

INFLUENCE OF TECHNOLOGY ADVANCEMENT STRATEGY ON ORGANIZATIONAL PERFORMANCE OF COUNTY GOVERNMENTS IN KENYA

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Abstract: *A turnaround situation represents absolute and relative-to-industry declining performance of sufficient magnitude to warrant explicit turnaround interventions. Kenya is endowed with a vibrant population, natural resources, and a stable infrastructure, all of which possess massive potential for optimal performance, but only if its (performance) is continuously improved, including planning, operational, and delivery levels. In Kenya, several parastatals have adopted turnaround strategies in pursuit of improved performance. Technology plays a pivotal role in managing the environment for better productivity, innovation, and business model development. Therefore, this study sought to establish the influence of technology advancement strategy and capacity building strategy on county governments' organizational performance in Kenya. The study findings indicate that technology advancement has a positive impact on the organizational performance of county governments. This means that a unit increase in technology advancement strategy would increase the organizational performance of county governments. The study further established that the influence of technology advancement strategy was significant. Based on these study findings, the study concluded that technology advancement strategy has a positive significant influence on county governments' organizational performance in Kenya.*

Keywords: *Employee Turnaround Strategy, Organization Performance, Technological Strategy*

1. Background

Worldwide, Global competitiveness and a cutthroat playing field have seen turnaround strategies become crucial to the survival of globally leading business entities (Gowen & Tallon, 2012). They posit that, for instance, what were formerly areas of disparity between American and Japanese businesses, such as personnel, manufacturing, or promotion, are now seen to merge on certain common strategies employed to overturn unfavorable corporate scenarios. They demonstrate the differences in analyzing suitable turnaround methodology, the efforts employed to reverse unfavorable circumstances, and the overall accomplishment of such activities (Gowen & Tallon, 2012).

The performance of the public sector in advanced economies such as the United Kingdom and the United States is blighted by organizational failure. Thus, it is crucial to comprehend the processes of organizational turnaround and to identify strategies that are likely to lead to better results (Boyne, 2016). These issues have not, however, featured prominently on the agenda of public administration researchers. In this article, an attempt has been made to remedy this deficiency by critically reviewing private sector studies of turnaround and drawing lessons for academic research and management practice. The major implications for research are

that a turnaround process model and a typology of turnaround strategies can be derived from the private sector literature (Boyne, 2016).

Technology plays a pivotal role in managing the environment for better productivity, innovation, and business model development. Companies struggle to adapt to new technological trends and investments' optimization processes to cater to new opportunities in the marketplace (Thamhain, 2015). Therefore, companies' fundamental need is to create and execute business and technology level strategies side by side to achieve sustained competitiveness and value creation. Technological advancement is the process of combining and reorganizing knowledge to generate new ideas. The development of technology has an impact on firm performance (Mumford, 2015). Technological advancement comes from internal advancement, and internal advancement comes from internal capability. So, there is a close relationship between technological advancement and firm performance (Mumford, 2015). Technologies can only increase productivity or improve organizational performance when combined with other resources effectively by human resources or when done effectively, and use technology productively and ethically (Dauda & Akingbade, 2016).

Employees in organizations play a key role in the accomplishment of goals (Richard, 2014). Therefore, the optimal organizational performance of employees in an organization cannot be overemphasized. According to Aguinis (2009), organizational performance is an effort backed by organizational policies to achieve certain objectives. Organizational performance can also be described as attaining a particular goal calculated based on identified or set standards of accuracy, completeness, speed, and cost and measured by the absorption rate of the development budget and performance contracting (Javed, 2014).

In Kenya, several parastatals have adopted turnaround strategies in pursuit of improved performance. The Kenya Cooperative Creameries Limited, the country's national dairy processor, had collapsed under persistent cash flow problems and poor management, only bouncing back to self-sustenance and profitability after adopting specific turnaround strategies (Abass, Munga & Were, 2017). The National Bank of Kenya also successfully employed turnaround strategies: besides modernizing their information technology, increasing access to their services through innovative mobile, web, and agency delivery platforms, they restructured their human resources and increased their capacity through training to obtain a team with the right attitude for growth (Ndaita, Gachie & Kiveu, 2015).

Transparency International reports dissatisfaction levels of 41% of Kenyan citizens with their county governments' performance. Key indicators of performance that were scrutinized included: appropriate use of County Government resources on such crucial components like infrastructure, healthcare, education, and social responsibility; internal management procedures including quality of communication among parties –including timeliness, operational and financial risk mitigation, mechanisms and policies to promote transparency and accountability; the county governments' ability and willingness to create employment, supporting small and upcoming businesses via credit availability and lending, providing market opportunities for agricultural produce, reducing post-harvest losses and enhancing the tourism sector and overall citizen satisfaction with programs and services (GoK, 2016). A key indicator of a performing organization is the efficiency with which it meets its targets (Namu *et al.*, 2014). The primary measure of organizational performance for institutions is largely based on its net profitability compared to its objective. Extra steps may include growth data and the results of consumer loyalty reviews. One of the devices used to gauge organization performance is the adjust scorecard (Gibbons & Kaplan, 2015).

There are 47 county governments in Kenya. The decentralization of public services to the County governments was to bring decision making closer to the people, enhance participation and representation of ordinary people

at the grassroots in politics, increase accountability and transparency, make the government more responsive to public demands and improve service delivery (Abass, Munga & Were, 2017). However, the organizational performance of the county governments has been met with dissatisfaction and criticism. For instance, healthcare, which is fully devolved, has faced monumental challenges in county governments across the country. In most counties, many patients seeking services at government-run health facilities have expressed frustration at slow services, lack of adequate facilities, and slow response times. Infrastructure development, security, and drainage have also not met desirable standards (Auditor General, 2017).

2. Statement of the Problem

While county governments are keen to find ways to achieve an organizational turnaround, eliminate service disparities across citizens, and bring performance up to expected standards, efforts to achieve this are faced with problems. A study by Transparency International (2016) indicated that the majority rated the services as average or poor in education (37%), health (27%), trade (25), and transport (22%).

Inyange (2014) established that turnaround strategies adopted in Kenya's oil corporation were top management change, efficiency and operating strategy, expansion of retail outlets, and employee retrenchment. Mutie (2013) established that top management teams, customer relationships, prompt delivery, and after-sales service are important factors that should be addressed during turnaround to establish a market niche and fulfill customer needs. Kamunde (2010) established that the bank adopted top management change, stakeholder involvement, and increased efficiency. Saigilu (2010) found that the turnaround strategies employed by KRA were highly effective in meeting organizational goals. Mwakida (2013) identified that KCC pursued two distinctive strategies: decline stemming that reverse the decline and recovery strategies that yield a defensible competitive position. The current study adopted technology advancement strategy, capacity building strategy, restructuring strategy, and collaboration strategy turnaround strategies.

From the above discussions, it can be seen that limited research has been done on the influence of turnaround strategies on the organizational performance of county governments in Kenya. It is against this background that this study was undertaken to fill the missing knowledge gap by establishing the influence of technology advancement on county governments' organizational performance in Kenya.

3. Research Objectives

The general objective of the study was to establish the influence of turnaround strategies on the organizational performance of county governments in Kenya.

This study was guided by the following specific objective:

- i. To determine the influence of technology advancement on organizational performance of county governments in Kenya.

4. Research Hypothesis

The study sought to test the following null hypotheses

- i. Technology advancement strategy has no significant influence on the organizational performance of county governments in Kenya.

5. Conceptual Framework

Conceptual framework is a representation that shows how the variables in a study relate to each other. The framework helps the reader see the proposed relationships between the study variables, graphically, or diagrammatically. Figure 1 depicts the influence of turnaround strategies and its component namely: technology advancement strategy and organizational performance of County Governments in Kenya.

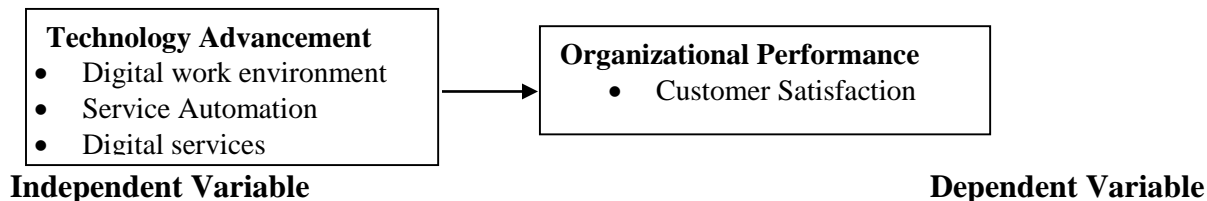


Figure 1: Conceptual Framework

6. Research Methodology

This study made use of descriptive and quantitative research designs. Descriptive research aims to accurately and systematically describe a population, situation, or phenomenon. It used to answer what, where, when, and how questions. A descriptive research design uses a wide variety of research methods to investigate one or more variables. A descriptive research technique was preferred because the research objective was to determine the cause and effect relationship between turnaround strategies and organizational performance of county governments in Kenya.

The study was conducted in the eight counties in Kenya. The study used the finance and planning departments, as they are involved with strategic planning in the counties. The study selected one senior officer from each of the finance and planning departments; one director from each of the finance and planning departments; the study also selected 10 middle-level staff from each of the finance and planning departments. Thus, this study's unit of observation was 16 senior officers, 16 directors, and 320 middle-level staff. Therefore, the total number of respondents was 192, as shown in Table 1.

A proportion sampling was selected from each category, from where random sampling was used in selecting sample respondents within the categories. The total sample size was 210 respondents, as shown in Table 1.

Table 1: Sample Size

| Category | Target Population | Sample Size |
|--------------------|-------------------|-------------|
| Senior officers | 16 | 16 |
| Directors | 16 | 16 |
| Middle level staff | 320 | 178 |
| Total | 352 | 210 |

7. Research Findings and Discussion

From the selected sample of 210 respondents, the study collected 187 questionnaires having been dully filled. The returned questionnaires formed a response rate of 89.05%.

Descriptive Results

Respondents were asked to indicate their level of agreement with the following statement relating to the technology advancement strategy. Table 2 presents the findings obtained.

Table 2: Technology Advancement Strategy

| Statement | Mean | Std. Dev. |
|--|-------------|------------------|
| Digital work environment | | |
| Our county has digitized its working environment | 3.982 | 1.370 |
| In our county, digital work environment has led to efficiency of operations | 3.777 | 1.275 |
| In our county, digital work environment has improved service delivery | 3.889 | 1.381 |
| Service Automation | | |
| Our county has adopted a service automation system | 3.698 | 1.331 |
| In our county, service automation helps us to serve citizens better | 3.948 | 1.263 |
| In our county, service automation allow citizens to access county services wherever they are | 3.863 | 1.326 |
| Digital services | | |
| Our county has adopted digital citizen services | 3.915 | 1.343 |
| Digital services has enabled citizens to access county services conveniently | 3.738 | 1.320 |
| In our county, digital services has improved customer satisfaction | 3.836 | 1.220 |

The findings in Table 2 show that the respondents agreed on 'digital work environment' that their county has digitized its working environment ($M=3.982$, $SD=1.370$); in their county digital work environment has improved service delivery ($M=3.889$, $SD=1.381$); and that their county digital work environment has led to the efficiency of operations ($M=3.777$, $SD=1.275$). According to Mahdzur and Salim (2016), advancements in technology in the public sector involve ICT innovation in services, service automation, and improving economic performance and social well-being. Therefore, the adoption of technology has led to the improvement of services in the county.

They also agreed on service automation, in that in their county, service automation helps them to serve the citizens better ($M=3.948$, $SD=1.263$); in their county, service automation allow citizens to access county services wherever they are ($M=3.863$, $SD=1.326$); and that their county has adopted a service automation system ($M=3.698$, $SD=1.331$). This concurs with Osborne & McLaughlin (2014) study that due to technology's innumerable advantages such as advanced efficacy and lesser instances of error, more and more organizations are adopting automation technologies to execute more workplace activities and processes. The result is that county governments have improved efficiency while boosting reliability, and automation has been a mainstay across industries.

Respondents were also in agreement on digital services that their county has adopted digital citizen services ($M=3.915$, $SD=1.343$); in their county, digital services have improved customer satisfaction ($M=3.836$, $SD=1.220$); and that digital services have enabled citizens to access county services conveniently ($M=3.738$, $SD=1.320$). This is in agreement with Mwirigi, Rho, and Park (2017) that governments' ability to respond to rapid technological change and advancement depends on the availability of the right set of skills, quality products and services, and robust capital markets. Such factors help to sustain a conducive environment for innovation and reception to new technologies.

Respondents also added that their county, despite having adopted technology, some of the technology they use is outdated. Therefore, there is a need to adopt more advanced technology at par with the world's advancement. They also indicated that employees require efficient and effective training while using technology since some are not well conversant with them. They also explained that the county's rate of technology adoption is slow and, therefore, the need to improve. There are other places that electricity is not reliable, and consequently, the optimum use of technology is affected.

8. Inferential Results

The study computed inferential statistics to test the relationship between the dependent and the independent variables. The study specifically computed correlation and multiple regression analysis.

Correlation Results

Correlational analysis was used to determine the relationship between the study variables. Pearson R correlation was used to measure strength and the direction of linear relationship between variables. The association was considered to be: small if $\pm 0.1 < r < \pm 0.29$; medium if $\pm 0.3 < r < \pm 0.49$; and strong if $r > \pm 0.5$.

Table 3: Correlation Matrix

| Variables | | Organizational Performance | Technology Advancement |
|---------------------------------|---------------------|----------------------------|------------------------|
| Organizational Performance | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | | |
| | N | 187 | |
| Technology Advancement Strategy | Pearson Correlation | .839** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 187 | 187 |

From the findings in Table 3, technology advancement strategy has a strong relationship with county governments ($r=.839$). The relationship between the variables is significantly positive ($p=0.000 < 0.05$). This means that technology advancement strategy used by the county government would influence their level of organizational performance. This study finding agrees with Osborne and McLaughlin (2014) that technology's advantages are advanced efficacy and lesser instances of error. More and more organizations are adopting automation technologies to execute more workplace activities and processes.

Multiple Regression Results

Model Summary

Model summary was used to determine the variation in the dependent variable that could be explained by changes in the independent variable. In this study, the amount of variation in county governments' organizational performance as a result of changes in collaboration strategy and capacity building strategy was sought.

Beta Coefficients of the Study Variables

The study used the coefficients findings to test the research hypothesis. If the p value is less than 0.05, we reject the H0 but the Ho is not rejected if it is more than 0.05.

Table 4: Regression Coefficients

| Model | Unstandardized Coefficients | | Standardized | t | Sig. |
|-----------------------------------|-----------------------------|------------|--------------|-------|------|
| | B | Std. Error | Coefficients | | |
| 1 (Constant) | 1.506 | .173 | | 8.705 | .000 |
| 1 Technology Advancement Strategy | .218 | .083 | .213 | 2.626 | .009 |

a. Dependent Variable: organizational Performance

From the findings in Table 4, the following regression equation was fitted:

$$Y = 1.506 + 0.218 X_1$$

Where: Y= Organizational Performance; X₁= Technology Advancement Strategy; ε= error term

From the regression equation, it can be observed that when the variables collaboration strategy and capacity-building strategy are held to a constant zero, they will influence county governments' organizational performance as indicated by beta value 1.506.

The first research hypothesis was that technology advancement strategy has no significant influence on county governments' organizational performance in Kenya. The findings showed that technology advancement has positive influence on organizational performance of county governments (β=0.218). The influence was further found to be significant since the p-value (0.009) was less than the selected level of significance (0.05). Since the p-value is less than 0.05, we reject the null hypothesis (technology advancement strategy has no significant influence on county governments' organizational performance in Kenya) and accept the alternative that technology advancement strategy has significant influence on counties' organizational performance governments in Kenya.

The second research hypothesis was that capacity building strategy has no significant influence on county governments' organizational performance in Kenya. The findings showed that capacity-building strategy has a positive influence on the organizational performance of county governments (β=0.228). Further, the influence of capacity building strategy is significant since the p-value (0.000) was less than the selected significance (0.05). Since the p-value was less than the selected level of significance, we reject the second null hypothesis (capacity-building strategy has no significant influence on the organizational performance of county governments in Kenya) and accept the alternative that capacity building strategy has significant influence on the organizational performance of county governments in Kenya.

9. Conclusion

The objective of the study was to determine the influence of technology advancement strategy on county governments' organizational performance in Kenya. The study found that technology advancement has a positive impact on the organizational performance of county governments. This means that a unit increase in technology advancement strategy would increase the organizational performance of county governments. The study further established that the influence of technology advancement strategy was significant. Based on these study findings, the study concluded that technology advancement strategy has a positive significant influence on county governments' organizational performance in Kenya.

10. Recommendations

Technology advancement strategy was found to have a positive significant influence on organizational performance. The study recommends county governments embrace more advanced technology and use it daily to enhance efficiency and productivity. There is a need for counties to ensure its services are automated so that people needing the services can access them from any location they are in. There is a need to adopt digital services because it would improve service delivery and enhance organizational performance in counties.

The study found that some counties' employees are not conversant with technology. Therefore, there is a need for the county governments to provide training to their employees to ensure they are efficient in rendering services to members of the public. Capacity building strategy was found to have a positive influence on county government organizational performance. There is a need for counties to improve their use of capacity building strategies like staff training/ empowerment, staff evaluation, career progression acquiring, retaining, and developing human resources. This would greatly improve their organizational performance.

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