in the production of products and services that deliver value to its market. A firm can gain advantage from using the capabilities that arise from the knowledge assets in ways which are difficult for others to imitate or replicate. Performance differences between organizations, then, are a result of their different stocks of knowledge and their differing capabilities in deploying knowledge. Knowledge and competence have become the primary drivers of competitive advantage; and to the extent that knowledge and capabilities are unique and difficult to imitate, they confer sustainable competitive advantage on the firm (Choo et. al., 2002).

Innovation initiatives tend to depend heavily on employees' knowledge, skill, and experience in the value creation process. According to this view, knowledge sharing can be seen as valuable inputs for innovation because of their characteristics of firm specific, socially complex, and path-dependent (Chiang & Hung, 2000). It is obvious that a firm's ability to transform and exploit knowledge may determine its level of innovation, such as new problem-solving methods and new product for rapid reaction to the market demand (Goh, 2002). However, organizations can only begin to effectively manage knowledge when employees are willing to sharing their knowledge. On-going

sharing of knowledge contributes to innovations in teams, units and/or the whole organization. To better fulfill innovative tasks, employees always have to borrow from tacit knowledge (skills or experience) of their colleagues or search for explicit knowledge (institutionalized approaches or practices) existing in the company. Therefore, a firm that can promote sharing knowledge practices within groups or organizations is likely to generate new ideas for developing new business opportunities, thus facilitating innovation activities (Lundvall & Nielsen, 2007).

Law and Ngai (2008) found knowledge sharing and learning behaviors would lead to better performance through the improvement of business process, product and service offerings of a firm. Ren et al (2007) explored the quantitative relationship between knowledge sharing and firm performance based on a survey in Xi'an, China, with contextual factors in consideration and found that different dimensions of knowledge sharing play various roles leading to performance differently.

Conceptual Framework

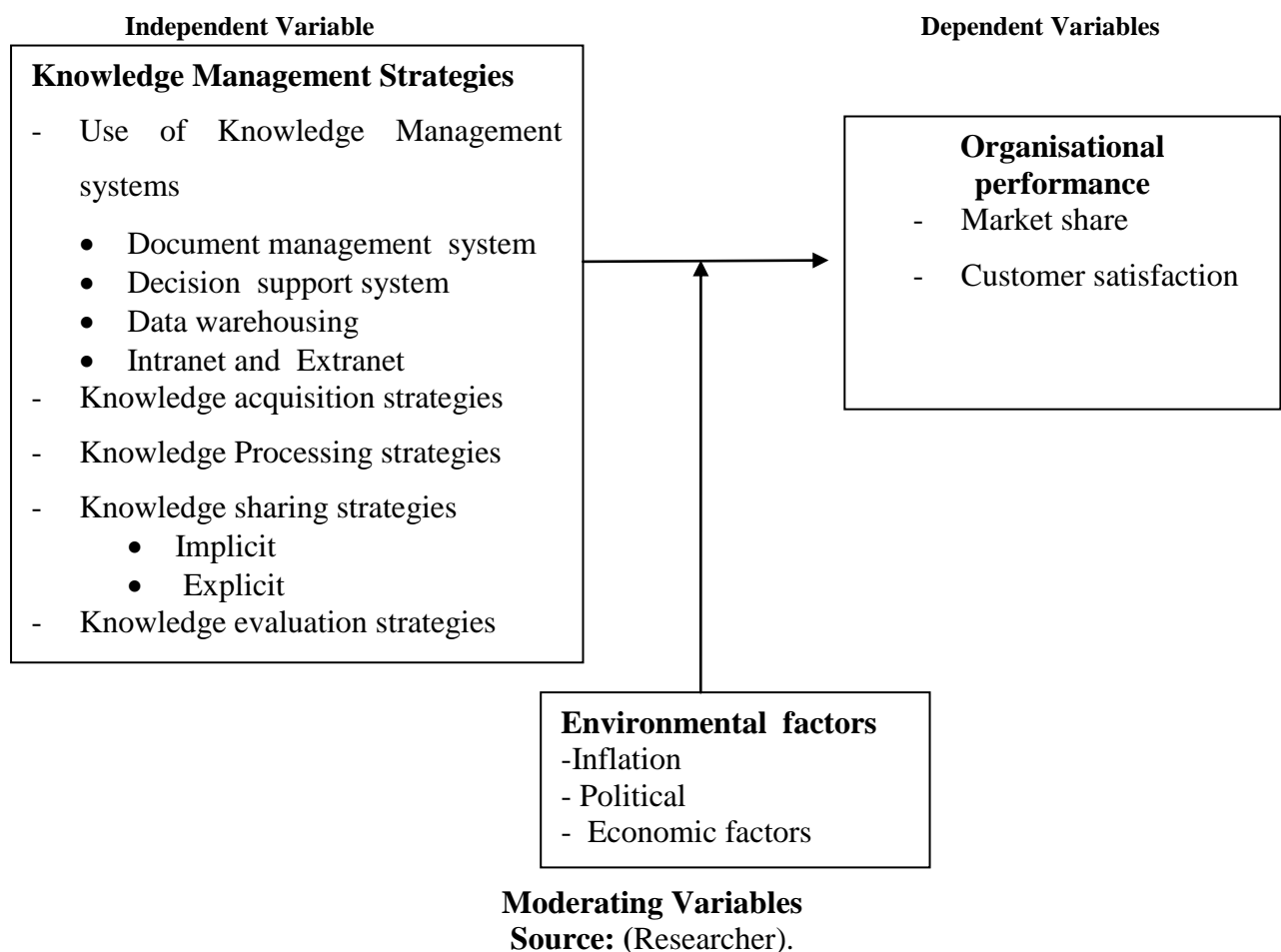


Figure 1. The Relationship between Knowledge Management and Firms' Organizational performance

The independent variable of this study were Knowledge Management which was operationalised as Use of Knowledge Management Systems : Document management system ,Knowledge Acquisition Strategies, Knowledge

Processing Strategies, Knowledge Sharing Strategies and Knowledge Evaluation Strategies, and dependent variables are organizational performance operationalised as Market share and customer satisfaction.

The variables in this study have been operationalized as : Knowledge management which was the independent variable is operationalized as document management system, decision support system, data warehousing, and intranet and extranet, knowledge acquisition, knowledge processing, sharing of explicit and implicit knowledge and knowledge evaluation strategies. The dependent variable which was organizational performance was operationalized market share, service quality and customer base.

METHODOLOGY

Research Design

This study adopted a descriptive research design because it provides an accurate portrayal of the characteristics, for example behaviour, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group.

Target Population

The target population of the study was the management of the 18 registered Real Estate Management firms in Nakuru Town. The accessible population was the management of 12 firms that are run by employed managers. The 12 firms have a total of 36 employees composed of CEO's, accounts and marketing sections. The study left out 6 real estate management firms which were micromanaged by their owners.

Sampling Design and Size

The study used Purposive Sampling techniques to select three respondents: namely CEO/Managing Director, an Accountant and Marketing Manager with a total 36 respondents. Mugenda and Mugenda (2007) contend that purposive sampling allows a researcher get information from those who are in the best position to provide it. The CEOs, accountants and marketers were the appropriate people to provide information on knowledge management strategies because they are the main users of knowledge being in charge of the overall operations of the firms or the sections they head.

Data Collection Methods

The study collected data using questionnaires administered through drop and pick method. The questionnaire had items. The researcher sought permission to conduct the study from the National Council of Science and Technology through Egerton University. Once the permission was granted, the researcher formally contacted the respondents and explained to them the purpose of the study and request for their cooperation.

Validity of the Instrument

The real estate management firms employees questionnaire was checked for validity and pilot for reliability before it was used during the actual study. Kothari (2004) points out that validity measures the accuracy of the instruments in obtaining the anticipated data that can meet the objectives of the study. The researcher consulted and sought

opinions of experts (lecturers in the Department of Business Management of Egerton University). The experts checked the content and construct validity of the research instruments. Content validity will ensure that items in the data tools are adequately representative of the subject area while the construct validity will ensure that the tools actually measure what they are supposed to measure (Fraenkel and Wallen 2000).

Reliability

Barry and Gail (1996) recommend pre-testing of research instruments before using it in research. A reliable instrument consistently produces the same results when used to collect data from the same subjects randomly drawn from the population (Borg & Gall, 2007). The questionnaire was pilot tested using 8 employees from firms which did not take part in the actual study. Its reliability was estimated using the Cronbach Alpha method. The method is recommended in situations where the instrument is administered once and the questions in it are not dichotomous but the multiple choice type (Gall, Gall & Borg, 2003). The instrument yielded a reliability coefficient of 0.74. The reliability was higher than the recommended threshold of 0.7 (Mugenda & Mugenda, 2007). The data collection tool was thus considered appropriate for the study.

Multicollinearity Testing

Multicollinearity diagnostics were performed to test whether the independent variables are related to each other instead of being related to the criterion variable (organizational performance). Multicollinearity was tested using tolerance and variance inflation factor (VIF) statistics, the results of the multicollinearity test are shown in table 13. Meyers, Gamst and Guarino (2006) suggest tolerance values at 0 .01 or less indicate the presence of multicollinearity. The tolerance scores range from 0.521 to 0.790, which far exceed the .01 threshold for multicollinearity problems.

Table 12: Multicollinearity test on the independent variables

Independent variables	Collinearity Statistics	
	Tolerance	VIF
Knowledge management system means	.521	1.919
Knowledge capture and acquisition means	.503	1.989
Knowledge processing strategies means	.670	1.493
Knowledge sharing strategies means	.703	1.422
Knowledge evaluation strategies means	.790	1.266

The VIF statistic is a separate collinearity diagnostic technique. The VIF is the reciprocal of tolerance and Stevens (1992) suggests VIF scores that exceed 10 indicate multicollinearity. VIF scores range from 1.266 to 1.989, which do not approach the conventional level of 10 where multicollinearity becomes a problem. Therefore, the tolerance and VIF values are well within normal bounds, indicating multicollinearity is not present among the explanatory variables.

Data Analysis

The collected data was organised, cleaned and coded. Data analysis was done with the aid of the Statistical Package for Social Sciences. Both descriptive and inferential data were obtained. Frequencies and percentages were used to summarise and describe data. The relationships between the variables were tested at the 0.05 level using the Pearson's Correlations. The effects of Knowledge Management Strategies on Organizational performance of Real Estate Management Firms was determined using multiple regression. The general regression model is

$$Y = f(X_1, X_2, X_3, X_4, X_5)$$

Specifically

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where by :

Y = the dependent variable (performance outcome)

β_0 = the constant

β_i = coefficient of the independent variable

X_1 = knowledge management systems

X_2 = knowledge acquisition

X_3 = Knowledge processing

X_4 = Knowledge sharing

X_5 = Knowledge evaluation

e = error factor

RESULTS AND DISCUSION

Characteristics of the respondents

A total of 36 questionnaires were administered to the respondents during the study. Out of this number, 34 were filled and returned to the researcher, representing a return rate of 94%. According to Mugenda and Mugenda (2007), a response rate of 50% is adequate for analysis and reporting, a rate of 60% is good and that of over 70% is excellent. The return rate was therefore rated as excellent.

Describing a sample gives a clear picture of its characteristics and provides evidence that it has attributes of the population (Kothari, 2004). The characteristics of the respondents are described in terms of their gender, age, level of education and the sections where they work. In addition to this information, the major challenges faced by the real estate management firms in the course of their work are also summarized.

Gender was one of the attributes of the respondents that was examined. Only 31 of the 34 respondents who took part in the study provided information on their gender. Out of this number, majority (58.1%) were male and the remaining 41.9% were female (Table 1). This means that there was gender imbalance in favour of the males. The results suggest that women are not given equal employment opportunities like their male counterparts. This is a common phenomena in developing countries (Subramamam & Arumugam, 2013). Onsonga (2006) and Mbugua (2004) observed gender imbalance in favour of males in employment in the public sector in Kenya.

Table 1: Gender of the Respondents

		Frequency	Valid Percent
Valid	Male	18	58.1
	Female	13	41.9
	Total	31	100.0
Missing	System	3	
Total		34	

The respondents were also requested to provide information on their age. Knowledge management is a relatively recent field and one would expect the field to be dominated by the young (Edward, 2011). The ages of the sample is given in table 2.

Table 2: Age of the sample

Age	Frequency	Percentage
Less than 25 years	2	6.1
25 – 40 years	17	51.5
41 – 50 years	11	33.3
Over 50 years	3	9.1
Total	33	100.0

The results in Table 2 reveal that the 6.1% of the sample were less than 25 years of age, 51.5% were in the 25 – 40 years age bracket, 33.3% were in the 41 – 50 years age bracket and 9.1% were above 50 years. The results as well reveal that majority (57.6%) of the respondents were aged 40 years and below. This means that the sample was composed of fairly young employees. The findings are consistent with those of Chang and Chuang (2009). They observed that the young are the majority in KM as it heavily depends on ICT which quite a number of the old employees tend to avoid.

Data on the highest level of education of the sample was collected and summarised. Lara (2008) avers that the ability of organizations to sustain their competitive edge significantly depend on their ability to create knowledge and manage it properly. This implies business concerns require a well educated and skilled labour force. The highest level of education of the sample is in table 3.

Table 3: Respondents highest level of education

Education level	Frequency	Percent
Primary school	1	3.7
Secondary	8	29.6
Bachelors	15	55.6
Masters	3	11.1
Total	27	100.0

The distribution of the sample by level of education as reflected in Table 2 showed that 3.7% had attained primary level education, 29.6% had reached the secondary school level, 55.6% had a bachelors degree and 11.1% were holders of a masters certificate. An examination of the data in the table reveals that the level of education of the employees is fairly high given that 42.4% of the sample are holders of university degrees and post graduate certificates.

The last attribute of the respondents that was examined was the section/department staff (table 4). Out of the 34 respondents 38.2% were from the Administration and Accounts Department, 35.3% were from marketing section, 2.9% from Legal Advocacy office, and the remaining 23.5% were the CEOs.

Table 4: Respondents Department/Section

	Frequency	Valid Percent
Administration and accounts	13	38.2
Marketing	12	35.3
Legal Advocacy	1	2.9
Managing Director	8	23.5
Total	34	100.0

Independent Variables (Knowledge Management Strategies) Indices

The Independent variables (Knowledge Management Strategies) indices were computed by use of mean scores. The KMStrs of the firms as perceived by the respondents were measured using a set of statements (questions) in the employees' questionnaire. The measurement was done via a five-point scale of Likert-type based on the extent to which the respondents agreed with the statements. Individual scores for each respondent were transformed into an aggregate score. The mean scores of the statements, the overall mean score (KMStrs index), and Standard Deviation summarized in the table below;

Table 5: Indices of Knowledge Management Strategies and the Standard Deviations

Knowlegde Management Strategy	Index	Std. Deviation
Knowledge Management Systems	3.97	0.81
Knowledge Capture and Acquisition	3.84	0.77
Knowledge Processing and Storage	4.16	0.69
Knowkedge Sharing	4.20	0.51
Knowledge Evaluation	3.57	0.79
Overall Index	3.95	0.71

The results in Table xxx show that the indices of the five components of Knowledge Management Strategies were between 3.57 (SD = 0.79) to 4.20 (SD = 0.51) whereas the overall index was 3.95 (SD = 0.71).

Organizational Performance Index

The Organizational Performance of the real estate firms was determined using data on their market share and customer satisfaction. The organizational performance index was computed by adding up the market share and customer satisfaction indices of the firms and dividing the sum by 2. The organizational performance index is given in table 6 below.

Table 6: Indices of Market Share, Customer Satisfaction and Organizational Performance

Performance	Index	Std. Deviation
Market Share	4.17	0.50
Customer Satisfaction	3.99	0.78
Organizational Performance Overall Index	4.07	0.56

The results in table 6 reveal that the organizational performance index of the real estate management firms is 4.07 (SD = 0.56). All the indices of both the independent and dependent variables were rated as good on a 1 to 5 rating scale.

Correlation and Regression Analyses

After the Knowledge Management Strategies(KMStr) and Organizational performance of the real estate management firms had been established, the relationship between them was determined. The association between the two constructs; Knowledge Management Strategies(KMStr) and Organizational performance was determined using the Pearson moments Correlations (r).

Table 7 : Results of the Correlation Analysis

Independent Variable	Dependent Variable	Correlation		Remarks
		Coefficient r	Coefficient P	
Knowledge Management Systems use	Organisation Performance	0.068	0.703	Not significant
Knowledge Capture and Acquisition	Organisation Performance	0.353	0.041	Significant
Knowledge Processing	Organisation Performance	0.546	0.001	Significant
Knowledge Sharing	Organisation Performance	0.313	0.071	Not significant
Knowledge Evaluation	Organisation Performance	0.58	0.000	Significant

Pearsons moments Correlation is used when the study variables are at ratio or ratio scales and are continuous (Mugenda & Mugenda, 2007). In determining the relationship between Knowledge Management Strategies and Organizational Performance, Regression Analysis was also used to test the hypotheses. The Correlation and Regression results are shown below:-

Table 8: Regression Results for Knowledge Management Strategies (and its constructs) and Organizational Performance

<i>Model Summary</i>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.720 ^a	.518	.432	.42809	

Table 10: The B, t-values and p-values of the regression output

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	St. Error	Beta		
(Constant)	1.505	.677		2.221	.035
Knowledge management systems use mean	-.220	.127	-.316	-1.738	.093
Knowledge capture and acquisition means	.183	.132	.256	1.383	.178
Knowledge sharing strategies means	.158	.174	.142	.906	.373
Knowledge processing strategies means	.248	.131	.302	1.886	.070
Knowledge evaluation strategies means	.293	.106	.409	2.773	.010

Table 11: Coefficient of Determination

R	R ²	Percentage
0.068	0.05	5%
0.353	0.124	12.4%
0.546	0.298	29.8%
0.313	0.098	9.8%
0.587	0.344	34.4%

Effect of Knowledge Management Systems on Organizational Performance

Knowledge Management Systems was hypothesized to affect organizational performance of real estate management firms. An index for knowledge management systems was calculated to represent all the items that were used to measure this construct. Correlation Analysis was used to test the relationships which were hypothesized as:

H₀₁: There is no significant relationship between knowledge management systems and organizational performance of Real Estate Management firms in Nakuru town

The results in Table 7 reveals that the relationship between Knowledge Management Systems use and Organisational Performance of Real Estate Management Firms was positive at 0.05 significance level ($r=0.068$). The hypothesis was accepted since there was a relationship between knowledge management and organizational performance. This finding is consistent with that of Rasula et al (2012) and Chang and Chuang (2009) that knowledge management contributes greatly to the performance of firm .

Morrissey (2005) points out that knowledge management system significantly contributes towards performance of firms because it gives decision makers/users in organizations the knowledge they need to make their decisions and perform their tasks. Knowledge management systems are seen as the means to aid organizations in creating, sharing and using knowledge (Gupta, 1999). It assists in efficient generation or acquisition, processing and secure storing of knowledge. KMS are systems designed to give users the knowledge they need to make decisions and perform tasks, however KMS is only useful when organizations use only appropriate systems and have the technical ability to use them (Gallupe, 2000). In the context of this study KMS are computer based technologies that are used to acquire, store and distribute knowledge, therefore, it matters that the user has the necessary ability and skills to appreciate KMS strategies, otherwise the effect will not be felt on performance.

Effect of Knowledge Processing Strategies on Organizational Performance

Pearson Correlation Analysis was used to test the relationship between the two variables that had been hypothesized as:

H₀₃: There is no significant relationship between knowledge processing strategies and organizational performance in Real Estate Management firms in Nakuru Town

The correlation analysis in table 13 reveals that there was positive and significant at 0.05 significance level of significance ($r=0.546$, $p=0.001<0.05$). coefficient of determination R^2 is 29.8% (table 11). This implies that an organization with high knowledge processing capability tend to perform better. On the basis of these results there is no evidence to accept the null hypothesis which states that there is no significant relationship between knowledge processing and organizational performance. The null hypothesis was thus rejected.

The hypothesis test results revealed that knowledge processing strategies is significantly related to organizational performance of the real estate management firms. Uhlaner et al (2007) noted that firms with knowledge processing capabilities performed better. Chen (2009) in a study that involved manufacturing and financial services industries in Hsinchu noted a close association between knowledge processing and performance. Wu and Lee (2006) aver that performance of firms are enhanced if knowledge is processed, relevant, and is accessible to those who need it.

Effect o Knowledge Sharing Strategies on Organizational Performance

Pearson Correlation was used to test the relationship which was hypothesized as:

H₀₄: There is no significant relationship between knowledge sharing strategies and organizational performance in Real Estate Management firms in Nakuru Town

The results of the correlation analysis in table (7) revealed that correlation between knowledge sharing and organizational Performance of Real Estate Management Firms was positive at 0.05 significance level ($r = 0.313$, $p=0.071 > 0.05$). Coefficient of determination R^2 is 9.8%. This means that improving knowledge sharing has only marginal positive effects on performance. Thus the hypothesis was accepted.

This is consistent with the findings of (Tortoriello, Täube & Möbus, 2014) that sharing of knowledge and expertise among individuals in organization increases individuals' creativity and potentials and also acts as a stimulus for generation of innovations.

The Effect of Knowledge Evaluation Strategies on Organizational Performance

Pearson Correlation was used to test the relationship between knowledge evaluation strategies and organizational performance which was hypothesized as:

H₀₅: There is no significant relationship of knowledge evaluation strategies and organizational performance in Real Estate Management firms in Nakuru Town.

The results in table 5 revealed that there is a positive and significant correlation between knowledge evaluation strategies and organizational performance of Real Estate Management Firms, at 0.05 significance level ($r=0.587$, $P=0.000 < 0.05$). Coefficient of determination R^2 is 34.4%. There is therefore no evidence to accept the null hypothesis which stated that there is no significant relationship between knowledge evaluation and organizational performance, hence the hypothesis was rejected.

The results are in line with those of Furneaux and Ward (2008) which stated that businesses with high knowledge evaluation capabilities perform better than their counterparts with low capabilities. In order to implement the Knowledge Management strategies successfully, organizations must have the ability to evaluate and select a favorable Knowledge Management strategy before that Knowledge Management implementation (Wu & Lee, 2006). Organizations must assess their knowledge resources and capabilities as well as broadly conceptualize their knowledge strategy to address any gaps.

The Effect of Knowledge Management Strategies on Organizational Performance

Regression analysis was used to establish the effect of use of knowledge management systems, knowledge capture and acquisition, knowledge processing, knowledge sharing, and knowledge evaluation on organizational performance of real estate management firms. The relationship was hypothesized as:

H₀₆: There is no significant effect of combined components of knowledge management strategies on organizational performance in Real Estate Management firms in Nakuru Town.

The regression model used to test the effect of the relationship is :

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where by :

Y = the dependent variable (performance outcome)

β_0 = the constant

β_i = coefficient of the independent variable

X₁ = knowledge management systems

X₂ = knowledge acquisition

X₃ = Knowledge processing

X₄ = Knowledge sharing

X₅ = Knowledge evaluation

e = error factor

The results of the regression analysis are shown in tables 8. The results of the model show that R-squared (R²) was 51.8%. This indicates that the variation in organizational performance of real estate management firms was explained by variations in the Knowledge Management Strategies. This demonstrates that organizational performance can be explained by other factors not included in this model. The results showed that the five knowledge management strategies combined have a significant effect on organizational performance of real estate management firms. The null hypothesis which stated that there is no significant effect of combined components of knowledge management strategies on organizational performance in real estate management firms in Nakuru town was thus rejected.

The results in the Table 10 showed that the intercept (constant) was $\beta_0 = 1.505$, while the Beta values of independent variables Knowledge management systems use, knowledge Capture and acquisition, Knowledge processing, Knowledge sharing and Knowledge evaluation were $\beta_1 = -0.316$, $\beta_2 = 0.256$, $\beta_3 = 0.142$, $\beta_4 = 0.302$ and $\beta_5 = 0.409$ respectively. Based on these results, the equation relating performance of real estate management firms and the five constructs of Knowledge Management Strategies is shown below:

$$Y_1 = 1.505 - 0.316 X_1 + 0.256 X_2 + 0.142 X_3 + 0.302 X_4 + 0.409 X_5$$

Beta values can be used to rank the independent variables contribution on the dependent variable. From table 10 above, considering the standardized coefficient beta, knowledge evaluation strategies factor has the highest ($\beta_5 = 0.409$), which implies it has the highest effect on organizational performance. Knowledge processing strategies

factor has the next highest effect ($\beta_3=0.302$), followed by knowledge capture and acquisition factor ($\beta_2=0.256$), knowledge sharing strategies factor ($\beta_4=0.142$), and knowledge management system factor ($\beta_1= -0.316$) in that order.

The results are in line with those of Vidovic (2010). The study investigated the link between knowledge management and performance of an organization, using the data from the research conducted in Croatia. The research confirmed that there is a link between knowledge management and performance. The results are also consistent with those of Liao (2009) who conducted a study using a sample of Taiwan knowledge-intensive firms engaged in manufacturing and financial. Empirical evidence from the study also supports the perspective that Knowledge Management Strategies affects organizational performance.

Summary and Conclusion

According to the findings, Male respondents accounted for 58.1% while female respondents accounted for the difference, 41.9%. The results as well revealed that the majority of the respondents (57.6%) were aged 40 years and below. The distribution of the sample by level of education reflected that 3.7% had attained primary level education, 29.6% had reached the secondary school level, 55.6% had a bachelors degree and 11.1% were holders of a post graduate certificate. Further examination of the analysis reveals that the level of education of the employees is fairly high given that 42.4% of the sample size are holders of university degrees and post graduate certificates. Out of the 34 respondents 38.2% were from the Administration and Accounts Department, 35.3% were from marketing section, 2.9% from Legal Advocacy office, and the remaining 23.5% were the CEOs.

The First Hypothesis was accepted that there is no significant relationship between knowledge management systems and organizational performance. While other studies show otherwise, this study supposes that the relationship is only possible in light of necessary ability and skills. Hypothesis Two was rejected, showing a significant relationship between knowledge capture and acquisition and organizational performance. These results are consistent with other studies. The effect Knowledge processing strategy on organizational performance (Hypothesis 3) was rejected, which shows that there is significant relationship between the two variables. This is consistent with other studies that knowledge processing enhances organizational performance, if knowledge is processed, relevant and accessible to those who need it.

Knowledge sharing strategies have a positive but weak correlation with organizational performance. This is contrary to what other studies show, that the correlation is positive and strong. Analysis of the information from respondents reveals that there is not much of knowledge sharing among the employees, which explains why the relationship is weak in this study. The Fifth Hypothesis was rejected. There is a positive and strong correlation between knowledge evaluation and organizational performance. In order to implement the Knowledge Management strategies successfully, organizations must have the ability to evaluate and select a favorable Knowledge Management strategy before that Knowledge Management implementation. This implies that it is only after an effective evaluation that a firm can come up with appropriate knowledge strategies, resources and time lines that would enable it realise the expected business outcomes.

The Sixth Hypothesis that was about composite effect of Knowledge Management Strategies factors on organizational performance was tested by use of Multiple Regression Analysis. Model summary results indicated a contribution of 51.8% by the predictor (independent) variable while the remaining proportion (48.2%) is explained by other factors and also by chance of error. From the Output of the Regression Anova, R-Square was significantly different from zero. This means that an equation relating the dependent variable to the independent/explanatory variables do exist.

The results from the equation relating performance of real estate management firms and the Knowledge Management Systems, Knowledge Capture and Acquisition, Processing, Sharing and Evaluation was:

$$Y_1 = 1.505 - X_1 0.220 + 0.183X_2 + 0.248X_3 + 0.158X_4 + 0.28193X_5$$

From the results of the regression analysis, the real estate management firms should put more emphasis on knowledge evaluation as the first priority and knowledge processing in that order for better performance, as reflected in both the Correlation and Regression Analyses.

Recommendations

The results of the study showed that there is no association between Knowledge Management Systems on one hand and knowledge Sharing on the other hand, and organizational performance of real estate management firms. This is contrary to what is in literature that shows that adoption of knowledge management Systems applications and knowledge Sharing Strategies, enhances performance. This study therefore recommends that the firms review their policies on, knowledge sharing strategies and Knowledge Management Strategies with a view of improving their effectiveness.

On Knowledge Sharing, studies show significant relationship, this study shows otherwise, from analysis of respondents data that showed lack of knowledge sharing. The researcher recommends that the staff in Real Estate management firms should be encouraged to share knowledge as to benefit from the Knowledge Sharing Strategies reflected in other studies.

Given that knowledge capture and acquisition, processing and evaluation enhance performance, the study recommends that Real Estate Management firms adopt these strategies as a way of boosting performance. The study further recommends that real estate firms adopt these strategies, and those that have adopted the strategies to strengthen their use as a way of maintaining a competitive edge.

REFERENCE

- [1] Abu-Khadegeh, M. (2011). The effect of knowledge management process on e-organizational performance . Unpublished Pdoctorate Symposium Brunel University West London
- [2] African Business; Kenya Property Valued Among the Best in the World; 4th. October, 2012
- [3] Alavi, M., and D. Leidner. (2001). "Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues." MIS Quarterly 25(1): 107–36.
- [4] Althoff, K'; Maurer, F. & Rehbold, R. (2009). Multiple Knowledge Acquisition Strategies in Moltke

- [5] Andreas P, Schaefer C and Armonat S. (2004) Aligning corporate real estate to real estate investment functions: Improved
- [6] Barua A, Kriebel CH, Mukhopadhyay T. (1995). Information technologies and business value: an analytic and empirical investigation. *Information Systems Research* 1995;6(1):3–23.
- [7] Batholomew, D. (2005). *Sharing Knowledge*. DBA
- [8] Bierly P, Chakrabarti A. (1996); Generic knowledge strategies in the US Pharmaceutical industry. *Strategic Management Journal* 1996;17:123–35.
- [9] Blyth, M. L., Friskey, E. A., & Rappaport, A. (1986). Implementing the shareholder value approach. *Journal of Business Venturing*: 48-58.
- [10] Carrillo, P.M, Anumba, C.J. and Kamara, J.M. (2000). Knowledge Management Strategy for Construction: Key IT and Contextual Issues, *Proceedings of CIT 2000, Reykjavik, Iceland, 28-30 June*, Gudnason, G. (ed.), 155-165
- [11] Carrillo, P.M, Robinson, H.S, Al-Ghassani, A.M and Anumba, C.J (2002), *Knowledge Management in Construction: Drivers, Resources and Barriers* (in press)
- [12] Carrillo, P. M.; Robinson, H. S.; Anumba, C. J. & Al-Ghassani, A. M (2003). IMPaKT: A Framework for Linking Knowledge Management to Organizational performance . *Electronic Journal of Knowledge Management*, 1(1), 1-12
- [13] Chang, T. & Chuang, S. (2009). Performance Effects of Knowledge Management: Corporate Management Characteristics and Competitive Strategy Enablers. *Asian Journal of Management and Humanity Sciences*, 4(4), 181-199
- [14] Chiang, Y. H., & Hung, K. P. (2010). Exploring open search strategies and perceived innovation performance from the perspective of inter-organizational knowledge flows. *R&D Management*, 40, 292–299.
- [15] Chang & Chuang (2009). Examining The Link Between Knowledge Management, Organizational Learning And Performance. *Organizational Learning and Knowledge*.
- [16] Choi B, Lee H. (2003). An empirical investigation of KM styles and their effect on corporate performance. *Information & Management* 2003;40:403–17.
- [17] Choo, C.W., (1998). *The Knowing Organization: How Organizations Use Information to Construct Meaning, Create Knowledge and Make Decisions*. Oxford University Press, New York.
- [18] Constant, D., Sproull, L., Kiesler, S., (1996). The kindness of strangers: the usefulness of electronic weak ties for technical advice. *Organization Science* 7 (2), 119–135.
- [19] Crossan, Mary M. Bapuji, Hari B. Crossan, Mary M. (2003). Examining The Link Between Knowledge Management, Organizational Learning And Performance. *Organizational Learning and Knowledge 5 International Conference Friday, 30 May – Monday 2nd June 2003, Lancaster University, UK*
- [20] Danskin, P., Englis, B. G., Solomon, M. R., Goldsmith, M. and Davey, J. (2005). Knowledge Management as a competitive advantage: Lessons from the textiles and apparel value chain. *Journal of Knowledge Management*
- [21] Du, R., Ai, S. Z., & Ren, Y. Q. (2007). Relationship between knowledge sharing and performance: A survey in Xi'an, China. *Expert Systems with Applications*, 32, 38–46.
- [22] E-Government Institute (2004). “E-government announces knowledge management winners”
- [23] Edwards, J. (2011). A Process View of Knowledge Management: It Ain't What you do, it's the way That you do it *Electronic Journal of Knowledge Management*, 9(4), 297-306
- [24] Freeman R. (1984). *Strategic Management: a Stakeholder Approach*. Pitman: Boston, MA.

- [25] Fugate, B.S., Stank, T.P. & Mentzer, J.T. (2009). Linking improved knowledge management to operational and organizational performance. *Journal of Operations Management*, (27), 247-264.
- [26] Furneaux & Ward (2008). Knowledge Management and Business Process Reengineering for Organizational performance Improvement
- [27] Garud, R. and A. Kumaraswamy (2005). "Vicious and virtuous circles in the management of knowledge: The case of Infosys Technologies." *MIS Quarterly* 29(1): 9-33.
- [28] Galbraith, J.R., (1973). *Designing Complex Organizations*. Addison-Wesley, Reading.
- [29] Gallupe, B. R. (2000). Knowledge Management Systems: Surveying the Landscape <http://www.business.queensu.ca/kbe>
- [30] Goh, S. C. (2002). Managing effective knowledge transfer: An integrative framework and some practice implications. *Journal of Knowledge Management*, 6, 23–30.
- [31] Grant, R. M. (1991). The Resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*
- [32] Hall, R. and Andriani, P. (2002). *Managing Knowledge for Innovation*. Long Range Planning
- [33] Hansen M, Nohria N, Tierney T. (1999). What's your strategy for managing knowledge? *Harvard Business Review* 1999;77(2):106–16.
- [34] Harch M. J. (1997) *Organization Theory*. U.K Oxford University Press.
- [35] Hill, C. W. L. and Jones, G. R. (2001). *Strategic Management Theory*. Boston: Houghton Mifflin Co.
- [36] Hitt, M. A, Keats, B. W. and DeMarie, S. M. (1998). 'Navigating in the new Competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. *Academy of Management Executive* 12(4), 22-42.
- [37] Hoerl, R.W., (2001). Six Sigma black belts: what do they need to know? *Journal of Quality Technology* 33 (4), 391–406.
- [38] Hofer, C. W. (1983). ROVA: A new measure for assessing organizational performance. In R. Lamb (Ed.), *Advances in Strategic Management*, Vol. 2: 43-55. New York: JAI Press.
- [39] Hulsebosch, J.; Turpin, M. & Wagenaar, S. (2009). Monitoring and evaluating knowledge management strategies. *IKM Background Paper* October 2009
- [40] Jelena Rašul, Vesna Bosilj Vu kšić & Mojca Indihar Štemberger (2012). The Impact of Knowledge Management on Organizational Performance. *Economic and Business Review*, 14(2), 147–168
- [41] Kaplan, R. (1984). Yesterday's accounting undermines production. *Harvard Business Review*, July/August: 95-101.
- [42] Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard - Measures that drive performance. *Harvard Business Review*, Jan-Feb: 71-79.
- [43] K'Kumu, O. A. (2006); Evaluation of Housing Statistics in Kenya. *Habitat International* 30 (2006) 27–45
- [44] Keskin H. (2005). The relationships between explicit and tacit oriented KM strategy, and firm performance. *Journal of American Academy of Business*, Cambridge 2005;7(1):169–75.
- [45] Knight Frank(www.knightfrank.com.vn/content/upload/files/GlobalCities_Q42011.pdf)
- [46] Kothari, C.R (2008) *Research Methods: Methods and Techniques*. 2nd edition. New Delhi: New Age international.

- [47] Krueger, G. (1995). 'Transition strategies for former state-owned enterprises in Russia.' *Comparative Economic Studies*, 37, 89-10.
- [48] Kogut, B., & Zander, U. (1996). What firms do? Coordination, identity, and learning. *Organization Science*, 502-518.
- [49] Kunkel, S. W. (1991). *The impact of Strategy and Industry Structure on New Venture Performance*. Unpublished Doctoral Dissertation, University of Georgia, Athens, GA.
- [50] Law, C. C. H., & Ngai, E. W. T. (2008). An empirical study of the effects of knowledge sharing and learning behaviors on firm performance. *Expert Systems with Applications*, 34, 2342-2349.
- [51] Lara, F. J. (2008). *The Effect of Knowledge Management on Organizations, Analysis of Directive Competencies*. <http://www.ucv.es/jovellanos>
- [52] Lee, H., & Choi, B. (2003). Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination. *Journal of Management Information Systems*, 20, 179-228.
- [53] Leonard-Barton, D., (1992). Core capabilities and core rigidities: a paradox in managing / new product development. *Strategic Management Journal* 13 (8), 111-125.
- [54] Lundvall, B. A., & Nielsen, P. (2007). Knowledge management and innovation performance. *International Journal of Manpower*, 28, 207-223.
- [55] March, J.G., (1991). Exploration and exploitation in organizational learning. *Organization Science* 2 (1), 71-87.
- [56] McDermott, C.M., O'Connor, G.C., (2002). Managing radical innovation: an overview of emergent strategy issues. *Journal of Product Innovation Management* 19 \ (6), 424-438.
- [57] Moballeghi, M. & Galyani-Moghaddam, G. (2011). *Knowledge Management and Measuring its impact on Organisational Performance*. 2011 International Conference on Financial Management and Economics IPEDR 2011, Singapore
- [58] Morrissey, S. (2005). *Design and Implementation of Effective Knowledge Management System* <http://www.ejkm.com> ©MCIL All rights reserved
- [59] Mugenda, O. M. and Mugenda, A. G. (1999). *Research Methods: Qualitative and Quantitative Approaches*, ACT Press, Nairobi
- [60] Mugenda, O. M. and Mugenda, A. G. (2007). *Research Methods: Qualitative and Quantitative Approaches*, ACT Press, Nairobi
- [61] Murray E. Jennex, (2005). 'Case Studies in Knowledge Management,' Idea Group Publishing, New York
- [62] Mwithiga, A and Jivanjee M. (2010); Property was the investment of the decade in Kenya ahead of the stock market. Retrieved on 5th. October, 2011. from <http://www.hassconsult.co.ke/special report.pdf>
- [63] Nonaka, I., (1991). Nevo, D., Furneaux, B. & Wand, Y. (2008). Towards an evaluation framework for knowledge management systems. *Information Technology and Management*, 9(4), 233-249. The knowledge-creating company. *Harvard Business Review* 69 (6), 96-104.
- [64] O'Lear, D. E. (). *Knowledge Management in Accounting and Professional Services* University of Southern California
- [65] Oshrat and Margaret (2011) REITS attracts most cash since 2006. Retrieved 17 October, 2011 from <http://www.bloomberg.com/news/2011-09-13/reits-lure-most-cash-since-2006-as-investors-seek-yield-inflation-hedge.html>

- [66] Pai DC. (2005). Knowledge strategies in Taiwan's IC design firms. *Journal of American Academy of Business*, Cambridge 2005;7(2):73–7.
- [67] Perrow, C., (1970). *Organizational Analysis: A Sociological View*. Wadsworth, Belmont.
- [68] Phillips, Bernard S. (1976). *Social Research: Strategy and Tactics*. 3rd ed. New York: Macmillan.
- [69] Polanyi, M. (1958). *Personal Knowledge: Toward a Post-Critical Philosophy*. Chicago: Chicago University Press.
- [70] Porter M. (1980). *Competitive Strategy*. Free Press: New York.
- [71] Porter, M. E. (1980). *Competitive Strategy*. New York Free Press.
- [72] Porter, M. E.(1985). *Competitive Advantage*. New York: Free Press.
- [73] Priem, R.L., Butler, J.E. (2001), Is the Resource-Based Theory a Useful Perspective for Strategic Management Research? *Academy of Management Review*; 26, (1), pp. 22–40.
- [74] Robles-Flores, J. A. (2004). Knowledge Management Systems and their Impact on Knowledge-Intensive Business Processes. II Coloquio Predoctoral Latinoamericano Puerto Plata, Santo Domingo, XXXIX Asamblea Anual de CLADEA
- [75] Rothaermel, F.T., (2001). Incumbent's advantage through exploiting complementary assets via interfirm cooperation. *Strategic Management Journal* 22 (6/7), 687–699.
- [76] Rosen D and Mausser H (1999), *Efficient Risk/Return Frontiers for Credit Risk*.
- [77] Sabherwal, R., Jeyaraj, A., Chowa, C., (2006). Information system success: individual and organizational determinants. *Management Science* 52 (12), 1849–1864.
- [78] Schulz M, Jobe LA. (2001). Codification and tactiness as knowledge management strategies: an empirical exploration. *Journal of High Technology Management Research* 2001;12(1):139–65.
- [89] Soo, C., T.M. Devinney and D.F. Midgley, (2002), Knowledge Creation in Organizations: Exploring Firm and Context Specific Effects, INSEAD 1-34 www.knowledge.insead.edu [visited: 2005/05/19].
- [80] Stoner, J. A. F, Freeman, E. R. and Gilr, J.R.D (2002). *Management* New Delhi Prentice Hall.
- [81] Swan J, Newell S, Robertson M. (2000). Limits of IT-driven knowledge management for interactive innovation processes: towards a community-based approach. In: Schriver Sprague RH, editors. *Hawaii international conference on system sciences*. Los Alamitos, CA, Maui HI: IEEE Computer Society Press; 2000.
- [82] Tsoukas, H., (1996). The firm as a distributed knowledge system. *Strategic Management Journal* 17 (Winter Special Issue), 11–25.
- [83] Tucker, A.L., (2007). An empirical study of system improvement by frontline employees in hospital units. *Manufacturing and Service Operations Management* 9 (4), 492–505.
- [84] United States Office of Personnel Management (2006). *Learning and Knowledge Sharing Strategy*
- [85] Uhlaner, L.; Van Stel, A.; Meijaard, J & Folkeringa, M. (2007). The relationship between knowledge management, innovation and firm performance: evidence from Dutch SMEs. www.eim.nl/smes-and-entrepreneurship.
- [86] Wilkesmann, U. (1999): *Lernen in Organisationen. Die Inszenierung von kollektiven Lernprozessen*, Frankfurt/New York 1999
- [87] World Bank (2001). *World development report 2000/2001: Attacking poverty*. Oxford: Oxford University Press.

- [88] Wu, W. & Lee, Y. (2007). Selecting knowledge management strategies by using the analytic network process. Science Direct Expert Systems with Applications 32, 841–847
- [89] Yang and Ye (2010), Return Correlation of China's Real Estate and Stock Markets
- [90] Zheng, W., Yang, B. & McLean, G.N. (2009). Linking organizational culture, structure, strategy, and organizational effectiveness. Mediating role of knowledge management, article in press.