Relationship between Knowledge Management and Innovative Work Behavior among Commercial Banks in Meru County, Kenya

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Abstract

To examine the extent to which knowledge management (KM) influences innovative work behavior (IWB) among the staff of commercial banks in Meru County, Kenya. Descriptive survey design was adopted. A structured questionnaire used to collect data in 20 commercial banks in Meru town with a population of 213 using a clustered random sampling on a sample of 110 comprising of top, middle, and lower levels management. A response rate of 92% was established. Content & convergent validity ensured data quality while cronbach's alpha value (0.7) tested the reliability of the questionnaire. Data was analyzed using the SPSS software and computed using Descriptive statistics and inferential statistics. Findings indicated a moderate positive correlation between KM and IWB. KM process (acquisition, sharing & application) was well established in banks processes. However, IWB process (idea generation, promotion and realization) was not well structured. Tacit knowledge requires knowledge champions as enabled by empowered leadership. To the knowledge of the authors, no previous studies have analyzed the relationship of KM and IWB nor the approach in the context of commercial banks in Meru County.

Keywords: *Knowledge management, Innovative Work Behavior, Tacit Knowledge, Explicit knowledge, organizational performance.*

1.0 Introduction

Consumer expectations, increasing competition from financial technology (FinTech) and regulatory pressures are challenges being encountered in the current banking industry. Given the rapid pace of change, the industry transitional success will not be merely about automating and smartening existing process but rather understanding the connected nature of customers, business models and technology. Therefore, financial institutions must engage their work forces to innovate at scale by tapping in the knowledge economy (FINEXRA, September 2017). According to Tong and Shaikh (2010), Knowledge Management is about directing people's view on knowledge,

guiding their behaviors in sharing knowledge, designing the right strategies and effective approaches to promote and leverage on knowledge creation, dissemination and application to fulfill organizational objectives. Essentially, how an organization faces ambiguity and it's capability in producing knowledge largely dictates its' competitive advantage (Choochote and Nurse, 2012). Moreover, according to Eugene, Byukusenge, Munene, and Milena (2017) the ambiguity lies in how organizations explore the tacit and explicit dimensions of knowledge of individuals, group and organizations and how they convert it into organizational assets. Employee innovative work behavior(IWB) is defined as an individual's behavior to achieve the initiation and intentional introduction(within a work role, group or organization) of new and useful ideas, processes, products, and procedures (Gkorezis, 2016). It comprises of idea generation, ideas search and communication, implementation starting activities, involving others and overcoming obstacles. These multiple facets unfold over time. In this study, IWB definition was adopted from Lukes and Ute (2017), to imply the behavior through which an employee generates/adopts new ideas and makes subsequent efforts to implement them (idea generation-idea promotion-idea application). An element of person-organization fit (P-O) fit) ensures compatibility of employees' values, personalities, abilities, and needs visa-vie the organization's values, demands and supplies (Tsai, 2002), thus connecting individuals strongly to their organization in a manner that motivates them to realize their creative ideas needs and share with their counterparts (Rietzschel, Nijstad, & Stroebe, 2010). Notably, organization efficacy is becoming progressively dependent on employees continous creativity and innovation of products, services, methods and operations in todays hypecompetitive socio-economic context (Adalgisa, Galletta, Vandenberghe, & Odoardi, 2015). Thus, commercial banks need to explore the knowledge economy at length and structure employee intellectual capabilities (tacit knowledge) as a strategy to new product/service development or risk redudancy and lose of customers to the laps of competition like table banking, microfinances exectra.

Evidently, global banks: Great western bank, Citi bank, Bank of America and world banks have developed KM software to target the most valuable clients, study customer transactions, identifying emerging markets and potentially wanting debit cards in a bid to save time and money (Lukes and Ute (2017). The Central Bank of Kenya report of 2016, acknowledges the tremendous growth of branch/ agent and internet banking has moved the transactions closer to a cashless economy as financial innovations have expanded at a tremendous rate ahead of financial regulations. Mobile banking services currently override the banking community and weaker banks are finding themselves unable to sustain their competitive market position due to the emergence of exogenous innovators. According to Babu and Hedge, (2004) the present new age e-bankers in commercial banks in Meru can only program and automate explicit component of knowledge and this restriction has lead to lack of experience in translating employees' tacit knowledge sharing behaviors into actual changes that lead to improvement of processes in banks (Spencer, 2010). Although previous studies such as Lukes and Ute (2017) have tried to measure employee innovation process across cultures such as Germany, Switzerland and Czech republic; while in Meru county Kinyua (2015) and Gakuo and Rotich (2017) studies investigated versatility of technological innovation in enhancing customer convinience; few studies have examined the extent to which KM influences IWB among commercial banks in Meru County. Further, the study hypothesized that KM does not significantly influence IWB among commercial banks in Meru County. Examining such relationship was crucial in informing management on how to leverage on

knowledge to integrate, foster and incorporate innovation at both individual and organizational level.

2.0 Literature Review

The study was underpinned by the Knowledge based view (KBV) theory whose main argument is that knowledge is maintained by individuals (repositories of knowledge). The theory postulates that knowledge is a strategic and significant resource that a firm possesses. It is valuable, rare, non-substitutable and not easily replicable. Pandey, (2018) hypothesizes that a firm's predisposition to knowledge management effectiveness is in its knowledge infrastructure and process capabilities. However, the continuous acquisition, transfer and application of knowledge in any organization are driven by the ever-changing competitive market conditions such as technical advancements, frequent deregulations and globalization. Hence, in the context of expanding globalization new possibilities and trends are constantly placing transformation pressures on organizations and the need to continuously develop competitive improvements and innovations through active and continuous use of knowledge has become inevitable (Rasmussen & Nielsen, 2011). As such, knowledge is an asset whose effective development and deployment plays a pivotal role in value creation and performance of an organization (Carlucci, 2013). Therefore, KBV provides firms with strategies for achieving competitive advantage, forms the basis for establishing human capital involvement in structural and routine activities which in turn helps in formulation of long term operational and transformational goals/objectives.

Furthermore, the study draws a lot from the diffusion of innovation theory. According to Everett (2003) diffusion innovation theory posits how, why and at what rate new ideas and technologies are spread and diffusion relies heavily on human capital as innovation has to be diffused first to trigger social change. This implies that innovation must be widely adopted in order to be self-sustaining as the heterogenious value of an innovation differs between organizations and drives either its adoption or abadonment of innovation " the diffusion of success or failure". Diffusion of innovation could be categorized into two: characteristics of innovations measured by; relative advantage, complexity, compatibility, observability and trialibility of innovations; and characteristics of adopters as measured by organizational size, structure, culture and strategy. Compartibilty with what is already in place makes the new idea seem less unceratin, more familiar and helps give meaning. The idea has to be consistent with employees existing values and past experiences. Complexity stipulates that the innovation has to be perceived as easy to use and understandfor fast adoption rate to be realized. Triablity suggests that if a potential adopter is able to 'play' with the innovation before being faced with an adoption decision, adoption is more likely. Finally, observability states that the more the results of an innovation are visible to others the more likely the innovation is to be adopted. Kang & Yoshio, (2010) argue that, in as much as an organization may adopt socially legitimized new practices while buffering internal routines/technical activities from significant changes; such a move can easily bring mismatch between compatibility attributes of adopted practices with those of adopters and implementation can be largely compromised. Raynard, (2017), used the theory of difussuion innovation as a basis for developing effective marketing and educational studies (ebooks). According to Raynard (2017), ebooks are not used as much as they should by students and faculties due to their complextity in their search. He argued that such perception has greatly influenced perception of

the product uptake and increases the perceived risk threshold despite its significance in ease of study and research. Often when innovation/improvement is initated some parts of the organizations some functions do not embrace its adoption. Thus, diffusion theory allows consistency and acts as a conduit for employees to own the process. This possiblility requires clarity on how ideas, product and processes difusse and spread within organizations.

2.1 Knowledge management (KM)

In the context of expanding globalization, new possibilities and trends are constantly placing transformation pressures on organizations and the need to continuously develop competitive improvements and innovations through active and continuous use of knowledge has become inevitable (Rasmussen & Nielsen, 2011). Knowledge management is a process of identifying and analyzing a firms accessible knowledge that is needed to achieve organizational objectives (Byukusenge, Munene, & Orobia, 2016). Additionally, it is doing what is needed to get the most out of knowledge sources (Irma & Rajiv, 2015). Further, KM is about directing people's view on knowledge, guiding their behaviors in sharing knowledge, designing the right strategies and effective approaches to promote knowledge creation, dissemination and leveraging to fulfill organizational objectives (Tong & Shaikh, 2010). Jiming and Holsapple (2013) suggest that KM to a larger extent is pegged on human activities, processes, social interactions and cognitive interpretation of information. Choochote and Nurse (2012) describe KM as a process of identifying, capturing, organizing and disseminating the intellectual assets that are crucial to the organization's long-term performance.

KM as a process can be understood from different angles: As the continuous management of all types and forms of knowledge to realize set goals; as fully exploring of the existing knowledge and creating new opportunities; transferring of knowledge to the right individuals at the right time; planning different activities in realizing set objectives so as to increase company's capital and identification and analysis of available knowledge (Verlag, 2011). KM process can be approached from various dimensions: creating, identification, storing/retrieving, transferring, distribution and applying (Tseng & Fan, 2011). Generalizing from above process, this study adopted three processes: acquisition, sharing, and application. According to Tseng and Fang (2015), knowledge acquisition fuels innovation. KM process influences work efficiency, while work efficiency influences organizational performance. Knowledge acquisition is the production of knowledge by either discovery or deviation from existing knowledge. This means an organization can find new knowledge internally/externally or create new knowledge from existing information within the organization. Tseng and Fang (2015) further suggested that the external information should not be merely scanned and converted into usable internal knowledge, but rather, the organization should assist employees validate and assimilate this knowledge in their existing resources. Knowledge sharing is the exchange of explicit and tacit knowledge. It refers to the frequency at which employees disseminate and share job-related know-how with their co-workers. Such sharing is predicted by factors such as organizational justice, trust, and commitment (Hsu-Hsin, Chiang & Tzu-Shian, 2011). As such, knowledge is an asset whose effective development and deployment plays a pivotal role in value creation and performance of an organization (Carlucci, 2013).

Various scientific studies postulate that the success of KM organizational capabilities and knowledge management success is not only bound on its knowledge processes capabilities, but also in the infrastructure capabilities and culture Satyendra, Dutta, and Nayak (2018); Chang and

Lin (2015) and Tseng (2010). Additionally, Mundra, Gulati, and Vashisth (2011) assert that sustainable competitive advantage is rooted in effective channeling of intellectual capital through Authentic Leadership (AL). Hence, for knowledge to be shared, organizational units must be motivated, have capacity to absorb it, and have transmission channels (Ortega-Egea, Moreno, & Dominguez, 2014).
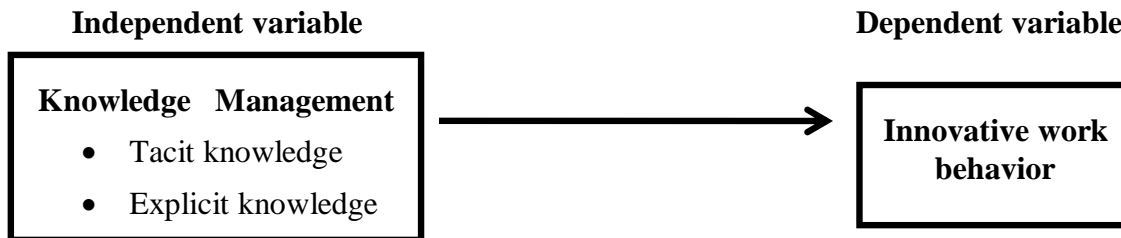
2.2 Innovative Work Behavior (IWB)

Prieto and Pérez-Santana (2014) describes IWB as an "everyday innovation" dependent on intentional efforts of the employees' to share beneficially novel outcomes in the workplace (Delois, 2010). IWB entails employees interaction to acquire and disseminate knowledge (Bilal, 2016). Notably, employee interaction acts as a prerequisite to knowledge sharing which is embedded in strong social connections, higher emotional closeness, and greater social cohesion. Kristof-Brown (2006) argues that organization need to adopt knowledge sharing to enhance innovation, competitive advantage and boost firm performance. However, for such sharing to occur, an element of person-organization fit   (P-O) fit) should be factored for it connects individuals strongly to their organization in a manner that motivates them to realize their creative ideas (Rietzschel, Nijstad, & Stroebe, 2010). According to Darrouxa, Jonathan, Massalel & Thibeli (2013) creativity and innovation are two pillars of KM and act as conduits for sustained economic development and competitiveness. Afar and Badir (2017), posits that IWB has to be aligned with organizational believes and the ability of employees to live an integrated life in a way that their job roles are in harmony, energizes motivation, commitment and creativity values as held by employees.

Research has shown critical success factors: trust, motivation, leadership capabilities, business strategies and organizational capabilities strengthen the nature of reciprocity, fosters employee emotional bond and contributes to increase of employee commitment (Hsu-Hsin, Chiang & Tzu-Shian, (2011); Temblay, Colley, Saunders, Healy, and Neville 2010; & Mandeep, Arif, and Kulonda (2017). Several studies utilize IWB as an enabling factor to performance through knowledge sharing and flow within the firm. Fagley and Adler (2012) established a positive link between IWB and workplace spirituality. The findings were synonymous with Afar and Badir (2017) argument applying the spiritual mindset in a workplace encourages creativity and innovativeness within the workers and enhances their productivity. Hakimian (2016), study concluded that three forms of commitment: affective, continuance and normative influence IWB positively. Results from Ortega-Egea et al. (2014) indicate, when communication flows exist, workers' orientation to innovation is greater. In Spain, Prieto and Perez-Sanatana (2014) hypothesized that high-involvement human resource practices were pivotal in employees IWB. In Kenya, (Kinyua, 2015) and Ndunga, Njati, & Rukangu, (2016) affirm an upward trajectory and versatility of technological innovation (Mobile banking and M-pesa platform), however Gakuo and Rotich, (2017) findings indicate protection/hoarding of knowledge and its application is an impendiment to IWB in commercial banks in Meru County. This study addresses this gap by examining extent to which KM influences IWB in the context of commercial banks in Meru County, Kenya. On the basis of the above discussion and previous empirical research this paper proposes the following hypothesis:

Ho: KM is positively associated with IWB among commercial banks in Meru County.

2.3 Conceptual Framework

Independent variable   **Dependent variable**

Knowledge Management
• Tacit knowledge
• Explicit knowledge

→

Innovative work behavior

Figure 1: Conceptual Framework showing the interaction of variables

(Source: Researcher)

3.0 Methodology

3.1 Sample and procedure

The study was conducted among Commercial banks staff in Meru County through a descriptive research design. A cluster of 20 banks was identified and a simple random sampling was applied in the clusters such that the probability of being chosen at any stage of sampling process of was high. Data was collected using a self-administered questionnaire. Prior to the formal data collection, a total of ten respondents were used for pre-testing in Equity and Family bank in Nkubu town. This was to ensure all queries were clear and to validate whether the items in the questionnaire measured what the study intended. The target population in the study was 213 comprising of top, middle and lower management levels and a return rate established 117 questionnaires were returned. After cleaning out data for outliers the sample remained at110. The kolmogorov-smirnov test conducted to show cumulative frequencies indicated that the sample accurately represented the population under study.

3.2 Measurement

A five-point Likert scale was used to measure all variables. KM construct was measured using 10 items adapted from Zhang (2011) and Lin and Lee (2005) The aim of the items was to show the extent to which knowledge management was being utilized in the banks and was defined by three dimensions: knowledge acquisition (3 items for example, "the firm values employees' attitudes and opinions"), knowledge sharing: tacit knowledge (2 items for example share my work experiences and knowledge with my co-workers), explicit knowledge (2 items e.g. "i share internal reports and other official documents in my workplace') and knowledge application (2 items for example, ("the firm utilizes knowledge into practical use"). The KM scale had a five-point Likert-type response format ranging from 1 (strongly disagree) to 5 (strongly agree). The scale of reliability was 0.86. IWB was measured using 10 items adopted from De Jong and Den Hartog (2010) and was approached from three dimensions: idea generation (4 item for example "generate ideas/solutions to addressing problems), idea promotion (3 items e.g. "mobilize support for innovative ideas"), and idea application/realization/practice (3 items for example ("transform

innovative ideas into useful applications at work").The likert scale was based on a five-point behavioral frequency scale ranging from 1 (Never) to 5 (always). The scale of reliability was 0.896.

3.3 Reliability and validity Cronbaach Alpha Test

Cronbach's alpha of KM and IWB were all above 0.8, indicating that the overall questionnaire has a good internal consistency and that the scale was stable and highly reliable. The composite reliability of KM and IWB was 0.86 and 0.896 respectively and most factors loading were greater than 0.7, indicating good aggregation reliability of the variables. Therefore, the variables in this study had good construct and content validity (Kumar, 2011).

Table 1: Summary of Reliability Analysis

Variable	Number of items	Cronbach's Alpha	Conclusion
Knowledge Management	10	0.860	Reliable
Innovative Work Behavior	10	0.896	Reliable
Overall	**34**	**0.914**	**Reliable**

Source: Field Data (2018)

4.0 Analysis and Results

An overall 94% response rate was realized. Descriptive statistics (mean and standard deviation) and inferential statistic (linear regression and structural equation model) analysis was computed accordingly. To test the relationship between KM and IWB, multiple linear regression analyses were performed. The study uses variance inflation factor (VIF) to examine the effect of multi-collinearity. The values of VIF associated with predictors show a range from 1.10 to 2.86. In this study the predictors had low correlation of 46.3% hence depicting absence of multicollinearity.

Table 2: Collinearity Statistics

Independent Variables	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Knowledge Management	0.786	1.273
Innovative Work Behavior	0.786	1.273

The collinearity statistics in Table 2 shows that the Variance Inflation Factor (VIF) values were less than five depicting that the data lacks collinearity. According to (Ombaka, 2014), VIF values for all the variables should be less than five. Therefore, the findings indicate lack of collinearity.

4.1 Descriptive Analysis

Bank employee were asked to indicate their level of agreement with the various statements in a 5-level Likert-rating scale (Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree – 1). The statements were measured in terms of how the banks valued employees' opinions; whether the bank acquired knowledge about new services/products from the industry

and whether the banks had developed processes for collaboration. Mean and standard deviation were used for ease of generalization of findings.

Table 3: Descriptive Data for Knowledge Acquisition

Statements (N = 110)		1	2	3	4	5	Mean	Standard Deviation
The bank values employees' attitudes and opinions	F	11	4	16	49	30	2.936	1.41
	%	10.0	3.6	14.5	44.5	27.3		
The bank has developed process for acquiring knowledge about new products/services from the industry	F	6	3	7	47	47	3.345	1.51
	%	5.5	2.7	6.4	42.7	42.7		
The firm has developed process for collaboration	F	7	2	16	50	35	3.073	1.42
	%	6.4	1.8	14.5	45.5	31.8		
Average (%)		7.3	2.7	11.8	44.3	33.9	3.118	1.447
Summary		21.8 (disagreement)			78.2 (Agreement)			

The findings on table 3 show that majority of the respondents (78.2%) with a mean aggregate score of 3.118 and a standard deviation of 1.447, agreed with the various assertions that banks had invested in knowledge acquisition process and collaboration. This indicated that the processes established by the banks on knowledge acquisition accommodated employees' opinions and attitudes towards new product/service adoption in the industry. These findings concur with that of Satyendra, Dutta, & Nayak (2018) that a firm's predisposition of knowledge management effectiveness is in its knowledge infrastructure and process capabilities as embedded its culture. Synonymous findings by Chang and Lin (2015), stressed that the ability of an organization to create such value through leveraging on knowledge assets is embedded in organizational culture. Moreover, knowledge based view (KBV) theory by Grant (1996) reiterated that the capabilities are possible through individuals as repositories of knowledge. The respondents were also asked how they shared their tacit knowledge dimension in the bank setup as illustrated in the table.

Table 4: Descriptive Data for Knowledge Sharing (Tacit Knowledge)

Statements (N = 110)		1	2	3	4	5	Mean	Standard Deviation
I share my work experiences and knowledge with my co-workers	F	11	4	9	34	52	3.47	1.56
	%	10.0	3.6	8.2	30.9	47.3		
I show my co-workers how to perform the most difficult part of work	F	10	8	8	38	45	3.37	1.53
	%	9.2	7.3	7.3	34.9	41.3		
Average (%)		9.6	5.5	7.8	32.9	44.3	3.42	1.545
Summary		22.8 (disagreement)			77.2 (Agreement)			

As indicated in table 4, there was high knowledge sharing amongst the staffs of the banks. This is due to the high level of agreement (77.2 percent) in regards to whether the employees share knowledge. On the question whether the employees shared work experiences 52 respondents strongly agreed (mean 3.47), with a close similarity on the question on sharing knowledge on how to perform difficult tasks with 45 respondents who strongly agreed as shown by the likert scale. Hsu-Hsin, Chiang & Tzu-Shian, (2011); Temblay, Colley, Saunders, Healy, and Neville (2010); and Mandeep, Arif, and Kulonda (2017) studies consistently ranked trust as an essential element to aid employees disseminate and share job-related know-how with their co-workers. This illustrates the usefulness of the process of sharing in strengthening the nature of reciprocity, fostering employee emotional bond and contribution to increased employee commitment within the banks.

As classified by Peroune, (2007) reciprocity is a relational/mentorship process involving three types: information, collegial and special peer relationships respectively. This responses show that expectations of reciprocity might motivate a higher effort to promote and apply the new idea in social contexts of the bank work space (Oğuz & Ayşe, 2011). However, Corfield & Patron, (2015) warned that formal hierarchies and work "silos" could be an impediment to cross organizational knowledge sharing unless the same was alignment of a sharing culture in the firm. Further, respondents were asked how they shared their explicit dimension of knowledge as illustrated in table.

Table 5: Descriptive Data for Knowledge Sharing (Explicit Knowledge)

Statements (N = 110)		1	2	3	4	5	Mean	Standard Deviation
I share internal reports and other official documents in my workplace	F	14	4	11	41	40	3.136	1.54
	%	12.7	3.6	10.0	37.3	36.4		
My employer encourages me to undertake university or polytechnic courses/ training seminars	F	18	8	19	41	24	2.81	1.398
	%	16.4	7.3	17.3	37.3	21.8		
Average (%)		14.6	5.5	13.7	37.3	29.1	2.973	1.469
Summary		33.7 (disagreement)			66.3 (Agreement)			

As shown on table 5, 66.3 percent of the respondents agreed that there was explicit sharing of knowledge in the banks. There was a high level of sharing internal reports and other official documents in the work place as illustrated by a mean of 3.1 and shows knowledge sharing is a prerequisite for innovation, organizational learning, development of best practices and capabilities. Choi, Bong, Kihwan, Ullah, & Kang, (2016) found that sharing enhances individual knowledge and transforms it into organizational knowledge by sharing file, documents and experiences. More so, as indicated by a mean 2.8 majority of the respondents fairly agreed employer encouragement towards pursing further education in institutions of higher learning.

Table 6: Descriptive Data for Knowledge Application

Statements (N = 110)		1	2	3	4	5	Mean	Standard Deviation
My bank utilizes knowledge into practical use	F	4	10	15	54	27	3.018	1.31
	%	3.6	9.1	13.6	49.1	24.5		
My firm locates and applies knowledge to changing competitive conditions	F	8	6	15	46	35	3.137	1.43
	%	7.3	5.5	13.6	41.8	31.8		
My firm encourages people with similar interest to work together to solve problems	F	13	9	18	45	25	2.89	1.37
	%	11.8	8.2	16.4	40.9	22.7		
Average (%)		7.6	7.6	14.5	43.9	26.3	3.015	1.37
Summary		29.7 (disagreement)			70.3 (Agreement)			

The results on table 6 shows that majority of the respondents (70.3%) were of the view that there was application of knowledge in the banks. This was viewed in terms of how the bank utilized knowledge into practical use (81, 73.6%), how the firm locates and applies knowledge to changing competitive conditions (81, 73.6%) and finally, by how the firm encourages people with similar interest to work together to solve problems (70, 73.6%). However, on whether the bank management encouraged employees with similar interest a mean of 2.8 was realized. Alguezaui & Filieri, (2014) findings indicate that heterogeneous knowledge bases orient organizational learning in building knowledge capital and performance and management support is crucial to drive advancement of knowledge. Prieto & Pérez-Santana, (2014) finding linked the mediating role of management support and co-worker support on the relationship between high-involvement human resources practices and innovative work behaviour.

4.2 Descriptive Statistics on Innovative Work Behavior

The study sought to determine how knowledge management translated to innovative work behavior in commercial banks in Meru County. Using a Likert scale, bank employee were asked to indicate their level of agreement with the various statements in a 5-level Likert-rating scale (Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree – 1).The statements were measured in terms of how the banks paid attention to issues outside the employees daily work, how ideas were generated when it came to addressing problems, extent to which management embraced innovation risk and creativity and finally to what degree were problems and opportunities anticipated. Mean and frequencies were used for ease of generalization of findings as herein summarized on table 7.

Table 7: Descriptive Data for Idea Generation

Statements (N = 110)		1	2	3	4	5	Mean	Standard Deviation
Pay attention to issues that are not part of your daily work	F	7	23	39	24	17	3.19	1.129
	%	6.4	20.9	35.5	21.8	15.5		
Generate ideas/solutions to addressing problems	F	2	28	21	27	32	3.54	1.209
	%	1.8	25.5	19.1	24.5	29.1		
Take the risk of being innovative & creative	F	3	27	18	32	29	3.52	1.206
	%	2.8	24.8	16.5	29.4	26.6		
Anticipate problems & opportunities	F	7	21	25	29	28	3.454	1.239
	%	6.4	19.1	22.7	26.4	25.5		
Average (%)		4.4	22.6	23.5	25.5	24.2	3.426	1.196
Summary		50.3 (disagreement)			49.7 (Agreement)			

Results show that the banks paid attention to idea generation partially (49.7%). The respondents were of the view that not much attention was paid to work that was not part of the job description (41, 37.3%). The findings contradict Gregorio, Javier, and José (2015), who argued that an organization cannot innovate in isolation. In essence, external relationships and networks complement knowledge domain. It was also evident that there was a lot of bureaucracy following little idea generation to addressing problems and this is why employees took less risk in being creative (61, 56%).

The findings seem to agree with Lukes & Ute, (2017) who, despite agreeing that successful innovation requires novel ideas to be acted upon and implemented; employees in organizations are rarely able to implement ideas on their own and have to receive permission from managers. In addition, it seems that due to the competitive environment which commercial banks in Meru County operated in, they seem to proactively have implemented contingency plans to mitigate on the same and as such pay little attention to issues not related to work (41, 37.3%). In as much as management in banks acknowledges knowledge of its employees, leveraging on the same is not well defined.

Table 8: Descriptive Data for Idea Promotion

Statements (N = 110)		1	2	3	4	5	Mean	Standard Deviation
Mobilize support for innovative ideas	F	1	32	15	37	25	3.481	1.163
	%	0.9	29.1	13.6	33.6	22.7		
Acquiring approval for innovative ideas	F	8	30	25	29	18	3.172	1.2105
	%	7.3	27.3	22.7	26.4	16.4		
Making organizational members enthusiastic for innovative ideas	F	6	25	26	30	23	3.354	1.201
	%	5.5	22.7	23.6	27.3	20.9		
Average (%)			4.6	26.4	20.0	29.1	20.0	3.336	1.192
Summary			50.9 (disagreement)			49.1 (Agreement)			

The results on table 8 show that there was moderate idea promotion. This corroborates the descriptive findings in Table 4.9 on idea generation. It seems that banks did not do much in mobilizing support for innovative ideas nor for approving innovative ideas as shown by 50.9% disagreement rate. Bank employees seem to be less enthusiastic (53, 48.2%) due to lack of promotion of innovative ideas. Jafri (2010) agrees with the findings that promoting and fostering innovative work behavior among employees is one of the serious challenges faced by managers. Ortega recommends knowledge flows are essential and organizations must permit regeneration of essential competences or risk becoming targets for "exnovation" innovation.

Table 9: Descriptive Data for Idea Application/ Realization

Statements (N = 110)		1	2	3	4	5	Mean	Standard Deviation
Transform innovative ideas into useful applications at work	F	3	37	19	33	18	3.236	1.165
	%	2.7	33.6	17.3	30.0	16.4		
Introducing innovative ideas into the work environment in a systematic way	F	6	26	28	29	21	3.300	1.185
	%	5.5	23.6	25.5	26.4	19.1		
Evaluating the utility of innovative ideas	F	3	19	26	38	24	3.555	1.097
	%	2.7	17.3	23.6	34.5	21.8		
Average (%)			3.6	24.8	22.1	30.3	19.1	3.364	1.149
Summary			50.6 (disagreement)			49.4 (Agreement)			

From the observations in table 9, there seems to be a challenge in regards to transformation of innovative ideas into useful applications at work. Only 49.4 percent of an average mean of 3.4 of the respondents were of the opinion that a framework existed for introduction of the useful ideas systematically and for their utility. Conversely 50.6% disagreed on knowledge application within the banks. In line with Bysted, (2013) findings purported that mental involvement and job autonomy were drivers of innovative work performance. Thus there is need for empowering leadership in banks to promote job autonomy (Gkorezis, 2016). Autonomy fosters exploration of more ideas and offers alternatives to various issues. Ortega was of the view that sustainable competitive advantage is no longer rooted in physical assets and healthy finances but in effective channeling of intellectual capital.

4.3 Results on Inferential Analysis

Inferential statistics assisted the researcher make predictions on data from the sample and generalize it to the population.

4.3.1 Linear Regression Diagnostics

The data was checked for absence of outliers, Normality of the residuals, absence of multicollinearity among the independent variables, homogeneity of variance, no autocorrelation and linearity between the predictors and criterion variable.

Outliers

Mahalanobis distance, Centered Leverage distance and Cook's Distance statistics were used to look for checking outliers. An initial regression run in SPSS was used to generate the three distance values. The cutoff value for Mahalanobis statistics (Mahalanobis, 1936) was from the chi-square distribution, χ (5%, 3 variables) = 7.815; cut-off for Leverage distance values was $2*k/n$ where 'k' was number of independent variables and n was 110 cases, $2*2/110 = 0.036$; cut off value for Cooks distance value was $4/(n-k-1) = 4/(110-2-1) = 0.037$

Table 10: Filtering Outliers

		Frequency	Percent
Valid	Selected	96	87.3
	Unselected	14	12.7
	Total	110	100.0

MAH_1 < 7.815 & COO_1 < 0.037 & LEV_1 < 0.036 (FILTER)

Based on the latter criteria and using the **'select cases'** command in SPSS, 14 outlier cases were identified and were not selected for further analysis hence remaining with 96 valid cases. The valid cases were used in testing of linear regression assumptions and mediation analysis.

Normality

Normality plots and statistical tests were used to check whether the standardised residuals were normally distributed. The statistical tests included: skewness statistics, Kolmogorov-Smirnov and Shapiro-Wilk statistics, which test the null hypothesis that the data is normal. The normality plots included normal Q-Q plot, normal P-P plot and histogram of standardised residuals.

Table 11: Tests of Normality

|	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	P-value.	Statistic	df	P-value
Unstandardized Residuals	0.093	96	0.041	0.968	96	0.019

a. Lilliefors Significance Correction

From table 11, the p-value of Shapiro-Wilk Test was 0.019, which was less than 0.05 hence the null hypothesis was not rejected. However, Shapiro-Wilk statistic was 0.968, which was closer to unity. According to Osborne and Waters (2002) and Field (2009), if Shapiro-Wilk statistic approaches unity, it is evidence of normality in the data. Therefore, the unstandardized residuals were sufficiently normally distributed. Furthermore, at 1 percent significance level, the residuals are normally distributed because the p-value of 0.019 is more than 0.01; hence, the null hypothesis in this case is retained.
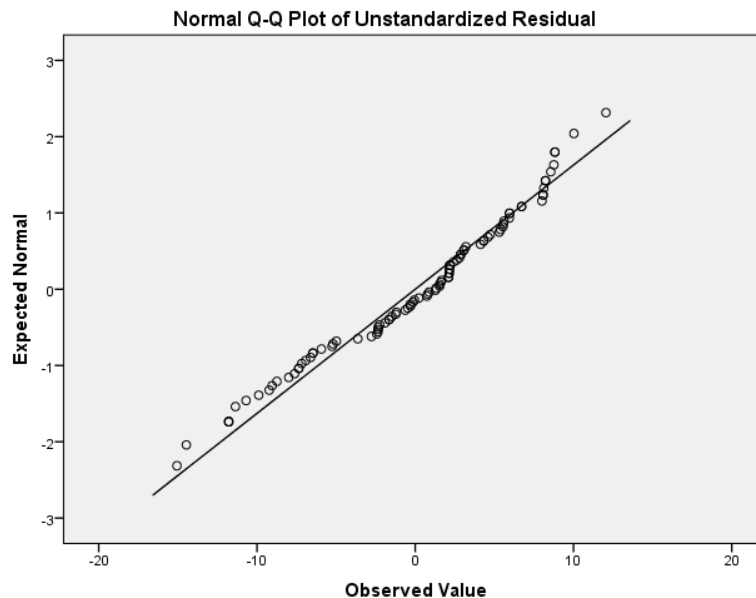
Figure 2: Normal Q-Q Plot of Unstandardized Residuals

The normal Q-Q plot in figure 2 shows normal distribution in the data because the observed values were along the expected normal curve. Normally distributed data should have data points along the expected normal line. This corroborates the findings of Table 11 that found the data to be statistically significant in terms of normality (Adnan, Nazibov, Rusiman, & Kavikumar, 2011).
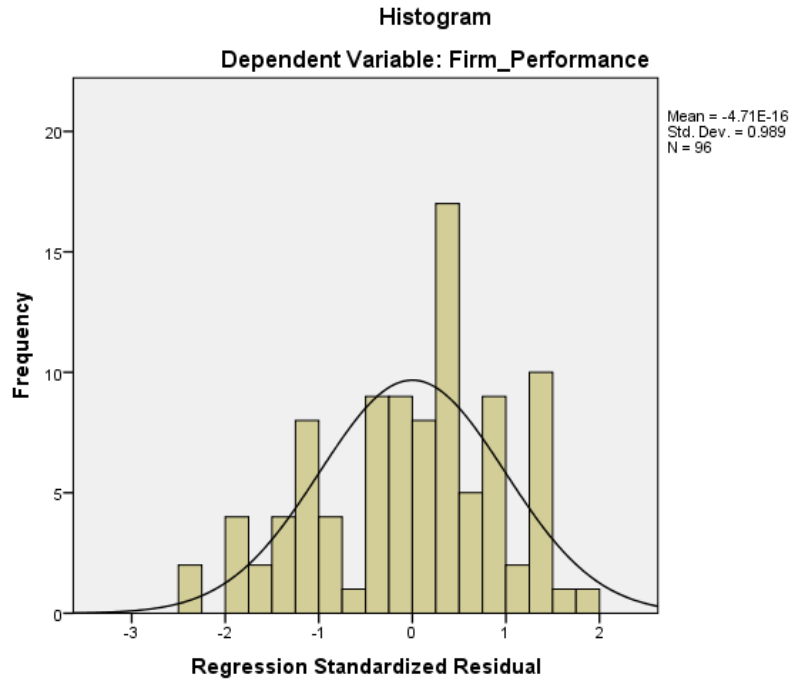
Figure 3: Histogram of Regression Standardized Residuals

Figure 3 shows the histogram of standardised residuals that was symmetric and with a normal fitted curve. Furthermore, the results as shown on table 12 show that the skewness and kurtosis were not significant. By dividing the scores of skewness and kurtosis by their respective standard errors, the quotients were -1.85 and - 0.93 respectively both well within ±1.96 limits. This suggests

that the departure from normality is not extreme (Kim, 2013).

Table 12: Skewness and Kurtosis of Residuals

	Score	Std. Error
Skewness	-0.455	0.246
Kurtosis	-0.454	0.488

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Firm_Performance
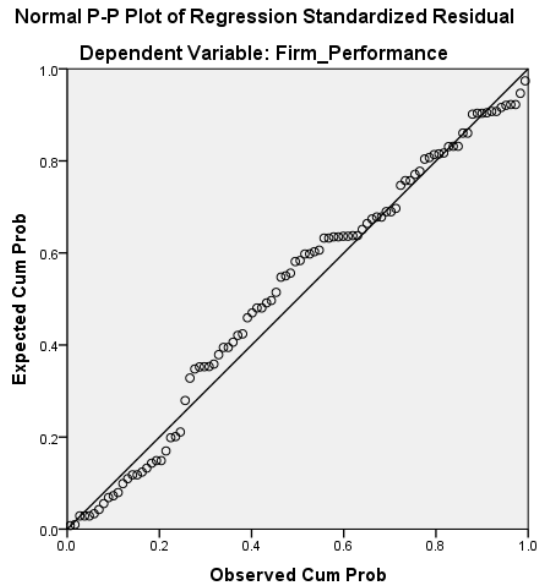
Figure 4: Normal P-P Plot of Standardized Residuals

The Normal P-P plot in Figure 4 shows that the observed cumulative probability values were distributed closely along the expected normal cumulative probability curve and this further illustrates that the data was normally distributed.

Multicollinearity

Independent variables should have low correlation amongst each other in order to avoid increasing the standard error and to avoid making the independent variables redundant. It was observed that Knowledge Management and Innovative Work Behavior had low correlation of 46.3% hence depicting absence of multicollinearity.

Table 13: Collinearity Statistics

Independent Variables	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Knowledge Management	0.786	1.273
Innovative Work Behavior	0.786	1.273

The collinearity statistics in Table 13 show that the Variance Inflation Factor (VIF) values were less than five depicting that the data lacks collinearity. According to (Ombaka, 2014), VIF values for all the variables should be less than five. Therefore, the findings indicate lack of collinearity. Appendix Table 13 shows the variance proportions of each independent variable in three dimensions one of which represents the regression constant. It is required that the loading for each variable to be high for one dimension and low for the other variables (Ombaka, 2014). Knowledge Management had one high loading of 0.94in the third dimension while Innovative Work Behavior

had the highest loading in the second dimension of 0.93dimensions. Since all the variables had high loadings in a single dimension, therefore there was no multicollinearity.

Linearity
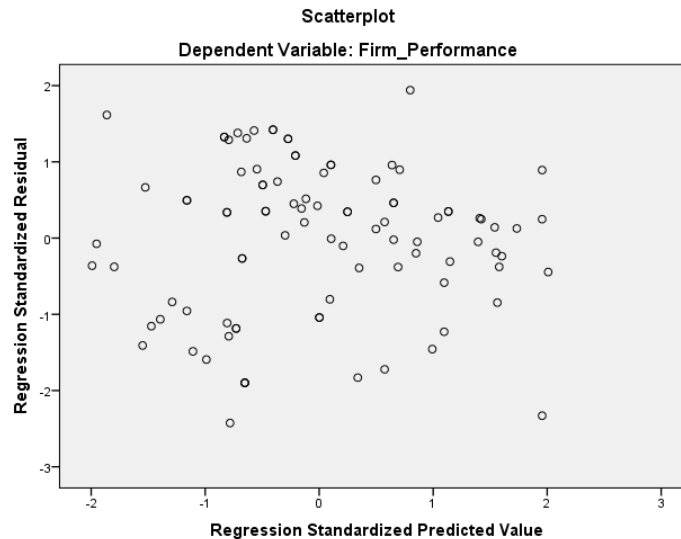
Figure 5: Scatter Plot of Regression Standardized Residuals against Regression Predicted Values

The standardised residuals as shown on figure 5 were randomly distributed without any visible pattern around the standardised predicted value. The scatter plot shows no outliers residual signifying that the predicted data was within the original data when plotted in a straight line. This shows evidence of linearity in the original data of the dependent variable (Kim, 2013).

Heteroscedasticity

Linear regression assumes homogeneity of variance throughout the data. Heteroscedasticity was measured using Breusch-Pagan (BP) and Koenker Test in Table 14 and by using Scatter Plot of Regression Standardized Residuals against Regression Predicted Values in Figure 4.

Table 14: Breusch-Pagan (BP) and Koenker Test

	LM–Statistic	P- Value
BP	2.838	0.242
Koenker	3.765	0.152

Breusch-Pagan (BP)(Breusch & Pagan, 1979) and Koenker statistics ((Koenker, 1981) test the null hypothesis that there is no heteroscedasticity in the data. The p-values of both tests had p-values less than 0.05 indicating homoscedasticity in the data. Figure (what) shows that the regression standardized residuals randomly spread around regression predicted values thereby indicating that there was no pattern in the residuals.

Autocorrelation

The Durbin Watson statistics (d) was 2.180, which is approximately two. As the Durbin Watson statistics becomes smaller, the serial correlation increases. If d < 2, there is positive serial correlation and if d > 2, there is negative serial correlation (Mukhtar, 2012). From the observed Durbin Watson statistic, there was no serial correlation.

4.3.2 Influence of Knowledge Management on Innovative Work Behavior

This was the second condition of the mediation test that involved testing the relationship between the independent variable (KM) and the dependent variable (IWB).

Table 15: Effects of Knowledge Management on Innovative Work Behavior

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.463	0.214	0.206	6.72494

Table 15 shows that there was a moderate positive correlation between Innovative Work Behavior and Knowledge Management with a Pearson's correlation coefficient of 46.3 percent. The coefficient of determination (R Square) was 21.4 percent meaning that 21.4 percent of the variations in innovative work behavior are due to variations in knowledge management.

Table 16: ANOVA Statistics of effects of Knowledge Management on Innovative Work Behavior

Model	Sum of Squares	Df	Mean Square	F	P-value.
Regression	1158.884	1	1158.884	25.625	0.000
Residual	4251.128	94	45.225		
Total	5410.012	95			

ANOVA test in Table 16 tested the null hypothesis that knowledge management is non-linearly related to Innovative Work Behavior at 5 percent significance level. The observed p-value was 0.000 that was less than 0.05 ($F_{(1, 94)} = 25.625$, $P =.000$), hence rejecting the second null hypothesis that there is no significant relationship between knowledge management and innovative work behavior thus showing significant linear relationship between the two variables. Prieto & Pérez-Santana, (2014) findings suggested managerial support as most proximal contextual influence and as that knowledge management supported by other determinants as extensive training, performance based compensation, work spirituality, and encouragement of participation had a positive significant contribution to innovative work behavior (Lukes & Ute, (2017). The findings demonstrate that other determinants are instrumental in enhancing IWB.

Table 17: Regression Coefficients for Innovative Work Behavior against Knowledge Management

Model	Unstandardized Coefficients		Standardized Coefficients	T	P-value	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	9.915	4.702	2.109	1.782	0.038	0.580	19.250
Knowledge Management	0.604	0.119	0.463	5.062	0.000	0.367	0.841

The regression equation of the linear regression analysis is as shown in equation (i):

$$Y = 9.915 + 0.604X_1 + e \quad \ldots\ldots\ldots\ldots\ldots\ldots (i)$$

$t-statistic \quad 1.782 \quad\quad 5.062$

$p\text{-value} \quad 0.038 \quad\quad 0.000$

Where

Y – Innovative Work Behavior

X_1 – Knowledge Management

e – Regression error term

The regression results as shown on table 17 established that by taking all factors into account constant at zero performance of commercial banks in Meru County was 9.915. A unit increase in knowledge management would lead to a 0.604 increase in scores on innovative work behavior. This insinuates, the more an individual gain and uses novel ideas, innovative work behavioral attitudes are adopted and becomes part of an organizational culture (Learning organization). The P-value in Table 17 shows that the relationship between knowledge management and Innovative Work Behavior was significant because the observed p-value was 0.000, which was less than 0.05.

5.0 Discussions and Conclusion

This paper analyses the relationship between KM and IWB in 20 commercial banks in Meru County. The results obtained show KM had a moderate positive correlation to IWB with a Pearson's correlation coefficient of 46.3 percent. The coefficient determination was 21.4 percent indicating that Knowledge Management accounted for approximately a fifth of the variations in Innovative Work Behavior. Findings further showed that the regression coefficient of KM was 0.604 with a p-value of 0.000 less than 5 percent significance level. Therefore, there was a significant relationship between KM and IWB. KM had three facets in this study: knowledge acquisition, knowledge sharing (implicit and explicit) and knowledge application. 80% of the respondents agreed to the assertions that banks developed processes for knowledge acquisition and had collaborations streams. It points out collaborations are key in ensuring efficient customer relationship management. More so, the results indicate a low response on the management encouraging employers to undertake higher education. This limitation can be traced back to the

operating time and work demands within the commercial banks in Meru. It was confirmed employees shared and applied knowledge they had acquired in the process of training and interaction among each other. This alludes that HRM practices are critical in creating KM structures in employee target setting measures. Chang and Lin (2015), stressed that the ability of an organization to create value is determined by leveraging on knowledge assets in fostering a learning environment that influences the motivation of individuals to pursue knowledge application in the long run. These sentiments are supported by Mundra, Gulati, and Vashisth (2011) who assert that sustainable competitive advantage is rooted in effective channeling of intellectual capital. Hence, for knowledge to be shared, organizational units must be motivated, have capacity to absorb it, and have transmission channels (Ortega-Egea, Moreno, & Dominguez, 2014).

In addition, idea generation and application within commercial bank in Meru was very low. Contrary to expectations bank management did not mobilize nor support innovative ideas. As a result, employees did not have the motivation to take the risks of innovation nor creativity. This shows redundancy and routine in service provisions and product differentiation was at a negligible margin. Gregory, Albritton, Osmonbekov, (2010) suggest that when employees perceive management support: showing concern, honest and non-judgmental feedback in their daily exchange processes, supporting their actions, showing inclination towards initiating creative ideas, exploring possible opportunities, solving current and future problems and translating their creative inputs into action; only then can their creative output increases. Afar and Badir (2017), explicitly states that perception of management and supervisor support is in form of employee freedom at work and resource availability, individual personal behavior elucidating personal fulfillment, flexibility, risk taking and fearlessness in addition to collective role behaviors to share ideas and build support. Further, high empowering leadership fosters individual and team self-efficacy that leads to innovative work behavior. Empowering leadership is characterized by authority delegation, involving employees in decision making and emboldened self-management (Chen, Sharma, Edinger, & Farh, 2011). Additionally, in as much as there was recognition of knowledge as an asset in the bank resource mobilization; there is still lack of clear mechanisms for systematic adoption, evaluation of idea utility and implementation of novel ideas. Innovation is an indispensable recourse for growth and according to Greve & Seidel, (2015) the heterogenious value of an innovation differs between organizations and either drives adoption or abadonment of innovation " the diffusion of success or failure".

5.1 Academic and practical implications

The results in this study are useful in enabling bank management make better decisions in KM structuring across various functions in view of improving innovativeness. Innovativess is enhanced when managers allow employees take risks in formulation of ideas, seeking novel solutions in product/service differentiation, encouraging employees to try new ways in their work approach and embracing an innovative culture. The study recommends appointment of knowledge ambassadors to help enhance idea generation, idea promotion and idea application as well as manage the knowledge resource center in the bank.

The findings in this study also provide policy implications in Kenya big four agenda, which is keen on competency-based education as one big agenda. Tacit knowledge is a critical tool in the technical and vocational institutions.

5.2 Limitation and Future Research

The paper has some limitations that suggest future research possibilities. One limitation stem from the length of period the research was done. Employees IWB required prolonged observational approach. A further limitation of the study consistent with previous studies was the measure of innovative work behavior for it is still at evolutionary stages. Some studies employed objective evaluation of supervisors while others used self-assessment of employees to rate IWB. This study employed subjective approach and suggest future studies can explore both approaches within the banking context to compare the results. KM and IWB are multi-dimensional constructs and might be analyzed from different perspectives. For instance, it would be interesting for future studies to investigate relationships between KM and various types of innovations.

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