

Project Management Practices And E-Government Performance In Kenya Trade Portal

Julius Thuo Gachuru
Dr. Kevin Muluka, Phd

Msc Student, Jomo Kenyatta University Of Agriculture And Technology
Senior Lecturer, Jomo Kenyatta University Of Agriculture And Technology

Abstract

In recent years, the global landscape has witnessed a transformative shift towards digitalization, with governments increasingly turning to electronic platforms to enhance service delivery and efficiency. Within this context, the implementation and success of e-government projects have become pivotal for nations striving to harness the benefits of technology in public administration. The Kenya Trade Portal stands as a noteworthy example of such initiatives, reflecting the nation's commitment to leveraging digital solutions for trade facilitation. The general objective of this study was to assess the effect of project management practices on e-government project performance: a case of Kenya Trade Portal. Specifically, the study sought to establish the effect of technological integration, stakeholder involvement, monitoring and evaluation, and risk management on the performance of Kenya Trade Portal. The study made use of primary data using structured questionnaires. An explanatory research design was adopted. The target population included all the 125 employees of the Kenya Trade portal from the various departments and fields. The collected primary data was analyzed descriptively by use of means and standard deviation and inferentially by use of correlation and regression analyses. The study found that technological integration had a significant positive effect on project performance Stakeholder involvement also significantly influenced project performance. Furthermore, the study revealed that monitoring and evaluation had a positive and significant impact on project performance. Risk management was found to have the strongest effect on project performance. The model indicated that the project management practices studied were highly influential in determining the success of the Kenya Trade Portal. In conclusion, the study confirms that project management practices play a pivotal role in enhancing the performance of e-government projects like the Kenya Trade Portal. The study recommends that project managers prioritize continuous technological upgrades, engage stakeholders throughout the project lifecycle, establish robust monitoring and evaluation systems, and adopt comprehensive risk management strategies to further enhance project outcomes.

Keywords: project management practices, project performance, technological integration, stakeholder involvement, monitoring and evaluation, and risk management

Date of Submission: 24-10-2024

Date of Acceptance: 04-11-2024

I. Introduction

Background if the Study

In recent years, the global adoption of E-government initiatives has emerged as a crucial strategy for enhancing the efficiency, transparency, and accessibility of public services. However, despite the potential benefits, the performance of E-government projects globally has been mixed, with numerous projects facing significant challenges related to implementation, scalability, and sustainability.

Global, Regional and Local Perspective

Studies indicate that globally, E-government project failure rates remain high, with nearly 35% of such projects failing to meet their intended objectives due to factors such as inadequate stakeholder engagement, poor technological infrastructure, and lack of proper monitoring and evaluation mechanisms (World Bank, 2020). In regions such as North America and Europe, while E-government projects have generally yielded positive results, developing countries continue to grapple with issues that impede their success (United Nations, 2021).

Focusing on Africa, E-government projects often face higher rates of failure compared to the global average. Factors such as insufficient infrastructure, lack of digital literacy, economic limitations, and governance challenges play a significant role in undermining the performance of these projects (European Investment Bank, 2021). The success or failure of these initiatives is further influenced by the complex socio-political environments within which they operate, leading to varied outcomes. A study by the African

Development Bank (2021) reveals that only 40% of E-government projects in Africa meet their performance expectations, highlighting the need for improved project management practices, stakeholder involvement, and risk management strategies.

Kenya, as one of the leading countries in E-government adoption in Africa, has made significant strides in integrating technology into public service delivery. The Kenya Trade Portal, among other key initiatives, is a testament to the country's efforts to digitize trade facilitation processes. Despite this progress, there remain concerns regarding the overall performance of such projects. Many E-government projects in Kenya face delays, budget overruns, and challenges related to stakeholder buy-in and technological adaptation, raising questions about the effectiveness of their project management practices (ICT Authority, 2022; International Trade Centre, 2021). As Kenya continues to expand its digital infrastructure, it becomes imperative to assess how project management practices, such as technological integration, stakeholder involvement, monitoring and evaluation, and risk management, influence the performance of E-government projects like the Kenya Trade Portal.

Statement of the Problem

Despite the launch of Kenya Trade Portal in 2018, the Kenyan trade portal has failed to generate the anticipated impact. A significant issue lies in the lack of awareness and dissatisfaction among the stakeholders, as customers are not adequately informed about the portal's existence or its intended purpose.

Furthermore, the ineffective performance of the trade portal might be attributed to insufficient resources allocated for its monitoring and evaluation. The sustainability of such a digital platform depends on continuous monitoring, support, and adaptation to evolving requirements, which might be hindered by resource constraints (UNCTAD, 2022).

Kenya has made significant strides in implementing e-governance services over the past decade, with a focus on improving efficiency and accessibility for citizens. The eCitizen platform, a one-stop portal for government services, has seen widespread adoption. As of 2021, over 7.5 million Kenyans were registered on eCitizen, accessing over 350 government services including business registration, driving licenses, and land records (Government of Kenya, 2021). The platform handles more than 50,000 transactions per day, reflecting the growing use of digital services in public administration (ICT Authority, 2021). Another Example is the iTax platform, managed by the Kenya Revenue Authority (KRA), has transformed tax filing and compliance. By 2022, over 5 million taxpayers had registered on iTax, and the platform processed 99.8% of tax returns electronically (Kenya Revenue Authority, 2022).

Several studies have investigated the relationship between project management practices and project performance. However, the majority of these studies have been conducted in areas outside the realm of e-government. For example, Mkutano and Sang (2018) explored the impact of project management practices on the performance of NGO projects, specifically within Nairobi County, Kenya. Maghanga (2019) conducted a study examining how risk management practices influenced project performance in cement manufacturing firms located in Nairobi County, Kenya. Wambua (2019) delved into the effects of Monitoring and Evaluation (M&E) practices on the performance of education projects funded by the county. Additionally, Mavuti, Kising'u, and Oyoo (2019) evaluated in 2019 to assess how project management practices impacted the implementation of funded projects.

Objectives of the Study

The general aim of this research was to assess the effect of project management practices on the performance of Kenya Trade Portal.

Specific Objectives

- i. To establish the effect of technological integration on the performance of Kenya Trade Portal.
- ii. To determine the effect of stakeholder involvement on the performance of Kenya Trade Portal
- iii. To establish the effect of monitoring and evaluation on the performance of Kenya Trade Portal.
- iv. To examine the effect of risk management on the performance of Kenya Trade Portal.

Scope of the study

The scope of this study was limited to establishing the effect of project management practices on the performance of Kenya Trade Portal. The specific elements of project management practices that were investigated in this study were the effects of technological integration, stakeholder involvement, monitoring and evaluation, and risk management on the performance of Kenya Trade Portal. The study was carried out at The Ministry of Trade headquarter office in Nairobi.

II. Literature Review

Theoretical Framework

The theories under review play a critical role in formulating the constructs of the study, encompassing both independent and dependent variables and elucidating the potential relationships between them. In this endeavour, three theories are explicated: the Technology acceptance model, the stakeholders' theory, and contingency theory.

Technology Acceptance Model

The Technology Acceptance Model (TAM) stands as a pivotal framework devised by Davis, Bagozzi, and Warshaw (1989), primarily within the realm of information systems and technology. TAM seeks to unravel the intricacies of how users embrace and employ technology by postulating that users' behavioral intention is shaped by their perceptions of both the ease of use and usefulness of a given technology.

Stakeholder Theory

Stakeholder Theory, a cornerstone in project management, centers on the intricate relationships between an organization and its stakeholders. Pioneering works on the theory was by Freeman (1984). At its core, Stakeholder Theory recognizes that organizations are interconnected with various entities, including government bodies, citizens, and interest groups.

Contingency theory

Contingency theory of organizational structure was developed by (Donaldson & Preston, 1995). This approach is recognized as the dominant and theoretical open system model at the structural level in organizational theory research (Otley, 2016), with the Conceptual Structural Model of Contingencies being particularly successful. Due to the complexity of systems, multiple management methods are required, and the emergency strategy necessitates the application of conventional management theories and modeling processes (Joslin, 2019).

Conceptual Framework

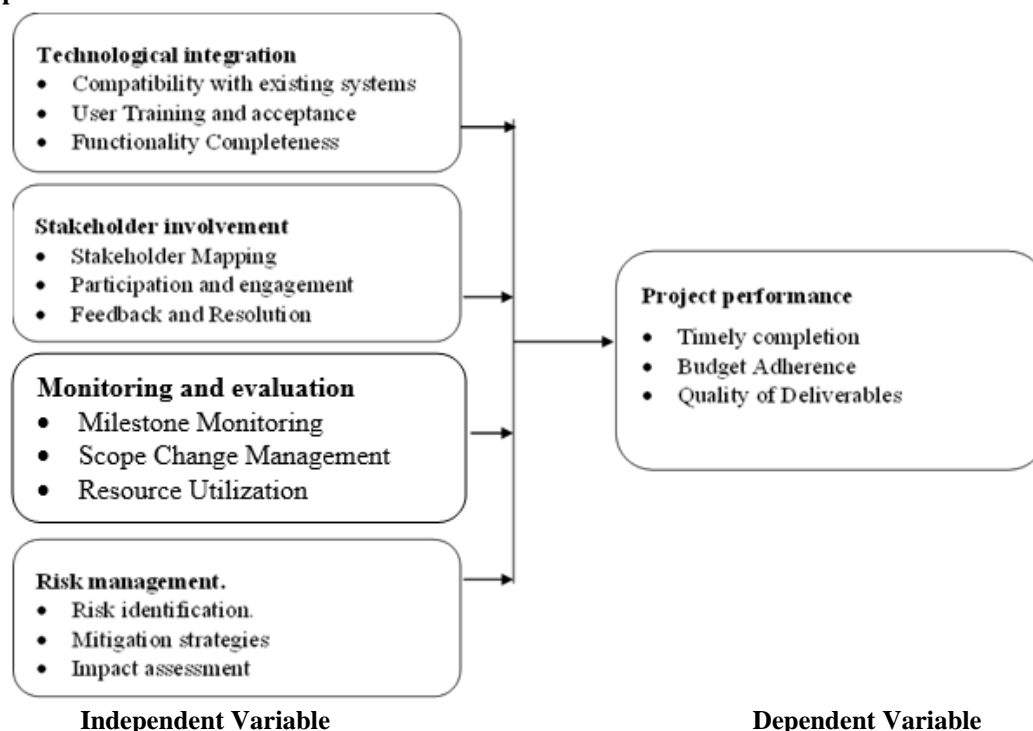


Figure 1 Conceptual Framework

Review of study variables

System compatibility is a pivotal aspect of technological integration, representing the extent to which integrated technological systems seamlessly work with existing infrastructure (Glyptis et al., 2020). Assessing this operational indicator involves evaluating the degree of harmony between new and existing systems, highlighting the efficiency of integration efforts (Waqar et al., 2023). Questions such as how well the integrated

technological systems were compatible with the current infrastructure, the ease of the integration process, and any encountered compatibility issues provide crucial insights (Dad et al., 2024).

Stakeholder involvement is vital for successful stakeholder involvement. Assessing the satisfaction of stakeholders with the communication channels used to convey project information provides insights into the clarity and accessibility of communication strategies (Martínez-Peláez et al., 2023). Evaluating the extent to which stakeholders felt informed and engaged throughout the project offers a measure of the project team's ability to maintain transparent and open communication (Zwikael et al., 2023). Investigating identified gaps or improvements needed in communication strategies ensures continuous enhancement of stakeholder engagement processes (Queiroz, 2022).

Effective progress tracking is essential for project success. Investigating the extent to which project milestones and deadlines were monitored to assess progress provides a fundamental measure of the project team's diligence in staying on track (Njiru & Thoronjo, 2024). Understanding how regularly project activities and milestones were observed contributes to gauging the consistency and thoroughness of the monitoring process (Mithileni, 2022).

Thorough risk identification is foundational to effective risk management. Evaluating the systematic identification of potential risks at various stages of the project provides insights into the project team's foresight and risk awareness (Algremazy et al., 2023). Investigating the presence of established channels for stakeholders to report perceived risks ensures a comprehensive approach to risk identification, incorporating diverse perspectives (Pomaza-Ponomarenko et al., 2023).

III. Research Methodology

An explanatory research design was adopted. The study population involved 125 employees within the State Department of Trade. This study employed a census approach, encompassing all 125 employees of the Kenya Trade Portal, as the target population. The decision to conduct a census was justified by the relatively small and well-defined size of the study population. Primary data was collected to ensure the study objectives were fully met. The primary data was obtained using a structured questionnaire.

Data was evaluated using descriptive statistical methods such as the mean, which is a measure of central tendency, and the standard deviation, which is a measure of dispersion. This aided in describing the variables of the study. Correlation and regression analysis were used to assess the strength and direction of relationship among the study variables, and this answered the research questions of the study. The following model was adopted.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where:

Y = Project performance

β_0 = Constant term

β_i = Beta coefficient of variable i measuring change Y to change in i

X_1 = Technological integration

X_2 = Stakeholder involvement

X_3 = Monitoring and evaluation

X_4 = Risk management

ϵ = Error term

Both descriptive and inferential statistics results were presented in tables and figures which were accompanied by pertinent interpretations and discussions.

IV. Research Findings And Discussions

Response Rate

The response rate for the study, showing that out of 112 distributed questionnaires, 96 were returned, representing a response rate of 85.7%, while 16 questionnaires were not returned, accounting for 14.3%.

Table 1 presents the correlation between the independent variables (technological integration, communication, monitoring and evaluation, and risk management) and the dependent variable, project performance.

Table 1: Correlation Results

		project performance	Technological integration	Stakeholder involvement	Monitoring and evaluation	Risk managements
project performance	Pearson Correlation	1				
	Sig. (2-tailed)					
Technological integration	Pearson Correlation	.713**	1			

	Sig. (2-tailed)	.000				
Stakeholder involvement	Pearson Correlation	.564**	.693**	1		
	Sig. (2-tailed)	.000	.000			
Monitoring and evaluation	Pearson Correlation	.913**	.529**	.624**	1	
	Sig. (2-tailed)	.000	.000	.000		
Risk managements	Pearson Correlation	.948**	.642**	.662**	.619**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
**. Correlation is significant at the 0.01 level (2-tailed).						
b. Listwise N=96						

The correlation between technological integration and project performance is positive and significant, with a Pearson correlation coefficient of 0.713 and a p-value of 0.000. This strong positive correlation suggests that as technological integration improves, project performance increases correspondingly. The high significance level implies that technological integration plays a crucial role in enhancing the performance of e-government projects like the Kenya Trade Portal. This finding is consistent with studies such as Mkutano and Sang (2018), who found that effective project planning and the integration of technology significantly contributed to project efficiency and success. In this study, technological integration likely improved operational efficiency, aligning with the findings of other researchers who highlighted the importance of seamless technology use in achieving project goals.

The correlation between stakeholder involvement and project performance is moderately strong, with a Pearson correlation coefficient of 0.564 and a p-value of 0.000, indicating a significant relationship. This suggests that increased stakeholder involvement positively impacts project performance, though the correlation is not as strong as with technological integration or other variables. Wamugu and Ogollah (2017) emphasized the importance of engaging stakeholders in the early stages of projects, such as identification and selection processes, which can significantly influence project outcomes. The moderate correlation in this study reinforces the idea that stakeholder engagement is vital for project success, particularly in ensuring that the needs and expectations of diverse groups are met throughout the project lifecycle.

The correlation between monitoring and evaluation and project performance is the second strongest in the study, with a Pearson correlation coefficient of 0.913 and a p-value of 0.000. This very strong and highly significant correlation suggests that robust monitoring and evaluation practices are critical for enhancing project performance. Regular assessment of project milestones, performance metrics, and feedback integration are essential components of M&E, as noted by Wambua (2019), who highlighted the impact of monitoring and evaluation on project performance in educational projects. In the context of the Kenya Trade Portal, effective M&E practices likely ensured that the project stayed on track, identified deviations early, and facilitated continuous improvements, resulting in a higher overall project performance.

Lastly, the correlation between risk management and project performance is the strongest, with a Pearson correlation coefficient of 0.948 and a p-value of 0.000. This extremely strong positive relationship indicates that effective risk management significantly enhances project performance. Managing risks effectively, particularly through early identification and mitigation strategies, ensures that potential challenges do not derail the project. This finding aligns with Maghanga (2019), who found that risk management practices, such as project risk avoidance and control, were essential in improving project outcomes in the cement manufacturing industry. In the case of the Kenya Trade Portal, the ability to identify and mitigate risks before they impact the project likely contributed to its high performance, emphasizing the critical role of risk management in complex projects.

Regression analysis aimed to determine the effect of the independent variables on the dependent variable (Project performance). The model summary, ANOVA, and coefficients tables present the analysis' findings. The findings of the study are shown in the tables below.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.965 ^a	.931	.928	.226091	2.268
a. Predictors: (Constant), Risk managements, Stakeholder involvement, Technological integration, Monitoring and evaluation					
b. Dependent Variable: project performance					

Table 2 shows the model summary for the regression analysis, focusing on the relationship between project performance (the dependent variable) and the independent variables. The R value of 0.965 indicates a very strong positive correlation between the independent variables and project performance, suggesting that

these factors are highly related to the performance outcomes. The R Square value of 0.931 means that 93.1% of the variation in project performance can be explained by the independent variables in the model. This high R Square indicates that the model is highly effective in explaining the factors that influence project performance, leaving only 6.9% of the variation to other factors not included in the model.

Table 3: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.647	4	15.662	306.387	.000 ^b
	Residual	4.652	91	.051		
	Total	67.298	95			
a. Dependent Variable: project performance						
b. Predictors: (Constant), Risk managements, Stakeholder involvement, Technological integration, Monitoring and evaluation						

Table 3 presents the ANOVA results, which assess the overall significance of the regression model. The F-statistic is 306.387 with a p-value (Sig.) of 0.000, indicating that the regression model is statistically significant. This means that the independent variables—risk management, stakeholder involvement, technological integration, and monitoring and evaluation—jointly have a significant impact on project performance.

Table 4: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.079	.201		5.361	.000
	Technological integration	.221	.053	.294	4.184	.000
	Stakeholder involvement	.398	.075	.329	5.324	.000
	Monitoring and evaluation	.206	.069	.214	2.980	.004
	Risk managements	.720	.070	.751	10.279	.000
a. Dependent Variable: project performance						

From Table 4, the following model has been developed:

$$Y = 1.079 + 0.294X_1 + 0.329X_2 + 0.214X_3 + 0.751X_4$$

Where:

Y = Project performance

X1 = Technological integration

X2 = Stakeholder involvement

X3 = Monitoring and evaluation

X4 = Risk management

The standardized coefficient (Beta) for technological integration is 0.294, with a t-value of 4.184 and a significance level (p-value) of 0.000. This indicates a significant positive relationship between technological integration and project performance. A higher Beta value suggests that technological integration contributes positively to improving project performance, although its effect is smaller compared to other variables like risk management. The positive t-value also signifies that technological integration is an important predictor of project success, and the low p-value (less than 0.05) confirms that this effect is statistically significant.

The standardized coefficient (Beta) for stakeholder involvement is 0.329, with a t-value of 5.324 and a p-value of 0.000. This suggests that stakeholder involvement has a strong and positive influence on project performance. A higher Beta value indicates that involving stakeholders in the project processes significantly improves outcomes. The positive t-value reinforces the importance of stakeholder involvement as a key factor in driving the success of the Kenya Trade Portal, and the p-value confirms that this relationship is statistically significant.

The standardized coefficient (Beta) for monitoring and evaluation is 0.214, with a t-value of 2.980 and a p-value of 0.004. This indicates that monitoring and evaluation positively contribute to project performance, though the effect is somewhat smaller compared to stakeholder involvement and risk management. The t-value shows that M&E is still a significant factor in driving project success, and the low p-value (less than 0.05) confirms the statistical significance of this relationship.

The standardized coefficient (Beta) for risk management is 0.751, the highest among the variables, with a t-value of 10.279 and a p-value of 0.000. This indicates that risk management is the most influential factor in improving project performance. A Beta value of 0.751 suggests that effective risk management

contributes substantially to the success of the Kenya Trade Portal. The very high t-value further emphasizes the strong positive impact of risk management, and the p-value indicates that this effect is statistically significant.

V. Conclusions

The first objective of the study was to assess the effect of technological integration on the performance of the Kenya Trade Portal. Based on the findings, it can be concluded that technological integration significantly contributes to the success of e-government projects. The strong positive relationship between technological integration and project performance indicates that effective use of technology streamlines operations, improves efficiency, and enhances project outcomes. Therefore, continuous investment in technology and ensuring alignment with the project's infrastructure is essential for boosting project performance.

The second objective sought to determine the effect of stakeholder involvement on project performance. The study concludes that stakeholder involvement is a critical factor in improving project outcomes. By actively engaging stakeholders in decision-making processes and ensuring transparent communication, the project can better meet the expectations and needs of various stakeholders. This leads to higher stakeholder satisfaction and a more successful implementation of the project. As such, fostering an inclusive approach that values stakeholder input is crucial for the overall performance of e-government projects like the Kenya Trade Portal.

The third objective was to examine the effect of monitoring and evaluation (M&E) on the performance of the Kenya Trade Portal. The study concludes that robust M&E practices are key to ensuring the continuous improvement and success of projects. The strong relationship between M&E and project performance underscores the importance of regularly tracking project milestones, incorporating stakeholder feedback, and using performance data for decision-making. Properly executed M&E enables timely adjustments, ensuring the project remains on track and meets its objectives effectively.”

The final objective focused on the effect of risk management on project performance. The study concludes that risk management is the most influential factor in determining the success of the Kenya Trade Portal. The significant impact of risk management practices highlights the necessity of identifying, mitigating, and addressing potential risks early in the project lifecycle. By proactively managing risks, the project team can avoid disruptions and ensure smooth project implementation. Thus, effective risk management is indispensable for enhancing the performance and sustainability of e-government projects.

VI. Recommendations

Based on the findings of the study, the first recommendation is for the enhancement of technological integration in e-government projects like the Kenya Trade Portal. Organizations should continue investing in cutting-edge technologies that align with the existing infrastructure and improve operational efficiency. Furthermore, ongoing training for project teams and users should be prioritized to ensure smooth adoption and utilization of integrated technologies. This will maximize the benefits of technological advancements and further enhance project performance.

The second recommendation focuses on improving stakeholder involvement throughout the project lifecycle. Project managers should adopt more inclusive strategies that actively engage all relevant stakeholders during planning, execution, and evaluation phases. Clear communication channels should be established to ensure stakeholders are well-informed and that their feedback is consistently incorporated into decision-making processes. By fostering stronger relationships with stakeholders, projects can achieve higher satisfaction levels and better outcomes.

The third recommendation is for organizations to strengthen their monitoring and evaluation systems. Continuous tracking of project milestones, regular performance assessments, and the timely integration of feedback are essential for ensuring that projects remain on course. The project management team should implement more comprehensive M&E frameworks that allow for the early identification of potential deviations and enable prompt corrective actions. This will help improve overall project efficiency and ensure that objectives are consistently met.

Finally, the study recommends prioritizing risk management practices to ensure project success. Organizations should develop and implement robust risk management frameworks that allow for the early identification, assessment, and mitigation of potential risks. Regular risk assessments should be conducted, and contingency plans should be established to address any unforeseen challenges that may arise. By integrating risk management into every phase of the project, organizations can minimize disruptions and improve the likelihood of project success, particularly in complex and dynamic environments such as e-government projects.

References

- [1] African Development Bank. (2021). E-Government In Africa: Challenges And Opportunities. African Development Bank.
- [2] European Investment Bank (2021). The Rise Of Africa's Digital Economy – The European Investment Bank's Activities To Support Africa's Transition To A Digital Economy. Retrieved From https://www.eib.org/attachments/thematic/study_the_rise_of_africa_s_digital_economy_en.pdf
- [3] Ict Authority, (2022). The Kenya Digital Masterplan: 2022-2032. Retrieved From <https://cms.icta.go.ke/sites/default/files/2022-04/kenya%20digital%20masterplan%202022-2032%20online%20version.pdf>
- [4] International Trade Centre. (2021). Digital Trade Platforms In Africa: The Role Of Technology In Trade Facilitation. International Trade Centre.
- [5] Kipkemoi, M. (2021). An Assessment On The Role Of Monitoring And Evaluation In Implementing E-Government Projects In Kenya. A Case Of The Ministry Of Ict, Innovation And Youth Affairs. Unpublished Thesis. Daystar University.
- [6] Kuldosheva, G. (2021). Challenges And Opportunities Of Digital Transformation In The Public Sector In Transition Economies: Examination Of The Case Of Uzbekistan. Adbi Working Paper 1248. Tokyo: Asian Development Bank Institute. Retrieved From <https://www.adb.org/publications/challenges-opportunities-digital-transformation-uzbekistan>
- [7] Ministry Of Industrialization, Trade And Enterprise Development (Moited) (2017). National Trade Policy: Transforming Kenya Into A Competitive Export-Led And Efficient Domestic Economy (2017). [www.Trade.Go.Ke](http://www.trade.go.ke).
- [8] Unctad (2022). Kenya Etrade Readiness Assessment. United. United Nations Conference On Trade And Development, Geneva.
- [9] United Nations. (2021). E-Government Survey: Digital Government In The Decade Of Action For Sustainable Development. United Nations.
- [10] United Nations (2018). United Nations E-Government Survey 2018, Gearing E-Government To Support Transformation Towards Sustainable And Resilient Societies. https://publicadministration.un.org/egovkb/portals/egovkb/documents/un/2018-survey/e-government%20survey%202018_final%20for%20web.pdf.
- [11] World Bank. (2020). Digital Government Readiness And Project Performance In Emerging Economies. World Bank.