
Influence of External Business Environment on the Success of Health Projects in Nyandarua County, Kenya

Kanyeria Ruth Njeri, Janesther Karugu

School of Business, Department of Management science, Kenyatta University, Kenya

ABSTRACT

Globally, project success is an important topic since the number of projects that are failing is extremely high with more than a third of projects failing to meet their objectives. There are two major strands of addressing project success, namely, how success is judged (success criteria) and the factors that contribute to project success. The successful implementation of projects is affected by several factors both in the internal and external environments. External environmental factors are those conditions that are not in the control of the project team and those that influence, constrain or direct the project. These factors include, political, economic, social and technological factors. Nyandarua County aims at improving access to quality healthcare to the community by upgrading local health facilities and building new ones. However, in spite of the efforts being made, it is evident that of the many health projects implemented by the Nyandarua County before and after 2013, many of them have been reported to have stalled. The broad objective of this study was to establish the influence of the external environment on the success of health projects in Nyandarua County. The following specific objectives were addressed; to establish the influence of government resource allocation on the success of health projects, to assess the influence of change in political leadership on the success of health projects, to find out the influence of finance on the success of health projects, to determine the influence of stakeholder involvement on the success of health projects and to establish the influence of technology adoption on the success of health projects. Theories reviewed in this study were the systems theory and project implementation theory. The study adopted a descriptive survey design with the target population being the project managers of health projects that are ongoing in the county. There were a total of 40 projects and therefore a census inquiry was used since the number is manageable. Data was conducted using a questionnaire and data was analyzed using the Statistical Package for Social Sciences (SPSS) to yield frequency tables, mean, mode, median and standard deviation. Multiple linear regression model was used to measure the relationship between the independent and the dependent variables. Data was presented using charts, tables and graphs. The study established a positively and significant relationship between government resource allocation, political leadership, finance, stakeholder involvement and technology adoption on the success of health projects. The study concludes that the budget provides a means to monitor the project's financial activities over the life of the project and provides a framework for expenditure to achieve the objectives of the project in an efficient manner. Realistic planning of finances is key to proper implementation of a project. Usually projects fail due to struggle because of the inattention of a project manager to the political environment. Finance provides numerous benefits such as risk management incentives, leverage flexibility extension and free cash flow creation. Stakeholder involvement develops a confidence atmosphere by requiring shareholders' voices to be heard and their issues to be identified and technology-based project management can help companies to streamline business operations, reduce overhead costs, and improve equipment tracking. The study recommends that project managers in the County should identify the right resources towards the

success of health projects being implemented in the County. Project leaders stay out in front of the County health projects through the political landscape of the County. A project managers seeking finance for a new health project should preferably seek the services of a financial advisor to assist with the feasibility study of the project and appoint sponsors to raise the funding. Project managers should engage stakeholders early and often in order to ensure project progress. The County should have good project management software that allows project teams to centralize documents, work on schedules and budgets together, and tag each other in updates and requests.

Key Words: *External Business Environment, Project Success, Resource Allocation, Political Leadership, Project Financing, Project Stakeholder Involvement, Project Technology Adoption*

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1. Introduction

Project is a short-term task carried out to generate a product or service that are distinct within a definite ending point, and unique means and are carried out in line with the strategic objectives of the organization (Ohara, 2015). Projects are executed under different ways and are different from each other in terms of size, scope, industry and as per the observation by Bradley (2012) all organizations anticipate that projects to be executed within a shorter period possible, within minimum cost but of better quality. In this regard, effective project management practices are the only means which can result to these because they lead to better management of all resources that are required for effect project performance. Project Management involves various aspects that include how to plan, organize, monitor and control activities that are involved in a project and the involvement of all the parties in order to attain the objectives of the project within set time, budget and performance metrics (Turner, 2016). According to Adeyemi (2013) all the firms value the idea of the management of the project due to an organized procedure of project control and it is the best procedure in which dependable project results can be arrived at during execution of a new project and influential tools that could enhance the ability of an organization to achieve better performance.

Ashley, Laurie and Jaselskis (2014) defined project success as results much better than expected or normally observed in terms of costs, schedule, quality, safety and participants satisfaction. De Wit (2015) posits that overall project success is achieved if all of the technical performance specifications of the project have been met, and if all project team members, end users and key people in the parent organization are highly satisfied with the outcome of the project. Therefore, it can be argued that the criteria for measuring project success go beyond the traditional measures of time, cost and quality; other criteria also have to be used, such as client satisfaction, end user satisfaction, environmental impact of the project, and so on. The success of a project is arriving at what the clients expects from the project and all other parties involved and attaining the rationale of the project (Arslan & Kivrak, 2014). According Chua, Kog and Loh (2013) project success requires creating proper project plan in terms of time to be taken as well as

considering the key factors towards its success. It helps the project manager and the stakeholders to arrive at better decision and focus on the success of the project. For better performance of funded projects it is important that organizations plan to have effective project management practices for better results of the projects.

The effective success of the projects determines the achievement of a projects whereby project performance is based on the complexity of the project, arrangements in contracting, how parties involved relate to each, the skills of the project manager and capabilities of those other parties involved (Stevens, 2016). Takim, Akintoye and Kelly (2013) observe that the performance of a project is normally gauged and measured in terms of the measures based on its performance. These measures are the methods common to obtain and present the related information in terms of its inputs, project efficiency and effectiveness. Hence, project performance can be measured in terms of how much has been spent, time taken, performance of project based on quality and whether it addresses user needs. Project success is an important topic since the number of projects which are failing is extremely high, with more than one third of projects failing to meet their objectives (Project Management Institute (PMI), 2013). Crawford (2000) highlighted two major strands of addressing project success, namely, how success is judged (success criteria) and the factors that contribute to project success. Initially, project success was referred to as reaching the project objective within the constraints of time, cost and performance. Although projects are now seen as complex and multidimensional (Mir and Pennington, 2014) with project success criteria differing from one project to another (Beleiu et al, 2014) and from industry to industry, time, cost and performance remain to be the most important constrains. This too applies to infrastructural projects in the health industry as is the main focus of this study.

Majority of organizations across the globe are focusing on project profitability while ideally, the main focus should be in achieving project success (Tahrdoost & Keshavarzsaleh, 2016). In Africa, according to the World Economic Forum (WEF) (2015), many infrastructure projects often struggle to progress beyond the conception stage mainly due to high costs, lengthy processes, lack of appropriate capabilities, insufficiently enabling regulatory environments, poor project governance and insufficient financial resources. Projects therefore, rarely get to the implementation phase and for this reason, multilateral institutions and donors have been a major source of funding especially in the preparation phase. This is also true in the Kenyan context with similar problems being encountered with only few projects meeting the success criteria (Muyuka, 2015). An external business environment is composed of all the outside factors or influences that impact the operation of business and therefore the business must act or react to keep up its flow of operations (Bryde, 2015). Musa, Bin Amirudin, Sofield and Mus (2015) show that environment can be acknowledged as the surroundings or conditions in which a specific activity is carried on. Business firm is a social entity which is formed by a hierarchical structure where all necessary items of its own are activated together to reach the collective goal. Therefore, it is absolutely that every factor inside or outside a business organization has a profound influence on project success.

Jaselskis and Ashley (2010) states that resources make organizations to run effectively, and allocating these resources to an organization should be done carefully. Allocating these resources can be tough, but an organization can acquire the resources they need appropriately through careful practice. Projects are divided into tasks and sub-tasks, which require renewable which include machines, tools and work force resources. The tasks and sub-tasks often compete for the same set of limited resources. In this regard, Slowinski (2015) states that resources are needed

for the successful implementation of the project and better performance and therefore, it is very difficult to successfully implement a project when resources are not available. Canes-Wrone and Ponce (2014) observe that changes in government may lead to halting or abandoning of most government projects because many leaders argue that such projects will not be credited to them. According to Wasilwa (2015) there is a risk of excluding those perceived to be opponents of the sitting politician. This presents many governance challenges at the same time threatening the continuity of development projects during political transitions. The author further indicates that the political processes within a country generate laws and regulatory requirements which may positively or negatively affect the success of the projects.

The financing area of the project is, in the case of many projects, considered to be within the stakeholder area of influence and, because of that, is not directly addressed by the project manager (Finnerty, 2013). John and John (2015) indicate that source of funds for the project are often from the company's central financing system, which may be a combination of borrowing from financial institutions, retained profits, financial reserves and progress, or down payments expected to be made by the client. Therefore, to effectively secure and manage a project's budget, project managers must not only have financial skills and experience. According to Atkinson, Waterhouse and Wells (2012) successful performance of a project is attained when parties involved achieve their targets together or individually. Chua, Kog, Loh and Jaselskis (2013) noted whereas delivering the project within budget is crucial factor in determining the success of the project, similar sentiments can be attributed to the delivering the project within the period set. Chua *et al.* (2016) observe that project quality is seen as meeting the required set of project performance by ensuring better relationships between the stakeholders. Improving the quality of result to better quality products and services and eventually lead to satisfying customer needs.

Organizations invest substantial resources into technology initiatives intended to generate advantages associated with improved use of human resources, increased operational efficiencies and creating new capacities within processes and products (Sargent, Hyland & Sawang, 2012). According to Small and Yasin (2013) the utilisation of right technology can streamline project managers roles and speed task completion time. The true value of technology in project management is the way in which it is utilized it can improve communication, help in risk assessment and control scheduling, but only under assumption that proper tools are used in the right way and at the right time. Nyandarua County is one of the 47 counties in Kenya and is located in the central region. According to the Nyandarua County Development Plan (NCIDP) 2013-2017, there were two level four public health facilities in the county, one mission hospital, three nursing homes, seven level three health facilities, 32 level two facilities and 50 private clinics. The average distance to the nearest health centre is 3.2 km with about 21 % of the households travelling up to one kilometer to access health service and 78 % travelling between 1.1 and 4.9 km. The most prevalent disease in the county is upper respiratory tract infection with the average morbidity rate for the county being 21.2%. In the plan, the county aimed at improving access to quality healthcare to the community with focus being on reduction of infant and maternal mortality rates through upgrading local health facilities to offer maternity services that will help the rural communities' access pre and postnatal maternal services. The health department is tasked with the implementation of a community health strategy program which aims at taking health services closer to the people by engaging community health workers in sensitization and provision of health care. It therefore strives to take the county beyond the

traditional health and it is anticipated that investments in the health sector will greatly improve the human resource development in the county (NCIDP, 2013 -2017).

2. Statement of the Problem

Project success has been a major concern in the field of project management over the years (Crawford, 2000) since the number of projects which are failing is extremely high, with more than one third of projects failing to meet their objectives (PMI, 2013). When projects are aligned with their strategic objectives, this brings value to an organization while implementing successful projects generates positive effects on the organization, influencing short, medium and long-term development. The NCIDP (2013 – 2017) indicates that close to 50% of the many infrastructural health projects started in Nyanadarua County before and after had stalled. Some of the reasons given for the stalled projects included land ownership disputes, inadequate funding and exhaustion of funds. All projects must take place within an environment. The environment represents in this case, are the external conditions that affect the development of any project. Therefore these conditions may be economic, political, technological, or social. They make up the environment within which any project operates. A project will in one way or the other be impacted by these factors during the course of the project cycle (Fewings & Henjewe, 2019). These factors will either impact the project negatively or positively and in the long run affect the completion of the project.

Jane, Justus and Francis (2014) carried out a study on the influence of external organizational environment on performance of community-based HIV and Aids organizations in Nairobi County, Kenya and found a statistically significant positive relationship between external environment and CBOs external environment and effectiveness. However, the study used secondary data which may not be specific to the needs of a researcher. Musa, Bin Amirudin, Sofield and Mus (2015) study investigated the influence of external environmental factors on the success of public housing projects in developing countries and found that the economics, social and political factors significantly affects public housing project success. However, the study used simple random sampling which is subject to sample biasness. Njenga (2017) did a study on the effects of external environmental factors on strategy implementation of Donor Funded Projects in Somalia and revealed that political, technological and social, all had different levels of impact on the implementation of projects in Somalia. However, the study was a case of the International Organization for Migration (IOM). Therefore, this study aimed at investigating the influence of the external environment on the success of health projects in Nyandarua County.

3. Objectives of the Study

The main objective of this study was to assess the influence of the external environment on the success of health projects in Nyandarua County.

Specific Objectives were:

- i. To establish the influence of government resource allocation on the success of health projects in Nyandarua County.
- ii. To assess the effect of change in political leadership on the success of health projects in Nyandarua County.
- iii. To find out the influence of finance on the success of health projects in Nyandarua County.

- iv. To determine the impact of stakeholder involvement on the success of health projects in Nyandarua County.
- v. To establish the effect of technology adoption on the success of health projects in Nyandarua County

4. LITERATURE REVIEW

4.1 Theoretical Literature Review

4.1.1 Resource Based View Theory

This study was guided by Resource Based View theory as proposed by Barney (1991). Barney (1991) states that a firm is a collection of physical capital resources, human capital resources and organizational resources. The core premise of the resource-based view is that organizational resources and capabilities can vary significantly across firms, and that these differences can be stable. The theory focuses on the idea of costly-to-copy attributes of the firm as sources of business returns and the means to achieve superior performance and competitive advantage. Chandler (1990) indicates that organizational capabilities emanates from lower management, middle and top management and that a firm can gain competitive advantage when its resources and capabilities are used properly. He further states that if these organization capabilities were carefully synchronized and assimilated it could achieve the economies of scale and scope needed to compete in national and international markets. Barney (1991) states that, “sustainable competitive advantage is derived from resources that are valuable, rare, imperfectly imitable (due to path-dependence, causal ambiguity, and social complexity), and no substitutable”. A resource-based view of the firm accepts that attributes related to past experiences, organizational culture and competences are critical for the success of the firm. This theory is relevant to the study because it shows that the County government manages their health projects on the basis of their resources and capabilities. A firm resource must, in addition, be valuable, rare, and imperfectly imitable and substitutable in order to be source of effective management of health projects tasks. Resources may increase the company’s capacity for proper management of wastes and, thus, contribute to project performance by helping the firm to appropriate the value.

4.1.2 Stakeholder Theory

This study was guided by stakeholder theory by Freeman (1994). According to Freeman (1994) this theory is based on management of the organization and ethical issues in business that shows the organization culture in the organizational management. The theory shows that organizations must put in mind individual matters and groups that may influence their activities when making decisions and attaining the goals of the organization (Gibson, 2000). Stakeholder theory addresses how the organization and its micro and macro environment relate to each other and its effects on how the organization activities are conducted (Filippone, 2012). Bourne (2009) shows that stakeholders are either from within or outside the organization. For example, in a given project clients, staff, suppliers, contractors, NGOs, government, and the local community among many others comprise are stakeholders. Hill and Jones (2012) state that stakeholder theory can be used to buy in the community trust in a project. The same view is supported by Walumbao (2011) that established that stakeholder theory provide principles in which community interests as a stakeholder are identified, analyzed and can be fulfilled. Danny (2014) opines that depending on how the community interests are identified and analyzed, decisions can be made by a firm that help the community or at least prevent harm from coming to the community. These

decisions may be to play by the rules of the game, adhere to legal contracts, or act on complaints or pressure brought to bear on the firm.

4.1.3 Transaction Cost Analysis Theory

This study was guided by Transaction Cost Analysis (TCA) advocated by Williamson (1981) who argues that Transaction Cost Analysis (TCA) theory ensures that costs across the supply chain are kept at a minimal. Transaction cost approach has been widely used in different areas, especially in economics and organizational studies. In the early 1970s, the mathematical economist, Williamson, incorporated TCA into the general equilibrium model and set up his transaction cost economics in the new theory of the firm. Halldorsson (2007) suggests that organizations can reduce their transaction costs by vertical integration and increasing the level of trust at the same time. This kind of integration can reduce the costs of inventory management while increasing the service level of both internal and external customers while releasing capital to be used in other areas of the organization. Organizational supply chain can however reduce transaction not only through vertical integration and increasing the level of trust among supply chain participants, but also through horizontal integration and economy of scale gained from the aggregation of supply and/or demand. This theory is relevant to the study as it shows that organizations should minimize their cost of transaction so as to increase their revenue generation. These costs should be obtained from the market rather than having it provided from within the firm. Therefore, organizational managers must weigh the internal transaction costs and against external transaction costs during purchase of project materials before the company decides whether or not to keep some activities in-house.

4.2 Empirical Literature Review

4.2.1 Resource Allocation and Project Success

A study carried out by Nair and Suma (2015) evaluated the impact analysis of allocation of resources by project manager on success of software projects. This research comprises of an empirical study of several projects developed in a product and service based CMMI Level 5 Software Company. The investigation result shows a significant impact of aforementioned factors on the success of software and on the company. The analysis further indicates the vital role of project managers in optimizing the resource allocation towards development of software. This paper brings in impact analysis of efficiency of project manager in effectively allocating resources such as time, cost, number of developers and so on. Umulisa, Mbabazize and Shukla (2015) study investigated the effects of project resource planning practices on project performance of Agaseke Project in Kigali, Rwanda. The research design to this study employs a Cross-sectional study design that uses both quantitative approach. Questionnaire was used in order to collect primary quantitative data while a focus group discussion in-depth interview guide would be used to collect qualitative data. Correlation analysis between human resource planning practices and project performance indicated positive and yet significant relationship between teamwork, training of the project members on handcraft making and project performance. Rugiri and Njangiru (2018) examined the effect of resource availability on performance of water projects funded by constituency development fund in Nyeri County, Kenya. The study employed a descriptive research design and relied on a target population of 86 water projects identified to have been funded by CDF in Nyeri County as gathered from the National Government Constituency Development Fund Board. Regression analysis results further demonstrated resource availability was a useful predictor of project performance. Pearson correlation analysis

results demonstrated that resource availability was positively associated with project performance.

4.2.2 Political Leadership and Project Success

Omony (2019) study examined the moderating role of project leadership on the influence of complexity on success of public infrastructural megaprojects in Kenya. The study was designed as multiple-method research. A census survey of 124 respondents based on 31 completed public infrastructural megaprojects was conducted using three interlinked questionnaires. Quantitative data analysis was conducted using both descriptive and inferential statistics, while qualitative data analysis was done through scenario mapping and triangulation. It was found that project leadership had significant positive influence on project success. Lategan and Fore (2015) study examined the impact of leadership styles on project success: A Case of a telecommunications company. This study is descriptive in nature. A structured questionnaire was utilized in order to collect data, which comprised closed ended questions and a few open-ended questions. A stratified random sampling method was used to draw a sample size of 100 units from a population size of 201 units. The role of leadership styles was found to be vitally important within an organization's path to success. Yang, Huang and Wu (2011) study investigated the association among project manager's leadership style, teamwork and project success. To address the primary aims, a questionnaire-based survey was used to measure the project manager's leadership style, teamwork, and project success in terms of schedule performance, cost performance, quality performance, and stakeholder satisfaction. The analyses suggest that increases in levels of leadership may enhance relationships among team members. The results also indicate that teamwork exhibits statistically significant influence on project performance.

4.2.3 Finance and Project Success

Siborurema, Shukla and Mbera (2015) carried out a study on the effects of projects funding on their performance in Rwanda: A Case Study of Bukomane-Gikoma Road. The target population was composed of two groups; one group was formed by the personnel involved in the projects planning and funding, and the other group was formed by the people involved in projects implementation management. Specially conceived questionnaire, consultation of existing documents and interviews were used to collect data. On analysis of the data, it has been found that both the cost estimation and technical design interfere with the projects funding policy and affect negatively the scheduled projects implementation time. Akali and Sakaja (2018) study evaluated the influence of contractors' financial capacity on performance of road construction in Kakamega County. Data was collected through questionnaires and interview schedule and was analyzed using descriptive and inferential statistics and thematic were applied to analyze data. Descriptive statistics utilized mean and standard deviation. To ensure that project financing does not affect successful completion and performance of road construction project the researcher recommended that enough finances should be set aside for the project before it commences. Mwenda (2016) study examined the influence of bank loan financing on project performance: A Case of Kenya Commercial Bank Financed Youth Groups' projects In Imenti South District-Kenya. Quantitative and Qualitative methods were employed to analyze the data collected from various sources. This entailed the use of simple descriptive statistics. The study established that high interest rates, coupled with lack of entrepreneurial skills were seen as the major factors that have a direct bearing with the loan repayment among youth groups', youth

group owned projects lacked the necessary collateral, and were confronted with a dilemma of obtaining bank finance.

4.2.4 Stakeholder Involvement and Project Success

Njogu (2016) study examined the influence of stakeholder's involvement on project performance: a case of NEMA automobile emission control project in Nairobi County. The study used both primary and secondary data. Inferential analysis correlation and regression was done to examine the relationship between stakeholders' Involvement and project performance. The study revealed that stakeholder Involvement in project identification has significance influence in Automobile Emission control project Performance. The results also show stakeholder Involvement in project planning had a positive and significance influence in Automobile Emission control project Performance. Ndunda, Paul and Mbura (2017) study assessed the influence of stakeholder activities on implementation of rural road projects in Machakos County. Descriptive survey design was used to accomplish the study objectives. A semi-structured questionnaire was used to collect data from the respondents Descriptive statistics provided an analysis of the relationship between the study variables. Project beneficiary participation positively and significantly influenced the implementation of road projects in Machakos County. Temba (2015) study aimed at assessing the role of stakeholder's participation on sustainability of donor funded project: A Case Study of Youth with Disabilities Community Program in Tanga. A cross sectional descriptive research design was used with a sample size of 70 stakeholders. The study found that in order for stakeholders' participation to be effective in promoting sustainability of donor funded projects it should be initiated from the beginning of the project. The study also found that the major role of stakeholders' participation in donor funded projects was mainly in the form of resource mobilization, collaboration and partnership, material contribution, and citizen control.

4.2.5 Technology Adoption and Project Success

Meller (2013) study focused on the use of technology and its influence on project success. A study of e-commerce companies in Ireland. A quantitative approach has been used as instrument to generate the data. It explores potential of use of technology in order to manage projects effectively and efficiently. A survey questionnaire was distributed among stakeholders involved in the project environment of largest players on the market. The research findings conclude that there is significant impact of implemented technology and usage of different technologies in managing and executing projects on the general outcome of the undertaking. Mwangi (2015) study examined the influence of ICT on Successful Project Completion in The Kenyan Banking Industry: Case of Five Largest Banks. This research study used a descriptive research design. The study used primary data which was collected by use of self-administered questionnaires. In processing the qualitative data content analysis was used. The quantitative data in this research was analyzed by use of descriptive and inferential statistics. The study found that use of Project Management Software and Document Management Systems, in project management have a positive influence on successful project completion in the Kenyan banking industry. Hemmati and Hosseini (2016) study evaluated the effect of IT application on project performance focusing on the mediating role of organizational innovation, knowledge management and organizational capabilities. By calculating descriptive indexes of the variables, Pearson coefficient of correlation and Structural Equation Modeling (SEM) are used to examine the causal relationships

between variables. The study found that there is a significant positive correlation between organizational innovation and project benefits.

5. Conceptual Framework

Figure 1 shows the conceptual framework which gives the relationship between the study variables. This includes the dependent variable, the independent variables.

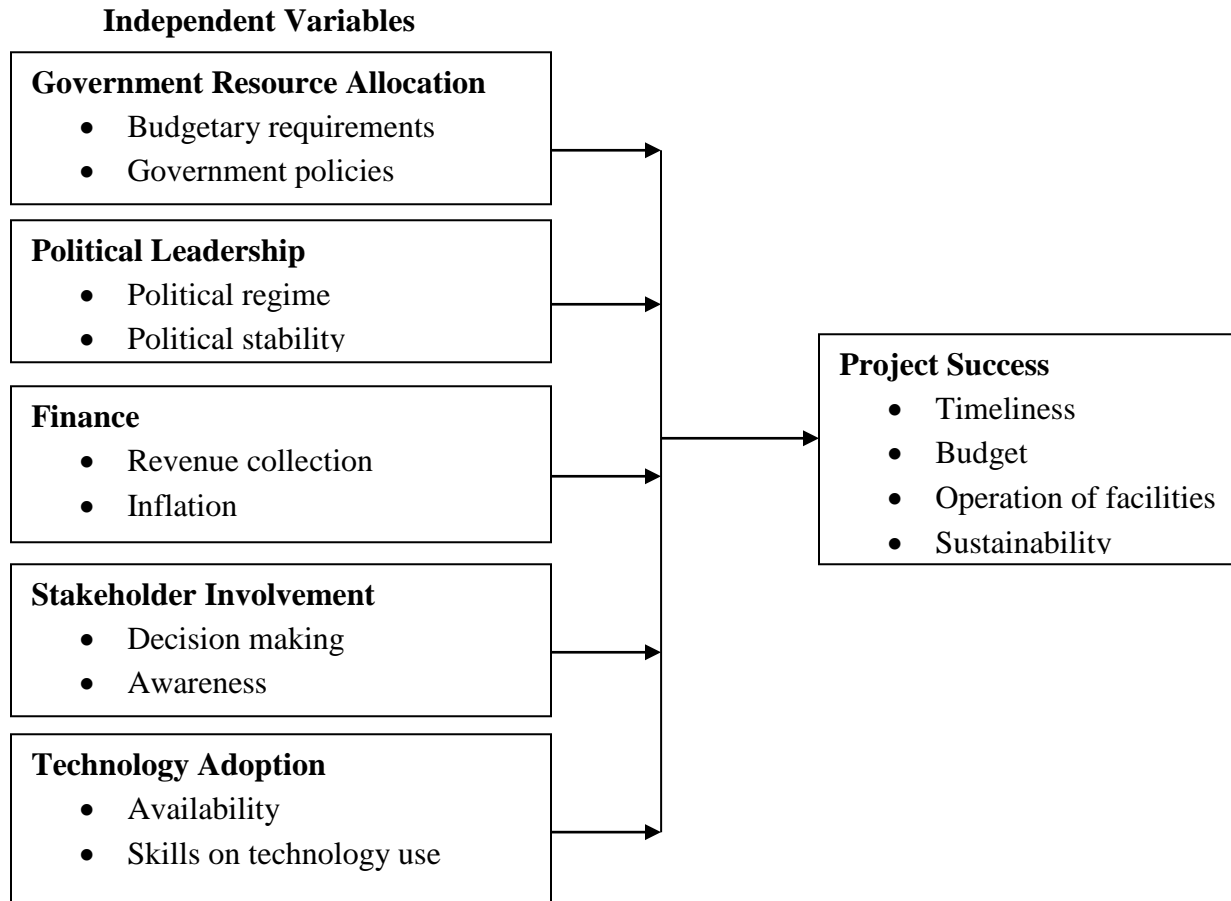


Figure 1: Conceptual Framework

Source: Researcher (2020)

6. Research Methodology

This study adopted a descriptive survey design to collect data. The target population for this study was the project managers of ongoing and recently completed health projects in Nyandarua County. In total, the number of targeted projects is 40. This study adopted a census sample design with a sample size of 40 respondents. This is because the target population is manageable and easily accessed since they are within the county system. This increased the chances of obtaining accurate data since the population was manageable. The primary data was collected through self-administered survey questionnaires which was hand-delivered or emailed to the targeted respondents. The questionnaires comprised of open-ended and closed-ended questions and were divided into several parts to help capture different sets of data. In order to test for the suitability of the questionnaire, the researcher conducted a pilot study in Nairobi County to a

selected sample with similar characteristics to the one to be used for the actual study. This helped to identify any problems likely to be encountered by the respondents while filling the questionnaires and thus rectify them before the actual research. Descriptive statistical analysis such as mean and standard deviation were used to analyse quantitative data and presented in terms of tables, frequencies, graphs and charts. This was made possible by use of Statistical Package for Social Sciences (SPSS) version 20.0. Because the study involves more than three variables multiple regression analysis was used which had a model as described below.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$$

Whereby Y= Project Success

X₁= Government Resource Allocation

X₂= Political Leadership

X₃= Finance

X₄ = Stakeholder Involvement

X₅ = Technology Adoption

β₁, β₂, β₃ and β₄ are coefficients of determination

ε is the error term

7. Research Findings and Discussions

Regression analysis was used to model, examine, and explore the relationships between the dependent variable against the four independent variables used for the study. The findings are shown in Table 1.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.690 ^a	.806	.791	1.204	.476	5.624	5	31	.001

Source: Researcher (2020)

The four independent variables that were studied, explain 0.791(79.1%) of the success of health projects in Nyandarua County as represented by the adjusted R square. This therefore means that other factors not studied in this research contribute 20.9% of the success of health projects in Nyandarua County.

Analysis of Variance (ANOVA) was used to determine the linear relationship among the variables under investigation. Using this method, the sum of squares, degrees of freedom (df), mean square, value of F(calculated) and its significance level was obtained. The results are shown in Table 2.

Table 2: Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	40.776	5	8.155	10.624	.001 ^a
Residual	44.954	31	1.450		
Total	85.730	36			

Source: Researcher (2019)

The significance value is 0.001^a which is less than 0.05 thus the model is statistically significant in predicting how the independent variables studied influenced the success of health projects in Nyandarua County. The F calculated at 5% level of significance was 8.155. Since F calculated is greater than the F critical (p value = 10.624), this shows that the overall model was significant.

Table 3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.521	2.398		1.301	.001
	Government resource allocation	0.512	0.423	2.202	1.209	.002
	Political leadership	0.662	0.299	1.356	2.212	.000
	Finance	0.516	0.849	3.470	1.315	.002
	Stakeholder involvement	0.776	0.506	4.411	1.929	.001
	Technology adoption	0.687	1.070	1.103	3.268	.003

The established regression equation by the study was:

$$Y = 0.521 + 0.512X_1 + 0.662X_2 + 0.516X_3 + 0.776X_4 + 0.687X_5$$

Where Y = Success of health projects

X₁ = Government resource allocation

X₂ = Political leadership

X₃ = Stakeholder involvement

X₄ = Finance

X₅ = Technology adoption

From the above regression model, holding all the independent variables studied constant, success of health projects in Nyandarua County would be 0.521. As shown in table 3 government

resource allocation, political leadership, stakeholder involvement, finance and technology adoption had a positive and significant effect on success of health projects in Nyandarua County as indicated by beta values. The relationships ($p < 0.05$) are all significant with government resource allocation ($t = 1.209$, $p < 0.05$), political leadership ($t = 2.212$, $p < 0.05$), stakeholder involvement ($t = 1.315$, $p < 0.05$), finance ($t = 1.929$, $p < 0.05$) and technology adoption ($t = 3.268$, $p < 0.05$). Stakeholder involvement was found to have a greater at 77.6% on the success of health projects in Nyandarua County compared to technology adoption (68.7%), political leadership (66.2%), finance (51.6%) and government resource allocation (51.2%). Ndavi, Ogolla, Kizito and Johnson (2009) state that the government's commitment to address the problems in the health sector has included deliberate decentralization efforts aimed at strengthening the effective implementation of activities at the district level and fostering closer coordination and collaboration amongst the ministries, donors, organizations and other stakeholders. According to Walid and Oya (1996) the successful implementation of projects is affected by several factors both in the internal and external environments.

8. Conclusion

On government resource allocation, the study concludes that the budget provides a means to monitor the project's financial activities over the life of the project and provides a framework for expenditure to achieve the objectives of the project in an efficient manner. Realistic planning of finances is key to proper implementation of a project. Allocation of resources helps managers to bring together more productive and effective project teams and workgroups and enables them to appraise their schedules and easily estimate resource availability in real-time. The study concludes on political leadership that usually projects are not collapsing due to technical reasons. Rather, they struggle because of the inattention of a project manager to the political environment, the failure to react with the correct leadership style to the situation, and the inability to deal with challenging group problems and relational issues. On financing, the study concludes that finance provides numerous benefits such as risk management incentives, leverage flexibility extension and free cash flow creation. Project funding helps investors to retain sensitive project details private. Sponsors may collect project funds simply on the basis of contractual obligations.

On stakeholder involvement, the study concludes that project stakeholder engagement means sharing a common understanding and participating in the project decision-making process. Develops a confidence atmosphere by requiring shareholders' voices to be heard and their issues to be identified. Enables the voices of the stakeholders to be heard and thereby increases the level of trust in the relationships and promotes transparency in the project's actions and ensures accountability for the project's actions. On technology adoption, the study concludes that technology-based project management can help companies to streamline business operations, reduce overhead costs, and improve equipment tracking. By adopting tools that are capable of making the staff get more involved in the results, an organization can perfect the planning, execute actions with more efficiency and keep track of the developed works. These minimize mistakes and strengthen the success of the project.

9. Recommendations for Policy and Practice

On government resource allocation, the study recommends that project managers in the County should identify the right resources towards the success of health projects being implemented in the County. Frequent estimation is necessary for each assignment within the project so that utilization of resources can occur in the most effective manner possible. Regarding political

leadership, the study recommends that project leaders stay out in front of the County health projects through the political landscape of the County. We must change the point of view of politics when effective health programs are to be done and it is their responsibility to cultivate and use political awareness to keep the County health initiatives centered and on schedule, to escape the political landmines we will inevitably encounter on projects and to protect project teams from the negative political activity of other individuals and groups and allow them to concentrate on their jobs.

On finance, the study recommends that a project managers seeking finance for a new health project should preferably seek the services of a financial advisor to assist with the feasibility study of the project and appoint sponsors to raise the funding. The project manager has an important role to perform in the process of successfully raising the funds, not in the least to ensure that resources are used optimally to achieve successful completion of the project.

The study recommends that the project managers should engage stakeholders early and often in order to ensure project progress. Identify and assess investors and prioritize them. Create a stakeholder database and create questions to better manage and impact key stakeholders ' involvement. Identify the principles of influence and determine an influence strategy. On technology adoption, the study recommends that the County should have good project management software that allows project teams to centralize documents, work on schedules and budgets together, and tag each other in updates and requests. In other words, project management software keeps everyone connected and aligned.


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