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Abstract

The main purpose of this research is to investigate the effect of strategic management process on organizational performance of NDP Ltd construction and engineering company in Rwanda. The research used descriptive research design with a mixed approach of qualitative and quantitative data. The results determined the sample size of 217 respondents from 500 people using Krejcie and Morgan (1970). However, only 188 respondents participated in this research with response rate of 86.6% of 217 respondents. The results of the first objective revealed that environmental scanning plays a significant and a positive effect on organizational performance in Rwanda with overall mean of 1.621 tending to high score of to a very great extent. The results of the second objective revealed that strategy formulation plays a significant and a positive effect on organizational performance in Rwanda with overall mean of 1.324 tending to high score of to a very great extent. The results of the third objective revealed that a big number of respondents strongly agreed that strategy implementation plays a significant effect in organizational performance. Lastly, the results of the fourth objective revealed that strategy evaluation plays a positive and significant effect in performance of NDP Ltd. Hence, these are supported by correlation analysis results which revealed that there is a positive and significant relationship between environmental scanning and budgetary performance ($r=0.717$ and $sig=0.00<0.01$), and quality performance ($r= 0.783$ and $sig=0.00<0.01$). The strategy formulation and timely performance ($r=0.647$ and $sig=0.00<0.01$), and quality performance ($r= 0.696$ and $sig=0.00<0.01$). Another positive and significant relationship between strategy implementation and timely performance ($r=0.650$ and $sig=0.00<0.01$), strategy evaluation and quality performance ($r= 0.707$ and $sig=0.00<0.01$) level of significance. Hence, in conclusion since all the predictors of strategic management process have a positive and significant relationship with the measures of organizational performance, this implies that there is a positive and significant relationship between strategic management process and organizational performance of NDP Ltd in Kigali City of Rwanda. It is in this regard the research would like to recommend to managers, evaluators, and strategy formulators as well as implementers to ensure that strategies are well formulated, implemented and evaluated to ensure organizational

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performance. This recommendation is made because the results of the study indicated that strategic management process has a positive effect on organizational performance.

Keywords: *Strategic Management, Organizational Performance, Construction and Engineering Company Performance, NPD ltd, Rwanda*

1. Introduction

Despite, the contribution of strategic management practices to performance by generating relevant information, creating a better understanding of the environment, and reducing uncertainty (Maldonado, et al., 2018). The Office of Auditor General in 2012 and 2018 has reported that poor Annual District performance evaluation was due to lack of strategic planning and management in local government (OAG, 2012 and 2018). However, even if this is the case there are no empirical research conducted in Rwanda to examine the effect of strategic management on organizational performance. Even, the very little previous empirical research carried out in Rwanda focused on the factors that foster business competitiveness and organizational performance (Rusibana, 2018), strategic management practices and service delivery in public institutions (Uwanyiligira, 2023).

There previous empirical research conducted in the area of environmental scanning, strategy formulation, strategy implementation, and strategy evaluation such as the research of Nyariki, et al (2021) conducted in Kenya on environmental scanning and organizational performance revealed that environment scanning continues to be recognized as feature impacting organization performance in the commercial parastatals because all measures of environmental scanning scored mean above 4.00 implying that environmental scanning affect positively organizational performance. The research of Okwemba and Njuguna (2023) conducted on strategy formulation on performance of Chemelil Sugar Company in Kisumu County, Kenya. The findings showed that a model summary demonstrated 27.4% of variation in organization performance explained by strategy formulation which implies that strategy formulation significantly and positively affect performance ($\beta = .689$, $t = .774$, $p = .046$).

However, no other research attempted to study strategic management and organizational performance in construction and engineering firms in Rwanda, even if the NPD Ltd a construction and engineering company has provided high quality civil engineering and construction solutions that are responsive to the needs of Rwanda and beyond to catalyze sustainable economic growth. Thus, it is in this regard the research wants to conduct this research to address the issues related to strategic management and organizational performance as well as providing the empirical results related to the same issues in Rwanda.

1.1 Objectives of the study

1.1.1 General objective

The general objective of this research is to investigate the effect of strategic management on organizational performance of NDP Ltd a construction and engineering company in Rwanda.

1.1.2 Specific objectives

To assess the effect of environmental scanning on organizational performance of NDP Ltd a construction and engineering company in Rwanda

- i. To evaluate the effect of strategy formulation on organizational performance of NDP ltd a construction and engineering company in Rwanda
- ii. To determine the effect of strategy implementation on organizational performance of NDP ltd a construction and engineering company in Rwanda
- iii. To establish the relationship between strategy evaluation and organizational performance in Rwanda.

1.1.3 Research Hypotheses

The following null hypotheses were used to test this research:

H₀₁: Environmental scanning has no significant effect on organizational performance of NDP ltd a construction and engineering company in Rwanda

H₀₂: Strategy formulation has no significant effect on organizational performance in Rwanda.

H₀₃: Strategy implementation has no significant effect on organizational performance of NDP ltd construction and engineering company in Rwanda.

H₀₄: Strategy evaluation has no significant relationship with organizational performance of NDP ltd a construction and engineering company in Rwanda

2.1 Empirical Literature Review

2.1.1 The effect of environmental scanning on organizational performance

The empirical research conducted by Mansour (2018) on the environmental scanning mechanism and its effects on performance with evidence from UAE has used descriptive and bivariate and multivariate analysis. The results revealed significant relationships between performance (as measured ROE) and interest in scanning, scanning frequency, sources of scanning (impersonal), and obstacles of scanning are existed. Significant relationships between performance (as measured by PM) and interest in scanning, scanning frequency, sources of scanning (personal), and sources of scanning (impersonal) are also existed. Finally, the current study revealed that UAE businesses are conducting regular, proactive, and hoc scanning more often than irregular, reactive, and primitive scanning.

The results of the same study of Mansour (2018) have also shown that competition (X3) and economical scanning (X6) are the only two independent variables (within the construct of scanning interest from X2 to X8) that have significant relationships with performance as measured by ROE, as $p = 0.002$, and 0.009 . Governmental report (X32) is the only independent variable (within the construct of impersonal sources of scanning from X28 to X38) that has significant relationship with performance as measured by ROE, as $p = 0.020$. Finally, uncertainty regarding government long-term policies(X61) is the only independent variable (within obstacles of scanning from X58 to X64) that has significant relationship with performance as measured by ROE, as $p = 0.018$.

The empirical research conducted by Okwemba and Njuguma (2023) on the effect of environmental scanning on performance of Chemelil Sugar Company in Kenya with a descriptive research design. The results revealed that, that environmental scanning is positively and significantly related to performance. The results of regression analysis established that environmental scanning is positively and significantly related to performance ($\beta = .840$, $p = .035$). Thus, a unit increase in environmental scanning practices while holding all other factors

constant, increases performance by 0.840 units. The study recommended that the company need to look at the internal analysis, industrial analysis, and external analysis to maintain a higher performance level. The company can regularly analyze its industrial environment to determine its opportunities and threats using Porter's Five Factor analysis tool. In addition, it is recommended that the company need to regularly analyze its internal environmental factors to determine its strengths and weaknesses using SWOT as an analysis tool. Conducting environmental audit is necessary and the company needs to prepare plans to cope with dynamically changing environments.

2.1.2 The impact of strategy formulation on organizational performance

The research conducted by Owich, *et al.*, (2018) on the influence of strategy formulation on organizational performance of companies listed at Nairobi Securities Exchange. The findings revealed that organizational performance was positively and significantly correlated with strategy formulation and that there was a significant mean difference between organizational performance and strategy formulation. Simple linear regression showed that strategy formulation significantly affects organizational performance. The paper recommends that to achieve the organizational vision and consequently enhance their performance, companies listed at the NSE should create conducive environment for effective strategy formulation such as ensuring all stakeholders are involved in formulation of strategies.

The research of Njagi and Kombo (2014) conducted on effect of strategy implementation on performance of commercial banks in Kenya with correlational research design. The results reveal that there is a moderately strong relationship between strategy implementation and organizational performance. The results show the model summary of the multiple regression analysis. R-value on the table shows the regression coefficient ($r = 0.693$) of the analysis, which shows that there is a strong and positive relationship between strategy implementation and organizational performance. Coefficient of determination (Adjusted R Square) is 44.8%. This shows that 44.8% variation in the dependent variable (organizational performance) is explained by the independent variable (strategy implementation). From the full regression model in table 2, the regression equation is therefore expressed as: $Y = 5.086 + 0.442 x_1 + 0.409 x_2$. Hence, the researcher therefore recommends that for institutions to thrive and compete they must implement strategies effectively.

2.1.3 The effect of strategy implementation on organizational performance

The previous empirical research of Mayookapan (2012) conducted on the impact of strategy implementation on performance of generic strategy with evidence from Thailand. The one-way Analysis of Variance (ANOVA) results showed that prospectors performed better than the other three strategic types, whereas reactors exhibited the lowest performance scores. While the success in strategy implementation is found to be a significant predictor of firm performance, the two-way Analysis of Variance (ANOVA) results revealed that the success in strategy implementation did not alter the relationship between Miles and Snow strategic type and a firm's performance. The ANOVA test (F-statistic) indicated the significant results for all performance measures ($p < 0.05$). The significant F-statistic suggested that at least one of the strategic types exhibited a different level of firm performance. This finding suggests that the relationship between Miles and Snow strategic type and a firm's performance may be universal, regardless of the location where the study is conducted. However, additional studies in other contexts are required before the conclusion can be made whether the strategic type – performance relationship were contingent on strategy implementation.

The results of the research of Wanyama (2019) conducted in Kenya on the strategy implementation practices and performance in international Non-Governmental Organizations. The results revealed that One Way Analysis of Variance (ANOVA) and multiple regression analysis established that strategy implementation practices were a significant predictor of strategy implementation. This relationship was also stated by Pearson's correlation analysis showing that strategy implementation practices had a significant positive relationship with strategy implementation. The study recommended that INGOs should strive to have valuable, rare, inimitable, and organized strategy implementation abilities to attain competitive advantage, hence, improved organizational performance. INGOs managers who are keen to boost performance ought to adopt strategy implementation practices that improve staff ability and create opportunities to use their skills in the workplace.

2.1.4 The relationship between strategy evaluation and organizational performance

The empirical study of Gaturu, *et al.*, (2017) conducted on the influence of strategic evaluation on organizational performance of mission hospitals in Kenya. The findings of this study show a sig value of 0.000 which is less than the sig value of 0.005. This leads to the acceptance of the null hypothesis which states that there is a positive significant influence of strategic evaluation on organizational performance of mission hospitals in Kenya.

The research of Muiruri (2014) conducted on strategy evaluation and control practices at the University of Nairobi in Kenya. The findings of the study were that evaluation and control was carried out regularly. Some departments had this practice on a quarterly basis while others undertook the practice twice a year. Evaluation has enabled the University of Nairobi monitor the performance of its various activities against the set targets of the strategic plan. The evaluation ensured that the institution was on the right path towards achieving the objectives of the strategic plan and also through control, the management was able to avoid any deviations from the goals or objectives. Through this process there has been accountability to all the stakeholders in the university. Performance appraisals were able to determine the best performing departments. The recommendations made from the study concluded that more resources needed to be invested in training of staff so that they can gain from the benefits of this evaluation and control process.

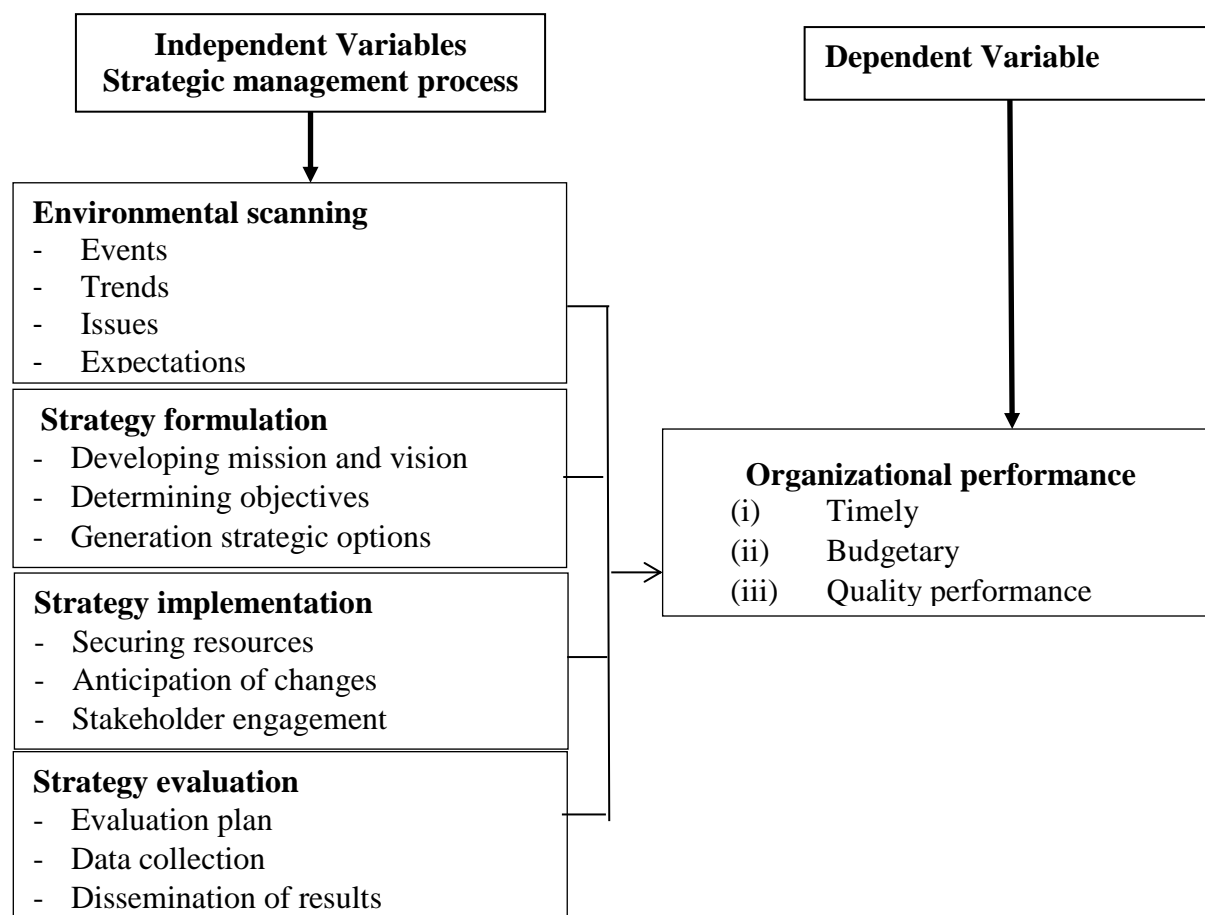
2.2 Research Gap

The previous empirical literature have shown that the current research has a lot of gap to fill because even if this research concentrated on strategic management process in terms of environmental scanning, strategy formulation, implementation and evaluation; and organizational performance. However, they gave less attention the factors like securing of resources, change anticipated and engagement of stakeholders which influence strategy implementation. For instance, the research of Mayookapan (2012) emphasized on the impact of strategy implementation on performance of generic strategy with evidence from Thailand; and the research of Wanyama (2019) concentrated in Kenya on the strategy implementation practices and performance in international Non-Governmental Organizations.

The same applies to the research of Gaturu, *et al.*, (2017) focused on the influence of strategic evaluation on organizational performance of mission hospitals in Kenya; and the research of Muiruri (2014) conducted on strategy evaluation and control practices at the University of Nairobi in Kenya which ignored factors like evaluation of plan, data collection and dissemination of results that affect strategy evaluation and organizational performance.

2.3 Conceptual Framework

The conceptual framework refers to the diagram demonstrating the relationship between the variables of the study (Eyisi, 2016). Thus, for the case of this research, the relationship is between independent variable which is strategic management and dependent variable which is organizational performance as demonstrated in the Figure 2.1 below:



**Figure 1: Conceptual Framework
 Researcher, 2023**

The Figure 1 of conceptual framework demonstrates that there is a relationship between the independent variable represented in the study as strategic management process with the dependent variable which is represented by organizational performance in construction and engineering firms. Thus, strategic planning is measured by environmental scanning, strategy formulation, strategy implementation and strategy evaluation while organizational performance is measured by timely, budgetary, and quality performance.

3. Materials and Methods

The researcher used descriptive research design with a mixed approach of qualitative and quantitative data; this design was used because it helps to collect qualitative and quantitative data (Eyisi, 2016). The target population of this study is 504 people where there are 5 managers and 499 employees of NPD Ltd construction and engineering company in Kigali City. The researcher determined the sample size of 217 respondents of the study using Krejcie and Morgan (1970) Table as attached on the appendix one. Whereby, 214 respondents were drawn from the total population of 500 which includes 4 respondents that were selected using census methods and which were selected using simple random sampling technique.

To collect the primary data both questionnaire and interview were used. Thus, the semi-structured and closed-ended questions were asked in a questionnaire of six parts. Another data collection instrument that was used is the interview guide which collected information related to themes concerning all the specific objectives. The researcher conducted a pilot study of 10 preliminary respondents who were different from the expected respondents. The reliability was also pre-tested through use of instrument by doing more than one pre-test of the instruments by conducting the same pilot study with the same 10 respondents a week after the first round of pilot study to test if the results remained above 0.700 standard level of content validity index.

The collected data from 213 respondents were analyze by the use of SPSS version 22.0 where the descriptive statistics were analyze with the use of mean and standard deviation while the inferential statistical analysis used Pearson correlation and regression analysis with a model represented by $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$ where Y represents organizational performance as dependent variable, β_0 represents constant coefficient, β_1 represents coefficient of determination of environmental scanning, β_2 represents coefficient of determination of strategy formulation, whereas β_3 represents coefficient of determination of strategy implementation, β_4 represents coefficient of determination of strategy evaluation. Lastly, X_1 , X_2 , X_3 and X_4 represents predictor of strategic management as independent variable. The data that were collected from the interview from 4 respondents from management team were analyzed using thematic analysis in order to develop narrative according to the themes of what the respondents deeply described in providing data concerning strategic management and organizational performance of construction and engineering company in Kigali city, Rwanda.

The research followed the ethical rules and principles regarding data collection and analysis in Rwanda such as protect the informant, avoid plagiarism as the ethical standards of conducting academic research (Kang & Hwang, 2023). All the respondents were asked with dignity and respect. The MKU letter of introduction assisted the researcher to seek acceptance letter form NDP ltd a construction and engineering company in Kigali City, Rwanda. Thus, both the introduction and acceptance letters were presented to respondents before being asking to be interviewed or to fill the questionnaire. It is in this regard; the respondents were told that the information that were given to researcher in this research served solely academic reasons to feel free to provide the information. The respondents were told not to include their personal identification on the questionnaire to ensure confidentiality of the information.

4. Presentation of Research Findings

4.1 Environmental scanning and organizational performance of NDP ltd a construction and engineering company in Rwanda

Table 1: Environmental scanning

Environmental scanning	Mean	SD
Tracking events promotes organizational performance	1.797	.937
Monitoring organizational trends enhances organizational performance	1.702	.869
Controlling organizational issues promotes organizational performance	1.383	.671
Tracking organizational expectations enhances future performance of the organization	2.010	1.007
Budgeting for all occurrences enhance organizational performance	1.531	.842
Overall Mean	1.621	

Key: 5 not sure, 4 to no extent, 3 to small extent, 2 to a great extent, 1 to a very great extent

Source: Primary Data, 2023

The results of the study in Table 1 showed a mean of 1.797 and standard deviation (SD) of 0.937 with 84(44.7%) of the respondents asserted that tracking events promotes organizational performance to a very great extent. The mean of 1.702 and SD of 0.869 with 95(50.5%) of respondents asserted that monitoring organizational trends enhances organizational performance to a very great extent. The mean of 1.383 and SD of 0.671 with 132 (70.2%) of the respondents asserted that controlling organizational issues promotes organizational performance to a very great extent.

The mean of 2.010 and SD of 1.007 with 72(38.3%) of respondents asserted tracking organizational expectations enhances future performance of the organization to a very great extent. The mean of 1.531 and SD of 0.842 with 116 (61.7%) of respondents stipulated that budgeting for all occurrences enhance organizational performance to a very great extent. The overall mean of 1.621 tends to 1 which is the highest score of to a very great extent which implies that environmental scanning is applied to a very great extent to ensure performance of NPD Ltd in Kigali City, Rwanda.

Basing on qualitative results of the study, it seems that environmental scanning is applied in NPD ltd to a very great extent which enhance organizational performance and these results are also supported by the results of the study of Mansour (2018) have also shown that competition (X3) and economical scanning (X6) are the only two independent variables (within the construct of scanning interest from X2 to X8) that have significant relationships with performance as measured by ROE, as $p = 0.002$, and 0.009 . Hence, both results of the current study and the previous one is supportive to each other which implies that the results is true that environmental scanning affects organizational performance to a very great extent.

Table 1: Organizational performance in NPD Ltd

Organizational performance	Mean	Std.
NPD Ltd project activities are delivered on time	1.255	.565
NPD ltd does all activities as scheduled in the budget	1.489	.749
NPD Ltd has constructed quality roads and houses	1.271	.571
Overall mean	1.311	

Key: 5 not sure, 4 to no extent, 3 to small extent, 2 to a great extent, 1 to a very great extent

Source: Primary Data, 2023

The results of the study in Table 2 showed that mean of 1.255 and SD of 0.565 with 148(78.7%) of the respondents asserted that NPD Ltd project activities are delivered on time to a very great extent. The mean of 1.489 and SD of 0.749 with 119(63.3%) of respondents asserted that NPD ltd does all activities as scheduled in the budget to a very great extent. The mean of 1.271 and SD of 0.571 with 145(77.1%) of the respondents asserted that NPD Ltd has constructed quality roads and houses to a very great extent. The overall mean of 1.311 tends to 1 which is the highest score of to a very great extent which implies that organizational performance is achieved to a very great extent in NPD Ltd in Kigali City, Rwanda.

The current results of the study have revealed that organizational performance is achieved to a very great extent. Thus, these results of the study are supported by the previous research of Lufthans (2012) asserting that organizational performance is a recurrent theme in strategic management research identifying it as effectiveness and efficiency.

Table 3: Correlation analysis between environmental scanning and organizational performance

		Timely performance	Budgetary performance	Quality performance
Environmental scanning	Pearson Correlation	.712**	.717**	.783**
	Sig. (2-tailed)	.000	.000	.000
	N	188	188	188

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

Source: Primary Data, 2023

The results of the study in Table 3 show that there is a positive and significant relationship between environmental scanning and organizational performances because the calculated Pearson correlation and significance level between environmental scanning and timely performance is positive and significant ($r=0.712$ and $sig=0.00<0.01$) level of significance. The calculated Pearson correlation and significance level between environmental scanning and budgetary performance is positive and significant ($r=0.717$ and $sig=0.00<0.01$) level of significance.

The calculated Pearson correlation and significance level between environmental scanning and quality performance is positive and significant ($r= 0.783$ and $sig=0.00<0.01$) level of significance. Thus, this implies that environmental scanning plays a positive and significant effect in performance of NPD Ltd in Kigali City, Rwanda. Basing on that, the null hypothesis stating that there is no significant effect of environmental scanning on organizational performances in Rwanda is rejected.

The results of the current research proved a positive and significant relationship between environmental scanning and quality performance. Thus, the results of this current research are supported by the research of the results of the study of Mansour (2018) have also shown Governmental report (X32) is the only independent variable (within the construct of impersonal sources of scanning from X28 to X38) that has significant relationship with performance as measured by ROE, as $p = 0.020$. Thus, this implies that since the current results and previous results revealed a significant and positive relationship between environmental scanning and organizational performance.

4.2 Strategy formulation and organizational performance of NDP ltd a construction and engineering company in Rwanda

Table 4: Strategy formulation

Strategy formulation	Mean	SD
Defining organizational targets promotes organizational performance	1.266	.569
Developing mission and vision of NDP Ltd promotes organizational performance	1.356	.633
Defining strategic focus of the organization enhances organizational performance	1.266	.569
Determining objectives promotes organizational performance	1.340	.629
Generating strategic options promotes organizational performance	1.393	.606
Overall mean	1.324	

Key: 5 strongly disagree, 4 disagree, 3 not sure, 2 agree and 1 strongly agree.

The results of the study in Table 4 show that the mean of 1.266 and SD of 0.569 with 146(77.7%) of respondents strongly agreed that defining organizational targets promotes organizational performance. The mean of 1.356 and SD of 0.633 with 132(70.2%) of respondents strongly agreed that developing mission and vision of NDP Ltd promotes organizational performance. The mean of 1.266 and SD of 0.569 with 146 (77.7%) of respondents strongly agreed that defining strategic focus of the organization enhances organizational performance.

The mean of 1.340 and SD of 0.629 with 135(71.8%) of respondents strongly agreed that determining objectives promotes organizational performance. The mean of 1.393 and SD of 0.606 with 122(64.9%) of respondents strongly agreed that generating strategic options promotes organizational performance. Thus, the overall mean of 1.324 tends to the highest score of 1 which is strongly agree which implies that a big number of respondents strongly agreed that strategy formulation plays a significant effect in performance of NPD Ltd in Kigali City, Rwanda. Basing on these results, the null hypothesis stating that there is no significant effect of strategy formulation on organizational performances in Rwanda is rejected.

The results from the quantitative statistics revealed that strategy formulation plays a significant effect in organizational performance. Thus, these results are supported by the results of the study of Owich, *et al.*, (2018) revealed that organizational performance was positively and significantly correlated with strategy formulation and that there was a significant mean difference between organizational performance and strategy formulation.

Table 2: Correlation analysis between strategy formulation and organizational performance

		Timely performance	Budgetary performance	Quality performance
Strategy formulation	Pearson Correlation	.647**	.639**	.696**
	Sig. (2-tailed)	.000	.000	.000
	N	188	188	188

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

Source: Primary Data, 2023

The results of the study in Table 4.5 proved that there is a positive and significant relationship between strategy formulation and organizational performances because the calculated Pearson correlation and significance level between strategy formulation and timely performance is positive and significant ($r=0.647$ and $sig=0.00<0.01$) level of significance. The calculated Pearson correlation and significance level between strategy formulation and budgetary performance is positive and significant ($r=0.639$ and $sig=0.00<0.01$) level of significance.

The calculated Pearson correlation and significance level between strategy formulation and quality performance is positive and significant ($r= 0.696$ and $sig=0.00<0.01$) level of significance. Thus, this implies that strategy formulation plays a positive and significant effect in performance of NPD Ltd in Kigali City, Rwanda. Basing on these results, the null hypothesis stating that there is no significant effect of strategy formulation on organizational performances in Rwanda is rejected.

The results of the study from the correlation analysis between strategy formulation and organizational performance have revealed that strategy formulation and project performance

have a positive and significant relationship which is also supported by the previous study of Njagi and Kombo (2014) revealed that there is a moderately strong relationship between strategy implementation and organizational performance. The results show the model summary of the multiple regression analysis. R-value on the table shows the regression coefficient ($r = 0.693$) of the analysis, which shows that there is a strong and positive relationship between strategy implementation and organizational performance.

4.3 Strategy implementation and organizational performance of NDP Ltd a construction and engineering company in Rwanda

Table 6: Strategy implementation

Strategy implementation	Mean	Std.
Securing resources promotes organizational performance	1.409	.765
Effective anticipation of changes enhances organizational performance	1.414	.729
Stakeholder engagement enhances organizational performance	1.345	.782
Collective decision making promotes organizational performance	1.542	.726
Strategic management process in planning enhances organizational performance	1.266	.569
Overall mean	1.395	

Source: Primary Data, 2023

The results of the study in Table 6 demonstrated that the mean of 1.409 and SD of 0.765 with 133(70.7%) of respondents strongly agreed that securing resources promotes organizational performance. The mean of 1.414 and SD of 0.729 with 129(68.6%) of respondents strongly agreed that effective anticipation of changes enhances organizational performance. The mean of 1.345 and SD of 0.782 with 144(76.6%) of respondents strongly agreed that stakeholder engagement enhances organizational performance. The mean of 1.542 and SD of 0.726 with 105(55.9%) of respondents strongly agreed that collective decision making promotes organizational performance. The mean of 1.266 and SD of 0.569 with 146(77.7%) of respondents strongly agreed that strategic management process in planning enhances organizational performance. Thus, the overall mean of 1.395 tends to the highest score of 1 which is strongly agree which implies that a big number of respondents strongly agreed that strategy implementation plays a significant effect in organizational performance of NPD Ltd in Kigali City, Rwanda.

The results of the current research showed that that strategy implementation plays a significant effect on organizational performance which is supported by the research of Wanyama (2019) which showed that strategy implementation practices had a significant positive relationship with organizational performance.

Table 7: Correlation analysis between strategy implementation and organizational performance

		Timely performance	Budgetary performance	Quality performance
Strategy implementation	Pearson Correlation	.650**	.644**	.705**
	Sig. (2-tailed)	.000	.000	.000
	N	188	188	188

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

Source: Primary Data, 2023

The results of the study in Table 7 revealed that there is a positive and significant relationship between strategy implementation and organizational performances because the calculated Pearson correlation and significance level between strategy implementation and timely performance is positive and significant ($r=0.650$ and $sig=0.00<0.01$) level of significance. The calculated Pearson correlation and significance level between strategy implementation and budgetary performance is positive and significant ($r=0.644$ and $sig=0.00<0.01$) level of significance.

The calculated Pearson correlation and significance level between strategy implementation and quality performance is positive and significant ($r= 0.705$ and $sig=0.00<0.01$) level of significance. Thus, this implies that strategy implementation plays a positive and significant effect in performance of NPD Ltd in Kigali City, Rwanda. Basing on these results, the null hypothesis stating that there is no significant relationship between strategy implementation and organizational performances in Rwanda is rejected.

The results of the research revealed that strategy implementation plays a positive and significant effect on organizational performance of NPD Ltd which is supported by the research of Mayookapan (2012) conducted on the impact of strategy implementation on performance of generic strategy with evidence from Thailand. The ANOVA test (F-statistic) indicated the significant results for all performance measures ($p < 0.05$).

4.4 Strategy evaluation and organizational performance of NDP Ltd a construction and engineering company in Rwanda

Table 8: Strategy evaluation

Strategy evaluation	Mean	SD
Evaluation plan promotes organizational performance	1.250	.562
Data collection process enhances organizational performance	1.308	.629
Dissemination of results enhances organizational performance	1.457	.926
Monitoring resources promotes organizational performance	1.377	.646
Tracking the results of the projects promotes organizational performance	1.452	.873
Overall mean	1.368	

Source: Primary Data, 2023

The results of the study in Table 8 showed a mean of 1.250 and standard deviation (SD) of 0.562 with 149(79.3%) of the respondents asserted that evaluation plan promotes

organizational performance to a very great extent. The mean of 1.308 and SD of 0.629 with 142(75.5%) of respondents asserted that data collection process enhances organizational performance to a very great extent. The mean of 1.457 and SD of 0.926 with 133(70.7%) of the respondents asserted that dissemination of results enhances organizational performance to a very great extent.

The mean of 1.377 and SD of 0.646 with 129(68.6%) of respondents asserted monitoring resources promotes organizational performance to a very great extent. The mean of 1.452 and SD of 0.873 with 131(69.7%) of respondents stipulated that tracking the results of the projects promotes organizational performance to a very great extent. The overall mean of 1.368 tends to 1 which is the highest score of to a very great extent which implies that strategy evaluation is achieved to a very great extent in NPD Ltd in Kigali City, Rwanda.

Table 3: Correlation analysis between strategy evaluation and organizational performance

		Timely performance	Budgetary performance	Quality performance
Strategy evaluation	Pearson Correlation	.652**	.646**	.707**
	Sig. (2-tailed)	.000	.000	.000
	N	188	188	188

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

Source: Primary Data, 2023

The results of the study in Table 9 revealed that there is a positive and significant relationship between strategy evaluation and organizational performances because the calculated Pearson correlation and significance level between strategy evaluation and timely performance is positive and significant ($r=0.652$ and $sig=0.00<0.01$) level of significance. The calculated Pearson correlation and significance level between strategy evaluation and budgetary performance is positive and significant ($r=0.646$ and $sig=0.00<0.01$) level of significance.

The calculated Pearson correlation and significance level between strategy evaluation and quality performance is positive and significant ($r= 0.707$ and $sig=0.00<0.01$) level of significance. Thus, this implies that strategy evaluation plays a positive and significant effect in performance of NPD Ltd in Kigali City, Rwanda. Basing on these results, the null hypothesis stating that there is no significant relationship between strategy evaluation and organizational performances in Rwanda is rejected.

Table 4: Regression coefficients of strategic management process and timely performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.374	.133		2.818	.005
Environmental scanning	.404	.076	.400	5.297	.000
Strategy formulation	.222	.070	.225	3.173	.002
Strategy implementation	.220	.071	.221	3.079	.002
Strategy evaluation	.218	.069	.224	3.171	.002

a. Dependent Variable: Timely performance

Source: Primary Data, 2023

The results of the study in Table 10 proved a positive and significant relationship between strategic management process and timely performance because environmental scanning and timely performance has (b=0.404 and sig=0.00), strategy formulation and timely performance has (b=0.222 and sig=0.02), strategy implementation and timely performance has (b=0.220 and sig=0.002) and strategy evaluation and timely performance (b=0.218 and sig=0.002). Thus, the regression model became $Y=0.374+0.404$ (environmental scanning) $+0.222$ (strategy formulation) $+0.220$ (strategy implementation) $+0.218$ (strategy evaluation). This means that a unit change in predictors of strategic management process significantly and positively affect timely performance which implies that since strategic management process has a positive and significant effect to timely performance in NPD Ltd in Kigali City.

Table 5: Regression coefficients of strategic management process and budgetary performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.382	.133		2.873	.005
Environmental scanning	.429	.076	.426	5.620	.000
Strategy formulation	.203	.070	.205	2.891	.004
Strategy implementation	.209	.071	.210	2.922	.004
Strategy evaluation	.211	.072	.212	2.924	.005

a. Dependent Variable: Budgetary performance

Source: Primary Data, 2023

The results of the study in Table 11 proved a positive and significant relationship between strategic management process and strategy evaluation because environmental scanning and budgetary performance has (b=0.429 and sig=0.00), strategy formulation and budgetary performance has (b=0.203 and sig=0.04) and strategy implementation and budgetary performance has (b=0.209 and sig=0.004). Thus, the regression model became $Y=0.382+0.429$ (environmental scanning) $+0.203$ (strategy formulation) $+0.209$ (strategy implementation) $+0.211$ (strategy evaluation). This means that a unit change in predictors of strategic

management process significantly and positively affect budgetary performance in NPD Ltd in Kigali City, Rwanda.

Table 6: Regression coefficients of strategic management process and quality performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.128	.114		1.126	.262
Environmental scanning	.469	.066	.466	7.152	.000
Strategy formulation	.216	.060	.219	3.591	.000
Strategy implementation	.231	.061	.233	3.771	.000
Strategy evaluation	.233	.064	.234	3.773	.000

a. Dependent Variable: Quality performance

Source: Primary Data, 2023

The results of the study in Table 12 proved a positive and significant relationship between strategic management process and quality performance because environmental scanning and quality performance has (b=0.469 and sig=0.00), strategy formulation and quality performance has (b=0.216 and sig=0.00) and strategy implementation and quality performance has (b=0.231 and sig=0.000). Thus, the regression model became $Y=0.128+0.469$ (environmental scanning) $+0.216$ (strategy formulation) $+0.231$ (strategy implementation) $+0.233$ (strategy evaluation). This means that a unit change in predictors of strategic management process significantly and positively affect quality performance in NPD Ltd in Kigali City, Rwanda.

Table 7: Summary of research Hypotheses decisions

Research Hypotheses	P-value	β coeff	Sig.	Decision on H ₀
H ₀₁ : There is no significant effect of environmental scanning on organizational performances in Rwanda	r=0.712	b=.404	Sig=0.00	Rejected
H ₀₂ : Strategy formulation has no significant effect on the organizational performances in Rwanda	r=0.639	b=0.203	Sig=.004	Rejected
H ₀₃ : Strategy implementation has no significant relationship with organizational performances in Rwanda	r=0.696	b=.231	Sig=.000	Rejected
H ₀₄ : Strategy evaluation has no significant relationship with organizational performances in Rwanda	r=0.707	b=.233	Sig=.000	Rejected

Source: Primary Data, 2023

The results in Table 13 were summarized from the correlation table of environmental scanning (r=0.712), strategy formulation (r=0.639), strategy implementation (r=0.696), strategy evaluation (r=0.707) with indicators of organizational performance (timely, budgetary and quality performance) respectively. While, the ones from regression table of strategic management process predictors with each of the indicators of organizational performance

represented by strategy implementation and organizational performance ($b=.404$ and $Sig=0.00$), environmental scanning and strategy evaluation ($b=0.203$ and $Sig=.004$), and strategy implementation and quality performance ($b=.231$ and $Sig=.000$) which implies that strategic management process has a positive and significant relationship with organizational performances in Rwanda since all calculated p-values and beta values were positive while each sig. value was under 0.05 level of significance. That is why all null hypotheses were rejected basing on the results of the study summarized in Table 13 and accepted the alternative hypotheses.

5.1 Conclusion

In conclusion, the results of the first objective revealed that environmental scanning plays a significant and a positive effect on organizational performance in Rwanda since the descriptive results shown an overall mean of 1.621 tending to high score of to a very great extent. That is why the null hypothesis stating that there is no significant effect of environmental scanning on organizational performances in Rwanda was rejected.

The results of the second objective revealed that strategy formulation plays a significant and a positive effect on organizational performance in Rwanda since the descriptive results shown an overall mean of 1.324 tending to high score of to a very great extent. Hence, based on the results, the null hypothesis stating that there is no significant effect of strategy formulation on organizational performances in Rwanda was rejected.

The results of the third objective revealed that a big number of respondents strongly agreed that strategy implementation plays a significant effect in organizational performance. That is why, the null hypothesis stating that there is no significant relationship between strategy implementation and organizational performances in Rwanda was rejected. Lastly, the results of the fourth objective revealed that strategy evaluation plays a positive and significant effect in performance of NPD Ltd. Hence, the null hypothesis stating that there is no significant relationship between strategy implementation and organizational performances in Rwanda is rejected.

5.2 Recommendations

Based on the findings of the study, the researcher would like to recommend to the managers of the company and its marketing team to do environmental scanning before launching a business in order to avoid investing in areas that cannot benefit them because the results of the study have shown that environmental scanning is positively related to organizational performance.

The researcher would also like to recommend to strategy formulators in the organizations and project to ensure that policies and strategies formulated are ready to support effective implementation of the strategy to ensure organizational performance because the result of this research indicates that strategy formulation and implementation are associated to organizational performance in this current research.

The researcher would like to recommend to the organizations to ensure effective evaluations to enhance organizational performance because the results of this current research indicated that strategy evaluation affect positively organizational performance.

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