

# African Journal of Emerging Issues (AJOEI)

Online ISSN: 2663 - 9335

Available at: https://ajoeijournals.org

### KNOWLEDGE MANAGEMENT

## KNOWLEDGE MANAGEMENT PROCESSES MODERATING INFLUENCE ON RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT RESOURCES AND EMPLOYEE PERFORMANCE IN KENYA

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**Publication Date: June 2025** 

#### **ABSTRACT**

**Purpose of the Study:** This study determined the moderating influence of knowledge management processes on the relationship between knowledge management resources and employee performance in Kenya.

**Research Methodology:** Using a mixed methods approach with post-positivism philosophy, the study employed case study design and simple random sampling at Kenya Bureau of Standards. From 2,148 employees, 370 respondents were selected using Yamane's (1974) formula, with 45 used for pilot testing. A 5-point Likert scale questionnaire was administered via drop-and-pick technique, achieving 75.5% response rate (290 usable responses). Data analysis using SPSS version 24 included descriptive statistics and inferential analyses through correlation and regression for hypothesis testing.

**Results:** Knowledge management processes significantly moderated the relationship between knowledge management resources and employee performance, improving R-square from 0.295 to 0.358 (6.4% increase in explanatory power). Regression analysis revealed a positive interaction coefficient of 0.024 (p < 0.001), confirming that enhanced knowledge processes amplify the impact of knowledge resources on employee performance. The statistically significant interaction term validated the moderating effect of knowledge management processes.

Conclusion: Knowledge management processes effectively moderate the relationship between knowledge management resources and employee performance, with 6.4% improvement in explanatory power demonstrating enhanced organizational capability. The positive interaction coefficient confirms that efficient knowledge management processes strengthen the impact of knowledge resources on performance outcomes. Knowledge management resources achieve optimal effectiveness when supported by well-designed and properly implemented knowledge management processes.

**Recommendation:** Marketing and ICT managers should develop integrated customer service frameworks to address relational capital deficiencies and ensure comprehensive customer concern management.

**Keywords:** Knowledge Management Processes, Knowledge Management, Resources, Employee Performance, Kenya

#### INTRODUCTION

Knowledge is justified true belief, which incorporates the truth, belief and justification conditions (Bolisani & Bratianu, 2018). Knowledge management is variably understood and literature depicts that no single definition of knowledge management fits all as it diversely acquires contextual leanings. Spender (2015) viewed pluralism in the understanding of concepts, definitions and terminologies as immaturity of knowledge management as a field of study while Arrau (2015) documented it as an acknowledged academic and professional purview, declaring it a well-established area of research in recent years. Abubakar et al. (2019) declared that organizations configure and leverage knowledge in decision-making and problem-solving in the dynamic business environment by generating structural capital, which promote employee performance. From this, Rahmayanto et al. (2019) perceived knowledge management as an arrangement through which an organization is able to identify, create, distribute and facilitate adaptation of insights and experiences, both tacit and explicit inherent in structural capital of the organization especially knowledge creation, sharing and utilization. However, Inkow (2020) viewed knowledge management as a discipline that deals with the collection, processing, sharing, use and measurement of the internal and external information potential of an organization.

Ortega-Gutiérrez, et al. (2015) held that organizations generate knowledge from inside and outside, thereby requiring internal processes for integration and utilization to support employee performance; and relatedly, Shah, et al. (2017) confirmed that knowledge infrastructure and knowledge resources enhance employee capabilities for handling emergent technologies, stakeholder requirements and new market demands, thereby buttressing role of knowledge management in employee performance. KAM-UNIDO (2020) characterized manufacturing giants such as the USA, China, Germany, Japan and the UK with effective knowledge management among other factors. Arzubiaga et al. (2022) held that effective knowledge management explains superior employee performance that buttresses strong German manufacturing and highest contribution to GDP in European Community. The value in knowledge management is in its ability to support both employee and organizational performance. Performance as a latent concern for management requires diverse strategies like structural capital and absorptive capacities to enhance delivery (Hurtado-Palomino et al., 2024). In emphasizing value of structural capital for both employee and organizational performance, Huang & Rust (2021) declared valuable benefits associated with organizational adoption of artificial intelligence; for instance, in promoting key organizational activities like learning, planning and problem-solving (De Bruyn et al., 2020) leading to knowledge creation, sharing and utilization (Pinheiro et al., 2020).

Inadequate mainstreaming of knowledge management practices hampered company innovativeness and employee performance (Admasu, 2017), owing to: lack of documentation on innovation activities as well as operations without research and development departments – a clear show of poor knowledge management (Chibuzor, et al., 2019). From the foregoing, it was discernible that weak knowledge management practice can be an impediment to both employee and organizational performance. In Kenya, Mosoti and Masheka (2010) reported slow uptake of knowledge management practices, much as Jagongo, et al. (2012) documented poor organizational practices and inefficient technological capability as critical factors leading to low uptake of knowledge management and potential hindrance to employee performance. Several studies have linked retarded knowledge management mainstreaming to prevalent low performance efficiency (Rasugu et al., 2020). Apparently, Kenya continues losing its manufacturing dominance in East Africa to Ethiopia, Rwanda, Tanzania and Uganda owing to among others: absence of job

satisfaction, sub-optimal employee performance, low productivity and low competitiveness (Kariuki & Kiiru, 2021). This study sought to highlight the influence of knowledge resources on employee performance as moderated by knowledge processes.

#### RESEARCH OBJECTIVE

- i. To demonstrate relationship between knowledge management resources and employee performance in Kenya.
- ii. To establish influence of knowledge management processes on employee performance in Kenya.
- iii. To determine the moderating effect of knowledge management processes on the relationship between knowledge management resources and employee performance in Kenya.

#### RESEARCH HYPOTHESIS

**H**<sub>01</sub>: There is no significant relationship between knowledge management resources and employee performance in Kenya.

 $H_{02}$ : There is no significant influence of knowledge management processes on employee performance in Kenya.

H<sub>03</sub>: There is no significant moderating effect of knowledge management processes on the relationship between knowledge management resources and employee performance in Kenya.

#### LITERATURE REVIEW

#### THEORETICAL REVIEW

#### Resource-Based View (RBV) of the Firm

The firm as an administrative organization utilizes human and physical productive resources (Penrose, 1959). The Resource-Based View (RBV) developed as a complement to the industrial organization (IO) perspective and Porter's (1980) contributions. Wernerfelt (1964) put together the resource-based framework and declared 'A Resource-Based View of the Firm' which posits that the availability of or access to resources and decision-making on use of the resources to a firm is a pillar factor for its sustained competitive advantage. RBV explains that internal capabilities and company assets confer competitive advantage and justify why firms within the same industry differ in performance. Barney (1991) in entrenching the concept declared that strategic resources are valuable, inimitable, rare and non-substitutable, expressing that both tangible and intangible strategic resources confer sustained competitive advantage to a firm. The theory is hinged on two major assumptions, heterogeneity and immobility. On the former, skills, capability and other organizational resources differ markedly from one firm to another while on the latter, the strategic resources do not move from one firm to another. These define both the uniqueness and inherent capability for productivity and competitiveness in a firm. Thus, strategic resources account for variations in profit and performance of the firms, making such resources the differentiating factors for efficiency and productivity among firms in an industry (Amit & Schoemaker, 1993). Similarly, Seth & Thomas (1994) contended that there exist efficiency differences among firms due to inimitability of their strategic resources, confirming that access to certain industry-specific resources dictate whether a firm thrives, survives or perishes.

Some of the fiercest critics of RBV hold that characterization of resources as being valuable, rare, inimitable and non-substitutable is neither necessary nor sufficient for sustainable competitive

advantage. They also claim that the value of a resource is too indeterminate to provide for useful theory; and that the definition of resource is unworkable. These are commonly referred to as the weaknesses of RBV but which do not obfuscate its utility.

#### **Herzberg Two Factor Theory of Motivation**

Fredrick Herzberg in 1959 sought to answer the question, "What do people want from their jobs?" Upon which he interviewed 203 engineers and accountants in Pittsburgh area and answers to the question led to publication of the article, "One More Time: How do You Motivate Employees?". This developed Herzberg's motivation-hygiene factors theory, also called the two-factor theory which holds that job satisfaction and job dissatisfaction exist on two different continua, each with its own set of factors (Herzberg, 1959; Herzberg, 2018). The theory holds that for peak performance, employees need to experience job satisfaction and motivation, such that presence of motivators such as work itself, responsibility, achievement, recognition, opportunity for growth, and self-development lead to job satisfaction; while deficiency in hygiene factors such as company policies, work conditions, salary, supervision, relationship with managers and peers, stimulate dissatisfaction (Herzberg, 2008). Certain studies have challenged Herzberg theory; hygiene factors like supervision, interpersonal relationship, salary and job security have been demonstrated to play a major role in motivating employees (Kotni & Karumuri, 2018), converse to the auspices of twofactor theory. Fundamental factors for this include impacts of technology, globalization and demographic shifts like generation Z dynamics, which appear to overturn some known features like effects of extrinsic and intrinsic factors on motivation. Though there have been evidence of extrinsic factors conferring motivation effects instead of hygiene behavior, the core relevance of Two Factor theory still holds as both motivation and hygiene effects remain relevant in employee behaviour. The main assumption of Herzberg theory is that employees adhere to expectations of Maslow hierarchy of needs, but which equally stands constrained by current labour dynamics.

#### **EMPIRICAL REVIEW**

The reviewed literature presents intellectual capital and knowledge management as central to enhancing employee and firm performance. Tuffaha (2020) identified key organizational elements—such as knowledge management, ICT, innovation, employee empowerment, and organizational culture—as foundational to building relational capital, which in turn supports knowledge sharing and change management. These findings align with Rane et al. (2023), who stressed customer satisfaction and relationship management as essential for business success. Scholars like Rehman and Rehman (2015) and Mubarik et al. (2020) advanced the argument that performance is strongly tied to how firms deploy knowledge resources and human capital capabilities. Mukaro et al. (2023) echoed this by asserting that intellectual capital, through intangible assets, significantly impacts employee performance, while Kriss (2014) and Momani et al. (2021) emphasized the centrality of customer-focused strategies and structural capital in facilitating organizational outcomes. Munyoro et al. (2022) added that optimized use of databases and information systems can deepen knowledge management practices and boost employee productivity.

Subsequent studies examined the mechanisms through which intellectual capital translates into firm performance. Jikhan et al. (2023) and John-Akamelu and Iyidiobi (2018) found that intellectual capital interacts with other variables to influence performance outcomes, while Corrado (2018) quantified the economic value of intangibles, highlighting their increasing role in global economies. While Murimi et al. (2019) questioned the direct link between intellectual

capital and firm performance in SMEs, other studies including Dost et al. (2016) and Bansal et al. (2023) reaffirmed its importance. Ngari (2014) linked supplier and customer knowledge with business performance, and Victoria et al. (2018) demonstrated a strong correlation between relational capital and value creation, a finding that supported Munyoro et al.'s (2022) advocacy for adoption of the Education 5.0 model by universities. Other works such as Ngugi (2013), Barkat et al. (2018), and Suharman et al. (2022) underscored intellectual capital's role in stimulating innovation and competitiveness in SMEs, while Koech and Cheluget (2019) pointed to strategic instruments like intellectual property rights as key to protecting and maximizing knowledge assets.

The literature also revealed strong support for the direct relationship between knowledge processes and employee performance. Juan et al. (2018) and Khanal and Poudel (2017) argued that team approaches and social capital enhance knowledge creation, which in turn improves productivity. Supporting studies by Nowacki and Bachnik (2016), Cegarra-Navarro et al. (2016), and Ritala et al. (2015) agreed that knowledge creation and sharing drive learning, innovation, and market access. Knowledge application was shown to aid firm operations and product development (Boateng & Agyemang, 2015), while Sangiorgi and Siboni (2017) emphasized universities' role in knowledge transfer. Mardani et al. (2018), Boateng et al. (2018), and Lin (2015) confirmed that knowledge management directly influences innovation quality and performance outcomes. Finally, Tadesse (2020), Aflah (2022), and Ayetigbo et al. (2023) all advocated for strategic knowledge acquisition and retention. However, studies such as Ogara et al. (2010), Wamitu (2016), and Akinyi (2017) warned that without deliberate knowledge processes, organizations risk losing valuable institutional knowledge, thereby weakening performance and competitiveness.

#### **CONCEPTUAL FRAMEWORK**

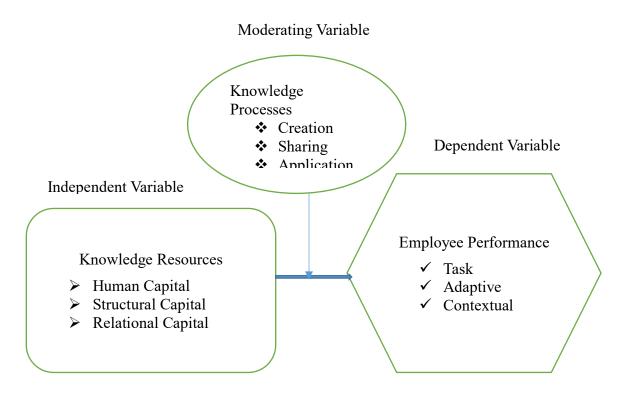


Figure 1: Conceptual Framework (Source: The Researcher)

#### **METHODOLOGY**

The study adopted post-positivism philosophy, case study design with simple random sampling technique and mixed methods approach — employing qualitative method to accommodate explanatory detailed responses required and quantitative method to provide precise responses, reducing information bias and facilitating data analysis. Using Fishers (1991) formula, a sample of 384 respondents was obtained from a target population of 2148 employees of the Kenya Bureau of Standards (KEBS), a statutory body regulating trade and industry in Kenya. 40 respondents who were later excluded from main survey were used for pilot study, involving a 5-point Likert-type scale questionnaire (Taherdoost, 2019), ranging from 1 = strongly disagree to 5 = strongly agree.

For respondent's trust and privacy, a briefing was conducted to explain the aim of the survey including agreeing to hard or soft copy questionnaire. Through a drop-and-pick later survey technique, primary data was obtained using a semi structured self-administered questionnaire; with 302 questionnaires collected from respondents and upon cleaning, 290 were determined fit for use, achieving a response rate of 75.5%. These were collated and exposed to SPSS version 23 aided – descriptive and inferential analytics; with mean and standard deviation making up descriptive statistics while for inferential statistics, Multiple Linear Regression Model was used to test the Hypothesis, as equation models assumed the form in part 3.3 – the moderation.

To establish the moderating effect of knowledge management processes (KP) on the relationship between knowledge management resources (KMR) and employee performance in food manufacturing firms in Kenya, the following linear regression steps were adopted:

Step 1: Regressing employee performance on KMR; noting the R square value the level of significance at p<0.005, giving;

$$Y = \beta_0 + \beta_1 KMI + e$$
 ......(1)

Step 2: Introducing the moderating variable (knowledge management processes) and noting the new R square value together with the level of significance (at 0.05) for the interactive term.

$$Y = \beta_0 + \beta_1 KMI + \beta_2 KP + \beta_3 KMI.KP + e...$$
 (2)

Where:

 $\beta$  1,  $\beta$  2,  $\beta$  3 = Beta Coefficients

KMR= Knowledge Management Resources

**KP= Knowledge Management Processes** 

KMR.KP= interaction term of KMR and KP

The regression coefficient for the interaction term,  $\beta 3$ , estimates the moderation effect of KP on the relationship between KMR and employee performance. A statistically significant beta value/regression coefficient indicates that the KP significantly moderates this relationship.

#### RESULTS AND DISCUSSION

The findings were reported for both the descriptive and inferential results with corresponding discussions to highlight outcomes for conclusions and recommendations.

#### **DESCRIPTIVE STATISTICS**

The outcomes of descriptive analyses were expressed, using tables, for all the variables and their constructs. The KMR had 12 items for assessment and the outcome as obtained is presented in Table 1, showing all the three constructs – human capital, structural capital and relational capital.

Table 1: Knowledge Management Resources (KMR) Descriptive Outcomes

Item								
Ref	Parameter	SD	D	N	A	SA	Mean	STD
HC	Human Capital							
HC1	Employees are actively involved in decision-							
	making and problem-solving at the workplace	4%	21%	25%	43%	7%	3.28	1.02
HC2	Our employees have exposure to the latest							
*****	trends and practices in their fields	2%	15%	22%	46%	15%	3.56	0.99
HC3	Employees are engaged in training and							
	development programs for career growth and enhanced expertise.	2%	8%	6%	55%	29%	4.01	0.92
HC4	Our employees continuously engage in	270	070	0%	33%	29%	4.01	0.92
1104	workshops and seminars to sharpen their							
	professional skills	2%	6%	13%	51%	28%	3.96	0.93
	Mean	3%	12%	16%	49%	20%	3.70	0.97
SC	Structural Capital	0 70	1270	1070	15 70	2070	2170	0.57
SC1	Our organization has routine frameworks for							
bei	harmony, quality standards and practices across							
	all departments.	1%	12%	15%	55%	17%	3.76	0.91
SC2	Our company has documented processes, well							
	communicated to employees and promote							
	effective work execution.	2%	8%	5%	54%	31%	4.04	0.93
SC3	The company has a strategic plan, clear to my							
	workplace, guiding performance activities in the	4%	2%	5%	46%	43%	4.2	0.96
SC4	Our organization has information systems,	4%	270	3%	40%	43%	4.2	0.90
304	databases and repositories that facilitate							
	knowledge storage and retrieval.	2%	1%	8%	53%	36%	4.2	0.8
	Mean	2%	6%	8%	52%	32%	4.05	0.9
RC	Relational Capital							
RC1	Our organization regularly conduct customer							
	surveys to identify areas requiring improvement	1%	6%	9%	59%	25%	4.01	0.84
RC2	Our organization has adopted customer							
	integration in all departments for							
D GO	comprehensive handling of customer concerns	3%	6%	11%	58%	22%	3.89	0.93
RC3	Our organization has established strategic							
	alliances with other firms for collaborations and partnerships	3%	4%	16%	59%	18%	3.84	0.88
RC4	Our organization has adopted supplier	370	+70	1070	3770	1070	3.04	0.00
IC.	integration practices	2%	7%	29%	48%	14%	3.64	0.89
	Mean	2%	6%	16%	56%	20%	3.85	0.89
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The outcome was summarized from statement parameter results to construct performance. Table 2 gives a summary of the constructs and their comparative scores.

**Table 2: Knowledge Management Resource Constructs Summarized Scores** 

Item No.	Construct	STD %	DA %	N %	AG %	STA %	MEAN	STD DEV
НС	Human Capital	3	12	16	49	20	3.70	0.97
SC	Structural Capital	2	6	8	52	32	4.05	0.9
RC	Relational Capital	2	6	16	56	20	3.85	0.89
Grand Mean		2	8	14	52	24	3.87	0.92

Table 2 was transformed to outcomes of disagreeing and agreeing responses with neutral responses maintained for those not explicit. Thus Table 3 involved summing up STD with DA into a set of disagreeing while AG is lumped up with STA into agreeing. The table supports horizontal analysis for all the constructs and vertically gives variable grand mean.

**Table 3: KMR Descriptive Outcome Snapshot** 

Item No.	Construct	Disagreeing %	Neutral %	Agreeing %
НС	Human Capital	15	16	69
SC	Structural Capital	8	8	84
RC	Relational Capital	8	16	76
Grand Mean		10	14	76

A cascaded summary of Tables 1, 2 and 3 indicate that slightly less than 70% of the respondents expressed satisfaction with prevailing aspects of human capital management. It was however perturbing to note that over 30% registered dissatisfaction. To this extent, it is crucial to determine whether the dissatisfaction relates to technological challenges, which may require reskilling and upskilling by employees (Acemoglu & Restrepo, 2017); demographic shifts or a combination of factors, making it necessary to optimize both human and technological capabilities (Zahi, 2025) to achieve required performance. Recently, Mwiathi (2021) found that health and education are critical in human capital, recommending that increased access to health insurance and improved education quality be given due focus for employee performance enhancement.

A significant improvement was recorded in structural capital as approximately 84% of the respondents were satisfied with existent portfolio and only 16% expressed displeasure. Gazi et al. (2024) held that intangible assets ought to be managed with a view to enhancing company productivity and performance, in addition to customer satisfaction. It is therefore pertinent that

efforts to capture concerns leading to dissatisfaction be judiciously expended, so as to harness their productivity and attain enhanced job satisfaction. In this way, the firm through intellectual property rights and other intangible assets, attains value-add and business growth.

Performance of relational capital was midway between human and structural capital, recording respondents' acceptance at 76% while dissenting view portfolio increased to 24% - calling for concerted efforts for improvements. Aspects that make employees be dissatisfied with workplace dynamics are varied; Otor (2015) viewed customer capital in the realms of connections, interactions, loyalty, and goodwill between firms and stakeholders. As such, effective relational capital tends to focus on developing beneficial relationships, with customer concerns being key, making customer relationship management (CRM) strategies most crucial in improving performance; and this was confirmed in Altarifi (2020) finding of a strong correlation between CRM effectiveness and marketing success of the firm.

In overall assessment, the variable performance reflected a 76% satisfaction and 24% dissatisfaction among respondents, depicting that measures for improvements need be implemented as a matter of priority in the firms. To attain sustainable alignment concerning employee growth and organizational performance, business landscape dynamics that influence workforce competitiveness (Lin et al., 2017) as well as potential interrupters like globalization, technological advancements, ubiquitous computing and demographic shifts deserve much focus. Human capital in the 4IR emphasizes technology and its impacts on man-machine balance, job design and skills instability (Hanine & Dinar, 2022) with attendant consequences on generational and cultural gaps, career management practices and such reconfigurations of work as reengineering, telework and crowdsourcing among others. Similarly, Graham et al. (2017) emphasized effects of digitization on labour dynamics relating to machines, relevance of skills and effects of use of digital technology on employee compensation. All these are critical in achieving human capital management paradigm that supports modern firms and attendant competition.

Linking human capital to relational capital is crucial for effective utilization of inherent synergy; therefore taking relational capital as strategic alliances with stakeholders and source of external knowledge and innovativeness to exploit new ideas and technologies for enhancing performance (Ramirez-Solis et al., 2022), it is significant that utility relations with customers, competition, regulators, and interested parties be tactfully harnessed for optimal institutional benefits; as they affect both current needs and future expectations of the firm, making customer relationship management a pivotal activity. Upon appreciating structural capital as comprising company structure, strategy, processes and systems, which make the operating platform, Ozkan et al. (2017) emphasized the ability of structural capital to facilitate knowledge creation, sharing and utilization for execution of customer demands and business sustainability. They further confirmed that structural capital provides linkage for utilization of both human capital and relational capital in the firm through the operating platform, which exhibits heterogeneity from one firm to another within a sector. From the foregoing, it is critical that remedial interventions be continually instituted to ensure continued fitness of strategy and practice to make knowledge resource dynamics suitable for enhanced employee performance.

#### **Knowledge Management Processes (KP) Descriptive Outcomes**

The moderator variable KP had 12 items for assessment and the outcome was obtained for all the three constructs – knowledge creation, sharing and application, as presented in Table 4.

**Table 4: Knowledge Management Processes Outcome Tabulated** 

ITEM								
No.	Parameter	SD	D	N	A	SA	Mean	STD
KC	Knowledge Creation							
KC1	The organization creates knowledge through research and development activities	2%	19%	22%	33%	24%	3.56	1.11
KC2	Our organization provides meetings for employees to exchange ideas and experiences	3%	14%	21%	41%	21%	3.63	1.07
KC3	Employees from diverse backgrounds and areas of expertise work together on projects for work improvements	3%	11%	19%	49%	18%	3.68	1.0
KC4	The organization supports apprenticeship, attachment and internship programs that generate knowledge	3%	1%	12%	40%	44%	4.2	0.92
KCM	Mean	3%	11%	18%	41%	27%	3.77	1.03
KS	Knowledge Sharing	1 - / -						1 -111
KS1	Our organization encourages mentoring and coaching programs where experienced employees share their knowledge, skills and insights with upcoming colleagues.	1%	11%	13%	39%	36%	3.99	1.01
KS2	Our organization has internal social networks where employees connect, communicate and share knowledge freely.		14%	17%	43%	23%	3.69	1.08
KS3	Our organization organizes knowledge fairs and expos where employees communicate and showcase ideas		28%	23%	33%	10%	3.12	1.12
KSM	Mean	3%	18%	18%	38%	23%	3.60	1.07
KA	Knowledge Application	•	ı					
KA1	My organization modifies its products, strategies and behaviour in light of emergent experience and acquired knowledge.	3%	9%	23%	50%	15%	3.65	0.95
KA2	The organization emphasizes the use of its knowledge base in solving work-related problems at individual and team levels.	1%	4%	20%	59%	16%	3.84	0.78
KA3	All staff are directed to utilization of new knowledge acquired as routine in their operations.	1%	13%	18%	55%	13%	3.66	0.9
KA4	Our company encourages using new knowledge for purposes of improving customer satisfaction and supplier services	1%	6%	12%	62%	19%	3.91	0.81
KA5	Our organization is effective in exploiting acquired knowledge to improve its company-wide productivity and performance	1%	9%	23%	52%	15%	3.71	0.86
KAM	Mean	1%	8%	19%	56%	16%	3.75	0.86
KPGM	Grand Mean	2.65%	12.2	18.5 7%	44.8	21.7	3.71	0.98

The outcomes were summarized from statement parameter results to construct performance. Table 5 gives a summary of comparative constructs scores.

**Table 5: Knowledge Processes Constructs Summarized Scores** 

Item No.	Construct	STD %	DA %	N %	AG %	STA %	M	SD
KC	Knowledge Creation	3%	11%	18%	41%	27%	3.77	1.03
KS	Knowledge Sharing	3%	18%	18%	38%	23%	3.60	1.07
KA	Knowledge Application	3%	18%	18%	38%	23%	3.60	1.07
Grand Mean		1%	8%	19%	56%	16%	3.75	0.86

From the constructs performances was drawn the variable performance as shown in Table 6.

**Table 6: KP Snapshot of Descriptive Outcome** 

Item	Construct	Disagreeing	Neutral	Agreeing
KC	Knowledge Creation, %	14	19	67
KS	Knowledge Sharing, %	21	18	61
KA	Knowledge Application, %	10	19	71
KP	Variable Mean, %	15		66
			19	

The overall performance showed that 66% of the respondents expressed satisfaction with performance of knowledge process function while 34% had reservations or discontent. Numerous researchers concur that effective and efficient knowledge management processes are mandatory for superior organizational performance (Zaim et al., 2019). Empirical demonstrations exist, showing that effective knowledge management processes influence market performance of firms as well as organizational learning and developmental activities (Kianto et al., 2017). For instance, Friedrich et al. (2019) identified altruism, self-efficacy, recognition, conformity and reputation as some of the reasons for knowledge-sharing in the firm; emphasizing that there are significantly more benefits to sharing knowledge despite risks such as unnecessary rivalry between coworkers, tendency to lie to obtain better results, and anxiety based on poor ratings. The foregoing are

fundamental concerns necessitating pertinent efforts to convert the 34% of the respondents who returned the verdict of failure to agree with the performance status of the knowledge management process function of the organization.

#### **Employee Performance (EP) Descriptive Outcomes**

The dependent variable EP had 12 items for assessment and the outcome was obtained as presented in Table 7 for all the three constructs – Task, adaptive and contextual performance dimensions.

**Table 7: Employee Performance Outcomes Tabulated** 

Item No.	EP Constructs	SD	D	N	A	SA	Mean	SD
TP	Task performance							
TP1	I always meet the work quality required	0%	4%	9%	51%	36%	4.19	0.77
TP2	Planning and organizing work is a task I							
	adequately attain	1%	1%	7%	59%	32%	4.19	0.71
TP3	I am result-oriented in line of our operating							
	culture	1%	2%	5%	49%	43%	4.3	0.76
TP4	Prioritizing tasks to dispense is within my							
	discretion	0%	7%	12%	51%	30%	4.03	0.85
TPM	Mean	1%	4%	8%	52%	35%	4.18	0.77
AP	Adaptive Performance							
AP1	I am able to keep my job knowledge up-to-date	0%	7%	6%	45%	42%	4.2	0.86
AP2	I readily learn new tasks, technologies and							
	procedures making my job skills up-to-date		2%	8%	55%	34%	4.19	0.75
AP3	I readily adjust my work goals whenever							
	necessary	1%	3%	7%	51%	38%	4.22	0.79
AP4	I always undertake problem solving creatively	1%	1%	5%	58%	35%	4.24	0.7
APM	Mean	1%	3%	7%	52%	37%	4.21	0.78
CP	Contextual Performance							
CP1	I am a consistent participant in team activities							
	at work	0%	3%	3%	53%	41%	4.31	0.69
CP2	I find it easy cooperating with others at work	0%	2%	3%	53%	42%	4.34	0.65
CP3	I experience effective communication in the							
	execution of my work	0%	3%	8%	55%	34%	4.2	0.71
CP4	I commonly volunteer to undertake tasks							
	beyond my responsibility for purposes of							
	effective work execution	1%	4%	7%	44%	44%	4.24	0.85
CP5	I like taking challenging assignments in my							
	work	0%	4%	5%	50%	41%	4.27	0.75
CPM	Mean	1%	4%	5%	49%	41%	4.22	0.76

The outcomes were summarized from statement parameter results to construct performance. Table 8 gives a summary of all the constructs and their comparative scores.

**Table 8: Employee Performance Constructs Summarized Scores** 

Item No.	EP Constructs	STD %	DA %	N %	AG %	STA %	M	SD
TP	Task	1	4	8	52	35	4.18	0.77
AP	Adaptive	1	3	7	52	37	4.21	0.78
CP	Contextual	1	4	5	49	41	4.22	0.76
<b>EPGM</b>	Mean	1	4	6	51	38	4.2	0.77

From the constructs performances was drawn as shown in Table 9, performance of the variable.

**Table 9: EP Descriptive Outcome Snapshot** 

ITEM	CONSTRUCT	DISAGREEING	NEUTRAL	AGREEING
TP	Task Performance, %	4	8	88
AP	Adaptive Performance, %	4	7	89
CP	Contextual Performance, %	4	5	91
<b>EPGM</b>	Mean, %	4	7	89

From the findings of the study (M=4.20; SD=0.77), it was evident that responses to the 12 statements used to explain EP with overall mean of 4.20 and a standard deviation of 0.77 demonstrated that majority of the respondents agreed on the indicators used to measure EP. Most of the respondents (89%) agreed with organizational KP as suitable, meeting expectations in their assessment, with 4% disagreeing while 7% remained undecided, depicting that management ought to determine the sources of inability to agree by the 11% of the employees.

#### INFERENTIAL RESULTS

The data was exposed to inferential analyses to determine existence of correlation and regression relationships.

#### **Correlation Determination**

This section provides Pearson's correlation analysis, to determine the relationship strength and direction, between KMR and EP; and between KP and EP. The test findings presented in Table 10 are interpreted in accordance with Armstrong (2019), in which  $r \ge 0.7$  indicates a strong relationship, r = 0.5 to 0.69 is a moderately strong relationship, whereas r < 0.5 indicates a weak relationship. Tables 10 and 11 respectively show correlation analysis outcomes between KMR and Employee performance, and that between KP and employee performance.

Table 10: Correlation Analysis Outcome between KMR and Employee performance

	Performance KMR
	Pearson
	Correlati
Performance	on 1
	Sig. (2-tailed)
	Pearson
	Correlati
KMR	on .543** 1
	Sig. (2-
	tailed) 0.000

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

Findings in Table 10 showed that KMR and employee performance have positive and moderately strong relationship (r=0.569, p<0.05), depicting that a change in KMR leads to a change in employee performance in the same direction. This was in tandem with Onumah and Duho (2019) position that competitive advantage of a firm is strongly dependent on its intellectual capital, which is directly tied to effectiveness of its human capital. This was also consistent with Mukaro et al. (2023) assertion that investments in innovation yield new processes or products, which in turn generate benefits from domino impacts on: employee productivity, business growth, market penetration and organizational competitiveness. The human, structural and relational capital resultant effects, if designed in tandem with suitable strategies would generally enhance employee productivity, performance and satisfaction.

Table 11: Correlation Analysis Outcome between KP and Employee performance

		Performano	KP	
Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
KMP	Pearson Correlation	.555**	1	
_	Sig. (2-tailed)	0.000		

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

Findings in Table 11 indicated that KP and employee performance have positive and moderately strong relationship (r=0.555, p<0.05), showing that a change in KP leads to a change in employee performance in the same direction. This builds into Rahmayanto et al. (2019) supposition that through knowledge creation, sharing and utilization, an organization is able to identify, create, distribute information; and facilitate adaptation of insights and experiences for both tacit and explicit knowledge. It also buttressed Abubakar et al. (2019) declaration that

knowledge processes promote employee performance in enabling organizations configure and leverage knowledge in decision-making and problem-solving in the dynamic business environment.

#### REGRESSION ANALYSIS OUTCOME

Regression analysis was employed to assess the research hypotheses and establish statistical link between the variables, which according to Triola (2021) aids in explaining statistical relationship between variables, improving the study's capacity to draw meaningful conclusions. Tables 12, 13 and 14 provide the regression outcomes.

Table 12: Model summary for KMR Moderated by KP

Model	R	R Square	Adjusted Square	R	Std. Error Estimate	of	the	Change Statistics			
								R Change	Square	df 1	df 2
1	.54 3a	0.295	0.287		0.49905			0.295		1	92
2	.59 9b	0.358	0.337		0.4812			0.064		2	90

The findings showed that the R square (KR and performance) was 0.295. With the moderating variable in the model (KP) the R square improved from 0.295 to 0.358 indicating that the model's explanatory power improved by (0.064) 6.4%. This shows that knowledge management processes improves/enhances the relationship between KR and employee performance in food manufacturing firms in Nairobi. This was illuminated in Nowacki and Bachnik (2016) conclusion that knowledge creation sprouts new ideas and solutions for tapping unfolding opportunities that enable learning and innovativeness, which potentially promotes employee intellect and performance. Hussein et al. (2016) held that mere existence of knowledge resources does not guarantee organizational success while Dalkir (2017) opined that employees must share and apply knowledge in their operations in order to develop sustained competitive advantage. Relatedly, Ahmad and Karim (2019) declared that knowledge sharing is one of the most fundamental organizational activities and of strategic importance, in consonance to Ozer and Vogel (2015) emphasis that benefits of knowledge sharing include, among others: cost reduction, short product development cycles, improved innovation, increased customer satisfaction and performance capabilities.

Table 4.13: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.57	1	9.57	38.427	.000b
	Residual	22.913	92	0.249		
	Total	32.483	93			
2	Regression	11.644	3	3.881	16.762	.000c
	Residual	20.839	90	0.232		
	Total	32.483	93			

The ANOVA results implies that the model used to explain the moderating effect of KP on the relationship between KR and employee performance was significant. This is supported by the calculated F calc of 16.762 and p value of 0.000. (Fcal=16.762s> Fcrit=2.68 and p<0.05).

**Table 4.14: Regression Coefficients** 

Model		<b>Unstandardized Coefficients</b>		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	2.359	0.305		7.723	0
	KR	0.483	0.078	0.543	6.199	0
2	(Constant)	1.903	0.799		2.381	0.019
	KR	0.318	0.134	0.358	2.372	0.004
	KP	0.351	0.148	0.407	2.367	0.005
	KP_KR	0.024	0.010	0.036	2.223	0.004

From the findings, the positive coefficient for the interaction term (0.024) suggests that as KP improves, the impact of KR on employee performance increases. The p-value (0.004<0.05) indicates this interaction is statistically significant, confirming that KP moderates the relationship between KR and employee performance in food manufacturing firms in Nairobi. This was found to be consistent with Huang and Huang (2020) recommendation that companies that want to improve their performance should work on developing both their internal capabilities such as knowledge processes, research and development as well as their external capabilities including through partnerships or joint venture. The study highlighted that the ability to generate and fine-tune new ideas is the single most important factor from intellectual capital for organizational performance. Thus, effectiveness of both company external capabilities such as market knowledge and relationships, as well as its internal capabilities including innovation provide determinant impact for organizational performance.

On the same vein, it is worth noting that in the knowledge economy, Big Data phenomenon reigns; and as Cuenca et al. (2021) documents, dealing with its six most important characteristics: volume, variety, velocity, value, veracity and variability, determine business success and competitiveness. Cavanillas et al. (2016) held that it is through the four phases of generation, acquisition, storage, and data analysis that raw data is collected, stored and transformed to information (Hernandez-Leal et al., 2017) using technological approaches; which require knowledge processes. This means that the effectiveness of KR in enhancing employee performance depends on how well KM processes are implemented. The effect of KR on employee performance is stronger when knowledge management processes are well enhanced.

#### CONCLUSIONS AND RECOMMENDATIONS

The study concluded that KMR had a statistically significant positive impact on employee performance in KEBS confirming that KMR enhances employee performance. The study further revealed that KP facilitates employee performance, with effectiveness of knowledge application

being key determinant of success of institutional knowledge management system. There was however, evidence of need to improve on knowledge sharing frameworks in order to stimulate knowledge creation by the institution to improved levels. The study concludes that KP had a significant moderating effect on relationship between KMR and employee performance in KEBS. KMR triple pillars performed in descending order of structural, relational and human capital respectively. Effective KP facilitates comprehensive utilization of KMR and promotes integrated approach to organization effectiveness.

The study had a raft of recommendations for both KMR and KP. Head of human resource should undertake improvements on human capital particularly on the dual issues of mainstreaming adequate employee participation in decision making and problem solving, and, undertaking measures to ensure sufficient exposure of employees to industry trends and professional practices. Similarly, relational capital improvements concerned two issues as priority: integration of customer services concerns, and, enhancement of stakeholder strategic collaborations. Heads of marketing and ICT need to design a framework that enables capture, collation and analysis of customer concerns and communication of solutions, in an integrated fashion for optimal effectiveness. The heads of marketing and research and development should formulate and ensure implementation of policies that aptly identify and engage strategic partners for symbiotic collaborations that guarantee sustained mutual gains. These enhancements would trigger marked improvements in employee performance.

To optimize effectiveness of knowledge sharing, heads of human resources and ICT should determine and execute measures that enhance internal social networks that facilitate employees to connect, communicate and freely share knowledge. Moreover, the head of research and development should in liaison with heads of marketing and ICT, provide a mechanism that promotes participation in knowledge fairs and expos where employees communicate and show case ideas. Improvements on knowledge creation require that head of research and development through a brainstorm team, obtains a framework to stimulate activities for increased knowledge creation. And together with the head of human resources, meetings should be provided for employees to exchange ideas and experiences. The various portfolio managers should also in liaison with heads of research and knowledge management develop and implement a framework enabling employees from diverse backgrounds and expertise to work together on projects for work improvements.

#### REFERENCES

- Abubakar A. M., Elrehail H, Alatailat M. A. & Alev Elçi A. (2019). Knowledge Management, Decisionmaking Style and Organizational Performance. *Journal of Innovation & Knowledge* Volume 4, Issue 2, April–June 2019, Pages 104-114; https://doi.org/10.1016/j.jik.2017.07.003
- Acemoglu & Restrepo (2017). Nber Working Paper Series Robots and Jobs: Evidence from US Labour Markets Daron Working Paper 23285 <a href="http://www.Nber.Org/Papers/W23285"><u>Http://www.Nber.Org/Papers/W23285</u></a>
- Admasu Z. (2017). Innovation Practices of Manufacturing Firms" and Competitiveness: Evidence from Firms in Eastern Ethiopia. *International Journal of Scientific and Research Publications*, Volume 7, Issue 7, July 2017. ISSN 2250-3153. www.ijsrp.org.

- Aflah, K. N. (2022). Knowledge Sharing and Individual Diversity Interaction at Zakat Institutions in Indonesia: Testing the Relationship. Shirkah: Journal of Economics and Business, 7(1), 86-99. https://doi.org/10.22515/shirkah.v7i1.501; ISSN: 2503-4235 e-ISSN: 2503-4243.
- Ahmad F. & Karim M. (2019). "Impacts of Knowledge Sharing: A Review and Directions for Future Research", *Journal of Workplace Learning*, Vol. 31 Issue: 3, pp.207 230, https://doi.org/10.1108/JWL-07-2018-0096
- Akinyi, O. R. (2017). Effects of Knowledge Management Practices in Financial Institutions: *A Case of ICEA Lion Asset Management Limited in Nairobi, Kenya* (Doctoral Dissertation, Department of Library and Information Science, University of Nairobi).
- Altarifi S. (2020). The Impact of CRM on Marketing Performance Through Innovation Capability. J. Crit. Rev., 7 (12) (2020), pp. 4424-4433
- Amit, R. & Schoemaker, P. (1993). Strategic Assets and Organizational Rent. *Strategic Management Journal*, 14, 33-46.
- Arrau G. P. (2015). Knowledge Management in the Context of Developing Countries: the Case of Chile Paper Given at the 16th European Conference in Knowledge Management. September 2015, University of Udine Italy.
- Arzubiaga, U., De Massis, A., Kammerlander, N., & Hoy, F. (2022). Knowledge management in family firms: opening the black box and suggestions for future research. *Journal of Knowledge Management*, 26(2), 269-290. <a href="https://doi.org/10.1108/JKM-03-2022-924">https://doi.org/10.1108/JKM-03-2022-924</a>
- Asiimwe, D. & Barigayomwe, R. (2024). Knowledge Management Practices and Employee Performance at DFCU Bank in Uganda International Journal of Advanced Research, 7(1), 1-11. https://doi.org/10.37284/ijar.7.1.1676
- Ayetigbo O. A., Ibrahim G. M., Adegbola E. A., Salam O. & Ayetigbo O. F. (2023). Knowledge Management and Employees Performance: A Study of Employees of National Open University of Nigeria; *Nigerian Journal of Management Sciences* Vol. 24, Issue 2b August 2023 Pg. 286. n at: https://www.researchgate.net/publication/373629577
- Bansal S., Garg I, Jain M & Yadav A. (2023). Improving the Performance of Small and Medium Enterprises through Intellectual Capital. *Journal of Intellectual Capital*, 24(3), 830-853, https://doi.org/10.1108/JIC-07-2021-0189
- Barkat W., Beh L. S., Ahmed A. & Ahmed R. (2018). Impact of Intellectual Capital on Innovation Capability and Organizational Performance: An empirical Investigation. *Serbian Journal of Management*, 13(2), 365-379. <a href="https://doi.org/10.5937/sjm13-16997">https://doi.org/10.5937/sjm13-16997</a>
- Barney, J. (1991). "Firm Resources and Sustained Competitive Advantage", *Journal of Management*, Vol. 17, No. 1, pp.99–120.
- Boateng O. G., Neilands B. T., Frongillo A. E., Quiñonez R. H. & Young L.S (2018). Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer published: 11 June 2018 DOI: 10.3389/fpubh.2018.00149
- Boateng, H. & Agyemang, F. G. (2015). The Effects of Knowledge Sharing and Knowledge Application on Service Recovery Performance. *Business Information Review*, 32(2), 119–126.

- Bolisani E. & Bratianu C. (2018). The Elusive Definition of Knowledge.
- Cavanillas M. J., Curry, E. & Wahlster, W. (2016). New Horizons for a Data-Driven Economy: A Roadmap for Usage and Exploitation of Big Data in Europe. Springer Nature (2016).
- Cegarra-Navarro J., Soto-Acosta P. & Wensley A. (2016). Structured knowledge processes and firm performance: The role of organizational agility. *Journal of Business Research* October2015.DOI: 10.1016/j.jbusres.2015.10.014: https://www.researchgate.net/publication/284013705.
- Chibuzor A.A., Jovita O. U. & Onyemachi U. C. (2019). Knowledge Management, Organizational Innovation, *Strategic Journal of Business and Social Science* (SJBSS) www.sj-bss.com
- Corrado C., Haskel J., Cecilia Jona-Lasinio C. & Iommi M. (2018). Intangible Investment in the EU and US before and Since the Great Recession and its Contribution to Productivity Growth. *Journal of Infrastructure, Policy and Development* (2018) Volume (2), Issue 1, 2018. DOI: 10.24294/jipd. v2i1.205
- Cuenca V., Urbina M., Cordova A. & Cuenca E. (2021). Use and Impact of Big Data in Organizations. Chapter in Advances in Intelligent Systems and Computing · March 2021 DOI: 10.1007/978-3-030-68083-1 12
- Dalkir, K. (2017).t Knowledge Management in Theory and Practice. MIT press.
- De Bruyn, A., Viswanathan, V., Beh, Y. S., Brock, J. K. U., & Von Wangenheim, F. (2020). Artificial intelligence and marketing: Pitfalls and opportunities. *Journal of Interactive Marketing*, 51(1), 91-105. <a href="https://doi.org/10.1016/j.intmar.2020.04.007">https://doi.org/10.1016/j.intmar.2020.04.007</a>
- Dost, M., Badir, Y.F., Ali, Z. & Tariq, A. (2016), "The Impact of Intellectual Capital on Innovation Generation and Adoption", *Journal of Intellectual Capital*, Vol. 17 No. 4, Pp. 675-695. ISSN: 1469-1930; Https://Doi.Org/10.1108/JIC-04-2016-0047
- Friedrich J. B., Michael K., Frederik W. & Markus S. M. (2019). Incentive Design and Gamification for Knowledge Management. Journal of Business Research, Https://Doi.Org/10.1016/j.jbusres.2019.02.009
- Gazi A. I., Mamun A. A., Masud A. A., Senathirajah A. R. & Rahman T. (2024). The Relationship Between CRM, Knowledge Management, Organization Commitment, Customer Profitability and Customer Loyalty in Telecommunication Industry: The Mediating Role of Customer Satisfaction and The Moderating Role of Brand Image. *Journal of Open Innovation: Technology, Market and Complexity*; Volume 10, Issue 1, 2024, 100227, ISSN 2199-8531, https://doi.org/10.1016/j.joitmc.2024.100227.
- Graham M, Hjorth I, Lehdonvirta V. (2017). Digital Labour and Development: Impacts of Global Digital Labour Platforms and The Gig Economy on Worker Livelihoods. Transfer (Bruss). 2017 May;23(2):135-162. https://doi.org/10.1177/1024258916687250
- Hanine, S., & Dinar, B. (2022). The Challenges of Human Capital Management in the VUCA Era. *Journal of Human Resource and Sustainability Studies*, 10, 503-514. <a href="https://doi.org/10.4236/jhrss.2022.103030">https://doi.org/10.4236/jhrss.2022.103030</a>
- Hernandez-Leal, E.J., Duque-Mendez, N.D., Moreno-Cadavid, J. (2017). Big Data: An Exploration of Research, Technologies and Application Cases. TecnoLogicas 20(39), 1724

- (2017). <a href="http://www.scielo.org.co/scielo.php?pid=S0123-77992017000200002&script=sci">http://www.scielo.org.co/scielo.php?pid=S0123-77992017000200002&script=sci</a> abstract&tlng=en
- Herzberg, F. I. (2018). Happiness and unhappiness: A brief autobiography. *In Management laureates* (pp. 1-38). Routledge. https://doi.org/10.4324/9781351127547
- Herzberg, F. I., Mausner, B. & Snyderman, B. (1959). The Motivation to Work (2nd Ed.). New York: John Wiley.
- Huang C. C. & Huang S. M. (2020). External and Internal Capabilities and Organizational Performance: Does Intellectual Capital Matter? Asia Pacific Management Rev 25(2):111–120. https://doi.org/10.1016/j.apmrv.2019.12.001
- Huang, M.H. & Rust, R.T. (2021). "A Strategic Framework for Artificial Intelligence in Marketing," in *Journal of the Academy of Marketing Science*, Vol. 49, pp.30–50, <a href="https://DOI.org/10.1007/s11747-020-00749-9">https://DOI.org/10.1007/s11747-020-00749-9</a>.
- Hurtado-Palomino, A., Gala-Velásquez, B. D. la, Zirena-Bejarano, P. P., & Bustamante-Carpio, J. A. (2024). Structural Capital and Firm Performance: Synergistic Effects of Realized and Potential Absorptive Capacities in Tourism Businesses. Global Business Review, 0(0). https://doi.org/10.1177/09721509241228012
- Hussein, T., Singh, K., Farouk, S. & Sohal, S. (2016), "Knowledge Sharing Enablers, Processes and Firm Innovation Capability", *Journal of Workplace Learning*, Vol.28 No.8, pp.484-495.
- Inkow M. (2020). Organizational Innovation Capability as a Result of Knowledge Management Processes a Literature Review Management 2020 Vol. 24, No. 1
- Jagongo A., Cheruiyot C. K. & Owino E. (2012). Institutionalization of Knowledge Management in Manufacturing Enterprises in Kenya: A Case of Selected Enterprises. *International Journal of Business and Social Science* Vol. 3 No. 10 [Special Issue May 2012] 127.
- Jikhan F. C., Muftiadi A. & Alexandri M. B. (2023). The Effect of Intellectual Capital on Firm Performance: A State of the Art. Jurnal Ilmiah Akuntansi dan Bisnis, 18(2) 322-341. https://ojs.unud.ac.id/index.php/jiab DOI: 10.24843/JIAB. 2023.v18.i02.p09
- John-Akamelu R. C. & Iyidiobi F. C. (2018). Intellectual Capital and Performance of Nigerian Banks; Int. J. Innovative Finance and Economics Res. 6(1):60-74, 2018: © SEAHI PUBLICATIONS, 2018 www.seahipaj.org ISSN: 2360-896X.
- Juan S. H., Ting I.W.K., Kweh Q. L. & Yao L. (2018). How Does Knowledge Sharing Affect Employee Engagement? Institutions and Economies Vol. 10, No. 4, October 2018, pp. 49 67.
- KAM UNIDO (2020). The Competitive Industrial Performance (CIP) Index Kenya Report.

- Kariuki, C. W. & Kiiru, D. (2021) Employee Recognition and Employee Performance at Public Hospitals in Nyeri County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(10), 243-264.
- Khanal L. & Poudel S. R. (2017). Knowledge Management, Employee Satisfaction and Performance: Empirical Evidence from Nepal. Saudi Journal of Business and Management Studies, Vol-2, Iss2(Feb, 2017):82-91.
- Kianto, A., Hussinki, H., & Vanhala, M. (2017). The Impact of Knowledge Management on the Market Performance of Companies. In E.-M. Vătămănescu & F. Pînzaru (Eds.), Knowledge Management in The Sharing Economy- Cross-Sectoral Insights into The Future of Competitive Advantage (pp. 189–207). Cham: Springer.
- Koech C. S. & Cheluget M. (2019). Understanding Knowledge Management and Employee Performance. Advancing African Knowledge Management and Education; Charlotte, Information Age Publishing
- Kotni V. D. P. & Karumuri V (2018). Application of Herzberg Two-factor Theory Model for Motivating Retail Salesforce. IUP Journal of Organizational Behavior 17(1):24–42
- Kriss, P. (2014). "The Value of Customer Experience, Quantified", Harvard Business Review, August 1, https://hbr.org/2014/08/the-Value-of-CustomerExperience-Quantified.
- Lin, C., Yu-Ping Wang, C., Wang, C. Y., & Jaw, B. S. (2017). The Role of Human Capital Management in Organizational Competitiveness. *Social Behavior and Personality: An International Journal*, 45(1), 81-92.
- Lin, H.F. (2015), "Linking Knowledge Management Orientation to Balance Scorecard Outcomes", Journal of Knowledge Management, Vol. 19 No. 6, pp. 1-53.
- Mardani A. N., Saghi M. & Mahmoud D. M. (2018). The relationship between Knowledge Management and Innovation Performance. *The Journal of High Technology Management Research*, 29.10.1016/j.hitech.2018.04.002
- Momani K. M. K., Jamaludin N. & Zanani W. A. (2021). The Effect of Relational Capital on the Intellectual Capital and Firm Performance Nexus: Evidence from the Jordanian Industrial Sector. *Journal of Sustainability Science and Management* Volume 16 Number 5, July 2021: 307-326; eISSN: 2672-7226 © Penerbit UMT. http://doi.org/10.46754/jssm.2021.07.019
- Mosoti, Z. & Masheka, B. (2010). Knowledge Management: The Case for Kenya. The journal of language, technology and Entrepreneurship in Africa. 2(1).
- Mubarik M. S., Devadason E. S. & Govindaraju C. (2020). Human Capital and Export Performance of Small and Medium Enterprises in Pakistan. *International Journal of Social Economics*, Vol. 47 No. 5, pp. 643-662. <a href="https://doi.org/10.1108/IJSE-03-2019-0198">https://doi.org/10.1108/IJSE-03-2019-0198</a>
- Mukaro C., Deka A. & Rukani S. (2023). The Influence of Intellectual capital on Organizational Performance. *Future Business Journal* 2023,9(1):31 <a href="https://doi.org/10.1186/s43093-023-0208-1">https://doi.org/10.1186/s43093-023-0208-1</a>
- Munyoro J., Machimbidza T. & Mutula S. (2022). "An Overview of Knowledge Management Research in Zimbabwe: From 2010 to 2022" (2022). *Library Philosophy and Practice* (ejournal). 7404. https://digitalcommons.unl.edu/libphilprac/7404

- Murimi M., Ombaka B. & Muchiri J. (2019). Relationship between Intellectual Capital and Performance of Small and Medium Manufacturing Enterprises in Kenya. Semantic Scholar. DOI: 10.25103/ijbesar.122.02Corpus ID: 213913853.
- Mwiathi P. S. (2021). Determinants of Human Capital Formation in Kenya: A Study on Kenyan Counties. Department of Economic Theory, School of Economics, Kenyatta University.
- Ngari J. (2014). Relational Capital and Business Performance of Pharmaceutical Firms in Kenya *International Journal of Science and Research* (IJSR). ISSN (Online): 2319-7064; Volume 3 Issue 8, August 2014. www.ijsr.net; Licensed under Creative Commons Attribution CC BY.
- Ngugi, J. K. (2013). Influence of intellectual capital on the growth of small and medium enterprises in Kenya. *International Journal of Arts and Entrepreneurship*, 1-187. http://ir.jkuat.ac.ke/handle/123456789/1480
- Nowacki R. & Bachnik K. (2016). Innovations within Knowledge Management: *Journal of Business Research*: Volume 69, Issue 5, May 2016, Pages 1577-1581.
- Ogara, W.O., Jalang"o, J.W. & Othieno, O.J. (2010). Knowledge Management and Institutional Framework: Kenyan Veterinary Services. *Journal of Knowledge Management Practices*, 11(3).
- Onumah J. M. & Duho K. C. (2019). Intellectual Capital: Its Impact on Financial Performance and Financial Stability of Ghanaian Banks. Athens J Bus Econ 5(3):243–268
- Ortega-Gutiérrez, J., Cegarra-Navarro, J. G., Cepeda-Carrión, G. & Leal-Rodríguez, A. L. (2015). Linking Unlearning with Quality of Health Services through Knowledge Corridors. *Journal of Business Research*, 68(4), 815–822.
- Otor E. O. (2015). The Influence of Intellectual Capital on The Performance of Small and Medium Enterprises: A Case of Mombasa County Kenya. Unpublished MBA Thesis of the University of Nairobi.
- Ozer, M., and Vogel, D. (2015), "Contextualized Relationship Between Knowledge Sharing and Performance in Software Development". *Journal of Management Information Systems*, Vol.32 No.2, pp.134-161.
- Ozkan N., Cakan S. & Kayacan M. (2017). Intellectual Capital and Financial Performance: A study of the Turkish Banking Sector, Borsa Istanbul Review, Volume 17, Issue 3, 2017, Pages 190-198, ISSN 2214-8450; <a href="https://doi.org/10.1016/j.bir.2016.03.001">https://doi.org/10.1016/j.bir.2016.03.001</a>. (<a href="https://www.sciencedirect.com/science/article/pii/S2214845016300011">https://www.sciencedirect.com/science/article/pii/S2214845016300011</a>)
- Penrose, E. (1959). The Theory of the Growth of the Firm, Oxford University Press, Oxford.
- Pinheiro J., Silva G.M., Dias Á.L., Lages L.F. & Preto M.T. (2020). "Fostering Knowledge Creation to Improve Performance: The Mediation Role of Manufacturing Flexibility", Business Process Management Journal, pp.1–22 <a href="https://doi.org/10.1108/BPMJ-10-2019-0413">https://doi.org/10.1108/BPMJ-10-2019-0413</a>
- Porter M. E. 1980. Competitive strategy: Techniques for analyzing industries and competitors. New York: Free Press.

- Rahmayanto, Adnan H. & Nursaban R. (2019). The Effect of Knowledge Management on Employees Performance Mediated by Job Satisfaction. *IOSR Journal of Business and Management* (IOSRJBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 21, Issue 7. Ser. VII (July. 2019), PP 72-81 www.iosrjournals.org DOI: 10.9790/487X-2107077281 www.iosrjournals.org.
- Rane N.L., Achari A. & Choudhary S.P (2023). Enhancing Customer Loyalty through Quality of Service: Effective Strategies to Improve Customer Satisfaction, Experience, Relationship and Engagement. *International Research Journal of Modernization in Engineering Technology and Science*; https://www.doi.org/10.56726/IRJMETS38104
- Rasugu D., Chege L. J., Ogindi K., Munene E., Magutu P. O., Kaguara A. W. & Ongeri R. N. (2020). Sustainable Manufacturing Strategies and Production Efficiency of Multinational Firms in Nairobi, Kenya. *Noble International Journal of Social Sciences Research ISSN* (e): 2519-9722 ISSN (p): 2522-6789 Vol. 05, No. 01, pp: 01-11, 2020: URL: www.napublisher.org Rasugu et al., 2020).
- Rehman, W. U. & Abdul Rehman, C. (2015). Linking Intellectual Capital and Knowledge Management with Organizational Performance: A Meta-Review Analysis. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 5(2), 63-73.https://doi.org/10.1016/j.strueco.2019.02.003.
- Ritala, P., Olander, H., Michailova, S. & Husted, K. (2015), "Knowledge Sharing, Knowledge Leaking and Relative Innovation Performance: An Empirical Study", Technovation, Vol. 35, pp. 22-31. Robbins, S. & Judge, T. (2013). Organizational Behavior (15th Ed.).
- Sangiorgi D. & Siboni B. (2017). "The Disclosure of Intellectual Capital in Italian Universities: What Has Been Done and What Should be Done?" *Journal of Intellectual Capital*, Vol. 18, No. 2, pp. 354-372. DOI: 10.1108/JIC-09-2016-0088.
- Seth, A. & Thomas, H. (1994). Theories of the Firm: Implications for Strategy Research. *Journal of Management Studies*, 31 (2), March, 165-191.
- Shah, N., Irani, Z. & Sharif, A. M. (2017). Big data in an HR context: Exploring organizational change readiness. *Journal of Business Research*, 70, 366-378. <a href="https://doi.org/10.1016/j.jbusres.2016.08.010">https://doi.org/10.1016/j.jbusres.2016.08.010</a>.
- Spender J. C. (2015). Knowledge Management: Origins, History and Development. *Part of the Knowledge Management and Organizational Learning Book Series* (IAKM, Volume 1). DOI: 10.1007/978-3-319-09501-1 1: Electronic ISSN 2199-8671; Print ISSN 2199-8663.
- Suharman, H., Alipudin, A., & Hidayah, N. (2022). Corporate Social Responsibility, Intellectual Capital and Corporate Performance in State-Owned Enterprises. Quality Access to Success, 23(189), 26–32. https://doi.org/10.47750/QAS/23.189.04
- Tadesse D. K. (2020). The Impact of Knowledge Management towards Organization Performance: *IOSR Journal of Business and Management* (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 23197668. Volume 22, Issue 3. Ser. I (March. 2020), PP 37-48 www.iosrjournals.org DOI: 10.9790/487X-2203013748 www.iosrjournals.org
- Taherdoost, H. (2019). What is the Best Response Scale for Survey and Questionnaire Design; Review of Different Lengths of Rating Scale/attitude scale/Likert Scale. *Hamed Taherdoost*, 1-10. https://ssrn.com/abstract=3588604

- Triola, M. F. (2021). Elementary Statistics. Pearson.
- Tuffaha M. (2020). The Determinants of Employees Performance: A Literature Review. *Journal of Economics and Management Sciences*; Vol. 3, No. 3; 2020. ISSN 2576-3008 E-ISSN 25763016: https://doi.org/10.30560/jems.v3n3p14
- Victoria, W., Simiyu, G. & Simiyu, A. Influence of Relational Capital Initiatives on Value Creation in Public Universities in Kenya. *International Journal of Social Sciences and Information Technology*, 4(10).
- Wamitu, S.N. (2016) Functional Boundaries as a Tacit Knowledge Sharing Factor and Its Effect on Public Sector Performance in Kenya. *Open Journal of Business and Management*, 4, 225-237. http://dx.doi.org/10.4236/ojbm.2016.42024.
- Wernerfelt B. (1964). A Resource-Based View of the Firm. Strategic Management Journal: Vol. 5, No. 2 (Apr. Jun., 1984), pp. 171-180: https://www.jstor.org/stable/2486175.
- Zahi N. N. (2025). The Impact of Structural Capital on Organizational Innovation and Process Innovation; *Sadat Journal of Administrative and Financial Research* Volume 3 | Issue 1 | Jan. 2025; (ONLINE) ISSN:2974-3389 https://sjsaf.journals.ekb.eg.
- Zaim H., Muhammed S. & Tarim M. (2019). Relationship between Knowledge Management Processes and Performance: Critical Role of Knowledge Utilization in Organizations. Knowledge Management Research & Practice, 17:1, 24-38, <a href="https://doi.org/10.1080/14778238.2018.1538669">https://doi.org/10.1080/14778238.2018.1538669</a>