Effects of Technological Changes on Employee Performance in Commercial Banks in Trans Nzoia County, Kenya

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Key Words: Technological Changes, Employee Performance, Commercial Banks, Trans Nzoia County

ABSTRACT
Increasing market pressures and market regulations have forced commercial banks to implement drastic organizational changes in order to remain competitive. However, while organizational change is a constant experience, the process of managing change involves a lot of challenges which if not well dealt with could hinder the attainment of desired goals. The purpose of this study therefore was to investigate the effects of technological changes on employee performance in commercial banks in Trans Nzoia County, Kenya. The study was guided by Uncertainty Management Theory, Lewin’s Change Management and McKinsey 7-S Change Management Models. The study adopted an explanatory research design. Target population of the study consisted of 470 employees drawn from 14 commercial banks in Trans Nzoia County. A sample size of 216 of employee was arrived at and stratified simple random sampling used to categorize managers, supervisors/administrators and clerical tellers. Data was collected using the questionnaires. Validity and reliability of the study instrument were ascertained and results showed that the instrument was valid and reliable. Cronbach alpha coefficient was determined and yielded an alpha value of 0.770 which was considered reliable. Descriptive and inferential statistics were used to analyze the collected data. The results indicated that technological change (β=0.654, p=0.0) had statistically significant effect on employees performance in commercial banks. Therefore, the study concluded that changes in technology at the commercial banks had statistically significant effect on the employee performance in commercial banks in Trans Nzoia County. The study recommended that management of commercial banks embrace participatory leadership and communication strategies to enhance employees’ readiness for technological changes. Further, commercial banks management should strive to be a learning organization and promoting changing attitudes those technological changes. The findings of this study would be beneficial to the employees of commercial banks as they would be sensitized technological changes adopted by the commercial banks in Kenya. The findings of this study would also be invaluable to future researchers who would wish to explore further on how technological changes affect employee performance in commercial banks.

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I. Introduction
Moran and Brighton (2011) characterized change the management as the procedure of ceaselessly restoring direction of an organization, structure and abilities to serve the regularly changing needs of outer and inward clients. Most managers today would concur that change has turned into a consistent marvel, which must be taken care of and oversaw appropriately if an organization is to outlast. Changes in innovation, the political condition, workforce demographics, social values, global economy, information systems and marketplace all significantly affect the procedures, services and products created. The summit of these powers has brought about an external environment that is dynamic, eccentric, requesting and frequently wrecking to those organizations, which are ill-equipped or unfit to react (Burnes, 2004).

It is critical to emphasize that in forms of change management, new frameworks are presented, techniques and structures are changed, jobs might be appointed and reassigned, and staff rationalization could be affected. All these could have quick and critical impact on the workforce inside the organization and if not appropriately oversaw may prompt work attitude shortcomings including work disappointment (Thompson, Strickland and Gamble, 2010). In practice, it has been discovered that workers regularly react adversely to change because of expanded work stress and pressure frequently connected with the change procedure (Self and Schraeder, 2009; Jones et al., 2008). Further, studies have discovered that workers are additionally worried...
about the greatness of change and how it impacts on their activity (Bartunek et al., 2006). In this way, the degree of planning and the whole administration of a change procedure assume a significant role since it is a noteworthy employees’ concern (Korsgaard et al., 2002).

Change in organization is a consistent encounter that includes a ton of challenges which if not well managed can thwart the fulfillment of desired outcome (Mbaabu, 2013). Further, awareness and knowledge about a considerable key issues entailed in the management of such change is regularly lacking in those charged with its development. A fruitful change program guarantees that workers comprehend the requirement for change and can become tied up with the change program. During change, workers contemplate about how change will profit or potentially hurt them and along these lines they require stellar administration during change process (Jabri, 2017).

The capacity to oversee and adjust to management change is a fundamental capacity required in the working environment today (Felicetti, 2009). Management of change influences employee performance in pre and past change period. During the change procedure, the conduct of the workers is incredibly affected through enthusiastic reactions. At the point when the issue of progress is acquainted with the employees, they will react with fear. They frequently behave in resistant and defensive role. It is vital to note that workers do not view change in positive perspective. Change meddles with their normal duties and they are exposed to a deviation from what they are accustomed to doing (Chemjor, 2015).

Globally, various studies have been conducted on the relationship between change management and performance. A study conducted in US by Dicke (2007) on employee engagement and change management concluded that employees who are engaged during a change management initiative are likely to have increased “buy-in” and better performance. Amanda (2013) on change management in the public sector indicated that there is need to align change management strategies to the employee perception so as to achieve improved employee performance in Canadian public sector organizations. In Sweden, Gülêr (2010) on change Management a case of Systems Applications and Products implementation in a major company found that change management had great impact on employee performance. He further stated that change management process should include attention to human factors such as communication, motivation and participation.

In Romania, Liviu and Cristian (2015) focusing on change management as a competitive advantage for Romanian companies showed that while 88% of Romanian organizations developed strategies in order to implement changes, only 9% of their staffs are very satisfied and 36% are satisfied with the implementation results. Isa, Hin and Yunus (2012) in their study change management initiatives and job satisfaction among salespersons in Malaysian direct selling industry found that change management initiatives in Malaysia direct selling industry had significant effect on employee job satisfaction as a result of shared change vision, training and upline support. Khosa, Rehman, Asad, Bilal and Niaz Hussain (2015) on the impact of organizational change on the employee’s performance in the banking sector of Pakistan concluded that organizational change management has a positive significant impact on employee’s performance in banking sector.

In Ghana, Osei-Bonsu (2014) studied the impact of change management on job satisfaction of employees in Ghana’s banking sector and found that change management had positive impact on employees’ job satisfaction. In Egypt, Ahmed (2012) observed that the impact of change management on hotels’ employees resulted to psychological support and equality between the employees which had significant influence on employee performance. Kalima (2015) investigated strategic change management practices at the Malawi enterprise development fund and found out that change management at the Malawi enterprise development fund had profound effect on employee performance as a result of staff training and through promotions of concerned staff members. Companies in South Africa make change-related tension for their workers in two different ways; first, the degree of tension relies upon the effect the change has on the people own work. This implies that high tension is as a result of huge personal demand. Second, if change significantly affects the work unit and that change isn’t overseen well, as far as decency, this additionally will in general lead to encounters of individual strain. If change isn’t very much overseen it can result to high work turn over and low generation (Donald, 2005).

Regionally, Fetiya (2015) on change management and organization performance: pre- post case study at Federal Ministry of Health, Ethiopia found out that change management in Ethiopian Federal Ministry of Health has positive impact on employee performance due to introduction of Balanced Scorecard as part of performance management programme. Ndahiro, Shukla and Oduor (2015) found out that change management in Rwanda Revenue Authority had been planned and implemented well resulting to increase in employee performance due to training and development as well as employing modern technology. In Tanzania, Kilato (2014) focused on change management effect on organization performance of manufacturing industries in Tanzania a case of Tanzania Portland Cement Company in Dar es Salaam (TPCC) and revealed that lack of recognition to issues of change management to staff in Tanzania Portland Cement Company Ltd (TPCC) affected employee performance negatively. In Uganda, Aupal (2016) on change management practices and
performance of selected local governments in Eastern Uganda found there is relationship between change management practices and performance of selected Local Governments in Eastern Uganda.

Locally, different investigations have uncovered that change management has influence on performance of employees. Wanza and Nkuraru (2016) on impact of change management and performance of employee: An instance of University of Eldoret, Kenya discovered that Change management influences performance of employees in different measurements in the University of Eldoret. Management of change was conceptualized using culture structure, technology and leadership. Technological change has both negative and positive impact on performance of employees. Njuguna and Muathe (2016) conducted in-depth critical review on the management of change and performance of employees. They uncovered that all signs pointed that that change management factors such as communication, training, motivational commitment and participatory leadership are significantly and positively related to the performance of employee. Kinoti (2015) on impacts of change management of change on performance of employees in co-operative bank of Kenya reasoned that management of change enhances performance of employees, because of viable supervisory connections and work process impacts productivity.

An investigation by Wandera (2014) on financial institutions change management, a contextual analysis of Kenyan banks uncovered that change management impacts commitment and sense of belonging by workers to be progressively profitable. Nzuki (2012) looked to discover the impacts of structural change on performance of employees at the Kenya Electricity Generating Company singled out structural parameters, for example, work teams, job redesign, span of control and chain of command on employee performance on the organization. Discoveries of the exploration showed that adjustments in levels of leadership range of control, work organization prompted an improvement in worker performance.

Burnes (2009) observed that change management process is continually renewing an organization’s direction, structure and capabilities to serve the ever-changing needs of external and internal customers and improve organization performance (Moran and Brightman, 2005). Recent changes in economic, political and social transformations have forced banks in Kenya to emphasize on change management to achieve set goals and objectives. Commercial banks have undertaken change management which according to the management will bring confidence and growth in activities and offer satisfactory services to their customers. As a result banks have implemented Credit Risk Management, restructuring, regulatory and policy reforms, business process reengineering, development of alternative distribution channels such as e-banking, new roles, as well as managerial practices. The study did not however look at the effect of technological changes on employee performance. This study therefore sought to fill the existing gap by determining how change management affects performance of employees.

Previous studies on change have paid little attention on change management and employee performance. Khatoon and Farooq (2016) explored the relationship between the aspects of organizational change and organizational performance while Kenneth (2013) focused on organizational cultural change and its impacts on performance in public institution: the case of Tanzania Public Services College. A study conducted by Khosa et al. (2015) on the impact of organizational change on the employee’s performance in the banking sector of Pakistan revealed that organizational change has a positive significant impact on employee’s performance in banking sector of Pakistan. The two studies focused on organizational change and organizational performance and not employee performance.

As commercial banks expect more changes in the future, the effect of these changes on employee performance has attracted attention of various researchers and scholars locally and internationally. However, the results have mixed outcome on the effect of change management on employee performance. A qualitative study carried out by Amanda (2013) in Canada to find out change management in the public sector indicated that change management has positive effect on service delivery in public sector. Osei-Bonsu (2014) carried out descriptive quantitative research design on the impact of change management on job satisfaction of employees in Ghana’s banking sector and found that change had a positive impact on employees’ job satisfaction. In Kenya, Njuguna and Muathe (2016) on critical review of literature on change management on employees’ performance conceptualized change management as participatory leadership, motivational commitment, training and communication are positively and significantly correlated to the employee’s performance.

However, longitudinal research carried out by Kilato (2013) on change management effects on organization performance of manufacturing industries in Tanzania found out that change management has negative effects on the performance of an organization resulting to loss of valued employees, productivity loss, active and passive resistance. In Kenya, Wanza and Nkuraru (2016) did a study on influence of change management on employee performance: a case of University of Eldoret revealed that change management was measured in terms leadership, technology, structure and culture. The results revealed that technology had both negative and positive effect on employee performance. This study was done in a University set up and not banks. This study sought to find out the effect of changes in technological changes on employee performance on banks in Trans-Nzioa County.
STATEMENT OF THE PROBLEM

Majority of commercial banks in Kenya have undergone numerous changes in response to customer expectations, globalization, technological development, and competition and regulation requirements (Njoroge, 2014). This has seen commercial banks retrenching aged employees to reduce their workforce, merging so as to strengthen their visibility in the market, introduction of mobile banking, ATM and agency banking so as to reduce the transaction costs (Njoroge, 2014). Despite this change, some commercial banks have failed to realize expected employee performance as some of the employees feel threatened by these changes due to loss of job, status quo, security and change in work schedule (Cyttoun, 2016).

Less attention and research has been conducted on the effects of change management on employee performance of commercial banks in Trans Nzoia County. Wanza and Nkuraru (2016) investigated the Influence of change management on employee performance a case of University of Eldoret, in Eldoret town while Omitto (2013) evaluated employee perception of change management practices at Kenya Commercial Bank Nairobi County. Muia (2015) focused change management challenges affecting the performance of employees: a case study of Kenya Airports Authority, Nairobi while Odenyo and Kerongob (2014) focused on the challenges of dealing with strategic change management at Taifa Cables and Retreads Limited in Mombasa City. Therefore, there was need to study the effect of change management of employee performance of commercial banks in Trans Nzoia County, to fill existing theoretical, conceptual and contextual gaps.

II. Theoretical Framework

Uncertainty Management Theory

Uncertainty Management Theory (UMT) was developed by Brashers (2001), an Associate Professor of Speech Communication at the University of Illinois at Urbana Champaign to address the concept of uncertainty management. Organizational change and pressure of irregularity results to vulnerability and dangers to workers’ prosperity (Terry et al., 2001). At the point when new technique, another item or new structure is initiated employees are regularly oppressed with new jobs and duties. The subject of whether this new job will fit the present one can cause job strain, and is a noteworthy cause of worker's nervousness, stress and vulnerability (Carnall, 2003). A basic component of the passionate state with change is a feeling of loss. In the underlying stages, when little is thought about the change activity, individuals have restricted learning of the proclaimed advantages. Once in a while the main thing that is sure is the information of intermittence. In this way workers just realize what they will lose, not what they will gain (Buller, 1988). Because of these reasons employees lead to fear of consequence change. Dubrin and Ireland (1993) noted that resistance to change is attributed to employee’s fear of poor outcomes, the unknown, and realization of pitfalls with the change.

Van den Bos (2001) serves as the theoretical foundation for positive change orientation. Reductions in uncertainty are associated with more positive employee perceptions and behaviors (Lind & Van den Bos, 2002) and improve employee reactions and change-related outcomes (Rafferty & Griffin, 2006). From these indicators of the latent change orientation construct is change self-efficacy (Jimmiesion, Terry, &Cullan, 2004). Change self-efficacy. Employees with high levels of change-related self-efficacy believe they have the ability to deal with change-related demands and that they can function effectively during the change process (Jimmiesionet et al., 2004). Ozer and Bandura explicate a specific relationship between self-efficacy and threat appraisal when noting that threat is not a fixed property of situation events rather, threat is a relational property concerning the match between perceived coping capabilities and potentially hurtful aspects of the environment. People who believe they can exercise control over potential threats do not conjure up fearful cognitions, and, hence, are not disturbed by them.

Lewin’s Change Management Model

The planned approach to organizational change emerged through the work of Kurt Lewin in 1951 relating to group decision-making, implementation and social change. For Lewin, a major concern was the issue of group conduct. He observed that the behaviour of individuals differed from group to group. Thus, in an attempt to understand the uniformity of some groups’ behaviour against others, he was able to argue that people may come to a group with very different reasons, but if they share a common objective, they are more likely to act together to achieve it. He maintained that there was a need to change group conduct so that it would not revert to the old level within a short time. In support of Lewin’s theory, Burnes (2004), suggested that ‘only by resolving social conflict, whether it be religious, racial, marital or industrial, could the human condition be improved’. Hence, Lewin’s theories were premised on the fact that planned change, through learning, would enable individuals to understand and reframe their views on how to resolve social conflict. From Lewin’s work resulted a model that views change as a three-step procedure. This three-step model is associated with intentional change in the organisation and change initiators may choose to use a range of strategies to implement
the intended change (Branch 2002). According to Harper (2001) the three steps are unfreezing, initiating the change (moving) and refreezing.

To expand, in the unfreezing step, workers deviate from the manner in which things have been undertaken. In firms, for viable change to happen, employees must grasp new work practices with a feeling of criticalness. So as to accomplish this, workers are urged or are compelled to remove themselves from safe zone that they were familiar with so they adapt to new work practices, regardless of whether there is vulnerability in regards to their future. Also, Harper (2001) contended that organizations that are executing change the management ought to urge workers to comply with an arrangement that takes into consideration the 'sloughing of yesterday' since 'it will power thinking and activity ... profit for new things ... make an eagerness to act'. In any case, this procedure has downsides, similar to tension and dangers related with vulnerability that can prompt unconstructive as opposed to useful conduct with respect to workers. These standards of conduct have been noted by Argyris (1993) who saw that employees will in general become on edge while performing new assignments, not knowing the results of the change if the change isn’t yet started.

In stage two (starting the change), workers take part in exercises that distinguish and actualize better approaches for getting things done or participate in new exercises so as to achieve change. In this regard, Harper (2001) recommended that for compelling change to occur, the management must guarantee that every single applicable stakeholders are allowed the chance to be occupied with basic leadership and critical thinking in a community oriented way. While the last was prevalently the job of the executives, the present reasoning is that workers who turned out to be included are well on the way to acknowledge change and become focused on making change a triumph. A superior comprehension of the requirements and advantages of progress may result in almost no opposition with respect to change beneficiaries. In the third and last advance (refreezing), the accentuation is on the fortifying of new procedures and assignments in the organization by the business. For this progression to be fruitful, workers must be recognized, as remuneration is a significant thought. Reward is essential for conduct adjustment. Workers ought to get suitable acknowledgment for changes in conduct in the event that they grasp or acknowledge the change. In this occasion, compensate serves to perceive that the new conduct is obeyed and keeps past conduct from reoccurring (Harper 2001).

In this way, as indicated by Branch (2002), Lewin's model of organizational change can be cultivated in three different ways: Changing the people who work in the association (their aptitudes, qualities, mentalities, and in the long run conduct) – with an eye to instrumental authoritative change; changing different hierarchical structures and frameworks – compensate frameworks, announcing connections, work plans; or Directly changing the organizational atmosphere or relational style – how frequently individuals are with one another, how struggle is overseen, how choices are made.

Lewin's model centered around the reliance and requesting factors inside a relationship. With regards to the association, this implied there was a procedure of reliance among the various units and subunits inside the organization. Additionally, the degree of reliance depended on the significance of the different units inside the organization. In any case, a noteworthy limit of this model is that it depends on the suspicion that organization work under stable conditions and can move starting with one stable state then onto the next in a sequential way, which means this model probably won't be valuable in more tumultuous and turbulent business situations.

**McKinsey 7-S Change Management Model**

While a few models of organizational effectiveness go all through design, one that has continued is the McKinsey 7-S system. Created in the mid-1980s by Tom Peters and Robert Waterman, two specialists working at the McKinsey and Company counseling firm, the fundamental reason of the model is that there are seven inward parts of an organization that should be adjusted in the event that it is to be effective in the management of change. The McKinsey 7-S model offers an all-encompassing way to deal with deal with organization. It has 7 factors that work as aggregate of change agent in particular; skills, staff, style, systems, structure, strategy and shared values. This model likewise offers four essential advantages; viable strategy to analyze and comprehend an organization, gives direction in organizational change, joins balanced and passionate segments lastly all parts are basic and must be tended to in a brought together way.

In McKinsey model, the seven territories of organization are separated into the 'delicate' and 'hard' regions. Procedure, structure and frameworks are hard components that are a lot simpler to distinguish and oversee when contrasted with delicate components. Then again, delicate regions, albeit harder to oversee, are the establishment of the association and are bound to make the continued upper hand. McKinsey 7-S Change Management model does not abandon its points of interest which incorporate successful technique to analyze and comprehend an association, giving direction, joining levelheaded and enthusiastic parts. All parts are indispensable and must be approached in a unified perspective.

Utilizing these model methods when one part changes, all parts change, since all components are interrelated, contrasts are overlooked and the model is intricate (Hayes, 2014). The model depends on the theory that, for an organization to perform well, these seven components should be adjusted and commonly
stressing. In this way, the model can be utilized to help distinguish what should be realigned to improve performance, or to look after arrangement (and performance) during different sorts of change. Whatever the sort of change rebuilding, new procedures, organizational merger, change of leadership and new systems, etc the model can be utilized to see how the organizational components are interrelated, thus guarantee that the more extensive effect of changes made in one area is contemplated.

**EMPIRICAL LITERATURE REVIEW**

A study by Osei-Bonsu (2014) was carried out to assess the extent of employee involvement in the change management processes, assess the impact of change management on employee job satisfaction and thirdly, attitude of employees after organizational change. A descriptive survey research design was employed to administer a self-designed questionnaire consisting of open and closed-ended items to one hundred and forty respondents using simple random sampling. Descriptive statistics was used to analyze the data. The main findings indicated that employees’ involvement in the process was limited to provision of adequate information. It was also revealed that generally, the change had a positive impact on employees’ job satisfaction. This study sought to find out the effect of technological changes on employee performance in commercial banks in Trans-Nzioa County.

A study by Kamugisha (2013) on the effects of change management in an organization; a case study of National University of Rwanda (NUR) sought to find out the effects of change management in National University of Rwanda. This study found that there are changes in the management of faculties. There are also changes in the requirements and performance of the staff, where administrative staffs are now to have at least a bachelor’s degree in relation to the positions they occupy. These changes were found to affect the organization human resources in terms of downsizing, outsourcing and recruiting more staff to fill some new posts. Technological changes in terms of enhanced internet bandwidth in the university have considerably had a significant impact on the operations of the university both in academic and administration.

Al-Jaradat, Nagresh, Al-Shegran and Jadellah (2013) conducted a study that aimed to identify the impact of change management on employee’s performance, through a case study of university libraries in Jordan. Three areas of change were addressed, the change in organizational structure, technology change and change in individuals. The researcher designed a questionnaire for the purpose of collecting the raw data, and used the random sample in data collection, 220 questionnaires were distributed on the members of the sample. The study found that change in the organizational structure is not flexible, and therefore this organizational structure is not appropriate for the business requirements within the University Library, leading to overlapping powers and responsibilities. The study found a positive relationship between the areas of change (organizational structure, technology, individuals) and the performance of workers at a level α = 0.05 with 0.589, 0.648, 0.711 correlation coefficient respectively. The study recommended that in order to ensure the success of the change program, it is appropriate to focus on organizational structure, human relations and technology and there must be a balance between these aspects to improve the performance of employees and this in turn reflects the quality of productivity. This study was conducted on university libraries in Jordan. The current study was conducted in Commercial Banks in Trans-Nzioa County.

Machuki and Aosa (2011) inspected the issue of the presence of limit impacts in the connection between innovation change and representative execution utilizing another econometric system that takes into consideration fitting estimation techniques and derivation. They further clarified that adjustments in innovation and physical setting to the manners in which change can be cultivated essentially influence the degree of representative presentation. In their paper titled innovation change and representative execution the Cameron and Green, (2005) contended that the degrees of conglomeration of mechanical advancement by association and country decide its exhibition and improvement. This is identified with the board and control of inward and frameworks and its reaction to outside framework. Huge improvement in yield, efficiency and development are accomplished when they utilize new innovation. Expanded efficiency and general monetary development in most created countries have been ascribed to expanding innovation and mechanical advancement.

A study by Dauda and Akingbade (2011) examined how employee relation could be employed for technological change management. It also sought to determine effective method of using technological innovation for improved performance in the Nigerian manufacturing industry. Question based on the hypotheses were formulated and 1256 questionnaires were distributed to select 30 manufacturing industry in beverages, textile, steel, cement and chemical industry in Nigeria. Findings revealed that employee relations do not have significant relationship with technological change. An empirical study by Abbas, Muzaffar, Mahmood, Ramzan & Rizvi (2014) examined the effects of information technology on performance of Allied Bank employees in Pakistan. The data was gathered through unstructured interviews. It was figured out that technology greatly escalates the productivity of employees along with time saving. It greatly affects the workload on employees and ensures control over mistakes and frauds. Quick access to information and ease of use enables the bank employees to deliver quality service. The study recommended that organizations which implement new
technology should provide proper training to its employees to increase their performance.

Kute and Upadhyay (2014) examined the relationship between technological changes and its impact on employee performance in commercial printing industry. The study found that technological changes affect employee’s performance in various ways like redundancy, employee turnover and the level of motivation at work. It was noted that technological changes affected skills and performance of the employees in the commercial printing industry. It is worth studying whether technological changes affect performance of employees in universities.

An exact examination by Abbas, Muzaffar, Mahmood, Ramzan and Rizvi (2014) inspected the impacts of data innovation on execution of Allied Bank representatives in Pakistan. The information was accumulated through unstructured meetings. It was made sense of that innovation enormously heightens the efficiency of workers alongside efficient. It incredibly influences the outstanding task at hand on workers and guarantees power over missteps and fakes. Snappy access to data and convenience empowers the bank representatives to convey quality administration. The investigation prescribed that associations which execute new innovation ought to give appropriate preparing to its workers to build their presentation.

Kute and Upadhyay (2014) inspected the connection between innovative changes and its effect on representative exhibition in business printing industry. Unmistakable research, an organized poll has been utilized to gather information on chose factors. The 200 respondents were arbitrarily chosen from chosen business printing industry in Pune District so as to apply the discoveries to their general execution. The examination found that mechanical changes influence worker’s exhibition in different ways like repetition, representative turnover and the degree of inspiration at work. It was noticed that mechanical changes influenced abilities and execution of the representatives in the business printing industry. It merits considering whether mechanical changes influence execution of representatives in Universities.

### III. Research Methodology

This study employed an explanatory research design. This layout focuses on elaborating on specific parts of your research. The researcher begins with a broad concept and then uses research as a tool to guide him or her to the themes that will be discussed in the near future. Explanatory study is a method for determining why something occurs. More in-depth inquiries can be launched using this form of study. Explanatory research can help you figure out what’s causing a problem and fill in the gaps in your knowledge (Creswell, 2013). The study was conducted in 14 commercial banks located in Trans Nzoia County. The unit of analysis was the 470 employees of commercial banks comprising of managers, supervisors/administrators, clerics/tellers. Managers included branch managers, human resource managers, credit managers and operational managers. Supervisors/administrators comprised of supervisors and administrator in different sections while clerics/tellers comprised of tellers, clerks, receptionist and credit officers. These three categories of employees formed the study sampling frame. The inclusion of all employees in this study gave the study opportunities to have data collected from management as well as regular employees (see Table 1).

<table>
<thead>
<tr>
<th>Table 1: Target Population</th>
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<tbody>
<tr>
<td>Name of the Bank</td>
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</tr>
<tr>
<td>Cooperative Bank</td>
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<tr>
<td>National Bank of Kenya Ltd</td>
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<tr>
<td>DTB – Diamond Trust Bank</td>
</tr>
<tr>
<td>Postbank</td>
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<tr>
<td>Eco Bank Kenya Ltd</td>
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<tr>
<td>Family Bank</td>
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<tr>
<td>Sipaid Bank</td>
</tr>
<tr>
<td>Equity Bank limited</td>
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<tr>
<td>Kenya Commercial Bank</td>
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<tr>
<td>Standard Chartered Bank limited</td>
</tr>
<tr>
<td>Barclays Bank Limited</td>
</tr>
<tr>
<td>Oriental Bank</td>
</tr>
<tr>
<td>Bank of Africa</td>
</tr>
<tr>
<td>I&amp;M Bank</td>
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<tr>
<td><strong>TOTAL</strong></td>
</tr>
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*Source: Compilation from Bank Operation Managers, 2020*

Stratified sampling was used to categorise the banks and the respondents. The respondents were then selected using simple random sampling technique from each stratum to form study sample. The sampling frame consisted of managers, supervisors/administrators and clerics/tellers. The sample size was determined from the total number of 470 members using Yamane (1967) formulae as shown below, and proportionate sample was used.
Where

\[
n = \frac{470}{1 + \frac{N(e)^2}{2}} = 216.092; \text{ approximately } = 216 \text{ respondent}
\]

Research Assistants helped in the administration of the questionnaires. The pilot study which was conducted in the Kenya Commercial in Bungoma town constituted 10% of the sample of 216 respondents (22 respondents) who were obtained from the target population based on Cooper and Schilder (2011) who recommended that 5%-10% of the section targeted comprise the pilot test for assisting in the establishment of the reliability of the questionnaire. These 22 respondents were not used in the final analysis. The results of the pilot were synchronized to and helped in the review process of the tools. The researcher used expert judgment to know the content of the research tools. The researcher used expert judgment to determine the content validity of the research instruments. The determination of content validity was primarily judgmental and intuitive. The researcher also used a panel of persons who judged how well the instrument met the standard. The researcher used the suggestions from the supervisors to improve the clarity of the items in the questionnaires for use in this study. Reliability results gave an overall coefficient of 0.770 which was above the threshold of 0.7 thus, the tools were reliable for data collection.

The data collected was analyzed using Statistical Package for Social Sciences (SPSS, version 22) software. The analysis used both inferential and descriptive statistics. Means and standard deviations were computed for all variables (independent and dependent variables). As inferential statistics, correlation and multiple regression analyses were utilized. The hypotheses were tested using the beta with a confidence level of 95 percent (=0.05). The researchers considered confidentiality, privacy and informed consent of the respondents. Only relevant details that helped in answering the research questions were included. The researcher owed loyalty to the informants and honoured promises associated with the research.

IV. Findings And Discussions

Descriptive Statistics

Response Rate

Two hundred and sixteen (216) questionnaires were distributed to respondents, one hundred and eighty five (185) were received which represented 85.6 % response rate and thirty one (31) questionnaires were not received this accounted for 14.4 % of the total questionnaires distributed. Mugenda and Mugenda (2004) assert that a response rate of more than 50% is adequate for analysis. Babbie (2004) also asserts that a 60% return rate is good and a 70% return rate is very good. Information from the questionnaires was used for analysis. The drop and pick method was used in administering questionnaires and this method partly contributed to the high response rate achieved in this study and also the higher response rate was due to assurance of anonymity and the respondents were not required to disclose traceable identities.

Table 2: Descriptive Information on Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>70</td>
<td>37.8</td>
</tr>
<tr>
<td>Male</td>
<td>115</td>
<td>62.2</td>
</tr>
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</table>

Level of Education

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>23</td>
<td>12.4</td>
</tr>
<tr>
<td>Bachelors</td>
<td>121</td>
<td>65.4</td>
</tr>
<tr>
<td>Masters</td>
<td>38</td>
<td>19.6</td>
</tr>
<tr>
<td>PhD</td>
<td>3</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29 years</td>
<td>35</td>
<td>18.9</td>
</tr>
<tr>
<td>30-39 years</td>
<td>118</td>
<td>63.8</td>
</tr>
<tr>
<td>40-49 years</td>
<td>19</td>
<td>10.3</td>
</tr>
<tr>
<td>Above 50 years</td>
<td>13</td>
<td>7</td>
</tr>
</tbody>
</table>

Tenure

<table>
<thead>
<tr>
<th>Tenure Group</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a year</td>
<td>7</td>
<td>3.8</td>
</tr>
<tr>
<td>From 1 to 5 years</td>
<td>93</td>
<td>50.3</td>
</tr>
<tr>
<td>From 6 to 10 years</td>
<td>80</td>
<td>43.2</td>
</tr>
</tbody>
</table>
Results in Table 2 indicate that 115(62.2%) of the total respondents were male while 70(37.8%) of the total respondents were female. It is therefore observed that among the commercial banks analyzed, it seems to be dominated by males. The study also revealed 35(18.9%) indicated their ages ranged between 20-29 bracket, 118(63.8%) respondents belonged to 30-39 age bracket, 19(10.3%) indicated their age to be between 40 and 49 years while the last 13(7.0%) respondents belonged to over 50 age brackets. The statistics show a majority of respondents being in age bracket 30-39 while the smallest respondents were over 50 years of age. Age is an important factor in a research because; mature people are bound to respond more responsibly and from an informed point of view as opposed to young respondents.

The results also revealed that 23(12.4.0%) of the total respondents possessed diploma, 121(65.4%) of the total respondents held a bachelor’s degree while 38(19.6%) had a master’s degree. Minority of the respondents (1.6%, 3) were found to have various doctorate degrees. A majority of respondents were degree holders and only a small percentage possessed a diploma. From the results it is evident that literacy levels are high which was recommendable in administering questionnaire on employee performance. This therefore made it possible for the researcher to obtain relevant responses on the topic under study.

Regarding duration (years) of the respondents in the institution, 7(3.8%) of the total respondents had worked with the bank for less than a year, 93(50.3%) of the total respondents had worked for between 1-5 years, 80(43.7%) respondents had worked for between 6-10 years while 5(2.7 %) respondents had worked for over 10 years. Majority of the respondents had worked for 1-10 years with the bank. The long tenure carries with it experience and better information in various issues. This therefore assisted the researcher obtain responses from a people with a wealth of experience on organizational change.

### Descriptive Results for Technological Change

**Table 3: Descriptive Results for Technological Change**

<table>
<thead>
<tr>
<th>No</th>
<th>Technology change</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>SDV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technological change has led to improve in the quality of work</td>
<td>2.2%</td>
<td>(4)</td>
<td>(4)</td>
<td>(6)</td>
<td>(48)</td>
<td>(123)</td>
<td>4.52</td>
</tr>
<tr>
<td>2</td>
<td>Technological change has resulted to increase in the efficiency and productivity of the employees in the company</td>
<td>2.2%</td>
<td>(4)</td>
<td>(4)</td>
<td>(8)</td>
<td>(53)</td>
<td>(116)</td>
<td>4.48</td>
</tr>
<tr>
<td>3</td>
<td>Technological change has results to reduction in the total errors</td>
<td>1.1%</td>
<td>(2)</td>
<td>(6)</td>
<td>(10)</td>
<td>(47)</td>
<td>(120)</td>
<td>4.50</td>
</tr>
<tr>
<td>4</td>
<td>There has been increase in the job performance after adopting new technologies</td>
<td>1.1%</td>
<td>(2)</td>
<td>(6)</td>
<td>(16)</td>
<td>(40)</td>
<td>(121)</td>
<td>4.47</td>
</tr>
<tr>
<td>5</td>
<td>I am able to accomplish work tasks quickly due to new technologies</td>
<td>4.9%</td>
<td>(9)</td>
<td>(13)</td>
<td>(22)</td>
<td>(45)</td>
<td>(94)</td>
<td>4.12</td>
</tr>
<tr>
<td>6</td>
<td>I am able to control the work and process more efficiently due new technologies</td>
<td>1.1%</td>
<td>(2)</td>
<td>(13)</td>
<td>(19)</td>
<td>(58)</td>
<td>(53)</td>
<td>4.01</td>
</tr>
</tbody>
</table>

**Overall Mean**: 4.35, SDV: 0.91

Technological change is one of the crucial factors that affects employee performance. To measure technological change, a set of six statements were formulated. The respondents were asked to indicate the extent of agreement with each of the technological change statements from strongly disagree to strongly agree. The relevant results are presented in Table 3. From Table 4.5, majority of the respondents strongly agreed that Technological change has led to improve in the quality of work as shown by 123(66.5%) of the respondents while 48 (25.9%) agreed with a mean of 4.52 and standard deviation of 0.84 indicating some deviation from the mean. The results also revealed that 53(28.6 %) and 116(62.7%) of the respondents agreed and strongly agreed respectively that technological change has resulted to increase in the efficiency and productivity of the employees in the company. A mean of 4.48 and standard deviation of 0.85 indicates that there is some deviation from the mean. In regard to errors, 120(64.9%) of the respondents strongly agreed that technological change has results to reduction in the total errors while 47(25.4%) agreed with a mean of 4.50 and standard deviation of 0.83.

There has been increase in the job performance after adopting new technologies as revealed by 40(21.6%) of the respondents who agreed and additional 121(65.4%) who strongly agree with a mean of 4.47 and standard deviation of 0.87. This implies that there is some deviation from the mean. The results also revealed that 45(24.3%) and 94(50.8%) of the respondents agreed and strongly agree respectively that they are able to accomplish work tasks quickly due to new technologies with a mean of 4.12 and standard deviation of 1.18. Lastly, 98(53%) of the respondents agreed that they are able to control the work and process more efficiently due new technologies and additional 53(28.6%) strongly agreed with a mean of 4.01 and standard deviation of 0.88 which suggests that there is some deviation from mean.
Employee Performance

Table 4: Descriptive Results for Employee Performance

<table>
<thead>
<tr>
<th>No</th>
<th>Employee Performance</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>SDV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Employees are efficient and effective in service delivery</td>
<td>0.5%</td>
<td>1.1%</td>
<td>1.6%</td>
<td>36.2%</td>
<td>60.5%</td>
<td>4.55</td>
<td>0.64</td>
</tr>
<tr>
<td>2</td>
<td>Employees are able to adjust to changing priorities at workplace</td>
<td>1.6%</td>
<td>8.6%</td>
<td>5.4%</td>
<td>31.4%</td>
<td>53%</td>
<td>4.25</td>
<td>1.01</td>
</tr>
<tr>
<td>3</td>
<td>Employees are able to meet their set targets at workplace</td>
<td>3.8%</td>
<td>7.6%</td>
<td>10.8%</td>
<td>47%</td>
<td>30.8%</td>
<td>3.94</td>
<td>1.03</td>
</tr>
<tr>
<td>4</td>
<td>Employee are proactive in service delivery</td>
<td>2.2%</td>
<td>13.5%</td>
<td>3.2%</td>
<td>29.2%</td>
<td>51.9%</td>
<td>4.15</td>
<td>1.13</td>
</tr>
<tr>
<td>5</td>
<td>Employees are able to solve problem at work independently</td>
<td>10.8%</td>
<td>14.1%</td>
<td>16.2%</td>
<td>28.6%</td>
<td>30.3%</td>
<td>3.75</td>
<td>1.43</td>
</tr>
<tr>
<td>6</td>
<td>Employees are able to meet all their deadline at work place</td>
<td>3.2%</td>
<td>5.4%</td>
<td>8.6%</td>
<td>29.2%</td>
<td>53.5%</td>
<td>4.24</td>
<td>1.04</td>
</tr>
</tbody>
</table>

Overall Mean 4.15 1.05

Employee performance in this study was used as dependent variable. It was measured using task completion and quality of output. The pertinent results are presented in Table 4.8. From Table 4.8, majority of the respondents (60.5%) strongly agreed that employees are efficient and effective in service delivery due to change management and additional 67(36.2%) agreed with a mean of 4.55 and standard deviation of 0.64. This implies that there is some deviation from the mean. There results further revealed that 58 (31.4%) and 98(53%) of the respondents agreed and strongly agree respectively that employees are able to adjust to changing priorities at workplace. A mean of 4.25 and standard deviation of 1.01 implies that there is deviation from the mean.

In regard to meeting targets, 87(47%) of the sampled respondents agreed that employees are able to meet their set targets at workplace and additional 57(30.8%) strongly agreed with a mean of 3.94 and standard deviation of 1.03. The results also revealed that 54(29.2%) and 96(51.9%) of the sampled respondents agreed and strongly agree respectively that employees in their organization are proactive in service delivery due to change management.

A mean of 4.15 and standard deviation of 1.13 implies that there is some deviation from the mean. As far as solving problem is concerned, 53(28.6%) of the sampled respondents agreed that they are able to solve problem at work independently and additional 56(30.3%) strongly agreed with a mean of 3.75 and standard deviation of 1.43. Lastly, majority of the respondents confirmed that employees are able to meet all their deadlines at work place as indicated by a mean of 4.24 and standard deviation of 1.04. This was further supported by 99(53.5%) of the respondents who strongly agreed and 54(29.2%) who agreed that employees are able to meet all their deadlines at work place.

Assumptions of Linear Regression

The research tested statistical assumptions, such as the regression assumption as well as the statistic employed. Normality, linearity, independence, homogeneity, and collinearity were among the tests performed before carrying out regression analyses.

Inferential Statistics

The objective of the study was to examine the effect of change in technology on performance of employees in commercial banks in Trans Nzoia County. The objective sought to answer the hypothesis which posits: $H_0$: There is no statistically significant effect of technological change on performance of employees in Commercial banks in Trans Nzoia County. This was accomplished by use of Pearson correlation coefficient ($R$) and unstandardized coefficient ($\beta$) and standardized coefficient (beta). A simple linear regression was carried by regressing the mean of technological change management against the mean of employee performance of commercial banks in Trans Nzoia County.
Table 4.12: Simple Regression Analysis Results

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.844*</td>
<td>0.712</td>
<td>0.702</td>
<td>0.34539</td>
<td>0.712</td>
<td>73.193</td>
<td>6</td>
<td>178</td>
<td>0.000</td>
</tr>
</tbody>
</table>

### ANOVA

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>52.389</td>
<td>6</td>
<td>8.731</td>
<td>73.193</td>
</tr>
<tr>
<td>Residual</td>
<td>21.234</td>
<td>178</td>
<td>0.119</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>73.623</td>
<td>184</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Employee performance
b. Predictors: (Constant); Downsizing

development of analytical model shown below for predicting employee performance from Technology
change is stated in the form of:

Employee performance = 1.512 + 0.654 Technological Change

From the results, technological change had significant positive effect on employee performance with
P<0.05 and it significantly accounted 71.2% variance in employee performance of the commercial banks in
Trans Nzoia County. Therefore, the research hypothesis was therefore failed to be accepted and it was
determined that technological change had significant effect on performance of employees in Commercial banks
in Trans Nzoia County.

These findings compare favorably with Kute and Upadhyay (2014) who found out that technological
changes affected positively the skills and performance of the employees in the commercial printing industry.
Machuki and Aosa (2011) explained that changes in technology and physical setting to the ways change can be
accomplished significantly affect the level of employee performance. Wanza and Nkuraru (2016) discovered
that management of change was conceptualized using culture structure, technology and leadership.
Technological change has both negative and positive impact on performance of employees. Finally, a significant
relationship is indicated between profitability and the rate at which banks implement technological change.
V. Conclusions

The study examined the effect of technological change management and concluded that the management of technological change had positive effects on the performance of employees in commercial banks in Trans Nzoia County. Established financial institutions in Kenya had been undertaken key technological changes in the work of cybercrimes and financial fraud which had resulted to some of the financial institutions collapsing. Therefore, improvement in the management of technological change such as mobile banking, mobile money transfer, use of ATMs, internet banking, service automation, marketing automation, real-time gross settlement (RTGS), block chain technology and social network platforms would result to increase in employee performance.

VI. Recommendations

No financial institution is immune from technological change due to globalization, hence, the need to satisfy customers and remain competitive in the market. However, employee resistance may result to commercial banks fail to realize these benefits. Therefore, the study recommended that commercial banks managers should examine their current system before embarking on new technological change. In this case, employees should be consulted from time to time and the new system should be built around the employees so as to increase their support toward technological change. The study also recommended that the management should adopt better technological change strategy to enable the employee shift seamlessly.

Acknowledgement

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