THE MEDIATING EFFECT OF INNOVATIVE WORK BEHAVIOR ON THE RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT AND PERFORMANCE OF COMMERCIAL BANKS IN MERU COUNTY

CHRISTINE MWENDWA NDWIGA

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DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented for a degree or any other award in any university.

Signature…… Date……..

Christine Mwendwa Ndwiga

(BUS-3-0486-2/2016)

This thesis has been submitted for examination with our approval as the university supervisors.

Recommendation

Signature…… Date……..

Dr. Paul Gichohi, PhD

Kenya Methodist University

Signature……... Date……..

Dr. Clement Nkaabu, PhD

Kenya Methodist University

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DEDICATION

I dedicate my thesis to God Almighty Father, Son and Holy Spirit for bestowing in me the gifts of wisdom, knowledge and understanding.

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The ultimate realization of this research work has been quite a journey in my pursuit for academic excellence. Not only was the undertaking made possible through linking with great minds, but also their contribution was a great investment in its finalization.

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ABSTRACT

The Kenya national government devolution strategy opened up the financial sector to diverse and competitive markets. As a strategy to respond to the fragmented emergent markets and innovate unique products and services commercial banks in Meru County need to leverage on knowledge economy. However, the ambiguity is in translating employees' tacit knowledge dimension into actual changes that can lead to process improvement. The purpose of this study was to explore the role knowledge management plays in enhancing perceived firm performance by examining the mediating effect of innovative work behavior of employees in the commercial banks in Meru County, Kenya. It hypothesized that there was no significant relationship between: knowledge management and firm performance; knowledge management and innovative work behavior, innovative work behavior and firm performance and no significant meditating effect of innovative work behavior on relationship between knowledge management and firm performance among commercial bank in Meru County. Knowledge-based view, diffusion innovation and Vroom's expectancy theories guided the study. Descriptive survey design was adopted. Data was collected from a cluster of twenty commercial banks with a population base of 213 within Meru town using a structured questionnaire. A sample size of 117 was surveyed and realized a 94% response rate. Clustered random sampling technique was used as the probability of being a cluster being chosen at any stage of sampling process was high clusters. Content and convergent validity ensured data quality, while cronbach's alpha value (0.7) was used to test the reliability of the research instrument. Data was analyzed using the SPSS software (version 22) and mean, standard deviation, and linear regression analysis were computed and presented using tables and figures. Linear regression analysis was applied in testing mediation and hypothesis. Results on mediation of the variable indicated that there was a strong positive correlation (R=65.2%, p-value of 0.000) between perceived firm performance and knowledge management. There was a moderate positive correlation between knowledge management and innovative work behavior. There was a moderate positive correlation between perceived firm performance and innovative work behavior. Finally, there was a strong positive correlation on perceived firm performance as influenced by both knowledge management innovative wok behavior. All had linear significant relationships. The beta coefficient of Knowledge Management was 0.939 before mediation and reduced to 0.806 in the presence of Innovative Work Behavior and the resultant model showed a partial mediation of innovative work behavior on perceived firm performance and knowledge management. It is concluded that knowledge management has a strong impact on performance of commercial banks in Meru. It was noted that employee knowledge is not utilized and is not well articulated within the banks in Meru. The study recommends for performance, banks need to appoint knowledge champions; in development of an innovative culture, they develop policies and manuals governing knowledge implementation, creativity and innovation as part of performance appraisals and allocation of budgets for knowledge management process. The findings imply that the knowledge economy is growing at unprecedented rate and it is paramount for commercial banks in Meru County synchronize it in their systems and processes.

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ABBREVIATIONS AND ACRONYMS

ABC: Africa Banking Corporation

CBA: Commercial Bank of Africa

EK: Explicit Knowledge

FP: Firm Performance

HFCK: Housing Finance Company Kenya

IWB: Innovative Work Behavior

KCB: Kenya Commercial Bank

KBV: Knowledge Based View

KM: Knowledge Management

KMC: Knowledge Management Conference

LAPSSET: Lamu port and Lamu Southern-Ethiopia Transport Coordination

NACOSTI: National Commission for Science and Technology

OP: Organizational Performance

P-O FIT: Person-Organization fit

SACCO: Savings and Credit Cooperative organization

TK: Tacit Knowledge

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study investigated the mediating effect of innovative work behavior (IWB) on the relationship between Knowledge Management (KM) and performance in commercial banks in Meru County. This chapter starts by providing the study's background, followed by problem statement, research objectives and hypotheses, significance, scope, limitations and delimitations of the study.

1.1 Background of Study

The banking industry represent the most complex social structure and managers must be strategically oriented to the unprecedented change witnessed from time to time in the business environment. High performing successful organizations present very different environments for their employees because they incorporate diverse human resources policies aimed at enhancing employee knowledge, skills and flexibility (Stoffers, Beautrice & Notelaers, 2014). Danisman (2018) purports that the banking industry is among the most data-driven industries and managing knowledge economy as competitive measure is a trending phenomenon as seen through decentralization for new products in global banks. Thus, faced with simultaneously hyper-competition in multiple arenas, commercial banks worldwide are exploring new technologies and business models that can propel their competition in this digital age (Danisman, 2018).

World Bank lacked quality in its content when it came to current and trustworthy sources that the bank could share with its clients in order to better address its mission of improving quality of life through poverty reduction in its operations in developing countries (World bank group, 2018). Thus, overwhelmed by the information volume contained in its documents and within people's heads, the Bank developed a knowledge management momentum in its working culture to enable personal thinking, discussion and knowledge synthesis (Zapp, 2017).

Global banks such as Great western bank, Citi bank, and Bank of America have developed data management software to target the most valuable clients, study of customer transactions, identifying emerging markets and potentially wanting debit cards in a bid to save time and money. In technology savvy countries such as Japan, the introduction of Robo-advisors is soon replacing relationship managers as they are virtually fast, cheap and efficient. In the last two decades, according to Central Bank of Kenya (2013) report, financial institutions in Africa have made substantial progress in terms of financial inclusion and innovation via cross border banking.

In Africa, the banking industry markets are fast-growing despite increased competition and tight laws and are nearly twice as lucrative as the worldwide average. Currently, retail banking in Africa has only a 38 percent penetration rate of the Gross Domestic Product (GDP); half of the worldwide average for emerging markets. Banks in this region, however, encounter blocks such as low income and revenue rates, extensive money utilization in most economies, and limited credit bureaus coverage. Some banks, are already exploiting the possibilities intrinsic in these problems, the key being to harness the extensive mobile phone coverage of Africa to generate low-price products and creative distribution models. In the next few years, such an innovative move could accelerate income development in African retail banking (Chironga, Cunha & De Grandis, 2018).

Previously, banks have applied Porters (1985) model of competitive advantage where they have yielded to barriers to entry, few substitutes and competitors. In Kenya's present banking scenario such barriers have fast been breached due to cross border banking challenges: fragmented markets, reduced profits due to non-performing loans, shifting regulatory frameworks, customer expectations and rapid technological changes (Linda & Waithaka, 2018). According to the Central Bank of Kenya report (2016) Kenya has witnessed tremendous growth of agent banking, investment in long term government bonds for development finance, and internet banking moving it closer to a cashless economy.

Notably, financial innovations have expanded at a tremendous rate much ahead of financial regulations. For example, mobile banking services currently override the banking community. Freed from regulatory constraints, competitive pressures have intensified and weaker banks are finding themselves unable to sustain their competitive market position due to the emergence of exogenous innovators (e-entrepreneurs).

1.1.1 Organizational Performance

An organizationoverall economic, strategic, and innovative performance depends on how it can use all knowledge it creates and how well it can turn it into unimitable core competence in identifying, capturing, systemizing, application and managing of tacit knowledge to create customer value(Harlow, 2018). Stoffers, Beautrice and Notelaers (2014) argue that a high performing organization is characterized by employee empowerement, involvment, participation and a sound learning environment. A free and enabled workplace enables space for employee self-development inside and outside employee job scope. Therefore, high performing organizations need to focus on employee development by creating job autonomy (avenues for idea experimentation) as opposed to complex structures, tight rules and regulatons which tend to stiffle employee's freedom to take initiatives in adoption of innovative culture (Stoffers et al., 2014). The efficiency of each individual therefore, is detrimental to firm performance (Mastrangelo, Lorenzet, & Erik , 2014).

According to Plouffe (2018), organizational performance relates to a company's performance in relation to its strategic orientation towards its objectives. Further, organizational performance is the interplay of organizations attributes actions and environment that eventually results into an economic outcome. This in turn corresponds to performance measurements, organizations market effectiveness, growth in market share, quality products, filing of patents, or effectiveness in the market (Hamann, Schiemann, & Bellora, 2013).

According to Haddadi and Yaghoobi (2014) and as based on the balance score card: financial metric (profits and overheads), customer metric (customer lifetime value, acquisitions and satisfaction), internal process (efficiency and effectiviness of operations), and people metrics (learning and growth) are vital key performance measurements that determine a firm's utility and desirability of its functions in complex and dynamic environments. Thestudy utilized internal processes and people's metrics to explore innovative activities among commercial banks in Meru county as propelled by a supportive organizational culture.

1.1.2 Knowledge Management

Essentially, how an organization faces ambiguity and it's capability in producing knowledge largely dictates its' competitive advantage (Perez-Soltero, Zavala-Guerrero, Barcelo-Valenzuela, Sanchez-Schmitz & Meroño-Cerdan, 2015). The authors define KM as the utilization of information and data, people's competencies, ideas, skills, intuitions, commitments, potential and motivations. Knowledge management is also seen as an effort of a firm to explore the tacit and explicit dimensions of knowledge of individuals, group and organizations, thereby converting it into organizational assets that managers can use to make concrete and conscise decisions Eugene, Byukusenge, Munene, and Milena (2017); which further helps inimproving invididual and organizational performance. Further, Dayan, Heisig and Matos (2017), describes KM as a planned activity which encompasses identification of key and necessary knowledge and transferring it among employees. Similar to this defination, Sohal, Ragsdell, Hislop and Brown (2018), defines KM as a five phase process of creation, validation, presentation, distribution and application; to learn, reflect, unlearn and relearnin order to build, maintain and replenish core competencies.

Tacit knowledge (TK) and Explicit knowledge (EK) are the two dimensions of knowledge. TK is found in the internal repository of an individual based on their experience, reflection, internalization or talents. As such, it cannot be managed and taught in the same way as EK.

Conversely, explicit knowledge (EK) is accessible in public-domain like databases, libraries, and other archieves. Thus, it is easy to share and codify. According toXinchun, Dennis, and Limin, (2016), explicit knowledge exchange is required prior to any attempts to transfer the related tacit knowledge. This means, in as much as both dimensions complement each other, an organization's core competence is more than explicit knowledge of the "know what". It requires more of the tacit knowledge "know how" to put the "know what" into practice.

Tacit Knowledge

It's estimated that 90 percent of the knowledge is synthsized in tacit form and this explains why most of it is an invisible item in an organization's budget (Chugh, 2015). According to Perez-Soltero et al. (2015), TK is deeply ingrained in an individual's actions, experience, ideals, values, or emotions embraced by a person.It encompasses two aspects: information and expertise in relation to "know how" and a cognitive dimension consisting of mental models, beliefs and values (Bachmaier, 2015). This makes it hard to extract, formalize, share and codify in any information system or database. The difficulties associated in its sharing emanates from perception, language, value, time, and distance. Thus, Perez-Soltero et al. (2015), argue that TK is the most neglected organizational asset.

Apparently, globalization of business is a new reality and for organization's spread across diverse geographical locations need to devise ways to interact, share, coordinate and learning from each. Pandey (2018), argue that for firms to thrive in the hyper-competitive mall, global pre-emption about innovations and continuous learning are not only necessary but also essential requirements. For example, Xerox has designed a knowledge management application -Eureka- for its engineers across the globe to "author" their solutions realtime (Doyle, 2016). World bank has also built a hub of knowledge sharing culture and enhanced it in its personnel evauation system (Eknowledge ManagementS). ICICI Bank in india implemented "wise guy portal" after realizing the that whenever an employee moved out of the bank there was hardly any trail for continuation by the new incumbent.

In Kenya, the phoward solutions organizes annual knowledge management conferences to create knowledge synergy between public and private sectors to address the struggle of of retaining and loosing knowledgeable and experienced employees to retirement or competition (phowad solution, 2018). It is therefore evident that the scalability of knowledge economy is the hallmark to managerial success and an opportunity to use tacit knowledge in an organization to attract and maintain a talented and productive workforce in the present global sphere (Doyle, 2016).

Explicit Knowledge

Explicit knowledge (EK) can be codified and communicated, easy to articulate in formal language, mathematical expressions, manuals and so forth Perez-Soltero et al. (2015). This knowledge dimension holds that knowledge is something explained by individuals and from time to time some form of assistance may be required in its articulation. However, due to its technicality, it needs some level of academic knowledge and comprehension that can be acquired through formal education or structured research (Chugh, 2015). A firm's level of knowledge is a dynamic process composed of phases such as knowledge creation, conversion, sharing, application, and storage. The process involves the transformation of explicit and tacit knowledge (Lai, 2013).

Moreover, EK cannot be sufficient enough to capture the more complex elements and as such, TK serves as an integrating mechanism (Xinchun, Dennis & Limin, 2016). Hence, organizational processes should enable the generation, categorization, articulation and systematic leverage on explicit knowledge assets, through the organizations intranet and internet (García-Sánchez, García-Morales, & Bolívar-Ramos, 2017). Notwithstanding, its evident elements of intellect resides inside the firm's human brains and some exist in the organization's systems, databases and operating technologies (Swagatika, 2016). However, in as much articulation of TK, particularly within the context of banking sectorcomplicates the process of transforming knowledge into information and vice versa; Ranucci and Souder (2015), argue that if both are well matched, intellect in each is leveragable and protectable.

1.1.3 Innovative Work Behavior

Prieto and Pérez-Santana (2014) describes Innovative Work Behavior (IWB) as a day to day innovation dependent on intentional efforts of the employees' to share beneficially novel outcomes in the workplace (Delois, 2014). Innovative Work Behavior (IWB), entails employees interaction to acquire and disseminate knowledge (Bilal, 2016). In particular, communication between employees functions as a prerequisite for sharing knowledge, which is rooted in powerful social links, emotional proximity, and higher social cohesion. Astakhova (2016) 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 individualsstrongly to their organization in a manner that enhances them to discover their creative ideas (Rietzschel, Nijstad, & Stroebe, 2015).

(P-O) fit relates to the synergy of the values, personalities, skills and needs of staff with the values, requirements and equipment of the organization (Rietzschel, Nijstad & Stroebe, 2015). (P-O) fit makes it easier for a individual to adapt to their setting through powerful social ties leading to the sharing of information. Notwithstanding, 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). It is paramount for managers to establish a sustainable commitment among employees as pertaining their work attitude, behaviour, performance, job satisfaction, and turnover intentionfor increased employee commitment in the job; which in turn benefits the organization in cost reduction following low turnover, better financial performance, less absenteeism and top notch productivity (Hakimian, Farid, Ismail & Nair, 2016).

1.1.4 Commercial Banks in Meru County

Following the national government development strategy on establishing devolved counties, Meru county is fast giving way to major investments such as the recently launched Lamu Port and Lamu Southern-Ethiopia Transport Coordination (Lapsset) and Isiolo International airport.

This has increased Meru county economic base on an upward trajectory; a move that has attracted 20 out of 22 key commercial banks in Kenya, to open up branches in the region. These satellite branches are manned by a regional manager while the branch manager oversees the daily operations within the branch. As a result, the county devolution strategy places many of these branches on a tough competitive pedestal due to diversity of client portfolio.

Consequently, various research conducted in Meru county commercial banks reveal technology, organizational culture and organizational leadership as enablers of performance. The enablers moderates relationships between KM and performance. More so, the growth of digital marketing (mobile and internet)is on an upward trajectory due to enhanced customer services (Kinyua, 2015). Such versatility in technologiocal innovation has created a platform for customers within the county to transact at points of convinience (Ndunga, Njati, & Rukangu, 2016). However, hoarding of knowledge and its application is seen to negatively affect performance and as such making knowledge implementation difficult (Gakuo & Rotich, 2017).

Notably, in trying to build an innovation culture, commercial banks such as Barclays and CFC Stanbic have tried to engage their employees in job shadowing whereby employees take upin acting capacity managerial positions for a span of three months as a way to gain experience and in case of any eventualitythe employee is able to fill the gap appropriately and make concrete operational decisions. Despite these efforts and the well laid out training and talent development policies, job specialization still tends to stifle innovation progression with far reaching effects on bank performance. This is evidenced by threat of substitution of product andservice delivery by new entrants like Savings and Credit Cooperative Organization(SACCOs), table banking initiatives, government affirmative action funds programes like the Youth fund, Uwezo fund, county self-help groups, women enterprise fund and micro-finance institutions. This points out that commercial banks within the Meru county to come up with inimitable (Tacit) competitive advantage that exogenous players will find hard to harness.

1.2 Statement of the Problem

Research has shown that knowledge economy can be a big boost for organizational performance. Digitalization of operations is the new trend in the financial industry and the appreciation of knowledge economy is increasingly taking shape as a point of differentiation. Thus, creativity and knowledge management act as conduits for sustained economic development and competitiveness (Darrouxa, Jonathan, & Thibeli, 2013). Therefore, organizations including banks need to fortify themselves in the competitive front and come up with differentiation strategies.

However, the tangible, dominating and competitive forces which were used to define and shape the banking industry phenomena including barriers to entry and few subsitutes no longer yield in and are fast fading. This implies that the present banking customer possesses a high bargaining power. The present new age e-bankers can only program and automate explicit component of knowledge and such a restriction has led to lack of experience in translating employees' tacit knowledge sharing behaviors into actual changes that lead to improvement of processes in banks Ndunga, Njati, & Rukangu, 2016).

Further, despite the efforts and articulately structured training and talent development policies, job specialization still tends to stifle innovation progression with far reaching effects on commercial banks' performance. This is evidenced by threat of substitution of product and service delivery by new entrants such as SACCOs, table banking initiatives, government affirmative action funds programes and micro-finance institutions. This illustrates the need for commercial banks within the Meru county to come up with inimitable (Tacit) competitive advantage that exogenous players will find hard to harness.

Lukes and Ute (2017) 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) investigated versatility of technological innovation in enhancing customer convinience. However, none attempted to investigate the role innovative work behavior plays as a mediator in enhancing knowledge management on firm performance in the context of commercial banks in Meru.

Thus, examining such mediation in this study, was crucial in informing management on how to leverage on knowledge economy inorder to integrate, foster and incorporate innovation at both individual and organizational level to spur high performance envisaged by all commercial banks in Meru County.

1.3 Purpose of the Study

The study set out to determine the role that knowledge management plays in enhancing firm performance by examining the mediating effect of innovative work behavior of employees among commercial banks in Meru County, Kenya.

1.4 General Objective of the Study

The general objective of the study was to investigate the mediating effect of innovative work behavior on the relationship between knowledge management and firm performance.

1.5 Specific Objectives of the Study

i. To examine the relationship between knowledge management and performance of commercial banks in Meru county.
ii. To examine the relationship between Knowledge management and innovative work behavior among commercial banks in Meru county.
iii. To assess the role innovative work behavior plays on the performance of commercial banks in Meru County.
iv. To investigate the mediating effect of innovative work behavior on the relationship between knowledge management and firm performance among commercial banks in Meru county.

1.6 Research Hypothesis

Ho_1: There is no significant relationship between knowledge management and the performance of commercial banks in Meru County.

Ho_2: There is no significant relationship between knowledge management and innovative work behavior among commercial banks in Meru County.

Ho_3: There is no significant effect of innovative work behavior on the performance among commercial banks in Meru County.

Ho_4: There is no significant mediating effect of innovative work behavior on the relationship between knowledge management and the performance of commercial banks in Meru County.

1.7 Significance of the Study

It was important to investigate how knowledge management and innovative work behaviors enhance superior performance in commercial banks in Meru County. The insights thereof may help commercial banks improve their macro economy environment through effective knowledge tapping and implementation. The study was conducted so as to propel banks to embrace sound financial innovative trends as a way to gaining competitive advantage. Consequently, it highlighted to management and employees of commercial bank on ways to build motivational synergy for purposes of knowledge sharing and managing the process efficiently.

In addition, insights gained will help management leverage knowledge as a strategic tool in gauging employee appraisals and reward policy. Moreover, the study will not only contribute into the existing body of knowledge in strategic management in human resources, but also help other researchers build further to the suggested areas of further research as well as go a notch higher to investigating other key constructs and underlying relationships leading to improved knowledge management systems. Finally, the society will be more enabled to embrace elements of knowledge management in Tertiary institutions for example, carpentry, metal work exacta to aid independent thinking in the facets of the informal (Juakali) sector which is the backbone of the Kenyan economy.

1.8 Scope of the Study

The study focused on commercial banks in Meru County, Kenya. The Meru region is economically empowered and acts as a hub of many diverse business investments. As a result, it attracts many commercial banks in the region. Therefore, the study aim was to illustrate how the commercial banks keep abreast with competition. Primary information was gathered from respondents in Meru town. The delimiting aspect of the study was that it explored in depth the role of tacit dimension of knowledge, negating explicit dimension of knowledge management. More so, it specifically focused on assessing innovative work behavior as a mediating factor in enhancing the organizational performance in the banking industry.

1.9 Limitations of the Study

The researcher had to anticipate challenge associated with respondent's cooperation and timely response owing to tight set targets by management. In mitigating the above, the researcher worked in tandem with the branch operations managers to achieve the set timelines. In addition, due to sensitivity and confidentiality of information security in the bank's the approval process took longer than anticipated. First, the questionnaires had to be scrutinized before the researcher was authorized to collect data from respondents.

Moreover, the measurement of innovative work behavior was a prevalent restriction stated in prior research because it is still at evolutionary phases. Some studies used objective supervisor assessment while others used employee self-assessment to rate creative work behavior. The researcher opted to employ subjective data. Further, the research was restricted to Meru town. Thus, sampling other regions for purposes of comparison did not suffice. Moreover, employee innovative work behavior required prolonged observational approach. Hence, conducting a longitudinal study was not actualized due to the requirements and time set aside to complete the MBA program.

1.10 Assumptions of the Study

The study assumed that the concepts of knowledge management and innovative work behavior were to some extent being practiced within the commercial banks in Meru County. The researcher also assumed that all the respondents would be sincere in their responses. Consequently, the researcher assumed the findings of the research could to be considered in the strategic management of commercial banks and replicated even in other counties.

1.11 Definitions of Terms

Innovative work behavior- a "day to day innovation" that depends on the employees ' deliberate efforts to share and apply unique ideas in the work (Prieto & Pérez-Santana, 2014)

Knowledge Management- the identification and leveraging on novel ideas to help an organization to compete (Dayan, Heisig & Matos, 2017).

Management- A conscious process of creating an environment in which, individuals, working together in groups efficiently and effectively accomplish group goals (Amanchukwu, Stanley & Ololube, 2015).

Mediating Variable-defines the relationship between the dependent and independent variables respectively (MacKinnon, 2015).

Organizational Performance- A Company's strategic orientation to its objectives and strategies (Stoffers, Beautrice & Notelaers, 2014).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter was structured in alignment of the specific objectives of the study. It comprises of literature review drawn from various sources: books, journals, research papers and internet sources. The review related to theoretical and empirical literature and tried to link the mediating effect of innovative work behavior on the relationship between knowledge management and performance of an organization. The chapter starts by presenting a theoretical framework followed by an empirical review that gave a critical analysis of published studies with reference to each objective of the study, a conceptual framework and chapter summary.

2.2 Theoretical Framework

A theoretical framework was used to support the theory applied in the research. Three theories which the study adopted entailed: Knowledge-based view theory, diffusion innovation theory and Vroom's expectancy theory respectively. The theories helped to explain, predict and understand phenomena of the key constructs: Knowledge management, performance, and innovative work behavior as a mediator.

2.2.1 Knowledge-Based View

The study was guided by the Knowledge based view (KBV) of the firm advanced by Grant (1996). 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 knowledge infrastructure and process capacities determine a firm's predisposition to knowledge management efficiency. Thus, the theory was adopted in this study to help managers understand how to manage knowledge as an organizational asset in gaining a competitive edge.

Knowledge based view expands the idea from the Resource Based View (RBV). RBV states that an organization is a collection of productive resources (physical and human), whereas KBV recognizes that knowledge is maintained by individuals (repositories of knowledge). However, the continuous acquisition, transfer and application of knowledge in any organization are driven by the ever-changing competitive conditions in the market. These conditions entail: technical advancements, frequent deregulations and globalization.

Therefore, as a concept of organizational learning, KBV provides firms with strategies for achieving competitive advantage, stipulates ways for human capital involvement in structural and routine activities and in formulation of long term operational and transformational objectives. However, KBV fails to suggest a roadmap to managing and utilizing knowledge as it distinctly characterizes and expounds on the strategic significance of knowledge to portend competitive advantage. Consequently, RBV limits knowledge to a single entity and portrays knowledge as one characteristic of an organization resource.

Previous studies such as Filieri and Alguezaui (2014) used KBV to highlight extended enterprise in transformations like emergency of knowledge economy, open innovation approach and offshore outsourcing in addressing challenges relating to innovation and competition of an organization's complex environment. Gregorio, Javier, and José (2015) study on knowledge management and innovation in high-tech industrial markets argued that an organization cannot innovate in isolation. In essence, external relationships and networks complement knowledge domain.

In the context of this study, knowledge based view was used to highlight the need for organizations to appreciate that wealth-creating capacity is situated in the heterogeneous knowledge bases they acquire and retain and their orientation as learning organizations is crucial in ultimately improving knowledge capital and performance (Alguezaui & Filieri, 2014). The theory, therefore, predicted a relationship between knowledge management and firm performance.

2.2.2 Diffusion Innovation Theory

The theory was developed by Rodgers Everett in 2003. Itposits on how, why and at what rate unique ideas and technologies are assimilated. According to Everett (2003), diffusion relies heavily on human capital and as such innovation has to be diffused first to trigger social change. Everett, further argues that, innovation as a process of difussion is communicacted overtime among the participants in a social system. Consequently, a new innovative idea is influenced by four key pointers: innovation itself, channels of communication, time, and social system. This implies in an organizaton set up, innovation must be be self-sustaining for it to be widely adopted. Globally, there existis a lot of innovation disruption strategies that have placed the global financial insitutions on a huge pedestal of profit magins and commercial gains. Greveand Seidel, (2015), proposition posits that the heterogenious value of an innovation differs between organizations and either drives 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; while for adopters measured by organizational size, structure, culture and strategy. Compartibilty with whatis already in placemakes the new idea clears unceratinity and helps give meaning. Additionally, 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 understand for fast adoption rate to be realized. Tribality suggests that if a potential adopter is able to interact with the innovation before being faced with an adoption decision, adoption becomes 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 and Yoshio (2010) argue that, in as much as an organization may adopt socially legitimized new practices while buffering internal routines and technical activities from significant changes; such a move can bring a mismatch between compatibility attributes of adopted practices with those of adopters and implementation can be compromised.

The study utilized the diffusion innovation theory as a way to integrate novel methods for improved knowledge translation in organizational practice. Consquently, the study could have considered the theory of disruptive innovationswhich posits that heterogenity within firms makes them internally complex and ridled with conflicts about resource allocation (Sandström, Berglund, & Magnusson, 2014). However, such disruption is highly evident in technological and manufacturing industries and not predominant in the banking industry.

Raynard (2017), used the theory of difussuion innovation as a basis for developing effective marketing and educational studies. According to Raynard, ebooks are not used as much as they should by students and faculties. This is because e-books have been seen as complext to search, greately influenced perception of the product uptake and increases the perceived risk threshold despite its significance in ease of study and research. In the context of this study, diffusion innovation theory is applicable in products and services design which resonates well with customers needs for purposes of increased usage and adoptability within the banking sector. This translates to product differentiation for increased organizational performance. Moreso, the commercial banks should be keen in ensuring they are clear on attitudes, awareness and percieved risks brought about by new product developments and how they can cause and disrupt adoption rates.

In addition, often when innovation is initated in an organization, some functions do not embrace its adoption. Thus, the use of the theory illustrated to management the need for consistent difussion of innovation as a way for employees to own the process. This possiblility requires clarity on how ideas, product and processes difusse and spread within organizations. The model has been critiqued based on people's worldviews. People normally see 'essential attributes' differently in any specific technological entity or human perception and values. This makes it difficult to identify and settle on the ones that allegedly are responsible for the diffusion.

2.2.3 Vroom's Expectancy Theory

The Vroom's motivation theory was propagated by Vroom's in 1964. In the view of the theory, behavior results from conscious choices among the alternatives provided with the aim of either maximizing pleasure or decrease pain. Edward Lawler and Lyman Porter, Victor Vroom (1971) advanced the theory and concluded individual's factors such as their personality, skills, knowledge, experience and abilities impact greatly on performance. Employees may possess different aims but still be motivated if they see that there is a positive correlation between efforts and performance. Performance that is favorable is expected to be rewarded as a result of a need satisfaction. Hence, the desire to satisfy the need is strong enough to make the effort worthwhile. Maslow hierarchy of needs theory and Herzberg's two-factor motivational theories were among other ideal theories that this study could have put into consideration. However, they theories stress on internal needs and the resulting effort expended to fulfill them and such a proposition is opposed to the expectancy theory which separates effort (as a result of motivation), performance and outcomes.

Vroom's expectancy theory has served as an enabler for the human resources units in rethinking their organizations performance appraisal and rewards policy strategies. This implies that the intrinsic and extrinsic motivations are embedded in transformational and transactional leadership, which in turn affect employees' innovative behavior. The theory has three key variables: Expectancy: belief that increased effort leads to increased performance; Instrumentality: the belief that if you perform well a valued outcome in form of a reward will occur; Valence: the importance an individual place on the expected outcome. As illustrated in the case of Yahoo Inc. on layoffs of excessive managers, instrumentality and valence of employee decreased by huge margins as indicated by low staff morale and impended product development. Yahoo Inc. management made a turnaround by Objectives and key results (OKR) system as a measure of employee effectiveness, divisions benchmarks and company overall ratings.

The valence component of expectancy theory explains the upward leadership influence that creates attitudinal and behavioral norms and shapes the organizations climate in the sense that the value an individual places on rewards is based on their needs, goals and personal value the individual makes congruent with that of the leader (Kang et al., 2015). According to Kang, George and Choi, (2015) transformational leaders inspire and intellectually stimulate others to perform with confidence over the expectations specified in the implicit and explicit exchange; whereas transactional leadership focuses on supervision and compliance by rewards or punishments.

Therefore, in the context of this study, an organization's climate incorporates employees shared perception concerning practices, procedures and kinds of behavior that can be rewarded in a particular setting; implying that management should be able to make concrete decisions that enhance performance and work ownership by the employees. However, the downside to implementation of this theory was traced in a group environment. It is not every other day an employee can walk to a manager's office and dictate the reward best suited for them. The theory assumes that the manager has access to employee instrumentality and valence factors. As such, it becomes hard for managers to anticipate how motivated they will be to undertake tasks. The manager does not know what an employee wants and how bad they want it. Moreover, as a "perception" based model its weak in predicting long-term patterns of behavior.

2.3 Empirical Review

This section presented a review of studies conducted by various researchers in relation to constructs on knowledge management (independent variable), performance (independent variable), and innovative work behavior as a mediating variable on the relationship between the dependent and independent variables. The purpose of conducting an empirical review for this study was to determine what other studies had come up with in terms of the research designs, approaches adopted, sampling criteria, and data collection analysis techniques and most importantly establish the missing links to the study.

2.4 Knowledge Management and Performance

In the context of burgeoning globalization, new possibilities and trends are constantly placing transformation pressures on organizations and the need to continuously develop competitive innovations through active and continuous use of knowledge has become inevitable (Inkinen, Kianto & Vanhala, 2015). Knowledge is an asset whose effective development and deployment plays a pivotal role in value creation and performance of an organization (Carlucci, 2013).

Knowledge management entails identifying and analyzing a firm's accessible knowledge that is key in achieving 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 guiding employees behaviors, perspectives and adopting effective approaches that promote creation, dissemination, sharing and leveraging on knowledge in articulating the right strategies to fulfill organizational objectives (Tong & Shaikh, 2014). Jiming and Holsapple (2013) suggest that KM to a larger extent is pegged on human activities, processes, social interactions and cognitive interpretation of information. Consequently, Perez-Soltero et al. (2015) describe KM as a process of tapping organizational intellectual assets through identifying, capturing, organizing and disseminating to propel long-term performance. The latter was considered in highlighting the importance of leveraging the collective process of knowledge assets to help banks compete.

Thus, knowledge management as a process can be understood in various 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 (Dayan, Heisig & Matos, 2017). Knowledge management process in this study was approached from various dimensions: creating, identification, storing, retrieving, transferring, distribution and applying (Harlow, 2018).

According to Tseng and Fang (2015), Knowledge management process influences work efficiency, while work efficiency influences organizational performance. Knowledge acquisition is the production of knowledge by either discovery or deviation from knowledge that already exists. 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 frequency at which employees disseminate and share job-related know-how with their colleagues and is determined by factors such as organizational justice, trust, and commitment (Wilson II, 2016). Moreover, Chastin, Winkler, Eakin, Gardiner, Dunstan, Owen and Healy (2015) asserted that trust is a link that integrates organization efficiency and enhances its operations. Similarly, a study focused on the construction industry by Mandeep, Arif, and Kulonda (2017) used spearman's correlation analysis and used rank-order analysis to identify critical success factors essential in the transfer and sharing of tacit knowledge such as: trust, motivation, leadership capabilities, business strategies and organizational capabilities.

The studies posited that trust levels strengthen the level of reciprocity, accelerates employee emotional bond and contributes to increase of employee commitment. The aforementioned studies did not clearly stipulate threshold and ways in which each of the aforementioned critical factors would propel innovative work behavior to enhance organizational performance. Knowledge application is the ability of converting acquired and shared knowledge into practical use (Tseng & Fang, 2015). Knowledge application is a crucial element of an organization's survival. It promotes knowledge sharing culture among employees in an organization.

As informed by studies conducted by Cepeda-Carrion, Martelo-Landroguez, Leal-Rodríguez, and Leal-Millán (2017) in construction industry; Mohammed and Alshawi (2015) in an airline industry, knowledge management process influences work efficiency, while work efficiency influences organizational performance. In reiterating this point, Chang and Lin (2015), stressed that the ability of an organization to add value through leveraging on knowledge assets is embedded in organizational culture as a vital element. This helps foster a learning environment, which, in the long run, influences the motivation of individuals to pursue knowledge application. In support of this notion, a study carried out to assess the application of knowledge management success paradigm in South Africa, identified culture as one of a success factor for knowledge management and organizational performance.

In their study on organizational capabilities and success of knowledge management Satyendra, Dutta, and Nayak (2018) found that KM is bound by processes and infrastructure capabilities and culture. Accordingly, an inductive case study conducted using multiple data collection methods: interviews, observations, and documentation in Turkey by Kamasak (2015) highlighted culture, human capital, business processes and networking capabilities among the most important determinants of organizational performance. Building on the same, Chang and Lin (2015), stressed that the ability of an organization to create such value through leveraging on knowledge assets is embedded in its culture. This is what helps foster a learning environment that influences an individual to be motivated in pursuing knowledge application in the long run. This thinking is synonymous with Kamasak's (2015) on the role of culture in facilitating the process of knowledge (creation, storage, transfer, and application).

According to Plouffe (2018), organizational performance relates to firms strategic outlook as compared objectives. Following Tseng and Fang (2015) research and as supported by the national science council of Taiwan, an organizations competitive performance is strongly associated with culture in determination of boundaries. This facilitates interactions by individuals and defines the scope of information processing to relevant levels.

In Africa, conferences on knowledge management such as Africa regional conference, knowledge management Africa among others, aim to synthesize coalitions' of both independent and interdependent knowledge consortiums and practitioners into a conduit for cooperative pursuit of mutual advantage to rival the developing countries whose economic dominance is hi-tech driven (Dlamini, 2017). In Kenya, Phowad solutions is a knowledge management startup company aimed to guide corporate come up with best practices around knowledge management implementation for improved service delivery and innovation (Phowad solution, 2018). Previous empirical studies like Wang and Lin (2013), noted that knowledge orientation plays a positive role in organizational performance in china. Noruzy, Vahid, Azhdari, and Rezazadeh (2014), revealed KM influenced performance in manufacturing firms. In the light of the above reviews, it is clear past studies focused on critical success factors such as organizational culture, leadership, knowledge models for best knowledge management practices as well as on knowledge implementation.

Wu and Chen (2014), Harlow (2018) and Dayan, Heisig and Matos (2017), have attempted to illustrate relationship between knowledge management and performance, by factors such as competition, organizational culture, customer knowledge. However, they did not tackle with specificity, knowledge management process and dimensions in the banking context. In as much as the mechanisms are in place to propagate KM in an organizations operation, the tacit dimension is ignored owing to the complexity of managing it. Therefore, this study seeks to address the gap in the context of commercial banks in Meru County, Kenya. Further, the study will help management understand the importance of leveraging on tacit dimension of knowledge as a differentiating strategy in commercial banks.

2.5 Knowledge Management and Innovative Work Behavior

Innovative Work behavior is an individual's actions to achieve the initiation and intentional introduction (within a work role, group or organization) of novel and useful ideas, processes, products, and procedures (Gkorezis, 2016). It comprises of: idea search, generation, communication, implementation, initiating activities, involving others and overcoming obstacles. These multiple facets unfold over time. In this study, individual work behavior definition was adopted from Lukes and Ute (2017), to imply that innovative work behavior is the behavior through which an employee generates unique ideas and makes subsequent efforts to implement them (idea generation-promotion-application).

In today's business world, survival of an organization required creativity and innovation. As such, it is paramount for managers to capitalize on antecedents of individual innovative behavior namely: culture and climate of work space, relationship with supervisors, job characteristics, social context, individual differences and affective commitment; in a bid to propel innovation and creativity in the organization (Hakimian, Farid, Mohd, & Pradeep, 2016). According to Darrouxa, Jonathan, & Thibeli (2013) creativity and innovation as two pillars of knowledge management act as conduits for sustained economic development and competitiveness. KM is a process where knowledge is adopted, coded, stored, utilized, and shared. Wilson II (2016) argues that members of an organization recreate and use knowledge in order to facilitate organization innovation, core capability and competitive advantage. Thus, knowledge sharing precedes innovation.

Atiku and Fields (2016) assert that effective channeling of intellectual capital leads to sustainable competitive advantage. Hence, for knowledge to be shared, various functions within the organization must be motivated, have capacity to absorb and transmit it in its channels (Ortega-Egea, Moreno, & Dominguez, 2014). Strong motivations enable individuals participate in joint production and it is proper for organizations to set appropriate triggers to raise these motives; through self-centered or other-centered.

If such motives are incorporated in service design like training and development programs, work values, cognitive functioning, it could create a paradigm shift in service delivery practice (Ortega-Egea, Moreno, & Domínguez, 2014).

In one of an expansive study which sampled 562 workers working in diverse Spanish organizations, Sergio, Moriano, and Molero (2014), stressed that knowledge sharing - as one type of employees sharing behavior- has a great strategic value for it helps individuals achieve group objectives and leads to superior performance. Further, the study postulated how authentic leadership behavior effects on innovative behavior as facilitated and solidified by intermediary processes such as the creation of a group that provides opportunities for continual learning, as well as employee social identification with their work groups. An authentic leader (AL) in this case, is characterized by balance in decision making, transparent communication, high levels of self-awareness, prioritization on collective interest and development of their collaborators all the time.

A similar study measuring employee innovative work behavior as propelled by knowledge sharing stipulated that, when employees perceive managerial support, it gives them courage not to hold back but work towards generate, communicate and implement ideas (Lukes & Ute, 2017). Managerial support would be perceived in this study as support for new and innovative ideas by management. Therefore, managerial support, as furthered by Gkorezis (2016), is enhanced by empowering leadership which encompasses innovative behavior by manager. Leaders who empower involve and delegate authority to decision-making and self-management to their employees (Lukes & Ute, 2017).

In Africa, innovativeness is evident in the increased mobile application development and usage. For instance, in South Africa, the introduction of speaking books audio as inspired by Afghanistan health sector are designed to get potentially lifesaving messages to millions of people struggling with depression and mental health problems. The Cameroon heart foundation has designed the cardio-pad to help cater for patients in rural areas with cardiac problems(Quartz Africa, 2018). Inye-tab, a mobile application in Nigeria helps bridge the digital divide in their youth (Iwuoha, 2013).

In Kenya, the ICOW mobile application is designed to encourage best practices for dairy farmers and eventually increase milk production (iCow Global, 2018). Similarly, the banking industry is thriving through internet and mobile banking. According to Mutsa, Cunha, Grandis, and Kuyoro (2018); Mckinsey and Company 2017 review report dubbed "roaring to life: Growth and innovation in African banking" illustrates the digital craze in various sectors in Africa. In Kenya, Mshwari mobile loan platform and M-pepea, offers credit facility to people with small businesses as well as individuals who do not have access to credit cards or bank loans. In spite of such innovation, the banking sector in Africa still has the second highest cost of risk in the world (Mutsa et al., 2018). However, some banks like Commercial banks of Australia, and Alipay in China have opted for non-banking services in sectors such as travel and hospitality and real estate.

Furthermore, the research by Bysted (2013) created and tested a theoretical model on sample panel data representing 294 staff in a Danish financial sector. The results indicated that job satisfaction and creative work behavior aligned with innovation trust in work. Furthermore, Afar and Badir (2017) studies in staff of five major hotels in the hospitality industry in China claim that IWB is an appropriate person organization. This demonstrates spiritual attitude in the workplace not only fosters creativity and innovativeness among staff, but also enhances their efficiency, leading to better general organizational results, whereas Afsar (2016) demonstrates impacts of information sharing as a mediator on the effect of fitting person-organization and IWB. Nevertheless, none of the above studies have attempted to demonstrate how IWB dimensions in Kenya mediate knowledge management and performance.

Hakimian (2016) examined the relationship and role between three forms of commitment: affective, continuance and normative and IWB of employees' in 219 small and medium enterprises in Malaysia. Findings were analyzed using the partial least square. Ortega-Egea et al. (2014) used a sample of 249 employees and applied hierarchical regression analysis to test and contrast distinct hypotheses from five organizations.

The findings collected found that the orientation of employees towards innovation is higher when communication flows occur. This findings aligned to Prieto and Perez-Sanatana (2014) study which examined the role of high-involvement human resource practices in enhancing innovation behavior among employees, as mediated by supportive work environment conditions. According to Lukes and Ute (2017) novel ideas need to be acted upon and implemented for innovation to be successful. However, in as much as innovative behavior plays a great role in organizational success, Hakimian, Farid, Ismail and Nair (2016), argues that promoting and fostering innovative behavior among employees is one of the serious challenges managers face. Employees rarely implement ideas out of their own volition for they have to seek permission from their managers. This, in itself, acts as an impediment. Undeniably, the relationship between intellectual capital and organizational performance is enhanced through improvement of innovation capabilities. The study sought to emphasize on the importance of management putting together and utilizing valuable intellectual capital within the commercial banks in Meru County, as a way to try curbing the ease of substitution.

2.6 Innovative Work Behavior and Performance

Sustained competitive advantage is not based on physical or good financial resources, but is based on effective channeling of intellectual capital. Afar and Badir (2017), posits that innovative work behavior (IWB) has to be streamlined 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. IWB refers to the process of channeling employees' interaction to acquire, apply and disseminate knowledge (Afsar, 2016). Prieto and Perez-santana (2014) define IWB as an the intentional efforts of the employees' to share beneficially novel outcomes in the workplace (Delois, 2014). The latter will be adopted in this study to imply organizations depend on the intellectual capital of it's employees to stay relevant in the hypercompetitive environment.

As Prieto and Perez-Sanatana (2014) emphasize, organizational efficiency is enabled by supportive job setting which in turn motivates employees to engage in joint manufacturing activities. Organizational performance relates to a company's performance relative to its strategic orientation based on its objectives and strategies (Singh, Burgess, Heap, Almatrooshi & Farouk, 2016).

Several studies utilize innovative work behavior as an enabling factor to performance through knowledge sharing and flow within the firm. For example, Fagley and Adler (2015), conducted a study within the context of china's five leading hotels and affirmed that such joint production, as aforementioned, can only be realized in a spiritual working environment where employees can discover their overall life purpose and develop strong work ties that align to core values and beliefs of a firm. Fagley and Adler's study used a four-factor model which was purported to have a better fit as informed by Harman test for common method bias. The research therefore discovered a favorable connection between the spirituality of the workplace and the IWB. The study established a positive link between IWB and workplace spirituality. Essentially, workplace spirituality is interconnected with other employees. IWB occurs when an employee is able to build social support to implement an idea (Afar & Badir, 2017).

More so, Afsar (2017) relates interconnectedness to social ties as enabler to discover and implement of new ideas. The researcher posits that much cannot be achieved by a single entity. Only through persistent coordination with others will idea sharing be realized. Gregory, Albritton, Osmonbekov, (2010) study in a university faculty in USA, suggest that when employees perceive management support, then their creativity rises. Afar and Badir (2017), state explicitly that management and supervisor assistance can be depicted in various forms: work independence, accessibility of resources, employee private conduct demonstrating private satisfaction, flexibility, risk-taking and fearlessness and collective role behaviors in idea sharing and support creation. It's also evident that 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 (Hughes, Robert, Frady & Arroyos, 2019).

This insight, was furthered by Prieto and Perez-Sanatana (2014) study which examined the relationship between the role of human resource practices in managing innovative work behavior and mediation of supportive environment conditions in 198 Spanish firms. The study applied regression analysis to test hypothesis. The findings illustrate work environment was an antecedent to IWB. As a matter of fact, Stoffers, Beatrice, and Notelaers (2014), enhanced this argument further by stating that such perception is what creates the difference between high and low performance in firms. The levels at which employers perceive organizational support in terms of challenge, motivation, empowerment, value and rewards employees learning effort; positively impacts their attitudes and behaviors towards the organization as they often reflect firm's achievement and performance.

Innovation is an indispensable recourse for growth. For instance, the Google Corporation has designed its systems in a way that a simple query shows more that 400 million pages for reading on choice topics. Moreover, in Africa, innovation is witnessed largely in remote and marginalized communities. Invention of solar lanterns in Zambia (Power Africa, 2016), Jiko-okoa, the third-generation Kenyan energy saving charcoal stove which reduces pollution and lowers consumption rates by 60% thus saving monies(Burn, 2018). In a longitudinal study conducted by Afsar (2016) which used a structural equation model to analyze the relationship between person organization fit, IWB and the mediating effect of knowledge sharing behavior for three government hospitals in Thailand; it is alleged that staff who commonly share expertise; homogenizes with innovation's situational features and ultimately engages in creative work behavior. Similarly, based on previously established mediation model by Stoffers et al., (2014) on IWB enhancement, Craig, Laura, Aoron, and Ridge (2013), purposed to show how perceived market and organizational dimensions acted as organizational moderators.

In support of Pauget and Dammak (2017), this study purposed to enlighten commercial banks in Meru county recognize that innovation virtually covers all aspects of an organization. It has to be felt in management, strategy, and marketing across all existing units within the bank.

Equally important, management need to appreciate that innovations is not only limited to technological aspects as reported by the previous studies but also, has to be felt deep in the recesses of social system to gain responsiveness and flexibility.

2.7 Summary of Research Gaps

This section is drawn from empirical review conducted by the study. It helps form the basis for formulation of survey argument by establishing insufficient information in previous studies.

2.7.1 Knowledge Management and Firm Performance

Cepeda-Carrion, Martelo-Landroguez, Leal-Rodríguez, and Leal-Millán (2017) purported that critical management process in creation of superior customer value was embedded in combination of three processes: absorptive capacity, transfer and application of knowledge. In absorptive capacity process, the study fails to acknowledge an organization can create new knowledge from existing information within the organization. In the context of information security in commercial banks in Meru county, Tseng and Fang (2015) suggest that 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. However, the study did not provide guidelines for validation of the same.

Moreover, Wu and Chen (2014), Harlow (2018) and Dayan, Heisig and Matos (2017), have attempted to illustrate relationship between knowledge management and performance based on determinant factors such as customer knowledge, organizational culture, networking, capabilities, business processes exacta. However, they have not detailed how each factor moderates KM and performance within context of banking in Kenya. The current study, thus sought to fill the existing contextual gap by analyzing the relationship between KM and firm performance in the banking industry.

2.7.2 Knowledge Management and Innovative Work Behavior

Bysted (2013); Afar and Badir (2017); Ortega-Egea et al.(2014); Prieto and Perez-Sanatana (2014) studies attempted to show various mediations such as: spiritual mindset, high to achieving creativity and innovativeness. However, they failed to show the impact each of the mediators had on the process model of knowledge management adopted in this study (knowledge acquisition, sharing and application).

In addition, the relationship between each component of commitment and employees' innovative behavior has not been explored within the context of the study. Further, the studies used regression analysis, Chi square, confirmatory factor analysis, structural equation model and partial least squares in their findings. This study used an additional Hawthorn effects model to analyze data to deduce findings.

2.7.3 Innovative Work Behavior and Firm Performance

Majority of previous studies have been conducted in manufacturing and hospitality environments like airlines, manufacturing firms' exacta. The nature of such sectors leans towards disruptive innovation theory and findings might not be transferable to banking industry. The current study sought to address the contextual gap by focusing on banking industry.

2.8 Conceptual Framework

The mediating effect of innovative work behavior on the relationship between knowledge management and performance is diagrammatically presented in the Figure 2.1, which shows the mediating variable effect on the explained and explanatory variables respectively. The direction of the arrows seeks to illustrate the perceived interrelationship between the variables.

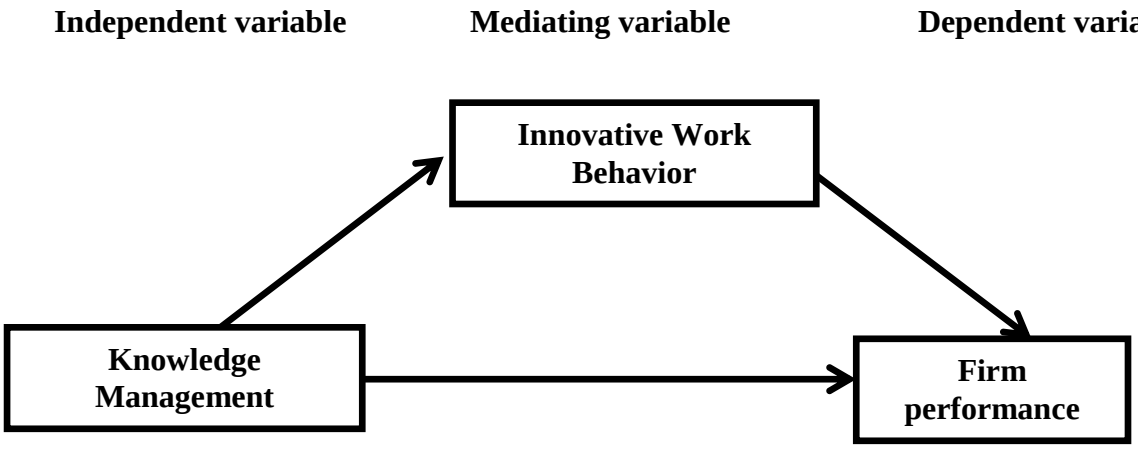


Figure2.1: Conceptual Framework showing the interaction of variables

Source: Author (2019)

Figure 2.1 shows that a mediating variable comes between the independent and dependent variable as illustrated in the framework. It is caused by independent variable and determines outcome of dependent variable. This implies that knowledge management influences IWB, which in turn, influences firm performance positively or negatively (Neuman, 2014). In context of this study, knowledge management is regarded as a process that is characterized by aspects such as knowledge acquisition (from other employees, partners, and customers), sharing (between supervisors & subordinates, colleagues, across units) and application (different types of knowledge and practical usage). Innovative work behavior was characterized by idea generation, promotion and realization; whereas performance was measured by two dimensions: organizational performance (return on sales, overall financial performance and employee morale, and market performance (research and development outlays, and product innovations).

Figure 2.2 demonstrate how key variables were operationalized and the specific aspects that were measured in each variable of the study.

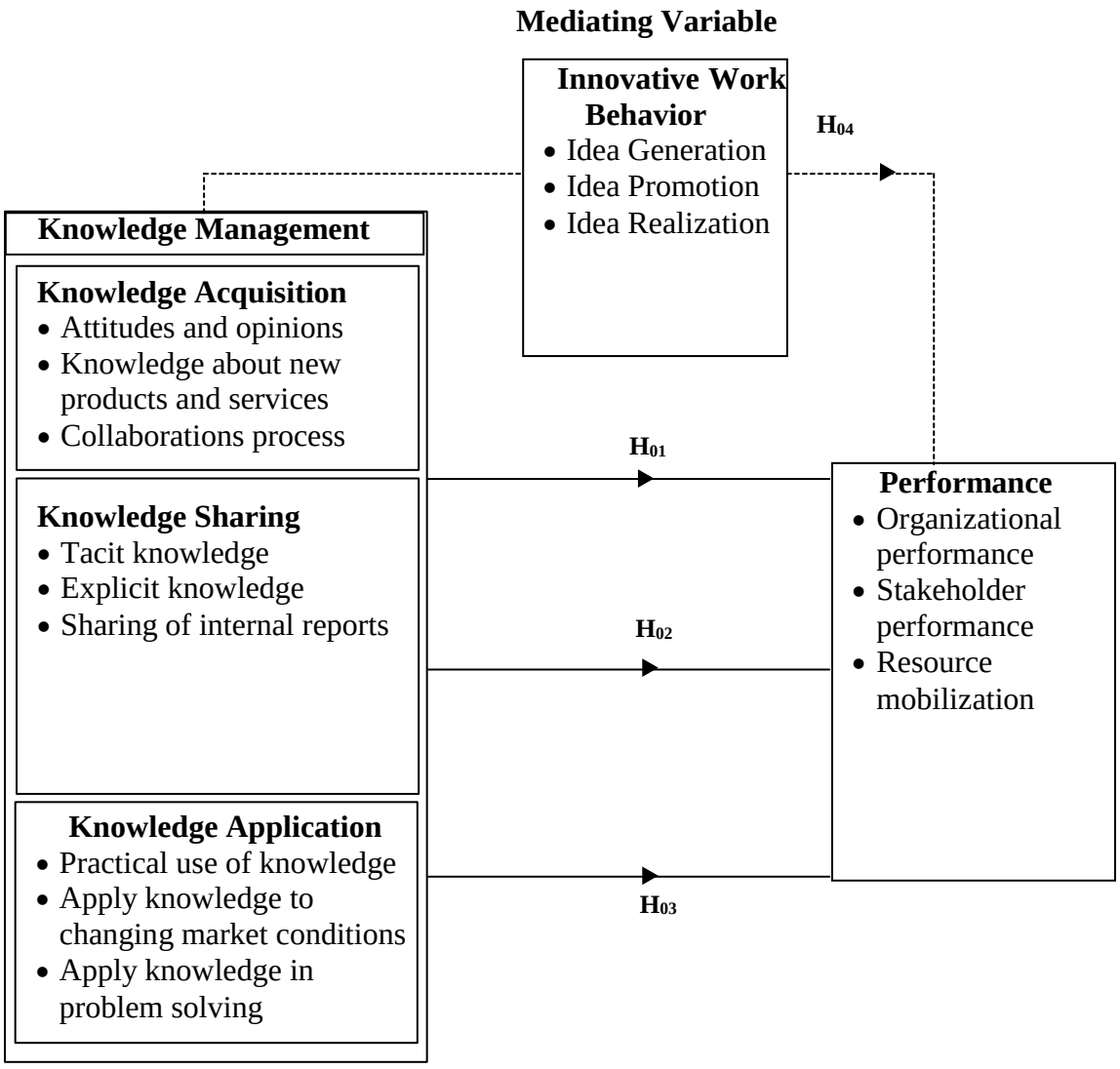


Figure 2.2: Operational Framework

Source: Author (2019)

2.9 Chapter Summary

This chapter has provided an outlook on the objectives bordered on the three constructs: knowledge management, innovative work behavior (mediator) and performance drawn from diverse literature sources. The major highlights from the arguments and perspectives of researchers were anchored on the fact that innovation virtually covers all aspects of an organization and it rests in employees' intellectual capital.

More so, innovative work behavior is embedded in factors such as motivation, trust, culture, management support and involvement (work spirituality). Notably, previous studies have researched at length on knowledge management process but failed to comprehensively show the mediating effect of innovative work behavior on knowledge management and performance in the context of commercial banks in Meru County.

Consequently, the research was guided by diffusion innovation theory which stipulated that new ideas are knowledge assets that needs to be adopted to enhance performance in an organization. It therefore proposes the need for staff to own the knowledge process in the production of ideas. The following chapter outlines the research methodology to be used in the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter specifies the procedures that were used in collection, processing and analysis of data. As such, it detailed the research design, population of study, sample and sampling techniques, data collection methods, data analysis and ethical considerations.

3.2 Location of the Study

The study was conducted within the context of the commercial banks in Meru County. Meru County is located on the Eastern side of the Mt. Kenya and it covers 6,936 square kilometers. On the North, it borders Isiolo, Laikipia to the West, while Tharaka-Nithi counties to the South West. Its total population based is estimated at1, 356,301(County government of Meru, 2018). Meru county economy boom has been propelled by heavy reliance in “Miraa”, opening up of the Isiolo airport, the current efforts by county government to revitalize coffee sector, and overall agriculture outlook via enabled collaboration by the county government with Republic of Korea (County government of Meru, 2018). As a result of the growing investment demands, 20branches have been launched to facilitate financial access. The research was conducted in Meru County to understand how commercial banks are responding to disruptive market trends in their product and service offering.

3.3 Research Design

The study adopted a descriptive research design to investigate the mediating effect of innovative work behavior on the relationship between knowledge management and performance among commercial banks in Meru County. Abbot and McKinney (2013), define descriptive research as a scientific method, which entails observing and describing the behavior of subjects without influencing it in any way. Hence, this approach supported the aim of the study, which sought to find out why, what, how and describe occurrence of a phenomena.

3.4 Population

A population refers to an entire group of individuals, events or objects having a common observable characteristics (Abbot & McKinney, 2013). The population of study was drawn from the commercial banks in Meru town. The accessible population was derived from 20 branches with a total personnel base of 213. The statistics were provided by branch managers during distribution of questionnaires. Meru County has a wide and sparsely geographical representation and most banks are densely represented within the outskirts. For example, ABC bank, Fina and CBA bank did not have branches representation within the outskirts of Meru County. However, banks like Equity had branches in areas like Nkubu, Maua; National Bank in Kianjai and Chuka; Family bank in Maua.

Although the scope was limited to Meru town, it was indeed evident that the management approach in terms of operationalization was similar across the branches. Thus, data collected was not expected to differ significantly in any way. Hence, going by these facts the targeted population was sufficiently represented by banks within Meru town. The units of observation were all permanent staff in top, middle and low management levels in the 20 banks. However, employees on contract such as support staff and direct sales representatives were not included in the population. In as much as the study was subjective in nature, this category was not considered due to their transitory nature and their input would be biased.

3.5 Sample Size and Sampling Techniques

3.5.1 Sample Size

Using sampling formulae in Bartlett, Kotrlik and Higgins (2001) for Cochran's (1977), the researcher computed the sample size to be 117 at 95 percent confidence interval and a margin of error of the mean of 3 percent.

$$N_0 = \frac{(t)^2 * (s)^2}{(d)^2} = \frac{(1.95)^2 * (1.25)^2}{(0.15)^2} = 266$$

Where:
N_0: represents the initial sample size before applying Cochran's (1977) correction
t: value for selected alpha level of .025 in each tail = 1.96
s: estimated standard deviation of the population (estimate of variance deviation for 5-point scale calculated by using 5 [inclusive range of scale] divided by 4 [number of standard deviations that include almost all (approximately 98%) of the possible values in the range]) = 5/4 = 1.25
d: acceptable margin of error of the mean (5*0.03 = 0.15)
The adjusted sample size n_0 is as follows:

$$n_0 = \frac{N_0}{1 + \frac{N_0}{population}} = \frac{266}{1 + \frac{266}{213}} = 117$$

Where;

n_0: This is the adjusted sample size using Cochran's (1977) correction formulae (Bartlett, Kotrlik, & Higgins, 2001).

3.5.2 Sampling Techniques

Sampling identifies a specific process by which the entities of the sample are selected. Data was collected through clustered random sampling. It was evident the bank population grouping/clusters were mutually homogeneous yet internally heterogeneous. A simple random sampling was applied in the cluster per each tier; such that the probability of being chosen at any stage of sampling process of was high. The technique gives accuracy in data collected due to its statistical confidence level and feasible from an operational angle.

Table 3.1: Sampling Frame

	Bank	Number of Respondents	Sample	Sample (%)
Tier 1	Barclays Bank	15	8	6.8
	CBA Bank	5	3	2.6
	Cooperative Bank	21	12	10.3
	Equity Bank	30	17	14.5
	KCB Bank	32	18	15.4
	Standard Chartered Bank	9	5	4.3
Tier 2	Bank of Africa	3	2	1.7
	Bank of Baroda	5	3	2.6
	CFC Stanbic Bank	6	3	2.6

	Diamond Trust Bank	4	2	1.7
	Family Bank	13	7	6.0
	Housing Finance	8	4	3.4
	I&M Bank	7	4	3.4
	National Bank	14	8	6.8
	NIC Bank	11	6	5.1
Tier 3	Consolidated Bank	8	4	3.4
	Credit Bank	8	4	3.4
	ABC Bank	4	2	1.7
	Post Bank	4	2	1.7
	Sidian Bank	6	3	2.6
	Total	**213**	**117**	**100**

Source: Researcher (2019)

3.6 Data Collection Instrument

A questionnaire was used to collect data from the target population. Compared to other instruments such as interviews, online surveys, questionnaires are less costly, easy to comprehend and guarantee anonymity of respondents in cases where sensitive information is required (Abbot & Mckinney, 2013). The questionnaire was divided into two parts. The first part consisted of items that defined the demographics, while part two consisted of items that measured given attributes of each objective under study. Most of the questions in the questionnaire were closed ended. As opposed to open ended questions. Closed ended questions were easy to code and analyze.

However, the researcher considered a few open-ended questions to solicit additional opinions from the respondents. The items were represented in matrix format and rated using a five-point Likert rating scale ranging from 1 to 5.

According to Cooper and Schindler (2013), a numerical scale is reliable and objective. It helps reduce subjectivity; focuses on is relevance in the study, helps in generalization and further ease data interpretation. In formulating the questions, most items in this study were adopted from various past studies.

Items on knowledge management were adopted from Zhang (2015); Lin and Lee (2015); innovative work behavior from De Jong, Parker, Wennekers and Wu (2015), while organization performance were from Craig et al. (2013).

3.6.1 Measurement of Variables

Knowledge management construct was measured using 10 items adapted from Zhang (2015) and Lin and Lee (2015). The aim of the items was to show the extent to which knowledge was being utilized in the banks. it 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).

Innovative work behavior (IWB) used 10 items adopted from De Jong, Parker, Wennekers and Wu (2015). The aim was to show if there was evidence of any individual innovative behavior in the workplace. IWB was approached from three dimensions: idea generation (4 item for example "generate ideas/solutions to addressing problems), idea promotion (3 items, for example, "mobilize support for innovative ideas"), and idea application/realization/practice (3 items for example ("transform innovative ideas into useful applications at work"). The IWB scale was based on a five-point behavioral frequency scale ranging from 1 (Never) to 5 (always).

Dess and Robinson (1984) adopted firm performance from the initial work. The use of these items was to illustrate the perception of firm performance visa vie competition. The construct utilized a 14 item scale adopted from Craig et al., (2013) scholarly work. Also, it was based on three dimensions namely: organizational, stakeholder output and resource allocation. Firm performance scale had a five-point Likert-type response format ranging from 1 (extremely poor) to 5 (extremely good).

The firm performance construct utilized a subjective performance perspective. This is because the targeted population worked in a bureaucratic environment and getting objective data was a challenge.

Nevertheless, the subjective data used in the study was supported by research studies such as Santos and Brito (2012); Camron (1978); and Chakravarthy (1986). These studies utilized subjective data and argued that data of subjective nature could be correlated to objective data. This is because subjective data reflects multidimensionality of the firm performance construct. According to the studies conducted using subjective financial measures, the constructs of study were found to have a high correlation with objective measures.

Secondly, subjective measure better reflected the multidimensionality of the performance construct in the study. Thirdly, subjective assessment of performance represented a balanced scorecard of the firm, because the assessment was composed of customer, internal processes and innovation as key performance indicators of financial performance. However, such was not the case with objective financial measures as it lacked a broader conceptualization of firm performance. Finally, a confirmatory factor analysis was run on the 40 items from the key constructs of this study to test how well the measured variables represented the number of variable (Bryman, 2014).

3.6.2 Data Collection Procedure

A self-administered questionnaire was used to collect data. An online questionnaire would have been a consideration; however, the assumption was that, not all respondents could have time and access to internet during working hours.

In addition, based on the nature of the regulations and procedures in commercial banks, copies of introduction letter approved by the university and research permit from NACOSTI were attached to each questionnaire for purposes of credibility and authenticity of this survey. The questionnaires were administered by researcher in line with the implementation schedule.

The questionnaires were dropped and picked on a later day as agreed with staff in a given bank. For purposes of tracking the process and progress, the researcher recorded the questionnaires to ensure good follow-up of the same.

3.7 Pre-testing of Research Instrument

The data collection instrument of this study was pre-tested in Equity and Family banks in Nkubu as they were not part of the targeted population. A total of ten respondents were used for pre-testing. This was to ensure all queries were clear and to validate whether the items in the questionnaire measured what the study intended. The advantage of this procedure is that it permits the instrument to be compared with itself and as such avoids problems that arise by using a different instrument.

3.8 Validity and Reliability of Research Instruments

Data quality in the study was achieved by computing the validity and reliability of the questionnaire as well as pretesting.

3.8.1 Validity of the Study

Validity is the degree to which the results obtained through research instruments give an actual representation of the phenomenon under study (that is whether the researcher has measured what he/she set out to measure (Korkmaz, Çakir & Özden, 2017). There are five tests that are commonly used to determine the validity of the research instrument: face, content, concurrent, predictive and construct validity respectively.

Face validity is used to establish a logical link between each item in the instrument, content validity ensure the items cover a full range of issue being measured, predictive validity determines outcome, whereas concurrent validities are based on comparison and finally, construct validity ascertains the total variance contributed by each construct (Korkmaz, Çakir & Özden, 2017).

In the light of the above, this study considered construct and content validities respectively. To ensure content validity, the researcher referred and critically evaluated the literature review to ensure items included in the questionnaire were in tandem with knowledge management, innovative work behavior and firm performance constructs.

Construct validity illustrated how the items loaded as per their relation with the aforementioned constructs. Thereafter, an Average Variance Extracted (AVE) was conducted to find out if the items had a 50% (0.5) validity threshold.

3.8.2 Reliability

Cooper and Schindler (2013), states that reliability is the overall consistency of a measure that is the extent to which results are consistent overtime. According to Korkmaz, Çakir and Özden, if a research tool meets criteria of consistent, stable, predictable and accuracy, then it's said to be reliable. Hence, the researcher keenly looked at factors such as wording of questions to rule out ambiguity. Moreover, since the instrument used measured attitudes and behaviors, the regression effect of items in the instrument was analyzed. Korkmaz, Çakir and Özden, (2017), points out that consistency in reliability can also be determined externally or internally.

External consistency procedures include; test/re-test (repeatability) and parallel forms of the same test, while internal consistency procedure is achieved via split-half technique procedure. In this study, reliability was tested using ten (10) questionnaires that were filled during the pre-testing stage. The collected data was entered in SPSS version 22 for purposes of computing a Cronbach alpha; a measure of internal consistency that establishes how closely related a set of items are as a group.

Bryan (2014) proposes that an alpha of between 0.7-1.00 shows that items in the instrument are reliable. Cooper and Schindler (2013) also noted that the greater the ratio the higher the reliability of the instrument.

3.9 Data Processing and Analysis

After data was collected from all administered questionnaires, a data cleanup was conducted to establish errors such as missing or double entries. Afterwards, the responses in questionnaires were categorized and converted into numeric codes. The analysis process used the steps suggested by Baron and Kenny(1986). Three different models were tested to establish the significance of hypothesized relationship. The Hawthorn effect model was used to establish the mediation effect.

The level of meaningfulness was determined at 0.5 thresholds and the Likert model significance was determined using the R square. The quantitative data was then analyzed using descriptive statistics (mode, mean, percentages, and standard deviation), and inferential statistics (regression analysis) with the aid of SPSS (statistical package for social sciences) software version 22. Consequently, the findings were presented in form of frequency distribution tables, pie charts, bar graphs, and descriptive statements.

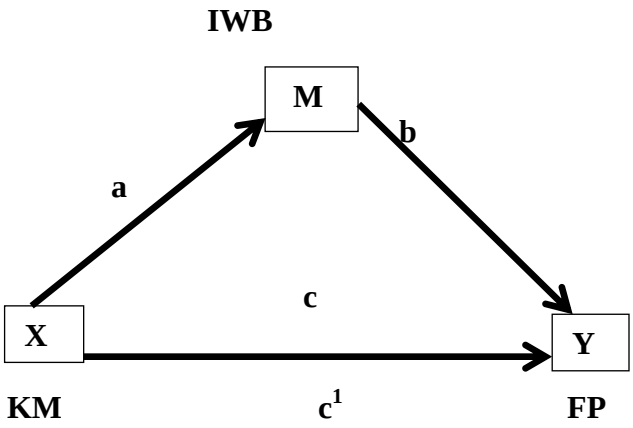
3.9.1 Testing of Regression Assumptions

The general purpose of multiple regression analysis, as an extension of simple linear regression, was to highlight the relationship between several independent and dependent variables respectively. Moreover, the use of multiple regression helped to determine the overall fit of the model used in study and the relative contribution of each of the predictors on the total variance.

In testing hypothesis, a multiple regression analysis was used the value of a variable based on the value of two more variables. For instance, firm performance as the outcome variable was predicted by knowledge management as an independent variable with the mediation effect of innovative work behavior. Therefore, normality was tested using histograms, quantile-quantile (QQ) plots, Shapirowilk test, skewness and kurtosis. Linearity used the Pearson’s correlation, Tolerance and Average Variance Extracted (AVE) while Homescedasticity tests included Levene’s test and standardized scatter plots.

3.9.2 The Research Model

In order to examine the research hypotheses, Baron, model on moderator-mediator analysis was applied. The model identified four measures for analyzing the mediating impact of creative work behavior on knowledge management and firm results in Meru County business banks. The purpose of the analysis was to clarify how conceptual variables account in the context of the study for differences in people's behavioral traits. Similarly, the study adopted a structure equation modeling inspired by previous studies such as: Mastrangelo, (Bysted, 2013) and Hakimian, (2016).



Baron and Kenny model (1986)

X= Independent variable (Knowledge management)

Y= Dependent variable (Firm Performance)

M= Mediating variable (Innovative work behavior)

Steps

1. How X predicts Y
   Y= **βo**+ cX + ϵ
   Effect of KM on FP

2. How X predicts M
   M= **βo**+ aX + ϵ
   Effects of KM on IWB

3. How M predicts Y
   Y= **βo**+ bM + ϵ
   Effects of IWB on FP

4. Direct & indirect effect prediction
   Y= **βo**+ c^1 X + bM +ϵ

The researcher expects to establish that, indeed innovative work behavior, as a mediating variable, influences knowledge management which in turn enhances firm performance.

3.10 Ethical Considerations

In order to gain consent for respondents to participate in the study the researcher had to present an introduction letter and research permit from the National Commission for Science and Technology Kenya (herein labeled as NACOSTI).

The introduction letter (see appendix1) indicated the purpose of study and introduced the researcher to the respondents. For anonymity, the questionnaire did not require any name entry of respondents. This helped avoid getting biased information from respondents for fear of getting implicated. Data presented was neither compromised nor fabricated. All sources consulted in this study were acknowledged appropriately. The recommended American Psychological Association (APA) referencing system guidelines were adhered to with precision.

3.11 Chapter Summary

This chapter comprehensively covered methodology of the study within the context of 20 commercial banks in Meru town. All employees participated in the study. The questionnaire was the main instrument of collecting data from the respondents. Research instrument piloting was performed to determine reliability and validity. Descriptive statistics (mean, mode, standard deviation) were subjected to the collected information. For testing the connection between variables and validating the hypothesis, inferential statistics such as regression were used. Tables and figures were used to capture the findings.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents results from data analysis presented in the form of frequency tables, figures and graphs. The results include descriptive and inferential statistics. The subsections of the study are reliability statistics, response rate, demographic characteristic, descriptive statistics of various variables, diagnostics tests to linear regression and mediation test results.

4.2 Response Rate

This section presents response rate from the respondents in the various banks.

Table 4.1: Response Rate

	Bank	**Population**	**Sample**	**Responses**
Tier 1	Barclays Bank	15	8	7
	CBA Bank	5	3	3
	Cooperative Bank	21	12	8
	Equity Bank	30	17	15
	KCB Bank	32	18	17
	Standard Chartered Bank	9	5	5
Tier 2	Bank of Africa	3	2	2
	Bank of Baroda	5	3	3
	CFC Stanbic Bank	6	3	4
	Diamond Trust Bank	4	2	2
	Family Bank	13	7	7
	Housing Finance	8	4	4
	I&M Bank	7	4	4
	National Bank	14	8	8
	NIC Bank	11	6	6
Tier 3	Consolidated Bank	8	4	4
	Credit Bank	8	4	4
	ABC Bank	4	2	2
	Post Bank	4	2	2
	Sidian Bank	6	3	3
	Total	**213**	**117**	**110**

The computed sample size was 117, the researcher managed to collect 110 questionnaires showing a 94 percent response rate. Further analysis was carried out using the 110 collected questionnaires. The high response rate was adequate to give reliability and credence to findings and recommendations. More so, the study adopted a subjective approach which did not threaten the information security in the commercial banks in Meru. The response rate is considered adequate given the recommendations by (Greenfield & Greener, 2016) who suggests 30% response while (Korkmaz, Çakir & Özden, 2017) advise on response rates exceeding 50%.

4.3 Demographic Characteristics

The study covered two demographic characteristics: Gender of the respondents and their job positions. The two streams have different approaches and responses in decision making and preference in uptake of innovative ideas. The findings could also imply that a relatively higher portion of male are deployed to work in hardship areas due to social challenges faced by the females. The results are presented below in form of frequency and percentages in Table 4.2 and Table 4.3 for both Gender distribution and Job distribution respectively.

4.3.1 Gender Distribution

This shows the number of females versus male who responded to the survey questions.

Table 4.2: Gender Distribution

	Gender	**Frequency**	**Percent**
	Male	68	61.8
	Female	41	37.3
	Total	**109**	**99.1**
Missing	System	1	0.9
Total		**110**	**100.0**

Results in Table 4.2 shows that there was fair representation among the respondents in terms of the gender. Approximately a third of the respondents were female (41, 37.3%) while male formed (68, 61.8%). Therefore, there was unbiased representation as far as gender was concerned.

4.3.2 Job Distribution

This shows how respondent were distributed across all functions of the bank set up. The following table gives an outline.

Table 4.3: Job Distribution

Job Category	Frequency	Percentage
Upper Management		
Branch Manager	8	7.3
Branch Operations Manager	12	10.9
Total	**20**	**18.2**
Middle Management		
Accounts	2	1.8
Asset Custodian	1	0.9
Bank Assurance Officer	2	1.8
Branch Acquiring Officer	1	0.9
Business Banker	1	0.9
Business Client Advisor	2	1.8
Business Development	1	0.9
Customer Relationship Officers	12	10.9
Personal and Business Banking	1	0.9
Supervisor	3	2.7
Total	**26**	**23.6**
Lower Management		
Administrative Officer	8	7.3
Back Office	1	0.9
Branch Sales Officers	4	3.6
Cash Management Officers	17	15.5
Credit Officers	7	6.4
Bank Tellers	19	17.3
Retail Support	1	0.9
ROC	1	0.9
Total	**58**	**52.7**
Not Identifiable		
Left blank by respondent	6	5.5
Total	**110**	**100**

From the responses, (20, 18.2%) were from the upper management, which comprised of the branch manager and the branch operations manager. The middle management formed (26, 23.6%), which included Accounts officer, Asset Custodian, Bank Assurance Officer, Branch Acquiring Officer, Business Banker, Business Client Advisor, Business Development, Customer Relationship Officers, Personal and Business Banking and Supervisors. Finally, (58, 52.7%) of the lower cadre officers formed of the respondents. They comprised of Administrative Officer, Back Office, Branch Sales Officers, Cash Management Officers, Credit Officers, Bank Tellers, Retail Support and ROC. Respondents were fairly distributed in terms of their various jobs within functions and positions. The profiling helped mitigate on data bias during data collection as all the functions were adequately represented.

4.4 Reliability Analysis

Reliability was tested using Cronbach's alpha and the results of each variable section showing the overall section alpha and the alpha value if a questionnaire item is deleted. Cronbach's Coefficient ranging between 0.7-1.0 was used as the criteria to conclude that the questionnaire is reliable Korkmaz, Çakir and Özden (2017). Table 4.4 gives a summary of the reliability analysis for all the sections.

Table 4.4: Summary of Reliability Analysis

Variable	Number of items	Cronbach's Alpha	Conclusion	Source
Knowledge Management	10	0.860	Reliable	Appendix Table 1
Innovative Work Behavior	10	0.896	Reliable	Appendix Table 2
Perception of Work Performance	14	0.918	Reliable	Appendix Table 3
Overall	**34**	**0.914**	**Reliable**	

Source: Field Data (2018)

4.5 Descriptive Statistics on Knowledge Management

This section describes the responses of the questionnaire items with regard to the three variables of the study, which were Knowledge Management, Innovative Work Behavior and Perceived Firm Performance.

Descriptive statics summarized data as drawn from the sample. Descriptive statistics are divided into measures of central tendency and measures of variability (Investopedia, 2019). Bank employee were asked to indicate their level of agreement in a 5-level Likert-rating scale (Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree – 1) per statements provided. The statements were measured in terms of how the banks valued employees' opinions; whether the bank acquired knowledge about new services and 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. Results are summarized in Table 4.5.

Table 4.5: 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 in Table 4.5 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 and service adoption in the industry. These results are in line with that of Satyendra, Dutta and Nayak (2018) that the predisposition of a company to efficiency in knowledge management lies in its knowledge infrastructure and process capacities as integrated in 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. This implies that knowledge is a strategic competitive tool that banks should embrace in their processes. The respondents were also asked how they shared their tacit knowledge dimension in the bank setup as illustrated in the table 4.6.

Table 4.6: 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)			

From Table 4.6, it was observed there was high knowledge sharing amongst the staffs of the banks. This is due to the high level of agreement (77.2 %) 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.Wilson II(2016); Chastin et al. (2015); and Mandeep, Arif, and Kulonda (2017) studies consistently ranked trust as an essential element for dissemination and sharing job-related know-how between employees.

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 Lukes & Ute, (2017) reciprocity is a relational and mentorship process involving three types: information, collegial and special peer relationships respectively. This insinuates that expectations of reciprocity might motivate a higher effort to promote and apply the new idea in social contexts within the bank work confines (Ranucci & Souder, 2015). However, Corfield and 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. This means that management should embrace and support sharing of knowledge across various functions in the organization. Further, respondents were asked how they shared their explicit dimension of knowledge as Table 4.7 demonstrates.

Table 4.7: 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)			

According to Table 4.7, 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 and Kang, (2016) discovered that sharing enhances individual understanding by exchanging files, records and experiences and converts it into institutional expertise.

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. Therefore, for an organization to grow, individuals must perceive growth in their personal goals. Both have to be in tandem.

Table 4.8: 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)			

Table 4.8 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 and 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 and Pérez-Santana, (2014) finding related the mediating role of assistance for leadership and co-worker support in the connection between highly supportive human resources practices and creative job behavior.

4.6 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 employees were asked to align their level of agreement with the various statements indicated 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 employee's 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.

Table 4.9: 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 6.4	23 20.9	39 35.5	24 21.8	17 15.5	3.19	1.129
Generate ideas/solutions to addressing problems	F %	2 1.8	28 25.5	21 19.1	27 24.5	32 29.1	3.54	1.209
Take the risk of being innovative & creative	F %	3 2.8	27 24.8	18 16.5	32 29.4	29 26.6	3.52	1.206
Anticipate problems & opportunities	F %	7 6.4	21 19.1	25 22.7	29 26.4	28 25.5	3.454	1.239
Average (%)		4.4	22.6	23.5	25.5	24.2	3.426	1.196
Summary		50.3 (disagreement)			49.7 (Agreement)			

Results from table 4.9 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 novel ideas give a lee way for successful implementing innovation; employees in organizations are rarely able to implement ideas proactively without 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%). Thus, for knowledge to diffuse in banks, managers should not only acknowledge it, but champion its enculturation among the employee's routine tasks.

Table 4.10: Descriptive Data for Idea Promotion

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

Table 4.10 shows 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. Hakimian, Farid, Ismail and Nair (2016) agrees with the findings that majority of managers face the challenge of promoting and fostering innovative work behavior among employees. Ortegaet. Al. (2014) states that knowledge flows are essential and organizations must permit regeneration of essential competences or risk becoming targets for "exnovation" innovation.

Table 4.11: 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 observations in Table 4.11, there seems to be a bottleneck 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 participants agreed 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 drivers of innovative work performance are embedded in involving employees on a mental capacity and making their jobs autonomous. 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 (2014) was of the view that sustainable competitive advantage is enabled through channeling of intellectual capital not in physical assets as was before.

4.7 Descriptive Statistics on Perception of Performance

The study sought to assess the perception of employees on performance of commercial banks in Meru County.

Respondents were asked to indicate the extent to which they agreed with the statements of each item on banks performance, stakeholder performance and resource mobilization under 5-level Likert-rating scale (Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree – 1). The tables below highlight the results respectively.

Table 4.12: ***Descriptive Data for Organizational Performance***

Statements (N = 110)	**1**		**2**	**3**	**4**	**5**	**Mean**	**Standard Deviation**
When compared to other banks, how do you rate the performance of your bank	F %	1 0.9	7 6.4	29 26.4	45 40.9	28 25.5	3.836	0.914
How well differentiated are your bank products	F %	2 1.8	4 3.6	18 16.4	53 48.2	33 30.0	4.009	0.883
How do you rank efficiency of your organizational processes	F %	0 0.0	6 5.5	17 15.5	60 54.5	27 24.5	3.982	0.790
How would you rate your organizations competitor knowledge	F %	1 0.9	0 0.0	18 16.4	66 60.0	25 22.7	4.036	0.690
Organization recognition of changes in the market place	F %	3 2.7	5 4.5	20 18.2	50 45.5	32 29.1	3.936	0.951
Average (%)		1.3	4.0	18.6	49.8	26.4	3.960	0.846
Summary		23.8 (disagreement)			76.2 (Agreement)			

Table 4.12 shows that majority of the respondents (76.2%) supported the notion that banks performed well. This was measured in terms of how the banks faired in comparison to other banks, how their products were differentiated (mean 4, 78.2%), efficiency of organizational processes (mean 3.9, 79%) and its flexibility to changing with the market place (mean 3.9, 74.6%). From the findings, the intrinsic motivation of employees is portrayed by their knowledge on their operational environment. This clearly show they share in the long-term vision, self-efficacy and challenge of the banks prosperity (Choi, Bong et al., 2016).

Table 4.13: Descriptive Data for Stakeholder Performance

Statements (N = 110)	1		2	3	4	5	Mean	Standard Deviation
Organization staff motivation/reward systems	F %	8 7.3	9 8.2	25 22.7	44 40.0	24 21.8	3.609	1.134
Staff engagement in solving customer problems	F %	1 0.9	15 13.6	24 21.8	48 43.6	22 20.0	3.682	0.976
Staff knowledge of processes	F %	3 2.7	6 5.5	20 18.2	57 51.8	24 21.8	3.846	3.564
Staff development in the organization	F %	9 8.2	5 4.5	29 26.4	49 44.5	18 16.4	3.564	1.080
Average (%)		4.8	8.0	22.3	45.0	20.0	3.675	1.689
Summary		35.0 (disagreement)			65.0 (Agreement)			

There was a lot of stakeholder involvement as observed in the results in Table 4.13 with majority in agreement (65.0 %). The banks' reward systems were fair according to the respondents and customers' problems were addressed through staff engagement. The staff members were well trained and they had good knowledge of bank processes. The results tend to unanimously agree with conclusive findings by Prieto and Pérez-Santana, (2014) that high-involvement human resources practices foster procedures and practices that influence organizational interest and success through employee shared perception of on supportive work environment.

Managers in commercial banks in Meru need to develop and enhance techniques in problem-solving for existing issues, key indicators for purposes of motivation and performance evaluation and appraisal systems for reward (Choi, Bong et al., 2016).

Table 4.14: Descriptive Data for Resource Mobilization

Statements (N = 110)	1		2	3	4	5	Mean	Standard Deviation
Firm recognition of knowledge as an asset	F %	4 3.6	6 5.5	23 20.9	61 55.5	16 14.5	3.718	0.910
Benchmarks against industry best practices	F %	1 0.9	8 7.3	24 21.8	52 47.3	25 22.7	3.836	0.894

Response to competitor initiatives	F %	2 1.8	7 6.4	29 26.4	58 52.7	14 12.7	3.682	0.845
Response to industry concerns raised by staff	F %	2 1.8	13 11.8	32 29.1	51 46.4	12 10.9	3.527	0.906
Talent management programs/policies	F %	6 5.5	11 10.0	28 25.5	51 46.4	14 12.7	3.509	1.020
Average (%)		2.7	8.2	24.7	49.7	14.7	3.654	0.915
Summary		35.7 (disagreement)			64.4 (Agreement)			

Resource mobilization was above average with an agreement of 64.4 percent. It is evident from the findings that the banks benchmarked in industry best practices on a mean of 3.7, and were responsive to competitor initiatives as indicated by a 3.7 mean threshold. This illustrates the characteristics of high-performance organizations where employee skills, knowledge and flexibility are enhanced (Stoffers et al., 2014). These characteristics will allow commercial banks in Meru to respond real time to competitions effectively.

In as much as the banks in Meru County recognized knowledge as an asset (70%), industry concerns by their employees were not taken into consideration effectively as shown by 57.1% agreement. In addition, talent management scooped a 57.1% agreement stipulating need for management to create an idea hub and psychometric tests to gauge employee personality against their strengths.

This sentiment is supported by Stoffers, Beautrice, Heijden, & Notelaers, (2014), who insist that although employees are primarily responsible in keeping up with trends in their occupations, work related development, talent development is a critical factor in knowledge economy and a turning point for achieving organizational success.

4.8 Results on Inferential Analysis

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

4.9 Linear Regression Diagnostics

The discussed assumptions are 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.

4.9.1 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 4.15: 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 as shown in Table 4.15 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.

4.9.2 Normality

Normality plots and statistical tests were used to check whether the standardised residuals were normally distributed. The statistical tests included: skewnessstatistics, 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 4.16: 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 Figure 4.16, 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.

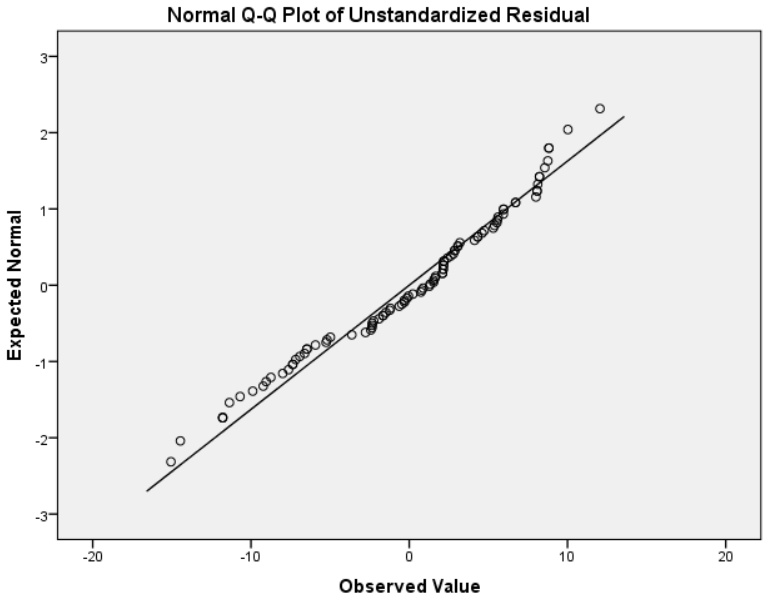


Figure 4.1: Normal Q-Q Plot of Unstandardized Residuals

The normal Q-Q plot in Figure 4.1 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 4.16 that found the data to be statistically significant in terms of normality (Adnan, Nazibov, Rusiman, & Kavikumar, 2011).

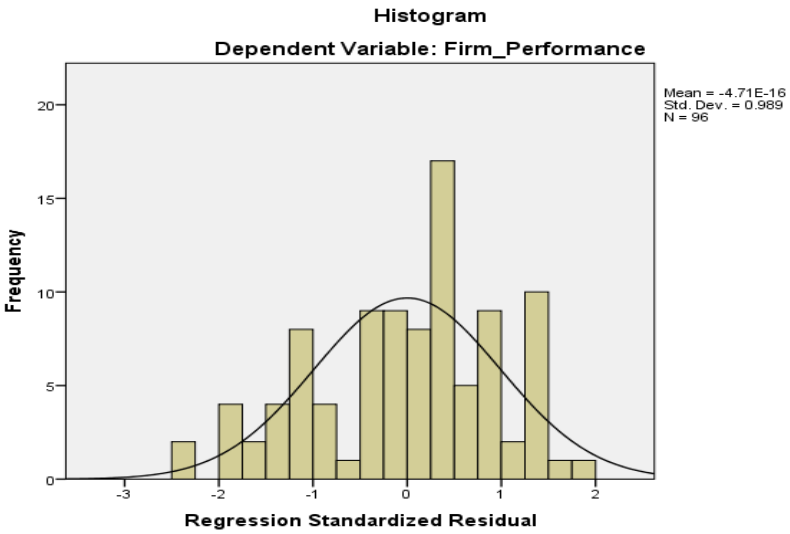


Figure 4.2: Histogram of Regression Standardized Residuals

Figure 4.2 shows the histogram of standardised residuals that was symmetric and with a normal fitted curve. According to Table 4.17, the skewed 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 $\pm$1.96 limits. This suggests that the departure from normality is not extreme (Kim, 2013).

Table 4.17: Skewness and Kurtosis of Residuals

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

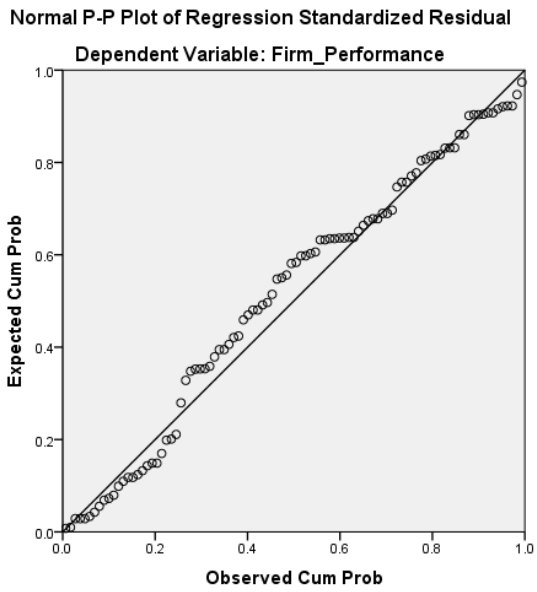


Figure 4.3: Normal P-P Plot of Standardized Residuals

The Normal P-P plot in Figure 4.3 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.

4.9.3 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. Appendix Table 4 shows that Knowledge Management and Innovative Work Behavior had low correlation of 46.3% hence depicting absence of multicollinearity.

Table 4.18: 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 4.18 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.

Appendix Table 5 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 0.94 in the third dimension while Innovative Work Behavior had the highest loading in the second dimension of 0.93 dimensions. Since all the variables had high loadings in a single dimension, therefore there was no multicollinearity.

4.9.4 Linearity

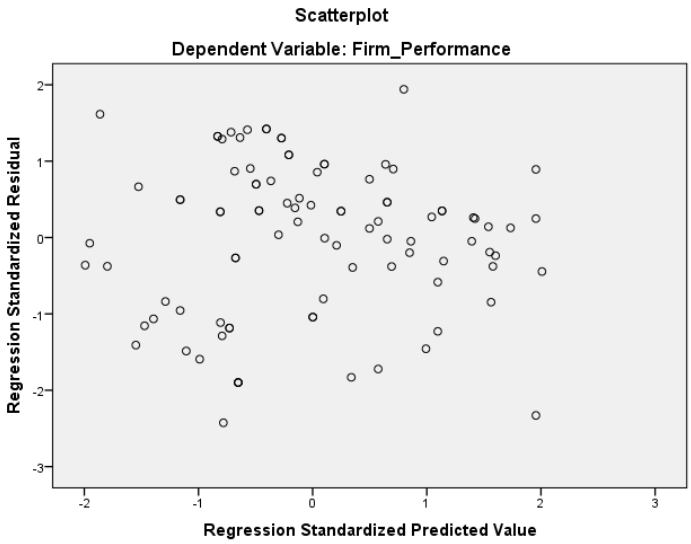


Figure 4.4: Scatter Plot of Regression Standardized Residuals against Regression Predicted Values

The standardised residuals in Figure 4.4 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).

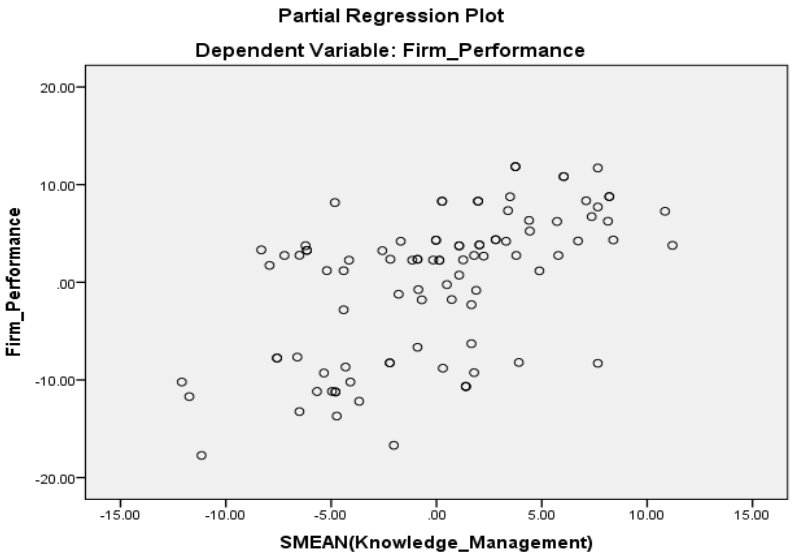


Figure 4.5: Scatter Plot of Firm Performance against Knowledge Management

Figure 4.5 shows the scatter plot of Firm Performance against Knowledge Management. There is visual evidence of a strong positive linear relationship between the two latter variables given the directions of the scatter plots. Appendix Table 4 also shows that the correlation coefficient between Firm Performance and Knowledge Management was 0.652 that neared unity hence proving that there was a strong positive correlation between the two variables.

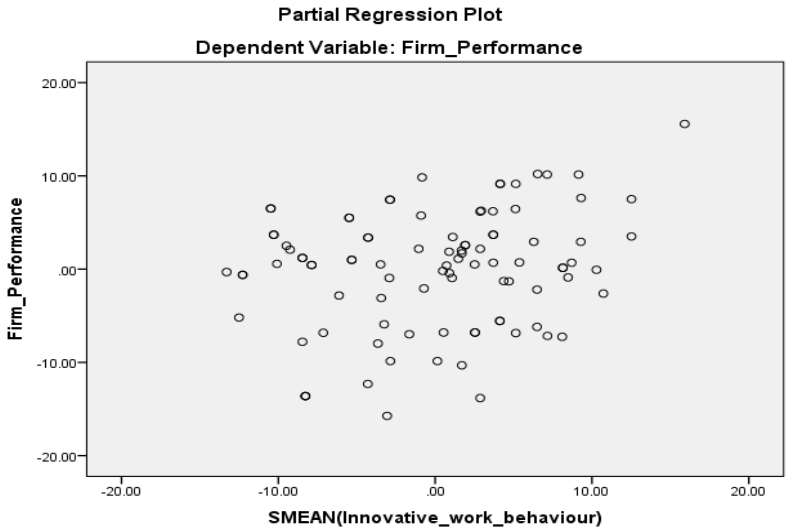


Figure 4.6:Scatter Plot of Firm Performance against Innovative Work Behavior

Figure 4.6 also shows the scatter plot of Firm Performance against Innovative Work Behavior. There is visual evidence of moderate positive linear relationship between Firm Performance against Innovative Work Behavior given the directions of the scatter plots. Appendix Table 4 shows that the correlation coefficient was 0.459 that was half-way between zero and one. Therefore, there was significant positive linear correlation between the two variables.

4.9.5 Heteroscedasticity

Linear regression assumes homogeneity of variance throughout the data. Heteroscedasticity was measured using Breusch-Pagan (BP) and Koenker Test in Table 4.19 and by using Scatter Plot of Regression Standardized Residuals against Regression Predicted Values in Figure 4.4

Table 4.19: Breusch-Pagan (BP) and Koenker Test

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

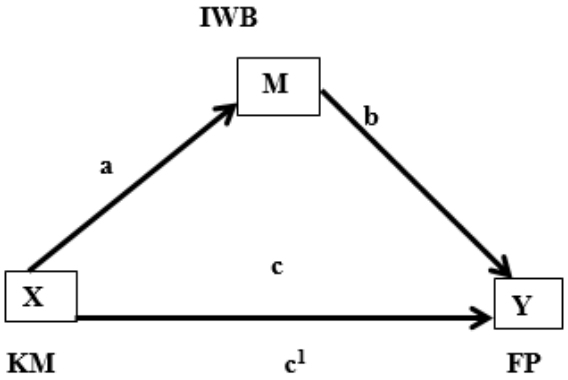
Breusch-Pagan (BP)(Breusch& Pagan, 1979) and Koenker statistics ((Koenker, 1981) test the null hypothesis that there is no heteroscedasticity in the data. The p-values of both tests had p-values less than 0.05 indicating homoscedasticity in the data. Figure 4.4 shows that the regression standardized residuals randomly spread around regression predicted values thereby indicating that there was no pattern in the residuals.

4.9.6 Autocorrelation

The Durbin Watson statistics (d) in the last column from the left of Table 4.25 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.

4.10 Testing for Mediation Effects of Innovative Work Behavior on the Relationship between Knowledge Management and Perceived Firm Performance

The study set out to determine mediation effect of Innovative Work Behavior on the Relationship between Knowledge Management and Perceived Firm Performance. Using Baron and Kenny (1986) model, the study tested four relationships listed below.



X= Independent variable (Knowledge management)

Y= Dependent variable (Firm Performance)

M= Mediating variable (Innovative work behavior)

Steps

1. How X predicts Y

   $Y = \beta o + cX + \epsilon$

   Effect of KM on FP
2. How X predicts M

   $M = \beta o + aX + \epsilon$

   Effects of KM on IWB
3. How M predicts Y

   $Y = \beta o + bM + \epsilon$

   Effects of IWB on FP
4. Direct & indirect effect prediction

   $Y = \beta o + c^1 X + bM + \epsilon$

4.10.1 Perceived influence of Firm Performance by Knowledge Management

This was the first condition of the mediation test that involved testing the relationship between the independent variable (Knowledge Management) and the dependent variable (Perceived Firm Performance).

Table 4.20: Model Summary of Perceived Firm Performance as influenced by Knowledge Management

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.652	0.425	0.419	6.35060

Table 4.20 shows that there was a strong positive correlation between perceived firm performance and knowledge management with a Pearson's correlation coefficient of 65.2 percent. The coefficient of determination (R Square) was 42.5 percent that means that 42.5 percent of the variations in perceived firm performance are due to variations in knowledge management.

Table 4.21: ANOVA Statistics for Perceived Firm Performance as influenced by Knowledge Management

Model	Sum of Squares	Df	Mean Square	F	P-value.
Regression	2800.804	1	2800.804	69.447	0.000
Residual	3791.029	94	40.330		
Total	6591.833	95			

ANOVA tests whether there is a significant linear relationship between two variables. In this case, it tested the null hypothesis that Knowledge Management is not linearly related to Perceived Firm Performance at 5 percent significance level. The results in Table 4.21 show a p-value of 0.000, which is less than 0.05($F(1, 94) = 69.447$, $P = .000$), hence rejecting the first null hypothesis that there is no significant relationship between knowledge management and perceived for performance and concluding that there was a significant linear relationship between the two variables. Findings matched Muigai, (2015) study conducted in all commercial banks in Kenya using cluster sampling technique; where the R square was at 42.5% at a 95% level of confidence.

Moreover, Gakuo, (2017) found a coefficient of determination at 0.641% implying a 64.1% of variations in performance of commercial banks as explained by knowledge process (Acquisition, conversion, protection and application) with a probability of 0.000. Knowledge management was thus seen to have a positive impact on performance. Empirical literature reviewed illustrated that knowledge management process influences work efficiency, which in turn enhances performance (Tseng & Fang, 2015).

Table 4.22: Regression Coefficients for Perceived Firm Performance 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)	15.856	4.440	-	3.571	0.001	7.040	24.671
Knowledge Management	0.939	0.113	0.652	8.333	0.000	0.716	1.163

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

$$Y = 15.856 + 0.939X_1 + e \quad \ldots\ldots\ldots\ldots\ldots\ldots \text{(i)}$$

t – statistic *3.571* *8.333*

p-value *0.001* *0.000*

Where

Y – Perceived Firm Performance

X_1 – Knowledge Management

e – Regression error term

The P-value in Table 4.22 shows that the relationship between Knowledge management and Perceived firm performance was significant with a p-value of 0.000 less than 5 percent. The regression above established that by considering all factors constant at zero performance of commercial banks in Meru County was 15.856. A unit increase in knowledge management would lead to a 0.939 increase in scores on perceived firm performance. This corroborates the findings in Table 4.22 of the ANOVA test. Therefore, the first criteria of mediation test were achieved. In line with Muigai, (2015) study infers that knowledge management has impact to perceived performance of an organization.

4.10.2 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 (Knowledge Management) and the mediating variable (Innovative Work Behavior).

Table 4.23: 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 4.23 demonstrates a moderate positive correlation between Innovative Work Behavior and Knowledge Management with a 46.3 percent Pearson correlation coefficient. 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 4.24: 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 4.24 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 ($F(1, 94) = 25.625$, $P = .000$), subsequently, rejecting the second null hypothesis that there is no significant relationship between knowledge management and innovative work behavior.

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 4.25: 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 (ii):

$$Y = 9.915 + 0.604X_1 + e \quad \ldots\ldots\ldots\ldots\ldots\ldots \text{(ii)}$$

t – statistic *1.782* *5.062*

p-value *0.038* *0.000*

Where

Y – Innovative Work Behavior

X_1 – Knowledge Management

e – Regression error term

The regression above 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 4.25 demonstrates that there was an important connection between knowledge management and Innovative Work Behavior because the observed p-value was 0.000, which was less than 0.05. Consequently, the second mediation test criterion was accomplished.

4.10.3 Perceived Influence of Firm Performance by Innovative Work Behavior

This was the third condition of the mediation test that involved testing the relationship between the dependent variable (Perceived Firm Performance) and the mediating variable (Innovative Work Behavior).

Table 4.26: Model Summary of Perceived influence of Firm Performance by Innovative Work Behavior

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.459	0.211	0.202	7.43986

Table 4.26 demonstrates a moderate positive correlation between Innovative Work Behavior and Perceived Firm Performance with a 45.9 percent Pearson correlation coefficient. Falk and Miller (1992) recommended the value of R2 should be at least 10% for endogenous constructs. The coefficient of determination (R Square) was 21.1 percent meaning that 21.1 percent of the variations in Perceived Firm Performance are due to variations in innovative work behavior.

Table 4.27: ANOVA Statistics for influence of Perceived Firm Performance by Innovative Work Behavior

Model	Sum of Squares	df	Mean Square	F	P-value
Regression	1388.795	1	1388.795	25.090	0.000
Residual	5203.039	94	55.351		
Total	6591.833	95			

ANOVA test in Table 4.27 tested the null hypothesis that there is no significant linear relationship between Innovative Work Behavior and Perceived Firm Performance at 5% percent significance level. The observed p-value was 0.000 that was less than 0.05($F(1, 94) = 25.090$, $P = .000$), hence rejecting the first null hypothesis that there is no significant relationship between innovative work behavior and perceived firm performance thus indicating a positive linear relationship between the two variables. Stoffers et al., (2014) recommended consideration of other moderators/determinants of innovative work behavior such as leadership styles, opportunities and abilities of employee's possibilities to develop and learn work-related activities.

Table 4.28: Regression Coefficients for Perceived Firm Performance against Innovative Work Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	T	P-value	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	35.505	3.469		10.236	0.000	28.618	42.392
Innovative work behavior	0.507	0.101	0.459	5.009	0.000	0.306	0.707

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

$$Y = 35.505 + 0.507X_1 + e \quad \ldots\ldots\ldots\ldots\ldots\ldots \text{(iii)}$$

t – statistic 10.236 5.009

p-value 0.038 0.000

Where

Y – Perceived Firm Performance

X_1 – Innovative Work Behavior

e – Regression error term

The above regression showed that the perceived strong performance of commercial banks in Meru County was 35.505 by taking into consideration all variables steady at zero. An increase in unit in creative work behavior would result in a rise in results of 0.507 on perceived company results. In Table 4.35, the P-value demonstrates that the connection between Perceived Firm Performance and Innovative Work Behavior was important because the p-value observed was 0.000, which was less than 0.05. Therefore, the third criteria for the mediation test were achieved.

4.10.4 Perceived Firm Performance as Influenced by both Knowledge Management and Innovative Work Behavior

This was the fourth condition of the mediation test that involved testing the relationship between the dependent variable (Perceived Firm Performance) and the independent variable (Innovative Work Behavior) in controlling for the mediating variable (Innovative Work Behavior).

Table 4.29: Model Summary of Perceived Firm Performance as influenced by both Knowledge Management and Innovative Work Behavior

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.676	0.456	0.445	6.20737

Table 4.29 shows strong positive correlation between Knowledge Management, Innovative Work Behavior and Perceived Firm Performance with a Pearson's correlation coefficient of 67.6 percent.

The coefficient of determination (R Square) was 45.6 percent meaning that 45.6 percent of the variations in Perceived Firm Performance are due to variations in both knowledge management and innovative work behavior.

Table 4.30: ANOVA Statistics of Perceived Firm Performance against Knowledge Management and Innovative Work Behavior

Model	Sum of Squares	Df	Mean Square	F	P-value
Regression	3008.410	2	1504.205	39.038	0.000
Residual	3583.424	93	38.531		
Total	6591.833	95			

ANOVA test in Table 4.30 tested the null hypothesis that there is no significant linear relationship between Innovative Work Behavior and Perceived Firm Performance at 5% percent significance level. The observed p-value was 0.000 that was less than 0.05(F (1, 94) = 39.038, *P* =.000), hence rejecting the null hypothesis that there is no significant mediating effect on the relationship between knowledge management and perceived firm performance; and indicating a positive mediating linear relationship between the knowledge management and innovative work behavior.

Theoretical arguments suggest a favorable connection between job autonomy (encourages exploration) and creativity as well as creative work conduct (Gkorezis, 2016). This findings further agree with Stoffers et al. (2014) on considering other determinants to enhance perceived firm performance.

Table 4.31: Regression Coefficients of Perceived Firm Performance against Knowledge Management and Innovative Work Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	T	P-value	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	13.664	4.441		3.077	0.003	4.845	22.484
Knowledge Management	0.806	0.124	0.559	6.483	0.000	0.559	1.053
Innovative work behavior	0.221	0.095	0.200	2.321	0.022	0.032	0.410

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

Y =	13.664	+	$0.806X_1$	$+0.221X_2$	+ e	…… (iv)
t – statistic	*3.077*		*6.483*	*2.321*		
p-value	*0.003*		*0.000*	*0.022*		

Where

Y – Perceived Firm Performance
X_1 – Knowledge Management
X_2 – Innovative Work Behavior
e – Regression error term

The P-value in Table 4.31 shows that the relationship between Perceived Firm Performance and the two predictors (Knowledge Management and Innovative Work Behavior) was significant with observed p-values of 0.000 and 0.022 respectively, which were both less than 0.05. The regression above established that by taking all factors into account constant at zero perceived firm performance of commercial banks in Meru County was 13.664. A unit increase in knowledge management at 0.806 and in innovative work behavior at 0.221 respectively, would lead to increase in scores on perceived firm performance. This stipulates that knowledge management on its own is a sufficient prerequisite for an organizational innovation culture.

4.10.5 Conclusion of Mediation Test

Having achieved all the four conditions of the mediation test according to Baron and Kenny (1986) model, it is therefore concluded that Innovative Work Behavior mediates the relationship between Knowledge management and Perceived Firm performance. The beta coefficient of Knowledge Management in Table 4.22 was 0.939 before mediation, which reduced to 0.806 in the presence of Innovative Work Behavior in Table 4.31. As the connection between Knowledge Management and Perceived Firm results in the presence of the mediator (Innovative Work Behavior) remained important, this demonstrates that the mediation impact was indeed partial.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section gives a summary of the results, conclusions and recommendations based on the mediating effect of Innovative Work Behavior on the relationship between Knowledge Management and Firm Performance among commercial banks in Meru County. The study gap on proper structuring and leveraging knowledge within banks, especially the tacit knowledge dimension was investigated. The research aimed to determine the role of knowledge management in improving company efficiency by examining the mediating impact of employee creative work behavior among commercial banks in Meru County, Kenya.

The research had four goals to establish the mediating impact: to determine the impact of knowledge management on firm performance; to determine the impact of knowledge management on innovative work behaviour; to determine the impact of Innovative Work Behaviour on firm performance; and to determine the impact on knowledge management and innovative work behavior on firm performance. These objectives are in line with Baron and Kenny (1986) model for testing mediation effect. The study was guided by knowledge-based view, diffusion innovation and Vroom's expectancy theories respectively. The units of analysis were twenty (20) commercial banks in Meru County with a sample size of 117. Clustered random sampling technique was adopted. A questionnaire was utilized in data gathering, which was analyzed using the SPSS software version 20.0.Computed the mean, mode, standard deviation, regression analysis, and ANOVA. The response rate of 94% was achieved.

5.2 Summary of Findings

This section provides a report on empirical facts based on data collected and analyzed for each construct used in the study.

5.2.1 Firm Performance

The approached perceived firm performance in three aspects: organizational performance, stakeholder performance and resource mobilization. From Table 4.15, majority of the respondents agreed that there was good organizational performance measured in terms of how the bank compared to other bank, product differentiation, and efficiency of organizational processes, competitor knowledge, and response to market changes. The respondents noted that the recognition of market changes has helped banks in Meru county benchmark with competitors through development of differentiated products and effective processes.

Table 4.16 also shows that most of the respondents felt that there was good stakeholder performance, staff was engaged in solving problems, staff knowledge on processes was highly rated and staff development. Internal processes in commercial banks seem to be well aligned to policies. However, the need to encourage employees own processes.

Further, Table 4.17 shows that majority of the staff agreed that there was good resource mobilization in terms of firm recognition of knowledge assets, responding to competitor initiatives as well as responding to changing to meet industry best practices. However, industry concerns raised by employees and talent management are not given much priority.

5.2.2 Knowledge Management and Firm Performance

Knowledge Management had three facets in this study: knowledge acquisition, knowledge sharing (implicit and explicit) and knowledge application. From Table 4.8, it was obvious that staff at commercial banks in Meru County had acquired high knowledge.

A high number of the participants concurred with the assertions that banks developed processes for knowledge acquisition and had collaborations to aid in the latter. In the competitive environment commercial banks in Meru operate in, collaborations are key in ensuring efficient customer relationship management.

Table 4.9 and Table 4.10 shows that at least two thirds of the respondents affirmed that they shared banking knowledge on a tacit and explicit dimension amongst them. More so, there seemed to be 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. In addition, majority of the respondents confirmed that they applied knowledge they had acquired in the process of training and interaction among each other.

In addressing the first objective of the study, knowledge management had strong positive correlation to firm performance. The results revealed that about half of the variations in the performance of commercial banks in Meru County accounted for knowledge management. In addition, a direct and important connection has been discovered between Knowledge Management and Firm Performance. According to Baron's suggested model, the first condition of mediation was met.

5.2.3 Knowledge Management and Innovative Work Behavior

In this study, Innovative work behavior was looked at in terms of idea generation, idea promotion and idea realization. Table 4.12 shows that commercial banks in this study performed poorly in terms of idea generation. Hence, less than half of the respondents agreed to the assertions that there was idea generation in their respective work places. Employees mostly adhered to their daily work, as there was limited room for idea generation. The frequency at which employees took risks of being creative in solving problems was minimal. This can be attributed to rigid banking systems put in place by management as confirmed by observations in Table 4.13 which show that the banks did not promote innovative ideas from the employees hence rendering the staff to be less enthusiastic in generating ideas.

Table 4.14 further shows that commercial banks did not apply ideas frequently. It is evident there was lack of structures to adopt and implement new ideas in the banks.

In addressing the second objective, Table 4.30 demonstrates a moderate positive correlation between knowledge management and innovative work behavior. Knowledge management accounted for about one-fifth of Innovative Work Behavior's differences. In addition, Knowledge Management and Innovative Work Behavior had a substantial connection. This satisfied the second condition of mediation proposed by Baron and Kenny (1986).

5.2.4 Innovative Work Behavior and Firm Performance

The third objective was regarding the relationship between Innovative Work Behavior and Firm Performance. Innovative Work Behavior only predicted a fifth of the variations in Firm performance. This could be because there was little Innovative Work Behavior in the banks albeit good performance in the same banks. Innovative Work Behavior nevertheless had significant relationship to Firm Performance. In addition, the two variables had a moderate positive linear relationship and a positive serial correlation. This therefore satisfied the third criteria as proposed by Baron and Kenny (1986) for testing mediation effect.

5.2.5 Knowledge Management, Innovative Work Behavior and Firm Performance

The fourth condition of testing mediation effect involved regressing the explanatory construct and the mediator on firm performance. The results in Table 4.36 indicate that approximately half of the variations of firm performance are due to variations in both Knowledge Management and Innovative Work Behavior. Table 4.38 showed that in the presence of Innovative Work Behavior (mediator), Knowledge Management still maintained its significant influence on Firm Performance although the influence was less compared to when only Knowledge Management is regressed on Firm Performance. This indicated a reduced effect of Knowledge Management on Firm Performance due to the mediating effect of Innovative Work Behavior.

Therefore, there was partial mediation by Innovative Work Behavior on the relationship between Knowledge Management and Firm Performance. The fourth criterion was met as proposed by Baron and Kenny (1986) for testing mediation effect.

5.3 Conclusion

The research envisaged the mediating impact of Innovative Work Behavior on the relationship between knowledge management and corporate performance. From the descriptive results, objective one was reviewing of knowledge management and its effect on perceived firm performance. It was evident that the commercial banks in Meru County practiced explicit knowledge management on high percentage through its well structure systems, processes, industry benchmarking and the vast knowledge on competitor initiatives. The general performance of these firms was above average also as observed.

In the second objective on knowledge management and innovative work behavior it was evident idea generation and application within commercial bank in Meru was very low. The 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. More so, 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.

In addressing the third objective innovative work behavior had a moderate positive linear correlation on perceived firm performance. This shows that other factors such as management support, job autonomy, culture, trust, work spirituality could be considered as predictors of perceived firm performance. In addition, Human resource practices and policies that are definitive on innovative work structures can attract novel ideas and commitment of employees in elevating performance. Finally, in addressing the broader objective of the study, Innovative work behavior was a partial mediator of the effect of Knowledge Management on Firm Performance.

This means that in itself, Innovative Work Behavior was a significant predictor of Firm Performance. Therefore, despite that there was small room for idea contribution in the banks, the same ideas nevertheless contributed significantly to perceived firm performance. Mediation explains the relationship between the dependent and the dependent variable. In this case, Innovativeness is one of the explanations as to why Knowledge Management contributes to Firm Performance.

This research therefore adds to the knowledge body by explaining the inner processes of the Knowledge Management and Firm Performance relationship. It goes on to show that imputed in the latter relationship, is the importance of Innovative Work Behavior.

5.4 Recommendations

To improve knowledge management and banks efficiency in Meru County, the researcher recommends the development of tacit knowledge models structures and procedures giving guidelines on how to incorporate it in systems and procedures within the banks systems. The customer management systems should be synchronized with knowledge management systems to ensure constant innovation and service convenience to customer.

In the second objective, commercial banks in Meru should appoint knowledge management champions to help enhance idea generation, idea promotion and idea application as well as manage the knowledge resource center in the bank.

In the third objective, the Human Resources policies should incorporate rewards and sanctions for idea innovation to motivate employee commit to the knowledge application. Consequently, training policies should offer specific training and task-related seminars for creativity and problem-solving abilities to increase skill variety. Knowledge should be included in employees perform appraisal in their corporate performance contracts.

In the fourth objective, commercial banks should consider knowledge as an element in their corporate budgets. Additionally, commercial banks should have more external collaborations to help benchmark across various industries and keep updated on innovation best practices trends.

5.5 Areas for Further Research

Since the results indicate a partial mediation effect, it means that the relationship between Knowledge Management and Firm Performance is not exhausted. There are other mediating variables accounting for the relationship between Knowledge Management and Firm performance. This study therefore recommends further studies into other mediating variables to understand the internal mechanisms of the latter relationship. In addition, this research also proposes further investigations into the moderating impact of Innovative Work Behavior on Knowledge Management and firm performance.

This study recommends a longitudinal study as innovation is an ongoing process. This is because the information used were obtained in the same era; common method variance may be a problem, as it may result in the mediation and the research variables being inflated with estimated intensity. A model for validating novel ideas can be developed to help organizations structure knowledge.

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APPENDICES

Appendix I: Introduction Letter

Dear participant,

I invite you to participate in a research study entitled knowledge management and innovative work behavior in commercial banks in Meru County. I am a master's student in the school of business at the Kenya Methodist University. The purpose of the research is to determine:

1. Evidence of knowledge management in the commercial banks in Meru County.
2. Understand existing innovative behaviors within the commercial banks in Meru.
3. Impact of knowledge management and innovative work behavior on banks performance.

Kindly note this questionnaire is anonymous and confidential and your participation in this research is completely voluntary. Data collected will only be reported as a collective combined total. If you agree to participate in this research project, kindly answer the questions to the best of your ability, and submit the response as per the stipulated deadline.

In case of any queries feel free to contact the business faculty, KEMU 02002118443.

Sincerely yours,

Christine M. Ndwiga

Mobile: 0710519310 Email: christine.ndwiga@gmail.com.

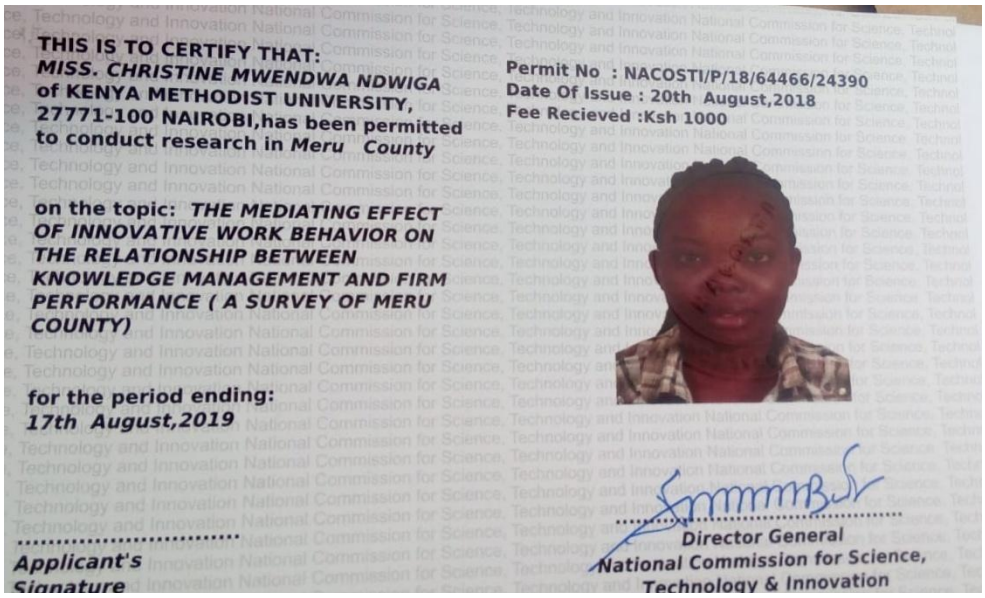
Instructor: Dr. Paul Gichohi (PhD)

Mobile: 0721743969 Email: pmakuster@googlemail.com

Instructor: Dr. Clement Nkaabu (PhD)

Mobile: 0722885457 Email: clement.nkaabu@kemu.ac.ke

Appendix II: NACOSTI Permit



THIS IS TO CERTIFY THAT:
MISS. CHRISTINE MWENDWA NDWIGA
of KENYA METHODIST UNIVERSITY,
27771-100 NAIROBI,has been permitted
to conduct research in *Meru County*

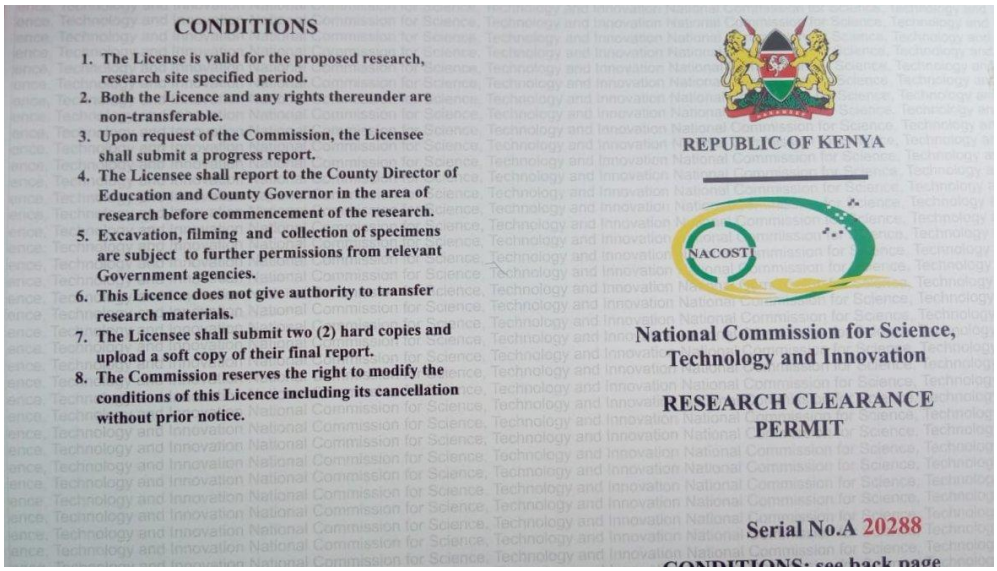
on the topic: *THE MEDIATING EFFECT OF INNOVATIVE WORK BEHAVIOR ON THE RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT AND FIRM PERFORMANCE (A SURVEY OF MERU COUNTY)*

for the period ending:
17th August,2019

.....
Applicant's Signature

Permit No : NACOSTI/P/18/64466/24390
Date Of Issue : 20th August,2018
Fee Recieved :Ksh 1000

.....
Director General
National Commission for Science,
Technology & Innovation



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CONDITIONS: see back page

Appendix III: Questionnaire

Instructions

Please answer all questions to the best of your ability. All information given will be kept confidential and only survey tallies will be shared upon request. Once finished answering please return within the stipulated deadline of 30th July 2018. Thank you.

PART A

1. **Gender**

   Male ☐ Female ☐

2. Name of Bank……Branch…….

3. Job Title…….

PART B: KNOWLEDGE MANAGEMENT POSSESSED IN FIRMS

No	Area:	Strongly disagree	Agree	Neutral	Disagree	Strongly Agree
	Knowledge **Acquisition**					
4.	The bank values employees' attitudes and opinions					
5.	The bank has developed process for acquiring knowledge about new products and services from the industry					
6.	The firm has developed process for collaboration					
	Knowledge **sharing** (Tacit Knowledge)	**Strongly disagree**	**Agree**	**Neutral**	**Disagree**	**Strongly Agree**
7.	I share my work experiences and knowledge with my co-workers					

8	I show my co-workers how to perform the most difficult part of work					
	Knowledge **sharing**: (Explicit knowledge)	**Strongly disagree**	**Agree**	**Neutral**	**Disagree**	**Strongly Agree**
9.	I share internal reports and other official documents in my workplace					
10.	My employer encourages me to undertake university/polytechnic courses/ training seminars					
	Knowledge **Application**	**Strongly disagree**	**Agree**	**Neutral**	**Disagree**	**Strongly Agree**
11.	My bank utilizes knowledge into practical use					
12.	My firm locates and applies knowledge to changing competitive conditions					
13.	My firm encourages people with similar interest to work together to solve problems					

PART C: INNOVATIVE WORK BEHAVIOR IN THE WORK PLACE

No	**Area:**	**Never**	**Sometimes**	**Fairly often**	**Often**	**Always**
	Idea generation: In your current job, how often do you					
14.	Pay attention to issues that are not part of your daily work					
15.	Generate ideas/solutions to addressing problems					
16.	Take the risk of being innovative & creative					
17.	Anticipate problems & opportunities					

No	Area:	Never	Sometimes	Fairly often	Often	Always
	Idea promotion: In your current job, how often do you					
18.	Mobilize support for innovative ideas					
19.	Acquiring approval for innovative ideas					
20.	Making organizational members enthusiastic for innovative ideas					
No	**Area:**	**Never**	**Sometimes**	**Fairly often**	**Often**	**Always**
	Idea Application/realization: In your current job, how often do you					
21.	Transform innovative ideas into useful applications at work					
22.	Introducing innovative ideas into the work environment in a systematic way					
23.	Evaluating the utility of innovative ideas					

PART D: PERCEPTION OF FIRM PERFORMANCE AND COMPETITION

No	Area: Organizational performance	Extremely poor	Poor	Average	Good	Extremely good
24.	When compared to other banks, how do you rate the performance of your bank					
25.	How well differentiated are your bank products					
26.	How do you rank efficiency of your organizational processes					
27.	How would you rate your organizations competitor knowledge					
28.	Organization recognition of changes in the market place					
No	**Area: Stakeholder performance**	**Extremely poor**	**Poor**	**Average**	**Good**	**Extremely good**
29.	Organization staff motivation/reward systems					
30.	Staff engagement in problem solving customer problems					
31.	Staff knowledge of processes					
32.	Staff development in the organization					

No	Area:	Extremely poor	Poor	Average	Good	Extremely good
	Resource mobilization					
33.	Firm recognition of knowledge as an asset					
34.	Benchmarks against industry best practices					
35.	Response to competitor initiatives					
36.	Response to industry concerns raised by staff					
37.	Talent management programs/policies					

Appendix IV: Reliability Analysis Results

Appendix Table 1: *Reliability Analysis of Knowledge Management*

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The bank values employees attitudes and opinions	28.7473	78.102	0.556	0.847
The bank has developed process for acquiring knowledge about new products/services from the industry	28.2967	76.855	0.551	0.848
The firm has developed process for collaboration	28.5604	75.982	0.646	0.840
I share my work experiences and knowledge with my co-workers	28.1648	74.095	0.648	0.839
I show my co-workers how to perform the most difficult part of work	28.2308	78.602	0.485	0.854
I share internal reports and other official documents in my workplace	28.5275	78.230	0.487	0.854
My employer encourages me to undertake university/polytechnic courses training seminars	28.8571	78.702	0.534	0.849
My bank utilizes knowledge into practical use	28.6154	79.439	0.538	0.849
My firm locates and applies knowledge to changing competitive conditions	28.4835	75.030	0.665	0.838
My firm encourages people with similar interest to work together to solve problems	28.7473	77.635	0.576	0.846
		Overall Reliability Statistics		**0.860**

Appendix Table 2

Reliability Analysis of Innovative Work Behavior

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Pay attention to issues that are not part of your daily work	31.0769	65.250	0.354	0.904
Generate ideas/solutions to addressing problems	30.7692	60.957	0.575	0.890
Take the risk of being innovative& creative	30.7802	57.973	0.750	0.878
Anticipate problems & opportunities	30.7692	59.557	0.662	0.884
Mobilize support for innovative ideas	30.7912	59.634	0.683	0.883
Acquiring approval for innovative ideas	31.0659	59.396	0.656	0.885
Making organizational members enthusiastic for innovative ideas	30.9121	57.703	0.761	0.877
Transform innovative ideas into useful applications at work.	31.0440	59.265	0.706	0.882
Introducing innovative ideas into the work environment in a systematic ways	30.9780	58.911	0.706	0.881
Evaluating the utility of innovative ideas	30.7802	62.040	0.563	0.891
		Overall Reliability Statistics		**0.896**

Appendix Table 3

Reliability Analysis of Perception of Firm Performance

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
When compared to other banks, how do you rate the performance of your bank	49.1304	72.488	0.635	0.912
How well differentiated are your bank products	48.9457	72.360	0.660	0.911
How do you rank efficiency of your organizational processes	48.9565	74.262	0.628	0.912
How would you rate your organizations competitor knowledge	48.9130	76.146	0.555	0.915
Organization recognition of changes in the market place	49.0000	72.989	0.580	0.914
Organization staff motivation/reward systems	49.2935	69.067	0.721	0.909
Staff engagement in problem solving customer problems	49.2391	70.689	0.721	0.909
Staff knowledge of processes	49.0543	73.612	0.610	0.913
Staff development in the organization	49.3587	68.716	0.770	0.907
Firm recognition of knowledge as an asset	49.2065	70.671	0.748	0.908
Benchmarks against industry best practices	49.0543	73.459	0.591	0.913
Response to competitor initiatives	49.2500	76.827	0.394	0.920
Response to industry concerns raised by staff	49.3696	73.532	0.582	0.914
Talent management programs/policies	49.3804	69.953	0.701	0.909
		Overall Reliability Statistics		**0.918**

Appendix V: Collinearity Results

Appendix Table 4

Correlational Matrix

		Knowledge Management	Innovative work behavior	Firm Performance
Knowledge Management	Pearson Correlation	1	**0.463**	**0.652**
	N	96	96	96
Innovative work behavior	Pearson Correlation	0.463	1	0.459
	N	96	96	96
Firm Performance	Pearson Correlation	0.652	0.459	1
	N	96	96	96

Appendix Table 5

Collinearity Diagnostics

Dimension	Eigenvalue	Condition Index	Variance Proportions		
			(Constant)	Knowledge Management	Innovative Work Behavior
1	2.963	1.000	0.00	0.00	0.00
2	0.026	10.620	0.21	0.05	0.93
3	0.010	16.955	0.79	0.94	0.06

Appendix VI: List of Commercial Banks in Meru County

	Bank
Tier 1	Barclays Bank
	CBA Bank
	Cooperative Bank
	Equity Bank
	KCB Bank
	Standard Chartered Bank
Tier 2	Bank of Africa
	Bank of Baroda
	CFC Stanbic Bank
	Diamond Trust Bank 2
	Family Bank 2
	Housing Finance
	I&M Bank
	National Bank
	NIC Bank
Tier 3	Consolidated Bank
	Credit Bank
	ABC Bank
	Post Bank
	Sidian Bank
	Total