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**TECHNOLOGICAL CHANGE MANAGEMENT AND
PERFORMANCE OF EMPLOYEES OF THE
PARLIAMENTARY SERVICE COMMISSION IN KENYA**
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TECHNOLOGICAL CHANGE MANAGEMENT AND PERFORMANCE OF EMPLOYEES OF THE PARLIAMENTARY SERVICE COMMISSION IN KENYA

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Abstract

Purpose: the purpose of the study was to investigate the effect of Technological Change Management on employee performance Public Sector Organizations in Kenya; Case of Parliamentary Service Commission (PARLSCOM).

Methodology: A descriptive research design was employed to describe the performance of employees in PSC after changes in organizational technologies. The target population was all the 914 employees of PARLSCOM on permanent and pensionable terms. The study used stratified and simple random sampling techniques to draw a sample of 91 employees from the target study population. Self-administered questionnaire and interview guides were used to collect primary. Secondary data was obtained from PARLSCOM's annual reports, government publications and earlier research. Data was analyzed using descriptive and inferential statistics. Descriptive statistics was used to summarize data while inferential statistics, specifically multiple linear regression was used to test hypotheses. The analysis was done using Microsoft Excel 2013 Analysis ToolPak.

Findings: The study found out that technological change management was significant in affecting the performance of employees of Parliamentary Service Commission in Kenya.

Unique Contribution to Policy: Managers should invest in technology through automation of their functions as much as possible. Human resource managers need to implement policies on training and development for employees to enhance knowledge and skills in the emerging technologies. They should also ensure that their employees are involved in deciding which technologies to be adopted and how they are managed.

Keywords: *Technological, organizational change management, employee performance*

1.0 INTRODUCTION

1.1 Background of the Study

In a study conducted in USA on elements that contribute most to organizational performance. By comparing federal employees from different agencies to determine the elements that contribute most to organizational performance in the public sector, which also compared the results to private-sector benchmarks. The study found that, the US federal government came after the private sector in a number of important organizational-performance measures, particularly in fostering employee engagement, talent management, and accountability

Antonelli (2012) defined Technological Change as the invention of technologies (including processes) and their commercialization via research and development (producing emerging technologies), the continual improvement of technologies (in which they often become less expensive), and the diffusion of technologies throughout industry. According to Dauda and Akingbade (2011) the state of technology in any organization has a significant influence on the quality and quantity of production of its goods or services. But despite this, technology is prone to constant change which organizations have to monitor, manage and cope with.

Madan, Jasleen and Bajwa (2016) in their study in India found that employees are the main component of an organization without which accomplishment of objectives is rarely possible. The study further found that technological change management influences the performance level of employees. One of the main challenges facing implementation of result-based management in Tanzanian public sector is declining employee performance (Sulle, 2011). Public sector reform still remains a necessary and on-going policy objective for many developing countries.

Dauda and Akingbade (2011) noted that for organizations to compete effectively and be profitable; their employees must be trained and involved in the management of technological change for organizational survival. But most organization tends to undermine the contribution of employee in managing technological change, the outcome of which are low profitability and performance. Imran, Maqbool and Shafique (2014) observed that technological advancement improves employee performance through enhanced motivation and training of employees. Technological advances have the ability to impact how employees go about their daily lives. This includes how they complete tasks around the home and at work.

1.1.1 Parliamentary Service Commission

The Parliamentary Service Commission (PSC) was established through an Act of Parliament in the year 2000. The mandate of the Commission is to facilitate the members of parliament to efficiently and effectively perform their roles of legislation, oversight, budget making and representation of the people of Kenya. The new constitutional dispensation had far reaching implications on the leadership, structure, roles and functions of Parliament. This entailed availing all the infrastructure including, offices and other amenities required for the two Houses of Parliament in time for the new Parliament (Republic of Kenya, Constitution, 2010). The study investigated the effect of management of these changes on performance of employees.

1.2 Problem Statement

Declining employee performance is one of most widespread problems facing public sector organizations and a major cause of poor performance of the public sector organizations when compared to their private counterparts (Shah, Ali, Najabat & Zulfiqar, 2015). Public sector reforms have been advocated by scholars as a necessary remedy for poor employee performance for many developing countries.

The new constitutional dispensation had far reaching changes in the commission's technologies aimed at improving service delivery (Republic of Kenya, National Assembly 2010). However previous scholarly studies have not focused on this area especially the relationship between the management of these changes and performance of employees. This is the gap in scholarly literature that the study sought to fill.

1.3 Research Objective

The objective of this study was to determine the effect of Technological Change Management on Employee Performance of the Parliamentary Service Commission of Kenya

1.4 Study Hypotheses

Based on the above research objective, the null-hypothesis below was formulated tested on five percent level of significance ($\alpha = 0.05$)

H₀: Technological Change Management has no effect on employee performance of the Parliamentary Service Commission of Kenya

2.0 LITERATURE REVIEW

2. 1 Lewin's Three-Step Change Theory

The study was guided by Lewin's Three-Step Change Theory. Lewin (1951) introduced the three-step change theory in which he viewed behaviour as a dynamic balance of forces working in opposing directions. Driving forces facilitate change because they push employees in the desired direction. Restraining forces hinder change because they push employees in the opposite direction. The first step in the process of changing behaviour is unfreezing the existing state of affairs. During the unfreezing stage awareness of how the status quo is hindering the organization in some way is created.

Communication is important during the unfreezing stage so that employees can become informed about the imminent change, the logic behind it and how it benefits each employee (Brisson-Banks, 2010). The second stage is implementation of the change; the planned change is actualized. During the changing step people begin to learn the new behaviours, processes and ways of thinking. During this step, education, communication, support and time are critical for employees as they become familiar with the change (Hamel & Prahalad, 2013)

The final stage of Lewin's three-step change model is refreezing. This is the stage of reinforcing, stabilizing and solidifying the new state of affairs after the change has been implemented. The technological changes made in the context of this study are accepted and refrozen as the new norm or status quo. Lewin found the refreezing step to be especially

important to ensure that people do not revert back to their old ways of thinking or doing prior to the implementation of the change (Wambua, 2012; Vincent, 2013; Coghlan, Rashford & Figueiredo, 2015). Efforts must be made to guarantee the change is not lost; rather, it needs to be cemented into organization's culture and maintained as the acceptable way of thinking or doing.

2.2 Technological Change Management and Employee Performance

Ochoti, Maronga, Muathe, Nyabwanga and Ronoh (2012) investigated factors influencing Employee Performance Appraisal System in the Ministry of State for interior and coordination, Nyamira county Kenya. The results of the study showed that 55.1% of the variation in performance of employees can be explained by the changes in implementation process, interpersonal relationships, rather accuracy, informational factors and employee attitudes. The study recommended further research to be conducted to determine the influence of the PAS outcome on employee performance.

Kimathi (2016) in a study that investigated the influence of strategic change management practices at Coca Cola Company in Kenya, revealed that incompatibility of the new change with existing organization structure, information technological innovations, political interference, social factors and consumer behaviour among key challenges faced by the company. The study used three step theory of change, force field analysis theory and Kanter model of change management and was conducted through a case study.

Van der Voet, Kuipers and Groeneveld (2016) noted that Public organizations often need to implement changes in governance, design and delivery of public services and that, employees play a central role in implementation of these changes. Carter, Armenakis and Mossholder (2013) tested a theoretical framework concerning the relationship between transformational leadership behaviour and affective commitment to change in a public sector context. The results showed that direct supervisors contribute to processes of organizational change, thereby increasing effective commitment to change among employees. The results further showed that, specific context of public organizations determined the transformational leadership behaviour of direct supervisors.

Dauda and Akingbade (2011) carried out a study to determine the relationship between technological change and employee skill; and between technological change and employee performance in the Nigerian manufacturing industry. The findings from the study showed that technological change has a significant relationship on employee skills and employee performance. Employees are required to upgrade their skills to cope with technological change for them to be relevant. Significant improvements were noted in the selected manufacturing industry performance, which are related to employee performance and satisfaction, but were not sufficient to cope with global competitiveness.

A quantitative study by Wachira (2013) which sought to determine the effects of technological innovation on the performance of commercial banks in Kenya showed that customer care employees at the banks valued technological innovations. The results further revealed a positive and significant relationship between banks' performance in terms of profitability and adoption of various technological innovations including customer independent technology, customer

assisted technology and customer transparent technology. The study underscored the need for banks to continuously invest in technological innovations for them to remain highly competitive.

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The study was carried out through a descriptive research design. According to Kothari (2014) the purpose of descriptive research design, is to collect detailed and factual information that describes an existing phenomenon. It attempts to describe such things as possible behaviour, attitudes, values and characteristics as they exist. Explanatory research design was also be used in giving clarifications as to why and how the variables are interdependent and also explain the relationship between the variables and the results of the research.

3.2 Target Population of the Study

The study was conducted at the Parliamentary service commission offices in Nairobi Kenya. The target population of study was all the 914 permanent and pensionable employees of Parliamentary service commission.

3.3 Sampling Method

Stratified sampling was used because it was possible to sub-divide the target population into three mutually exclusive strata that were based on the sector of service. The three sectors included the National Assembly, the Senate and the joint Service.

3.4 Sampling technique

The sampling technique that was used in this study was simple random sampling. All the employees had equal chances of being included into the sample.

3.5 Sample Size

A total of ninety-one respondents were identified and questionnaires were administered to them. This is in consistent with Mugenda (2003), that 10% of the accessible population is enough for a sample size that is a representative of the study population. This was then distributed proportionally in the strata as per Pedhazur and Schmelkin's (1991) formula below:

$$R = \frac{C \times S}{P}$$

Where; **R** is respondent required from a stratum

C is stratum population (category)

S is the desired size (91)

P is the total population (914)

Through the above formula, the sample size is as per the table below

Table 3.1: Sampling and Sample Size Distribution Table

		No. of Employees (C)	$R = \frac{C \times S}{P}$
Level of Management	Services in Parliament		
Top Level	National Assembly	12	1
	Senate	11	1
	Joint Service	08	1
	Sub-Total	31	3
Middle Level	National Assembly	16	2
	Senate	13	1
	Joint Service	14	1
	Sub-Total	43	4
Low Level	National Assembly	148	15
	Senate	80	8
	Joint Service	612	61
	Sub-Total	840	84
Total Number of Employees and Sampling Size		914	91

Source: (Researcher, 2018)

3.6 Data collection Instruments

The research used questionnaires and interviews as guides to collect primary data. The study was use questionnaires with both structured and unstructured questions. The questionnaires were self-administered. Interviews were conducted to three key informants; one from the top management. One interviewee were recruited from each service; the National Assembly service, the senate service and the parliamentary joint service. The study was also utilize secondary data. The sources of this data included: Government documents and records, official statistics, Newspapers and journals, Web pages and text book. The secondary data was useful in complementing primary by availing data that may have not been obtained from the primary sources.

3.7 Data collection procedure

The researcher used pilot testing and Cronbach's alpha methods to address validity and reliability of the study instrument. Questionnaires were administered using self-administered method. Every questionnaire was accompanied by a transmittal letter which contained a brief about the research. The researcher engaged two assistants to hand deliver the questionnaires to the respondents using a drop-and-pick method and collected after two weeks. The researcher also conducted interviews with the key informants at their workplace.

3.8 Data Analysis

Data analysis is the process of systematically searching and arranging materials obtained from the field (questionnaires filled by respondents and interviews forms filled by interviewers) with the aim of increasing understanding of collected data and enabling the researcher to present them to others. Analysis involves working with data, organizing them, breaking them into manageable units, synthesizing them and searching for patterns (Silverman, 2015).

After collecting the questionnaires from the field, data cleaning was done to correct any error that might have occurred during data collection and data was coded for analysis. Quantitative data was analyzed using descriptive and inferential statistics. Descriptive statistics was used to describe and summarize the data. Descriptive statistics of mean and standard deviation were computed to make it possible to interpret the information. Inferential statistics; multiple linear regression analysis was carried out using Microsoft excel 2013 Analysis ToolPak.

The regression results were used to test the hypotheses. Qualitative data collected using interview schedules was analyzed using thematic analysis. The linear regression was conducted using empirical model below.

$$E_P = \beta_0 + \beta_1 TCM + \varepsilon$$

Where;

E_P = Employee Performance

β_0 = Constant

TCM = Technological Change Management

E = Error Term

3.12 Data Management and Ethical Considerations

Authority to carry out research on this topic was sought from the National Commission for Science, Technology and Innovation (NACOSTI) for which the researcher got the authorization. The commission's authority also required the researcher to report to the county commissioner and the county director of education, Nairobi City County before embarking on research project. The researcher met all these requirements before conducting the study. Participants were guaranteed privacy, confidentiality and anonymity in carrying out the research. The researcher assured them that their names will not be used in the report. The data collected from the field was scrutinized and processed in order to ensure proper data management.

4.0 RESEARCH FINDINGS

4.1 Response Rate

The sample size on which the questionnaires were administered was ninety-one employees of the parliamentary service commission who had worked for the commission for at least three years on permanent and pensionable terms.

Therefore, a total of 91 questionnaires were administered to 18, 10 and 63 employees serving in the National Assembly, the Senate and the Joint Service of the Parliamentary Service Commission respectively. Out of the 91 questionnaires that were distributed, 76 were correctly filled and returned while 15 questionnaires were not received even after follow-up. The results are show below.

4.2 Demographic Profile of the Respondents

This section presented the demographic characteristics of respondents, based on gender, age, educational qualification and length of service.

Table 4. 1 Gender of the Respondents

Source: (Researcher, 2018)

Parliamentary Service	Male	Female	Total
National Assembly	10	6	16
Senate	4	4	8
Parliamentary Joint Service	29	23	52
Total	43	33	76
Percentage	57	43	100

Table 4.1 shows that 57% of the respondents were males and 43% were females.

Table 4. 2 Age of the Respondents

Age Group (Years)	Male		Female		Total	
	n	%	n	%	N	%
18 – 30	18	24	12	15	30	40
31 – 45	14	18	15	20	29	38
Above 45	11	15	6	8	17	22
Total	43	57	33	43	76	100

Source: (Researcher, 2018)

Table 4.2 shows that 40% of the respondents were in age bracket of 18 – 30 years, 38% were in age bracket of 31– 45 years and 22% were of age 45 years and above. A majority of the respondents (78%) were of age between 18 –45years.

Table 4. 3 Level of Education

Level of Education	Frequency	Percentage
High School	17	22
College Diploma	31	41

Bachelor's Degree	22	29
Postgraduate Degree	6	8
Total	76	100

Source: (Researcher, 2018)

Table 4.3 shows that 22% of the respondents had High School level of education, 41 percent of the respondents were Diploma holders, 29 % had a Bachelor's Degree and 8% had a Postgraduate Degree. This shows that the parliamentary service commission in Kenya is managed by highly skilled individuals. This guarantees reliable responses and therefore reliable findings by the study.

Table 4. 4 Duration of Service Level of Education Frequency Percentage

Below 5 years	30	39	5 – 10 years	21	28	Above 10 years	
	25	33					
Total				76			100

Source: (Researcher, 2018)

Data in Table 4.4 above showed that 30 out of the 76 sampled respondents (39%) had served the parliamentary service commission for a length of not more than 5 years. Further, 28 % of the respondents had served for at least five years and not more than 10 years and (33%) of the respondents had served for more than 10 years. Therefore, the respondents' responses can be relied upon for analysis of the effect of organizational change management on employees' performance.

4. 3 Regression results

Table 4.5: Effect of Cultural Change Management on performance of employees

Regression Statistics

Multiple R	0.83599242				
	7				
R Square	0.69888333				
	8				
Adjusted Square	R 0.68191901				
	9				
Standard Error	0.36353643				
	8				
Observations	76				

	Coefficient s	Standard Error	t Stat	P- value
Intercept	0.452712103	0.266299452	1.70001139	0.093505905
Technological Change Management	0.24597501741	0.0647750817157	0.001731232877	0.2751016802751

Source: (Researcher, 2018)

$$E_p = 0.45 + 0.25TCM + \varepsilon$$

Table 4.5 shows that the adjusted R-squared is 68.2% meaning that the independent variable explain 68.2 percent of variations in the dependent variable while the remaining 31.8% (100% - 68.2%) of the variations in Employees' Performance is explained by other variables not included in the model. Therefore, the model can reliably be used to test the influence of Cultural Change Management on Employee Performance.

4. 8 Testing of Hypothesis

Multiple regression analysis was used to test the null hypothesis that was formulated and the results are as follows: The coefficient of Technological Change Management was 0.25, the tstatistic and corresponding p-value were 2.25 and $0.001 < 0.05$ respectively. Therefore, at five percent level of significance, the null hypothesis is rejected, implying that technological change management has a significant effect on the performance of employees of Parliamentary Service Commission in Kenya.

Since the coefficient for technological change management is positive and significant, it can be inferred that technological change management has a positive effect on performance of employees of Parliamentary Service Commission in Kenya. Introduction of ICT had enhanced efficiency in service delivery. Innovation in Technology had improved communication and reduced workloads among the Employees of the Parliamentary service commission. Similar findings were reported by Byrne, Fernald and Reinsdorf (2016) in the United States. The study found a positive link between IT and increased employee productivity.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Declining employee performance is one of most cited problems facing public sector organizations and a major cause of poor performance of the public sector organizations when compared to their private counterparts. This study sought to determine the extent to which Technological Change Management affect employee performance of the parliamentary service commission in Kenya. This was achieved by the use of explanatory and descriptive survey design which was cross-sectional by design. Primary and secondary data was collected using structured questionnaire. The data collected was analysed using descriptive and inferential statistics. The descriptive analysis was used to describe and summarize the data. Multiple regression was used to assess the effect of the independent variable on employee performance. The findings showed that Technological Change Management has a significant positive effect on the performance of employees.

5.2 Conclusion

Organizations need highly performing employees to accomplish their goals; to deliver the products and services they specialize in. Improved employee performance implies better delivery of public services to both government and the citizenry. This has the potential to improve livelihoods, and sustain good governance (Hope, 2013). In this study, the researcher examined how Technological Change Management affect employee performance of the parliamentary service commission in Kenya. Technological Change Management was found to be statistically significant in influencing the performance of employees of Parliamentary Service Commission in Kenya; therefore, managers and policy makers should look for ways of motivating human resource in the organization for better performance.

Organizations should encourage invention of technologies; including processes and their commercialization via research and development and integrate them throughout the organization since technological advances have the ability to impact how employees go about their daily lives. This includes how they complete tasks around their homes and at workplaces.

5.3 Contributions of the Study to Knowledge

The study focused on Technological Change Management and employee performance, particularly in the parliamentary service commission. This would be beneficial to the management in understanding key change management factors that influence performance of employees. The empirical data herein may provide evidence in formulating strategies, policies, and building effective and efficient processes for organizational change management. The

findings from this study also are beneficial to researchers and other human resource managers by providing the scholarly literature on Technological Change Management and employee performance in the public sector organizations.

5.4 Recommendations for Policy Implication

Managers should invest in technology through automation of their functions as much as possible. Human resource managers need to implement policies on training and development for employees to enhance knowledge and skills in the emerging technologies. They should also ensure that their employees are involved in deciding which technologies to be adopted and how they are managed.

5.5 Recommendation for Further Research

The researcher recommends that a similar research should be conducted in other public organizations in Kenya. The current research can be duplicated in order to compare and validate the findings of this study. Further studies should also be carried out to investigate change management factors affecting employee performance in the public sector apart from Technological Change Management

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