

# Effect of External Project Environment on the Success of Construction of Les Hirondelles Nursery and Primary School Buildings Projects in Kigali City, Rwanda

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**Abstract:-** The study “Effect of external project environment on the success of Construction of les Hirondelles nursery and primary school buildings projects in Kigali City” is directed by the following precise objectives: to determine the effect of economic environment, to analyse the effect of political environment, to examine the effect of physical environment and to find out the effect of technological environment on the success of construction of les Hirondelles nursery and primary school buildings projects in Kigali City. Both descriptive and inferential research designs were employed in the study. There were 86 employees in the study's sample. A questionnaire was utilized to gather data, and the Statistical Package for Social Sciences (SPSS) was employed to assist with the usage of descriptive statistics, correlation analysis, and multiple linear regressions as data analysis techniques. The results indicate that effective economic environment has positive significant effect on the projects as evidenced by  $B = 0.468$ ,  $p\text{-value} = 0.000 < 0.05$ . The findings revealed that political environment affect the projects negatively as evidenced by  $B = -0.167$ ,  $p\text{-value} = 0.000 < 0.05$ . The findings showed a positive significant effect of physical environment on the projects as evidenced by  $B = 0.504$ ,  $p\text{-value} = 0.000 < 0.05$  and the study showed a positive significant effect of technological environment on the projects as evidenced by  $B = 0.362$ ,  $p\text{-value} = 0.000 < 0.05$ . The study's conclusion was that physical environment had the greatest positive effect on success of the projects followed by economic environment and then technological environment having the least effect on success of the projects. However political environment had a negative effect on success of the projects.

## I. INTRODUCTION

Due of the numerous parties involved, including customers, contractors, consultants, stakeholders, stockholders, and regulators, the construction business is complicated globally, this parties can affect the success of the project through many related topics and factors. These involvements of numerous parties, with various processes, different phases and stages of work and a great deal of input from both the public and private sectors, with the major aim being to bring the project to a successful completion (Karim and Marosszeky (2019).

Construction projects in Africa, particularly in Zambia, are determined by constraints pertaining to time, money, and quality (Kelly, Male & Graham, 2019). It seems that Zambian contractors have not been as successful as expected. It is not often that one finds out about unfinished or severely delayed local projects. The lack of success seen by numerous contractors working on construction projects has a significant impact on their competitiveness (Zulu & Chileshe, 2018).

In East Africa, European colonization had a significant impact on Kenya's construction industry. Urbanization and the construction industry were directly impacted by the railway line and the increasing influence of Europe and Asia. Trading centers grew up beside railroad lines and served as a vital conduit between the modern space economy's urban-based sectors and rural areas. Small towns' expanding urban populations quickly led to a rise in building activity in both urban and peri-urban areas (Agweta, 2018).

In Rwanda, Construction projects often have delays and cost overruns, particularly larger, heavier projects. For example, the construction of National Bank branches nationwide was beset by delays and overbudget expenses (OAG, 2018). According to the construction project study, 35.7% of projects failed financially, while 45.2% of projects failed in terms of schedule (Gitau, 2017). Challenges affecting the construction industry, the Rwanda Housing Authority recommended that construction companies adopt documents that are already planned (RHA, 2019). The concept of delays and overrun cost in project is now a global phenomenon and may be caused by different factors; therefore, the study seeks to assess the effect of external project environment on the building construction project success in Kigali City, Rwanda

## II. STATEMENT OF THE PROBLEM

The degree of success in carrying out the development activities for construction projects will largely depend on the quality of the managerial, financial, technical, and organizational success of the respective parties, while also taking into account the business environment, political and economic stability, and related risk management (Santos, 2021). A more sophisticated method is required to deal with the beginning, planning, financing, designing, approving, implementing, and finishing of a project because construction is becoming an increasingly complex process. There are many constructed project which fail in time success, others fail in cost success and others fail in other success indicators. In addition, there are other indicators of success in construction project such as project manager's competence, coordination between participants, monitoring, feedback and external environment factors. To examine the primary causes of Rwanda's building project delays, a worldwide analysis of the project has been carried out. According to a statistical examination of fifteen commercial building projects from 2010 to 2020, none of them were completed by the deadline. It was found that 75% of these projects need extra time to be finished, and 15% of them were cancelled (Chandu et al., 2018). This failure may be caused by improper different factors including external environment. A study done by Helen et al (2019) indicated that external factors such as political, economic, social, and cultural risks affect seriously the construction project success. Therefore, the purpose of this study is to determine how the external project environment affects the building construction project's success in Kigali City, Rwanda.

## III. THE STUDY'S OBJECTIVES

Assessing the impact of the external project environment on the construction of the Les Hirondelles nursery and primary school buildings in Kigali City, Rwanda, is the study's main goal.

## IV. LITERATURE REVIEW

The work of other researchers is reviewed in this section. The main goal of this review is to have a comprehensive grasp of the many perspectives held by researchers regarding the external environment of projects and how they impact project success.

### A. Conceptual Review

The conceptual review comprises of economic environment, political environment, physical environment and technological environment and project success:

#### ➤ Economic Environment

The financial and economic component focused on the overall amount of economic activity, the resources available to complete the task, and the degree of economic competition surrounding the appointment of each party involved in the building project. Obalola (2019) clarified that financial environment forces are distinguished from economic ones on the basis that economics is to do with the deployment of resources, whereas financial limitations are strictly to do with money. Financial limits seem to always exist on building projects. Assuring a project's financial viability in a changing economic climate is a difficult task for any project manager (Odeh and Battaineh, 2018). Additionally, since the construction industry's operations are heavily impacted by periodic economic cycles, it's critical to accurately forecast both local and global economic trends (Oladapo and Olotuah, 2018). Li et al. (2021) concur that stable macroeconomic conditions and prudent economic policies are essential for construction project success.

#### ➤ Political Environment

The political environment pertains to government policies and how construction projects are affected by political decisions. The political sphere plays important responsibilities in the construction business, primarily as regulators of the national economy, clients, and the building environment through laws governing construction practices and ethics, among other things (Young, 2017). This implied that monetary and budgetary policies may be used by governments to dramatically alter the demand for building services. Governments regulate the built environment by influencing the processes of development and building permission, as well as enforcing adherence to laws and regulations.

Governments may also use their authority to start or halt projects for political, social, or environmental reasons, as noted by Mansfield et al. (2019). Political variables include political stability and political involvement in creating favorable conditions and incentives for the construction of public housing (Chen et al., 2018). In terms of infrastructural development, the availability of a supportive legal environment, and assurances to developers, politics is crucial to the success of public housing.

Therefore, key components of national growth are strong political leadership, national unity, and stable governments. Thomas and Martin (2017) held the view that no project is isolated from a variety of influences, including industrial, political, and regulatory control. They suggested that managers of construction projects should be aware of the political factors that can lead to an uncertain environment, such as unstable governments, erratic changes in the economy, and unforeseen shifts in consumer demand.

#### ➤ *Physical Environmental*

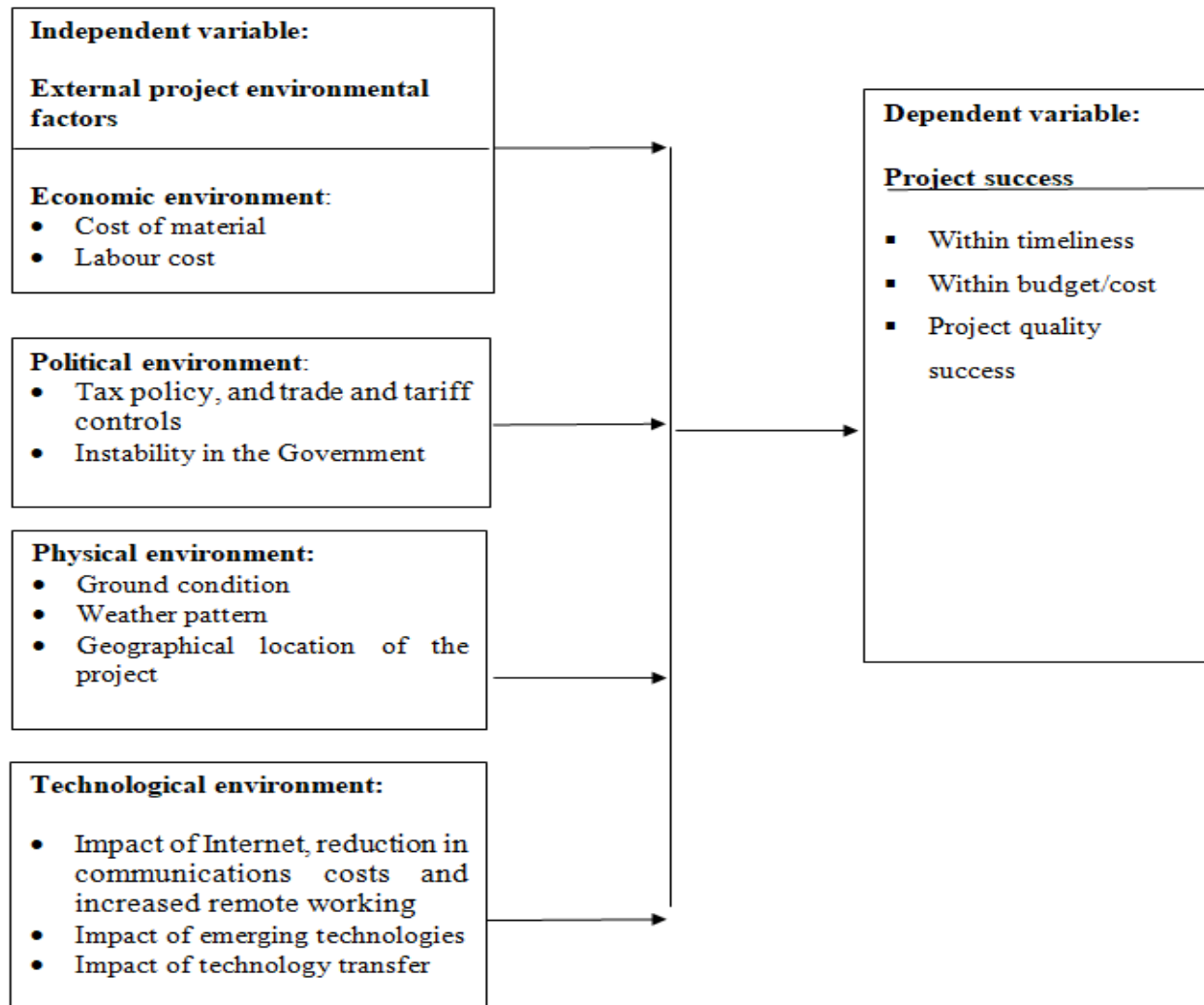
The physical environment in which a construction project is located can have a significant impact on its development because construction projects are constantly influenced by physical factors. Physical effects most commonly include a project's geographical location, ground conditions, and weather patterns. They are unpredictable, therefore management interventions have been ineffective in preventing their occurrence. Nonetheless, Martin and Thomas (2017) believe that construction managers would take physical effects into serious consideration when developing management tactics in order to avoid excesses that can take advantage of available resources.

#### ➤ *Technological Environment*

Technology is an aspect of the environment that should be considered in developing strategic plans. Oladapo and Olotuah (2017) maintained that the appropriate construction technology can be measured by the availability of locally made plant and equipment, skilled manpower resources, extent of local material resources and the degree of utilization of such local construction resources. The technological environment includes research, knowledge and technology (Snieskiene 2017). Technological factors increase the country's competitiveness through the provision of timely and effective information, the modernization of servicing systems, the assurance of the appropriate level of quality and other measures based on innovations and adapted technology (Barkauskas, 2019). Barkauskas asserts that when using modern technology and information systems, it is necessary to achieve that institutional information would be available for residents of a given country and people from foreign countries as well. The increased use of computer programs, technological trends and innovations, increasing speeds in producing units, smart systems, improvements in artificial intelligence and diversification are examples of technological forces (O'Connor, 2018). Electricity, telecommunications, railroads, water supply and natural gas are some of the factors that attract potential investors in a given place (Johnson, 2017).

#### ➤ *Project Success*

A construction project is deemed successful when it is completed on time, without cost overruns, and within the stated quality specifications (Sinesilassie et al. 2019). Success factors are interconnected performance characteristics that contribute to project success (Olugboyega et al. 2020), providing the foundation for organizations to succeed on a project (Nguyen et al. 2020). The essence of project success is that the right projects be completed properly (Langston et al. 2018). According to Duy Nguyen et al. (2004), additional performance metrics include functionality, contractor competitiveness, the lack of conflicts and court cases, and occupiers' "fitness for purpose." Given the complexity of defining success and the variables that affect its achievement, project success is one of the project management subjects that receives the greatest research. Still, the term "project success" is imprecise and often depends on the perspective that the person using it prefers (Jugdev and Müller 2005).

*B. The Conceptual Framework*

**Fig 1: Conceptual Framework**  
**Source:** Researcher Compilation (2023)

## V. METHODOLOGY

This study adopted a descriptive research design and inferential research design. Descriptive research design was used to describe external project environment in terms of political, economic, physical and technological environment and success of building construction. The study also outlines the degree of building construction success in terms of schedule, cost and budget, success in terms of quality, and customer satisfaction. The association between the external project environment and the building construction project's success was determined using inferential statistics.

A population refers to an entire group of individuals or constituents who share at least one item. The word "population" also refers to the larger group that a specimen is collected from (Orodho and Kombo, 2003, pp.2-3). The target

population for the study is employees of les Hironelles nursery and primary which is 86 employees. As the number of population of the study is too small, there is no need to sample.

Sample, according to Creswell (2009, pp. 31–32), is the process of choosing study participants from the entire population in order to save time and money. The sample size is equal to the total population based on the study's population. As a result, the sample size consisted of 86 workers from the Les Hironelles construction project.

One method a researcher employs to obtain subjects, units, or other study components is sampling procedures. According to Kothari (2011), pp. 72–76, it involves choosing a number of people or items from a population so that the chosen group has components that are typical of the traits shared by the group as a whole. Sampling was not necessary

because the study's population was quite small. The number of population and the study's sample size are equal.

The researcher collected data through questionnaire to obtain up-to-date information.

Both open-ended and closed-ended questionnaires were created, and they were self-administered by the researcher, who let the study participants complete the forms in the research area. Open-ended and Closed-ended questionnaires were created for the study and distributed to building construction project staff of les les Hirondelles school. A questionnaire consists of a written set of pre-formulated questions, to which respondents record their responses, typically in the form of alternatives with relatively narrow margins. Five replies on a Likert scale were employed. The five anchors on the Likert scale are strongly disagree, disagree, neutral, agree, and strongly agree. The Likert scale is an interval measure. The degree of agreement or disagreement is measured using the Likert scale. Likert scales work well for assessing behavior, attitudes, values, and perception.

According to Mugenda and Mugenda (2003), the Likert scale has scales that help translate the qualitative replies into numeric values. To enable responding to research questions and assessing results, the investigator methodically collected data based on study variables. The researcher requests authorization from the managers of the building construction project before starting the data collection process.

#### ➤ *Reliability and Validity of the Measurement Instruments*

According to Mugenda & Mugenda (2003), validity is the extent to which findings derived from data analysis accurately depict the phenomenon being studied. The Content Valid Index (CVI) was used to verify the validity of the data. This was accomplished by giving the supervisor and subject matter experts a copy of the questionnaire and asking them to score the pertinent questions and items in respect to the study goals. The scores were then divided by the total number of questions. According to Cooper and Schindler (2011), a research instrument's CVI needs to be more than or equal to 0.7 in order to be considered legitimate. The questionnaire is deemed legitimate if the computed CVI is higher than 0.60 (Saunders et al., 2007). Then, the following formula was used to calculate a content validity index (CVI):

$$CVI = \frac{\text{No of Questions declared valid}}{\text{Total No of Questionnaires}}$$

In study the calculated CVI was = 25/31=0.806

Since the CVI was higher than 0.60, the questionnaire was deemed legitimate.

The term reliability refers to how consistent the findings of a measurement are when the measurement is conducted twice or more (Cooper & Schindler, 2011). Consequently, it refers to the extent to which research equipment produce data or conclusions that are consistent following multiple trials. The test-retest procedure was employed to evaluate the instruments' dependability. Ten Munini resettlement project employees will be given the identical questionnaires in this process. Following the questionnaire administration, the scale reliability—which measures how consistently a measurement process produces the same results across multiple trials—was applied. This was accomplished by comparing the Cronbach's Alpha coefficient value with the value of 0.7. The measurement result is considered reliable if the coefficient Cronbach's Alpha is greater than 0.7.

**Table 1: Reliability Statistics**

| Cronbach's Alpha | N of Items |
|------------------|------------|
| 0.821            | 31         |

**Source:** Primary data, 2023

The results showed that the coefficient for all variables was 0.821. The study was deemed credible since all constructs showed that the Cronbach's Alpha value was higher than the recommended value of 0.7.

## VI. DATA ANALYSIS

Data processing was carried out in compliance with the research study's general and specific objectives. The observations made in the fields are converted into a set of categories, and these codes are then converted into tabulation and quantitative analysis fields. This process was used with the help of SPSS version 23.0. Both inferential statistics, such as correlation and multiple linear regression analysis, as well as descriptive statistics, such frequencies, percentages, means, and standard deviations, were employed to analyze the data.

#### ➤ *Descriptive Statistics*

The opinions of the respondents on the economic, political, physical, and technological environments were described using descriptive statistics like mean, frequency, and standard deviation. The success of the construction of the Les Hirondelles nursery and main buildings was also described in terms of schedule, budget/cost, quality success, and customer satisfaction.

#### ➤ *Pearson Correlation Test*

The statistical relationship between the les Hirondelles building construction project's success and the external project environment—that is, the political, technological, physical, and economic environments—can be measured with great benefit using the Pearson correlation coefficient.



### ➤ Multiple Regression Models

To determine the impact of each predictor, including the political, technological, physical, and economic environments, on the construction of Kigali City's Les Hirondelles Nursery and Primary School, multiple regression analysis was employed.

### ➤ Model Specification

The econometric model that was employed was as follows:

The equation ( $Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + e$ )

Where  $B_0$  = constant

$\{\beta_1, \beta_2, \beta_3 \text{ and } \beta_4\}$  = coefficients of independent variables and  $\mu$  = error term

Y= Success of Construction of les Hirondelles nursery and primary school buildings in Kigali City

X1= Economical environment

X2=Government environment

X3= Physical environment

X4= Technological environment

## VII. FINDINGS

The inferential statistics results for the study variables are shown in this section. The study employed correlation analysis to assess the degree of association between the independent variables, namely political, economic, physical, and technological, and the dependent variable, the success of building construction projects. The impact of the independent on the dependent variable was ascertained using regression analysis.

### ➤ Correlations Analysis

The coefficient of correlation ( $r$ ) denotes the determination of a linear relationship between two variables. Pearson's coefficient of correlation is the most widely used method for determining the strength of correlations between variables (Orodho, 2009). The value of  $r$  is frequently used to summarize the relationship between two variables. Positive value of  $r$  implies positive correlation while negative value of  $r$  implies negative correlation. When the  $r$  value is +1, it implies that there is a perfect positive association among the two variables whereas while it is -1; it implies that there exists a perfect negative association among the variables. A correlation coefficient of 0 ( $r = 0$ ) shows that there is no linear association among the two variables. This technique presupposes that the data is from a population which is normally spread.

**Table 2: Correlations coefficient**

|   |                     | X1     | X2     | X3     | X4     | Y |
|---|---------------------|--------|--------|--------|--------|---|
| X1= Economical environment                  | Pearson Correlation | 1      |        |        |        |   |
| X2=political environment                    | Pearson Correlation | .505** | 1      |        |        |   |
| X3= Physical environment                    | Pearson Correlation | .494** | .528** | 1      |        |   |
| X4= Technological environment               | Pearson Correlation | .571** | .409** | .653** | 1      |   |
| Y= Success of building construction project | Pearson Correlation | .837** | .401** | .883** | .767** | 1 |
|   | Sig. (2-tailed)     | .000   | .000   | .000   | .000   |   |

\*\*. Correlation is significant at the level of 0.01 (2-tailed).

The Pearson product-moment correlation coefficient was used in the study to examine correlations between the variables. Table 2 shows that all predictor variables had a substantial positive association with project success. The study found that the economic environment had a Pearson correlation of 0.837, indicating a strong positive link with the success of the construction of Les Hirondelles nursery and primary school in Kigali City. Political environment showed a Pearson correlation coefficient of 0.401, indicating a high positive link with the success of the construction of les Hirondelles nursery and primary school in Kigali.

Physical environment had a Pearson correlation of 0.883, indicating a strong positive correlation, whereas the technological environment had a Pearson correlation of 0.767,

indicating a high positive correlation with the success of the construction of les Hirondelles nursery and primary school in Kigali.

### ➤ Multiple Linear Regression Analysis

Regression Analysis: This section presents regression analysis findings for each independent variable. Regression analysis is a statistical approach used to find the linear relationship between two or more variables. Regression is primarily used to make predictions and infer causal relationships. The regression coefficient ( $R^2$ ) indicates how well the values fit the data.  $R^2$  and adjusted  $R^2$  are two statistics used to test model fit; values near 1 imply a better match. To determine the causal effect of one variable on another, a researcher collects data on the underlying variables

of interest and uses regression to estimate the causal variables' quantitative effect on the variable that they influence. A researcher also evaluates the statistical significance of the estimated relationships, which is the degree of confidence that the genuine relationship is similar to the calculated relationship. Regression analysis aims for determining the

variables that are concurrently related with predictor variables and forecast the dissimilar outcome of each variable on the criterion variables. This section also includes results from the analysis of variance (ANOVA) and multiple regression study of all variables.

**Table 3: Model Summary**

| Model   | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|-------------------|----------|-------------------|----------------------------|
| 1   | .949 <sup>a</sup> | .901     | .896              | .20497                     |
| a. Predictors: (Constant), X4= Technological environment, X2=Government environment, X1= Economic environment, X3= Physical environment |                   |          |                   |                            |

According to the findings in Table 3, the R-squared for the relationship between the external project environment and the success of the construction of Les Hirondelles nursery and primary school in Kigali City is 0.901. This means that the external project environment can only account for 90.1% of variance in building construction project success. The remaining 0.9% of dissimilarity can be explained by other factors related to the success of the construction of les Hirondelles nursery and primary school in Kigali City. The R square value is an important indicator of the predictive accuracy of the equation. The implication of these findings is that external environment factors play a significant role in enhancing the success of Construction of les Hirondelles nursery and primary school in Kigali City.

**Table 4: ANOVA**

| Model   | Sum of Squares | df | Mean Square | F       | Sig.              |
|---|----------------|----|-------------|---------|-------------------|
| 1   |                |    |             |         |                   |
| Regression  | 30.811         | 4  | 7.703       | 183.336 | .000 <sup>b</sup> |
| Residual  | 3.403          | 81 | .042        |         |                   |
| Total   | 34.214         | 85 |             |         |                   |
| a. Dependent Variable: Y= Success of Construction of les Hirondelles nursery and primary school in Kigali City                          |                |    |             |         |                   |
| b. Predictors: (Constant), X4= Technological environment, X2=Government environment, X1= Economic environment, X3= Physical environment |                |    |             |         |                   |

This study employed analysis of variance (ANOVA) to determine the significance of the regression model. A p value of less than or equal to 0.05 was considered statistically significant. The results in Table 4 show the outcome of the regression model with a p-value of 0.000, which is less than 0.05. The outcomes also show that the regression model was statistically significant in predicting how external environmental factors will affect the Les Hirondelles Nursery and Primary School's success during construction in Kigali City. The ANOVA findings show that F-critical (4,81) was 2.47, whereas F-calculated was 183.336. This demonstrates that F-calculated is bigger than F-critical; thus, there is a positive substantial linear relationship between external environmental factors and the success of building construction projects in Kigali City. This means that when there is a variance in external environmental factors, there is a large variation in the success of Construction of les Hirondelles nursery and primary school in Kigali City. In addition, the p-value was 0.000, which is less than the significance level (0.05). This companies model's goodness of fit indicates that external environmental factors have a favorable and significant impact on the success of the construction of Kigali City's Les Hirondelles Nursery and Primary School.

**Table 5. Regression Coefficients**

| Model   |                               | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|---|-------------------------------|-----------------------------|------------|---------------------------|--------|------|
|   |                               | B                           | Std. Error | Beta                      |        |      |
| 1   | (Constant)                    | -.745                       | .228       |                           | -3.265 | .002 |
|   | X1= Economic environment      | .468                        | .077       | .359                      | 6.114  | .000 |
|   | X2=Government environment     | -.167                       | .043       | -.162                     | -3.848 | .000 |
|   | X3= Physical environment      | .504                        | .068       | .476                      | 7.427  | .000 |
|   | X4= Technological environment | .362                        | .053       | .318                      | 6.805  | .000 |
| a. Dependent Variable: Y= Success of Construction of les Hirondelles nursery and primary school in Kigali City. |                               |                             |            |                           |        |      |

### ➤ Hypothesis Testing

According to the data in Table 5, the success of the construction of les Hirondelles nursery and primary school in Kigali City had a positive index of 0.468 when the economic environment (X1) was held constant. This means that while the economic climate changes by one unit, the success of a construction project changes by 0.468 units. The link is statistically significant because the p value (0.000) is smaller than the significance level (0.05). The findings indicate that the economic climate has a beneficial impact on the success of the construction of Les Hirondelles nursery and primary school in Kigali City. From the findings above, the researcher found out that the null hypothesis stating that there is no statistically significant effect of economic environment and success of Construction of les Hirondelles nursery and primary school in Kigali City was rejected because  $\beta_1 = 0.468$ ,  $p = 0.000$  is less than 0.05 level of significance.

When the political environment (X2) was kept constant, the project had a negative index of -0.167. This means that as the political environment changes by one unit, the success of the Construction of les Hirondelles Nursery and Primary School in Kigali City decreases by -0.167 units. The association is significant since the p-value (0.000) is smaller than the threshold for significance (0.05).

The findings reveal that the political environment has a detrimental impact on the success of the construction of Les Hirondelles nursery and primary school in Kigali City. Based on the findings, the researcher rejected the null hypothesis, which stated that there is no statistically significant effect of political climate on the success of the construction of les Hirondelles nursery and primary school in Kigali.

Table 5 shows that while the physical environment (X3) was held constant, the construction of the les Hirondelles nursery and primary school in Kigali City had a positive index of 0.504. This suggests that the construction of Les Hirondelles Nursery and Primary School in Kigali City will be successful by 0.504 units for every unit that the physical environment changes. Given that the p value (0.000) is smaller than the significance level (0.05), the link is considered significant. The results demonstrate that the physical environment positively impacts the success of Hirondelles nursery and primary school in Kigali City's construction. From the findings, the researcher found out that the null hypothesis stating that there is no statistically significant effect of physical environment and success of Construction of les Hirondelles nursery and primary school in Kigali City was rejected.

Table 5 shows that the success of the construction of les Hirondelles nursery and primary school in Kigali City had a positive score of 0.362 when the technological environment (X3) was kept constant. This means that as the technological

environment changes by one unit, the success of the Construction of les Hirondelles Nursery and Primary School in Kigali City increases by 0.362 units. The link is statistically significant because the p value (0.000) is smaller than the significance level (0.05). The results demonstrate that the success of Les Hirondelles Nursery and Primary School in Kigali City has been positively impacted by the technology environment. From the findings above, the researcher found out that the null hypothesis stating that there is no statistically significant effect of technological environment and success of Construction of les Hirondelles nursery and primary school in Kigali City was rejected.

## VIII. CONCLUSION

The study concluded that the level of project success as evidenced by respondents who stated that building construction project was excellent where 71.4% and 73.2% of respondents stated that building construction are completed within the expected time and building construction project are completed within the allocated budget respectively. The findings indicate that effective economic and financial factors like access to capital, unexpected price rises for materials, unexpected price rises for labor, inflation rate, foreign exchange rate, and insufficient working capital significantly influence the success of housing projects in descending order. The findings revealed that physical environment had the greatest positive effect on success of construction of school buildings project in Kigali City followed by economic environment and then technological environment having the least effect on success of success of Construction of les Hirondelles nursery and primary school buildings in Kigali City. However, political environment had a negative effect on success of construction of school buildings project in Kigali City.

## RECOMMENDATIONS

In view of the regression results, it was shown that political environment had the negative and significant effect on success of Construction of les Hirondelles nursery and primary school in Kigali City. The report consequently suggests that, in partnership with the government, building projects acquire experienced manpower who offer inputs on a continuous basis, and that the political should provide help to those projects in bringing up-to-date equipment and streamlining the importation process.

The findings revealed that economic environment had the first largest and significant effect on success of Construction of les Hirondelles nursery and primary school in Kigali City. In light of this finding, the study proposes that an effective finance system (economic element) is vital in terms of the flow of incomes and the affordability of completed housing units.



The results analyzed indicated that physical environment had the largest and significant effect on success of Construction of les Hirondelles nursery and primary school in Kigali City. Based on this outcome, the study suggests that project managers prioritize project quality as the most critical objective. Quality can be ensured by identifying and eliminating the causes of poor project success. Thus, project managers must have a deeper awareness of the physical environment and how to measure it.

The results of regression analysis indicated that technological environment had positive effect and significant effect on success of Construction of les Hirondelles nursery and primary school in Kigali City. Based on this finding, the study proposes that adopting strong monitoring and control techniques, technology transfer, and maintaining quality according to agreements must be solved in other comparable projects by learning from this construction project. In other words, construction projects are typically supported or subsidized by public funds; yet, an uncertain political and economic environment can have an impact on project implementation, resulting in delays and cost overruns. Thus, three external environmental aspects (economic, physical, and technological) that have an impact on success should be given due consideration in the creation and implementation of construction project policies.

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