Shadrack Mutungi Simon

Dr Shadrack Mutungi Simon, Lecturer; Department of Construction Management, Jomo Kenyatta University of Agriculture and Technology, Kenya. ROR: https://ror.org/015h5sy57, Email: smutungi@jkuat.ac.ke, ORCID: https://orcid.org/0000-0001-6968-7857

ISSN: 1023-0564 • e-ISSN: 2415-0487

Received: February 2026
Peer reviewed and revised: May 2026
Published: June 2026

KEYWORDS: construction firm performance, local contractors, Kenya, organisational dimensions, organisational performance, performance determinants

HOW TO CITE: Simon, S.M. 2026. A multidimensional analysis of organisational performance drivers among local construction contractors in Kenya. *Acta Structilia*, 33(1), pp. 74-113.

Published by the UFS
http://journals.ufs.ac.za/index.php/as

A MULTIDIMENSIONAL ANALYSIS OF ORGANISATIONAL PERFORMANCE DRIVERS AMONG LOCAL CONSTRUCTION CONTRACTORS IN KENYA

RESEARCH ARTICLE[1]

https://doi.org/10.38140/as.v33i1.10170

ABSTRACT

This study investigates the influence of ten organisational determinants on ten dimensions of performance among local contractors in Kenya's construction sector. Grounded in the Resource-Based View and Contingency Theory, the research adopts a multidimensional framework to assess profitability, growth, technical capability, business efficiency, employee satisfaction, financial stability, client satisfaction, product quality, managerial capability, and safety performance. Data were collected from 378 valid responses, using structured questionnaires administered to contractors and consultants. Multiple regression analysis was employed to model the relationships between each performance dimension and the ten determinants, culminating in a composite model of overall organisational performance. Findings reveal that strategic planning, contractor innovativeness, supplier effectiveness, organisational structure, and quality of service are the most consistent and significant predictors across performance dimensions. The composite model yielded an adjusted R^2 of 0.819, indicating strong

1 DECLARATION: The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

explanatory power. External factors such as government support and competition showed limited but context-specific influence, while performance measurement practices exhibited paradoxical effects. The study underscores the primacy of internal strategic and operational capabilities in driving performance and offers actionable recommendations for contractors, policymakers, and industry stakeholders. These include strengthening planning systems, supporting innovation, optimising supplier networks, and reforming performance measurement frameworks to support strategic learning and continuous improvement.

ABSTRAK

Hierdie studie ondersoek die invloed van tien organisatoriese determinante op tien dimensies van prestasie onder plaaslike kontrakteurs in Kenia se konstruksiesektor. Gegrond op die Hulpbrongebaseerde Beskouing en Gebeurlikheidsteorie, gebruik die navorsing ‘n multidimensionele raamwerk om winsgewendheid, groei, tegniese vermoë, besigheidsdoeltreffendheid, werknemertevredenheid, finansiële stabiliteit, kliëntetevredenheid, produkkwaliteit, bestuursvermoë en veiligheidsprestasie te bepaal. Data is versamel uit 378 geldige antwoorde, deur gebruik te maak van gestruktureerde vraelyste wat aan kontrakteurs en konsultante versprei is. Meervoudige regressie-analise is gebruik om die verhoudings tussen elke prestasiedimensie en die tien determinante te modelleer, wat gekulmineer het in ‘n saamgestelde model van algehele organisatoriese prestasie. Bevindinge toon dat strategiese beplanning, kontrakteursinnovasie, verskafferseffektiwiteit, organisatoriese struktuur en diensgehalte die mees konsekwente en beduidende voorspellers van prestasiedimensies is. Die saamgestelde model het ‘n aangepaste R^2 van 0.819 opgelewer, wat sterk verklarende invloed aandui. Eksterne faktore soos regeringsondersteuning en mededinging het beperkte maar kontekssspesifieke invloed getoon, terwyl prestasiemetingspraktyke paradoksale effekte getoon het. Die studie beklemtoon die voorrang van interne strategiese en operasionele vermoëns in die dryf van prestasie en bied uitvoerbare aanbevelings vir kontrakteurs, beleidmakers en belanghebbendes in die bedryf. Dit sluit in die versterking van beplanningstelsels, die ondersteuning van innovasie, die optimalisering van verskaffersnetwerke en die hervorming van prestasiemetingsraamwerke om strategiese leer en voortdurende verbetering te ondersteun.

1. INTRODUCTION

The construction industry plays a pivotal role in Kenya’s socio-economic development, contributing significantly to employment creation, infrastructure development, and GDP growth. Within this industry, local contractors are expected to drive national development agendas such as Vision 2030 and the Big Four Agenda, by executing public and private projects efficiently and sustainably. However, despite their strategic importance, local contractors in Kenya continue to underperform at the organisational level. Reports and empirical studies have consistently highlighted challenges such as weak management structures, low profitability, poor strategic planning, fragmented teams, operational inefficiencies, and limited adoption of modern technologies (Cherono & Njeru, 2024; Waweru & Omwenga, 2015).

A literature review (Makokha & Ngugi, 2022) highlights a persistent and critical focus on project-level performance metrics such as cost, time, and quality. This narrow perspective often neglects firm-level organisational performance, a broader concept that reflects how well an entity is managed

and the value it provides to its various stakeholders. Organisational performance is inherently multidimensional, encompassing the alignment of organisational goals with internal resources and the overall satisfaction of stakeholders (Kim & Faust, 2025; Simon, Njuguna & Kivaa, 2021). The current research in Kenya is limited by several key gaps. First, a project-centric bias persists, where studies overlook the essential firm-level dynamics that ensure long-term sustainability. Secondly, there is a lack of comprehensive multidimensional models that can integrate diverse performance indicators into a single, cohesive analytical framework. There is a notable paucity of empirical research specifically for the Kenyan construction sector, which limits the applicability of broader global models to this unique local context. Internal capabilities such as strategic planning, innovation, and employee performance remain significantly underexplored, despite their role in construction industry success.

This study seeks to address this gap, by developing and testing multiple regression models that link key internal and external determinants to various dimensions of organisational performance with specific reference to construction contractors in Kenya. The study adopts a multidimensional approach to performance measurement and employs a two-tiered regression analysis, first, by examining how the ten identified determinants influence each performance dimension individually and, secondly, by integrating these dimensions into a composite organisational performance index. The ultimate aim is to identify the most influential predictors of performance and provide actionable insights for policymakers, industry stakeholders, and local contractors. By shifting the analytical lens from project-level metrics to organisational-level dynamics, this study contributes to a more holistic understanding of performance in Kenya's construction sector and offers an empirical foundation for strategic interventions.

2. LITERATURE REVIEW

2.1 Dimensions of organisational performance

Organisational performance is a multidimensional concept and should be treated as such in its evaluation. According to Mousa, Ali and Gurler (2024), the vast majority of studies on organisational performance consider either a single or two dimensions without even a proper justification for the selection of the criteria. In the construction sector, organisational performance extends beyond project-level metrics such as cost, time, and quality, encompassing firm-level dimensions such as profitability, growth, innovation, employee engagement, and client retention. Performance should be evaluated through a systems perspective, integrating structural, behavioural, and contextual variables.

Murphy, Trailer & Hill (1996) critique the narrow scope of many performance studies, noting that 60% of them rely on one or two dimensions without adequate justification. More recent scholarship has shifted toward multidimensional frameworks. For example, Mousa *et al*. (2024) and Martínez-Peláez *et al*. (2023) emphasise the need to integrate financial, technical, and relational outcomes, while Khan & Haji-Othman (2025) highlight the importance of employee satisfaction and managerial capability in sustaining long-term competitiveness. Based on extensive literature (Awan & Javed, 2024; Khan & Haji-Othman, 2025; Martínez-Peláez *et al.*, 2023; Mousa *et al*., 2024; Saputra *et al.*, 2024; Shuriye & Wambua, 2020), ten key dimensions of organisational performance have been identified: (i) profitability: financial returns and margins; (ii) business efficiency: operational productivity and resource optimization; (iii) quality of products: conformance to standards and client expectations; (iv) growth: expansion in market share, capacity, and revenue; (v) financial stability: liquidity, solvency, and risk resilience; (vi) safety performance: adherence to occupational health and safety standards; (vii) managerial capability: leadership, decision-making, and strategic execution; (viii) client satisfaction: perceived value and service quality from the client's perspective; (ix) technical capability: engineering competence and technological adoption, and (x) employee satisfaction: staff morale, motivation, and retention. These dimensions collectively offer a comprehensive framework for assessing organisational performance in construction firms.

2.2 Determinants of organisational performance

Organisational performance is influenced by a combination of internal and external factors. The internal environment includes strategic orientation, human capital, operational systems, and organisational culture, while the external environment encompasses market dynamics, regulatory frameworks, and stakeholder pressures. From the literature (Awan & Javed, 2024; Castillo, Alarcón & Pellicer, 2018; Khan & Haji-Othman, 2025; Luke & Thoronjo, 2021; Martínez-Peláez *et al*., 2023; Mousa *et al.*, 2024; Oluwatayo & Amole, 2011; Saputra *et al*., 2024; Shuriye & Wambua, 2020), ten determinants have been consistently associated with performance outcomes: (i) strategic planning practices: effective goal-setting, resource alignment, and long-term visioning; (ii) performance measurement practices: use of KPIs, benchmarking, and feedback systems; (iii) quality of service: reliability, responsiveness, and client-centric delivery; (iv) organisational structure: hierarchical clarity, decentralization, and communication flow; (v) contractor's innovativeness: adoption of new technologies, creative problem-solving, and process improvement; (vi) employee performance: skills, productivity, and engagement levels; (vii) client effectiveness: clarity of requirements, feedback, and collaboration;

(viii) supplier effectiveness: timely delivery, quality inputs, and strategic partnerships; (ix) competition: market pressure, differentiation, and strategic agility, and (x) government support: policy incentives, regulatory facilitation, and infrastructure investment. These determinants interact in complex ways, shaping the strategic and operational landscape of local contractors.

2.3 Theoretical framework

This study is grounded in two complementary theoretical perspectives, namely the Resource-Based View (RBV) and Contingency theory. RBV posits that organisational performance is driven by the firm's internal resources and capabilities – those that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). Determinants such as strategic planning, employee performance, innovativeness, and supplier effectiveness align with RBV, by emphasising internal competencies that local contractors can leverage to gain a competitive advantage. Contingency theory, on the other hand, asserts that organisational effectiveness depends on the fit between internal structures and external environmental conditions (Donaldson, 2001). Determinants such as competition and government support reflect external contingencies that shape strategic choices and performance outcomes. This theory supports the idea that no single determinant guarantees success; rather, performance emerges from context-specific alignment. Together, these theories provide a robust foundation for modelling the multidimensional nature of organisational performance and its determinants in the Kenyan construction sector.

2.4 Conceptual framework and research hypothesis

Figure 1 presents the study's conceptual framework. The ten identified dimensions reflect both tangible and intangible aspects of firm-level performance, offering a holistic view of organisational health. The ten identified determinants are hypothesised to exert varying degrees of influence across the ten performance dimensions.

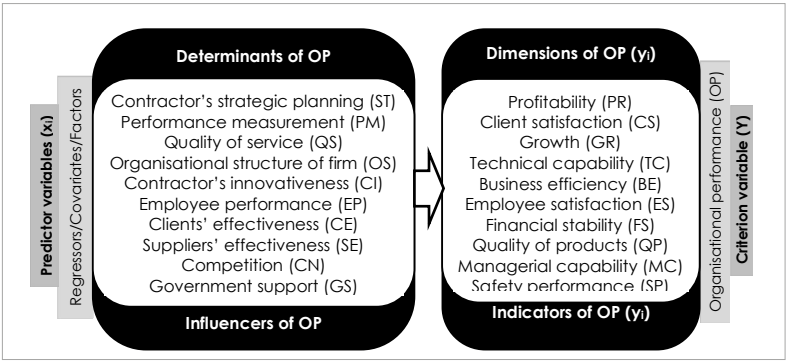

Figure 1: Conceptual framework

The research predicts that the ten organisational determinants exert a statistically significant influence on organisational performance among local contractors in Kenya. To empirically test the relationships, the study employs multiple regression analysis. Each performance dimension is treated as a dependent variable, regressed against the ten determinants. In addition, a composite index of overall organisational performance (OP) is constructed and regressed against the same predictors. This results in eleven regression models, each representing a unique performance-determinant relationship premised on the literature reviewed and the adopted theoretical framework as summarised hereunder:

$$PR=\alpha_{PR}+\beta_{ST}\,ST+\beta_{PM}\,PM+\beta_{QS}\,QS+\beta_{CI}\,OS+\beta_{CI}\,CI+\beta_{EP}\,EP+\beta_{CE}\,CE+\beta_{SE}\,SE+\beta_{CN}\,CN+\beta_{GS}\,\ldots\ldots\text{Equation 1}$$

$$CS=\alpha_{CS}+\beta_{ST}\,ST+\beta_{PM}\,PM+\beta_{QS}\,QS+\beta_{CI}\,OS+\beta_{CI}\,CI+\beta_{EP}\,EP+\beta_{CE}\,CE+\beta_{SE}\,SE+\beta_{CN}\,CN+\beta_{GS}\,GS\ldots\ldots\text{Equation 2}$$

$$GR=\alpha_{GR}+\beta_{ST}\,ST+\beta_{PM}\,PM+\beta_{QS}\,QS+\beta_{CI}\,OS+\beta_{CI}\,CI+\beta_{EP}\,EP+\beta_{CE}\,CE+\beta_{SE}\,SE+\beta_{CN}\,CN+\beta_{GS}\,GS\ldots\ldots\text{Equation 3}$$

$$TC=\alpha_{TC}+\beta_{ST}\,ST+\beta_{PM}\,PM+\beta_{QS}\,QS+\beta_{CI}\,OS+\beta_{CI}\,CI+\beta_{EP}\,EP+\beta_{CE}\,CE+\beta_{SE}\,SE+\beta_{CN}\,CN+\beta_{GS}\,GS\ldots\ldots\text{Equation 4}$$

$$BE=\alpha_{BE}+\beta_{ST}\,ST+\beta_{PM}\,PM+\beta_{QS}\,QS+\beta_{CI}\,OS+\beta_{CI}\,CI+\beta_{EP}\,EP+\beta_{CE}\,CE+\beta_{SE}\,SE+\beta_{CN}\,CN+\beta_{GS}\,GS\ldots\ldots\text{Equation 5}$$

$$ES=\alpha_{ES}+\beta_{ST}\,ST+\beta_{PM}\,PM+\beta_{QS}\,QS+\beta_{CI}\,OS+\beta_{CI}\,CI+\beta_{EP}\,EP+\beta_{CE}\,CE+\beta_{SE}\,SE+\beta_{CN}\,CN+\beta_{GS}\,GS\ldots\ldots\text{Equation 6}$$

$$FS=\alpha_{FS}+\beta_{ST}\,ST+\beta_{PM}\,PM+\beta_{QS}\,QS+\beta_{CI}\,OS+\beta_{CI}\,CI+\beta_{EP}\,EP+\beta_{CE}\,CE+\beta_{SE}\,SE+\beta_{CN}\,CN+\beta_{GS}\,GS\ldots\ldots\text{Equation 7}$$

$$QP=\alpha_{QP}+\beta_{ST}\,ST+\beta_{PM}\,PM+\beta_{QS}\,QS+\beta_{CI}\,OS+\beta_{CI}\,CI+\beta_{EP}\,EP+\beta_{CE}\,CE+\beta_{SE}\,SE+\beta_{CN}\,CN+\beta_{GS}\,GS\ldots\ldots\text{Equation 8}$$

$$MC=\alpha\_MC+\beta\_ST\ ST+\beta\_PM\ PM+\beta\_QS\ QS+\beta\_CI\ OS+\beta\_CI\ CI+\beta\_EP\ EP+\beta\_CE\ CE+\beta\_SE\ SE+\beta\_CN\ CN+\beta\_GS\ GS \quad \text{Equation 9}$$

$$SP=\alpha\_SP+\beta\_ST\ ST+\beta\_PM\ PM+\beta\_QS\ QS+\beta\_CI\ OS+\beta\_CI\ CI+\beta\_EP\ EP+\beta\_CE\ CE+\beta\_SE\ SE+\beta\_CN\ CN+\beta\_GS\ GS \quad \text{Equation 10}$$

$$OP=\alpha\_OP+\beta\_ST\ ST+\beta\_PM\ PM+\beta\_QS\ QS+\beta\_CI\ OS+\beta\_CI\ CI+\beta\_EP\ EP+\beta\_CE\ CE+\beta\_SE\ SE+\beta\_CN\ CN+\beta\_GS\ GS \quad \text{Equation 11}$$

Where;

- PR=Profitability, CS=Client satisfaction, GR=Growth, TC=Technical capability, BE=Business efficiency, ES=Employee satisfaction, FS=Financial stability, QP=Quality of products, MC=Managerial capability, SP=Safety performance, OP=Organisational performance.
- ST=Strategic planning practices, PM=Performance measurement practices, QS=Quality of service, OS=Organisational structure of the firm, CI=Contractor's innovativeness, EP=Employee performance, CE=Clients' effectiveness, SE=Suppliers' effectiveness, CN=Competition, and GS=Government support.
- α is a constant (the predicted value for each of the criterion variables when the value of the predictor variable is zero);
- β is the regression coefficient for each of the predictor variables.

3. RESEARCH METHODOLOGY

3.1 Research design

This study adopted a survey research design, which is appropriate for collecting standardised quantitative data from a large population of contractors and consultants, enabling researchers to capture consistent responses that support generalisable inferences across groups (Creswell & Creswell, 2018). This design is particularly effective for identifying patterns, relationships, and trends among organisational determinants, as it systematically gathers structured data that can be analysed using inferential statistical techniques (Repke, Birkenmaier & Lechner, 2024). The design aligns with the study's objective of modelling how various internal and external factors influence multiple dimensions of organisational performance. By employing structured questionnaires, the study ensures consistent measurement across participants and strengthens the validity of the constructs being assessed. The survey format supports the application of quantitative analytical methods, including multiple regression analysis, which allows for empirical testing of hypothesised relationships between variables (Bryman, 2012). Results from these inferential tests provided a deeper understanding of the determinants of organisational performance,

and support valid recommendations to enhance organisational performance among local contractors in Kenya.

3.2 Population, sampling, and responses

The target population comprised 1,427 local contractors registered under National Construction Authority (NCA) categories 1, 2, and 3, as well as construction consultants such as architects, civil and structural engineers, quantity surveyors, and project managers, among others, who had recently worked with these contractors. These categories were selected because they represent firms with operational capacity and involvement in medium to large-scale projects, making them suitable for evaluating organisational-level performance. The formula developed by Cochran (1963) was used to establish a sample size of 306 contractors.

A stratified random sampling technique was employed to ensure representation across the three NCA categories and between contractors and consultants. Stratification enhances the precision of estimates by accounting for heterogeneity within the population (Etikan & Bala, 2017). A total of 612 questionnaires were distributed, 306 to contractors and 306 to consultants who had professional interaction with the selected contractors. This dual-source approach was designed to mitigate potential bias arising from self-reporting by contractors and to enhance the objectivity of the data. Although there were two units of observation, there was a single unit of analysis, the contractor.

A total of 378 responses were obtained: 235 from contractors and 143 from consultants. This represented an overall response rate of 62%, which was deemed adequate based on the recommendation by Mugenda and Mugenda (2003).

3.3 Data collection

A structured questionnaire was developed based on validated constructs from existing literature. The instrument consisted of three main sections: (i) Section A: Background information on respondents and firm characteristics; (ii) Section B: Measures of the ten dimensions of organisational performance, and (iii) Section C: Measures of the ten determinants of organisational performance. Items in section A were measured using a nominal scale, while those in sections B and C were measured using a ten-point rating scale, which is suitable for capturing attitudes, perceptions, and self-assessed performance levels (Jamieson, 2004). The 10-point scale was chosen, due to its ability to not only offer more variance compared to smaller scales but also its higher degree of measurement precision. It not only provides an improved opportunity to detect changes but also

gives more power in explaining a point of view (Taherdoost, 2019). The questionnaire was pre-tested with a pilot group of 20 respondents to assess clarity, reliability, and construct validity. Necessary adjustments were made based on feedback. Data were collected through self-administration of the questionnaires, which were distributed both physically and electronically.

3.4 Data analysis

All data were analysed using Statistical Package for the Social Sciences (SPSS) version 25 (IBM, 2017), which provides advanced statistical tools for managing, analysing, and interpreting research data. Descriptive statistics (including means, standard deviations, and frequencies) were generated to summarise respondent characteristics and the distribution of all study variables.

Reliability was assessed using Cronbach's *alpha*, while validity was examined through factor loadings, composite reliability (CR), and average variance extracted (AVE). According to Hair Jr. *et al*. (2010), Cronbach's *alpha* values above 0.70 indicate strong internal consistency, factor loadings above 0.70 confirm item reliability, CR values above 0.70 demonstrate construct reliability, and AVE values above 0.50 establish convergent validity.

The presence of common method bias was assessed using the correlation matrix procedure and Harman's single-factor test to determine whether measurement bias arising from the use of a single data-collection method could affect the study findings. The correlation matrix procedure was used to identify excessively high correlations between variables, as recommended by Rodríguez-Ardura and Meseguer-Artola (2020), while Harman's single-factor test was employed to determine whether a single factor accounted for a substantial proportion of the total variance in the data (Chen & Ding, 2026).

Testing statistical assumptions was necessary to ensure that the data met the requirements for valid and reliable regression analysis. Accordingly, before conducting the regression analysis, four major statistical assumptions (linearity, normality, homoscedasticity, and multicollinearity) were tested. Linearity of the collected data was checked using scatter plots (SSS, 2025a). Tests of normality were carried out, including Kurtosis, Skewness, Kolmogorov-Smirnov and Shapiro-Wilk. The z-values were calculated by dividing the kurtosis and skewness values by the respective standard errors. According to Hair Jr *et al*. (2010), z-values within the range of −1.96 to +1.96 at the p = 0.05 significance level indicates approximate normality; if not, the data is either skewed or kurtotic, thus denoting non-normality. Homoscedasticity was tested using Levene's test of equality variance. A smaller F-value generally indicates more similar variances,

while a larger F-value suggests greater differences between group variances. However, the decision is based on the p-value ($p < 0.05$), not on a fixed F cutoff. A non-significant p-value (typically above 0.05) means there is not enough evidence to conclude that the variances differ (SSS, 2025b). Multicollinearity occurs when two or more predictor variables in the model exhibit very strong correlations. Variance Inflation Factor (VIF) measures how much the variance of a regression coefficient is inflated because of multicollinearity (Alin, 2010). Daoud (2018) notes that VIF = 1 indicates no correlation, VIF ≤ 5 indicates moderate correlation, and VIF > 5 indicates high correlation. VIF < 10 and tolerance of 0.1 thresholds were accepted (Hair Jr *et al*., 2010; *Fox,* 2015).

Multiple linear regression was conducted in SPSS to examine the predictive relationships between the determinants and the organisational performance outcomes in two stages, namely Stage 1: Each of the ten dimensions of organisational performance was regressed individually against the ten determinants to identify specific predictor-outcome relationships, and Stage 2: A composite index of overall organisational performance was created, by integrating the ten dimensions. This index was then regressed against the same ten determinants to assess their collective influence. Regression outputs were interpreted using established best-practice indicators, including R and Adjusted R^2 (power of the models), F-statistics with significance p-values (overall model significance), and standardised beta coefficients (importance of each predictor) (Field, 2018).

4. RESULTS

4.1 Respondent profile

The contractors' profile (Table 1) shows that most surveyed firms were classified under NCA1, with additional representation from NCA2 and NCA3. Most firms employed fewer than 30 permanent staff and were less than 15 years old, reflecting the lean and developing nature of many construction firms in Kenya. These characteristics justified their inclusion, as they operate within the resource and competitive conditions that influence organisational performance.

The consultants' profile (Table 2) indicates that the majority were quantity surveyors, followed by construction managers and engineers, with most having less than 10 years of professional experience. Their professional backgrounds and industry exposure justified their participation, as they are directly involved in contractor evaluation, cost management, and project performance assessment, providing informed and diverse perspectives on organisational performance.

Table 1: Contractors' profile

Demographic	*Category*	*Frequency*	*%*
NCA Category (n = 235) (missing = 0)	NCA1	107	45.5
	NCA2	62	26.4
	NCA3	66	28.1
Number of permanent staff (n = 233) (missing = 2)	Up to 10	64	27.5
	11-20	62	26.6
	21-30	45	19.3
	31-40	26	11.2
	41-50	9	3.9
	51-60	4	1.7
	61-70	2	.9
	71-80	3	1.3
	81-90	6	2.6
	More than 90	12	5.2
Age of the firm (years) (n = 233) (missing = 2)	Up to 5	30	12.9
	6-10	64	27.5
	11-15	62	26.6
	16-20	29	12.4
	21-25	13	5.6
	26-30	12	5.2
	31-35	5	2.1
	41-45	6	2.6
	More than 45	12	5.2

Table 2: Consultants' profile

Demographic	*Category*	*Frequency*	*%*
Professional background (n = 143) (missing = 0)	Construction management	23	16.1
	Quantity surveying	86	60.1
	Civil and structural engineering	21	14.7
	Architecture	9	6.3
	Others	4	2.8
Professional experience (years) (n = 143) (missing = 0)	Less than 5	41	28.7
	6-10	56	39.2
	11-15	20	14.0
	16-20	15	10.5
	21-25	5	3.5
	26-30	5	3.5
	36-40	1	.7

4.2 Reliability, validity and common method bias

Table 3 shows that the measurement model demonstrated strong reliability and convergent validity. For the **dimensions** of organisational performance, Cronbach's Alpha ranged from 0.925 (Technical capability) to 0.966 (Managerial capability), with an average composite score of α = 0.947, CR = 0.949, and AVE = 0.791. Factor loadings were consistently above 0.83, and AVE values exceeded the recommended 0.50 threshold (Hair Jr *et al*., 2010), confirming convergent validity.

For the **determinants** of organisational performance, Cronbach's Alpha values ranged from 0.881 (Government support) to 0.963 (Performance measurement practices), with a composite score of α = 0.945, CR = 0.918, and AVE = 0.717. Factor loadings were all above 0.74, and AVE values exceeded 0.70 for most constructs, except Government support (AVE = 0.499), which fell slightly below the recommended threshold. Overall, the results confirm excellent reliability and validity across constructs, with only minor concerns for Government support.

Table 3: Reliability and validity of dimensions and determinants

DIMENSIONS						
Code	*Item*	*Cronbach's alpha*	*Factor loading*	*R^2*	*CR > 05*	*AVE > 05*
PR	Profitability	0.958	0.907	0.823	0.959	0.823
CS	Client satisfaction	0.946	0.876	0.768	0.943	0.767
GR	Growth	0.938	0.884	0.783	0.947	0.783
TC	Technical capability	0.925	0.839	0.707	0.923	0.707
BE	Business efficiency	0.941	0.879	0.773	0.945	0.773
ES	Employee satisfaction	0.958	0.922	0.851	0.966	0.851
FS	Financial stability	0.954	0.895	0.801	0.953	0.801
QP	Quality of products	0.953	0.898	0.808	0.954	0.808
MC	Managerial capability	0.966	0.918	0.844	0.964	0.844
SP	Safety performance	0.935	0.870	0.758	0.940	0.757
	Composite score	0.947	0.889	0.792	0.949	0.791
DETERMINANTS						
Code	*Item*	*Cronbach's alpha*	*Factor loading*	*R^2*	*CR > 05*	*AVE > 05*
ST	Strategic planning practices	0.950	0.887	0.789	0.914	0.724
PM	Performance measurement practices	0.963	0.918	0.833	0.947	0.788
QS	Quality of service	0.947	0.876	0.768	0.914	0.723
OS	Organizational structure of the firm	0.943	0.873	0.763	0.903	0.701

DETERMINANTS						
Code	*Item*	*Cronbach's alpha*	*Factor loading*	*R²*	*CR > 05*	*AVE > 05*
CI	Contractor's innovativeness	0.958	0.906	0.822	0.942	0.763
EP	Employee performance	0.956	0.902	0.815	0.939	0.751
CE	Clients' effectiveness	0.938	0.863	0.746	0.898	0.682
SE	Suppliers' effectiveness	0.959	0.904	0.817	0.945	0.778
CN	Competition	0.957	0.896	0.805	0.941	0.764
GS	Government support	0.881	0.749	0.576	0.832	0.499
	Composite score	0.945	0.877	0.773	0.918	0.717

Table 4 presents the assessment of common method bias, using both the correlation matrix procedure and Harman's single-factor test. The correlation matrices showed no serious concern, as the highest observed correlations (0.784 for performance dimensions and 0.821 for performance determinants) were well below the 0.90 threshold suggested by Rodríguez-Ardura and Meseguer-Artola (2020). However, Harman's single-factor test indicated that a single factor explained 56.97% of the variance in contractors' data, 53.19% in consultants' data, and 55.04% in the combined dataset. These values exceed the recommended 50% threshold (Chen & Ding, 2026), suggesting that some common method bias may be present. As Fuller *et al*. (2016) note, higher levels of common method bias do not necessarily invalidate the observed relationships among variables, although they may contribute to consistently high path coefficients.

Table 4: Common method bias assessment

Analysis	*Variables*	*Highest correlation*	*Threshold (Rodríguez-Ardura & Meseguer-Artola, 2020)*	*Single factor variance*	*Threshold (Chen & Ding, 2026)*	*Interpretation*
Correlation matrix -Dimensions	PR, CS, GR, TC, BE, ES, FS, QP, MC, SP	0.784 (PR–GR)	< 0.90			No serious concern
Correlation matrix -Determinants	ST, PM, QS, OS, CI, EP, CE, SE, CN, GS	0.821 (QS–OS)	< 0.90			No serious concern
Harman's single-factor test – Contractors	12 compo-nents			56.97%	< 50%	Some bias present

Analysis	*Variables*	*Highest correlation*	*Threshold (Rodriguez-Ardura & Meseguer-Artola, 2020)*	*Single factor variance*	*Threshold (Chen & Ding, 2026)*	*Interpretation*
Harman's single-factor test – Consultants	13 compo-nents			53.19%	< 50%	Some bias present
Harman's single-factor test – Combined data				55.04%	< 50%	Some bias present

4.3 Testing statistical assumptions

Before running the regression analysis, four key assumptions were checked: linearity, normality, homoscedasticity, and multicollinearity.

4.3.1 Linearity

The scatter plot in Figure 2 shows a clear linear relationship between organisational performance and its determinants – organisational performance (OP) increases as determinants (DT) improve.

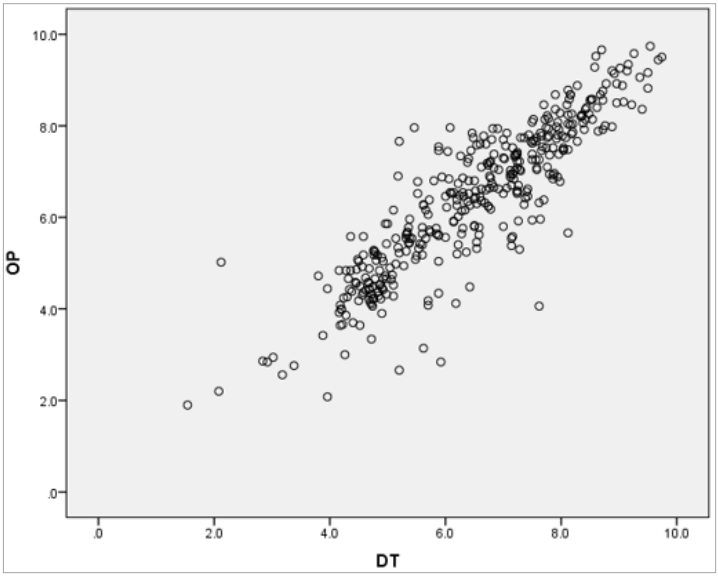

Figure 2: Scatter plot of organisational performance versus its determinants

4.3.2 Normality

Table 5 shows the results for the normality tests, including original vs. transformed data. Initial tests (skewness, kurtosis, Kolmogorov-Smirnov, Shapiro-Wilk) indicated that many variables were not normally distributed, with z-values not between -1.96 and +1.96 and p = 0.05 significance level. To address this, the data were transformed using Templeton's (2011) two-step method, which successfully produced normally distributed values without altering the integrity of the dataset.

Table 5: Normality tests (original vs. transformed data)

Variable	*Kurtosis z (Orig.)*	*Kurtosis z (Trans.)*	*Skewness z (Orig.)*	*Skewness z (Trans.)*	*K-S Sig. (Orig.)*	*K-S Sig. (Trans.)*	*S-W Sig. (Orig.)*	*S-W Sig. (Trans.)*
Profitability	-1.136	-0.208	-2.088	0.536	.033	.067	.005	.796
Client satisfaction	-4.272	-0.820	-1.548	0.000	.000	.200*	.000	.265
Growth	-2.104	-0.500	-2.948	0.336	.004	.200*	.000	.755
Technical capability	-1.464	-0.784	-2.184	0.088	.009	.200*	.002	.367
Business efficiency	-0.848	-0.692	-1.460	0.128	.002	.200*	.013	.503
Employee satisfaction	-2.144	-0.792	-3.628	0.104	.000	.200*	.000	.396
Financial stability	-0.160	-0.776	-3.272	0.072	.000	.200*	.000	.380
Quality of products	-5.144	-1.048	0.260	-0.216	.000	.200*	.000	.077
Managerial capability	-3.056	-1.240	-2.012	-0.424	.000	.200*	.000	.017
Safety performance	-2.016	-1.400	-2.372	-0.536	.000	.200*	.000	.006
Strategic planning	-1.808	-1.092	-1.040	-0.248	.038	.200	.001	.098
Performance measurement	-2.584	-1.036	-2.040	-0.152	.000	.200	.000	.105
Quality of service	-3.592	-1.128	-1.384	-0.288	.000	.200	.000	.054
Organisational structure	-1.944	-1.060	-2.116	-0.192	.001	.200	.000	.106
Contractor's innovativeness	-0.856	-0.812	-3.788	0.112	.000	.200	.000	.462
Employee performance	-4.040	-1.236	0.768	-0.432	.015	.050	.000	.013
Clients' effectiveness	-1.728	-0.628	-1.476	0.176	.000	.200	.003	.552
Suppliers' effectiveness	-1.808	-0.972	-1.864	-0.128	.000	.200	.000	.128
Competition	-2.824	-0.964	-1.704	-0.136	.000	.200	.000	.130
Government support	4.224	-0.776	-1.872	0.071	.000	.200	.000	.677

4.3.3 Homoscedasticity

Table 6 shows the equality of variance using Levene's test. The F-values show that some groups showed more consistency in their responses, while others showed wider differences among participants in the study. Because the differences in variability were statistically significant ($p < 0.05$), the assumption of equal variance was not met. This is important because many statistical tests assume that groups have similar levels of variability, and violating this assumption may affect the reliability or interpretation of the results.

Table 6: Levene's test of equality of error variances

Dimensions of organisational performance	*F*	*df1*	*df2*	*Sig.*
Profitability	2.635	269	108	.000
Client satisfaction	4.564	269	108	.000
Growth	2.931	269	108	.000
Technical capability	3.498	269	108	.000
Business efficiency	3.580	269	108	.000
Employee satisfaction	3.751	269	108	.000
Financial stability	4.410	269	108	.000
Quality of products	3.771	269	108	.000
Managerial capability	4.706	269	108	.000
Safety performance	3.378	269	108	.000

4.3.4 Multicollinearity

Multicollinearity occurs when predictor variables in a regression model are highly correlated, which can undermine the reliability of parameter estimates (Alin, 2010). To assess this, Variance Inflation Factor (VIF) values and tolerance statistics were examined. Table 7 shows that all predictors showed moderate correlations ($VIF \leq 5$), but none exceeded the critical threshold of 10. With tolerance values consistently above 0.1, the results confirm that multicollinearity was not a problem in this dataset. This means the regression model can reliably estimate the effects of each determinant on organisational performance.

Table 7: Multicollinearity test using VIF values

Determinants of organisational performance	*Tolerance*	*VIF*
Strategic planning practices	.350	2.855
Performance measurement practices	.257	3.884
Quality of service	.224	4.474
Organisational structure of the firm	.217	4.618
Contractor's innovativeness	.302	3.309

Determinants of organisational performance	*Tolerance*	*VIF*
Employee performance	.297	3.362
Clients' effectiveness	.367	2.726
Suppliers' effectiveness	.241	4.149
Competition	.389	2.567
Government support	.638	1.568

4.3.5 Remedies for statistical assumption violations

The main violations (non-normality and unequal variances) were corrected through data transformation. After transformation, all variables met the normality criteria, and the data were suitable for regression analysis.

4.4 Relationships between determinants and dimensions of organisational performance

Multiple regression was carried out at two levels. First, each **dimension** of organisational performance was individually regressed against the ten **determinants** of organisational performance. Secondly, the multiple dimensions of organisational performance were integrated into a single criterion variable, which was regressed against the determinants of organisational performance. This resulted in a total of 11 regression models. The first ten models are a result of multiple regression between **individual** dimensions of organisational performance and the determinants, while the last model was a result of multiple regression between overall organisational performance and its determinants.

4.4.1 Profitability versus determinants of organisational performance

A regression analysis of profitability against the determinants of organisational performance yielded the results shown in Table 8. The multiple regression analysis yielded an adjusted R^2 of 0.473, indicating that the ten determinants included in the model explain 47.3% of the variance in financial outcomes among Kenyan contractors. While this represents the lowest explanatory power across the ten performance dimensions studied, the model remains statistically significant ($F = 34.791$, $p < 0.001$).

Table 8: Regression results for profitability (PR)

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
(Constant)	.848	.366		2.315	.021
ST	.242	.069	.246	3.506	.001*
PM	-.013	.079	-.014	-.169	.866
QS	.086	.089	.078	.967	.334

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
OS	.167	.083	.163	2.008	.045**
CI	.161	.055	.200	2.937	.004*
EP	.375	.075	-.343	-4.993	.000*
CE	.059	.066	.055	.891	.374
SE	.257	.081	.242	3.175	.002*
CN	.148	.064	.141	2.328	.020**
GS	-.009	.045	-.009	-.190	.850
Model 1 summary	*R*	*R²*	*Adjusted R²*	*Std. error of the estimate*	
	.698	.487	.473	1.3503	
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	634.385	10	63.438	34.791	.000*
Residual	669.200	367	1.823		
Total	1303.585	377			
Dependent variable: Profitability (PR) *p < 0.01; **p < 0.05					

The regression analysis revealed six determinants that significantly influence profitability among local contractors in Kenya. Employee performance was identified as the most influential driver (β = 0.375, p < 0.001), underscoring that human capital is the primary engine of financial success; contractors who invest in a skilled and productive workforce achieve superior operational efficiency and returns. This is followed by Strategic planning (β = 0.246, p = 0.001), where firms that engage in structured long-term visioning demonstrate a significantly higher capacity to optimise financial outcomes and mitigate risks.

Supplier effectiveness also proved critical (β = 0.242, p = 0.002), highlighting that reliable supply chain partnerships are essential for controlling costs and avoiding project delays that erode margins. Contractor innovativeness (β = 0.200, p = 0.004) indicates that the adoption of new technologies and creative problem-solving enables firms to differentiate themselves and enhance productivity. Two final significant factors were Organisational structure (β = 0.163, p = 0.045), which provides the functional clarity required for effective decision-making, and Competition (β = 0.141, p = 0.020). The positive association with competition suggests that market pressures may act as a catalyst for local firms to adopt leaner, more adaptive and cost-effective business practices.

Determinants such as Performance measurement practices, Quality of service, Client effectiveness, and Government support did not yield statistically significant results in relation to profitability. This suggests that, while these factors may be vital for long-term reputation or regulatory

compliance, they do not translate directly into immediate financial gains within the current Kenyan construction climate. These findings reinforce the importance of prioritising internal capabilities, specifically strategic planning, innovation, and workforce development, to drive the bottom line.

The following regression model (equation 12) of explaining and predicting profitability was formulated using the estimated coefficients.

$$PR=0.848+0.242ST-0.013PM+0.086QS+0.167OS+0.161CI+0.375EP+0.059CE+$$
$$0.257SE+0.148CN-0.009GS \quad \text{Equation 12}$$

4.4.2 Client satisfaction versus determinants of organisational performance

Table 9 presents the results for the regression of client satisfaction and the ten determinants of organisational performance. The multiple regression analysis yielded an adjusted R^2 of 0.580, indicating that the ten determinants included in the model explain 58.0% of the variance in how local contractors meet client expectations. The model is statistically significant ($F = 53.150$, $p < 0.001$). This is a relatively strong model, suggesting that the selected determinants are robust indicators of how well contractors meet client expectations.

Table 9: Regression results for client satisfaction (CS)

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
(Constant)	1.099	.331		3.318	.001**
ST	.308	.062	.308	4.934	.000**
PM	-.116	.071	-.119	-1.630	.104
QS	.319	.080	.287	3.975	.000**
OS	.035	.075	.034	.468	.640
CI	.102	.050	.125	2.058	.040*
EP	.107	.068	.096	1.570	.117
CE	-.060	.060	-.055	-1.000	.318
SE	.275	.073	.256	3.762	.000**
CN	-.066	.057	-.061	-1.141	.255
GS	-.051	.041	-.052	-1.254	.211
Model 1 summary	*R*	*R²*	*Adjusted R²*	*Std. error of the estimate*	
	.769	.592	.580	1.2207	
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	791.943	10	79.194	53.150	.000**
Residual	546.832	367	1.490		
Total	1338.775	377			
Dependent variable: Client satisfaction (CS) *p < 0.01; **p < 0.05					

Four of the ten determinants emerged as statistically significant predictors of client satisfaction. Strategic planning practices proved to be the most influential factor ($\beta = 0.308$, $p < 0.001$), suggesting that contractors, who engage in structured goal setting and resource alignment, are significantly better equipped to meet project requirements and build client trust. This is closely followed by Quality of service ($\beta = 0.287$, $p < 0.001$), which underscores that reliability, responsiveness, and professional conduct are central to shaping positive client perceptions. Supplier effectiveness also showed a strong and significant impact ($\beta = 0.256$, $p < 0.001$), highlighting that dependable supply chain partnerships are essential for achieving the timely project delivery and high-quality outcomes that clients demand. Contractor innovativeness ($\beta = 0.125$, $p = 0.040$) was found to be a significant contributor, indicating that firms adopting creative solutions and new technologies can better differentiate themselves and add value for their clients.

Determinants such as Performance measurement practices, Organisational structure, Employee performance, Client effectiveness, Competition, and Government support did not yield statistically significant effects on client satisfaction. This suggests that, while internal systems and external market conditions are vital for general management, they may not be directly visible or impactful from the client's perspective compared to direct service quality and strategic execution. These results reinforce the RBV, by demonstrating that internal strategic and operational competencies are the primary levers for achieving high levels of satisfaction among clients.

The following regression model (equation 13) of explaining and predicting client satisfaction was formulated using the estimated coefficients.

$$CS=1.099+0.308ST-0.116PM+0.319QS+0.035OS+0.102CI+0.107EP-0.060CE+0.275SE-0.066CN-0.051GS \quad \text{Equation 13}$$

4.4.3 Growth versus determinants of organisational performance

The multiple regression analysis for the growth dimension yielded an adjusted R^2 of 0.619, indicating that the ten determinants included in the model explain 61.9% of the variance in firm-level expansion, market penetration, and capacity development among local contractors in Kenya. This is one of the strongest models in the study, suggesting that the selected determinants are highly relevant for explaining firm-level growth trajectories. The model was found to be statistically significant with an F ratio of 62.352 ($p < 0.001$).

Table 10: Regression results for growth (GR)

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
(Constant)	-.011	.362		-.032	.975
ST	.183	.068	.160	2.680	.008**
PM	-.032	.078	-.028	-.409	.683
QS	.136	.088	.107	1.551	.122
OS	.138	.082	.115	1.671	.096
CI	.377	.054	.402	6.951	.000**
EP	-.254	.074	-.200	-3.422	.001**
CE	.055	.065	.044	.842	.401
SE	.235	.080	.190	2.943	.003**
CN	.032	.063	.026	.502	.616
GS	.099	.045	.088	2.199	.028
Model 1 summary	*R*	*R²*	*Adjusted R²*	*Std. error of the estimate*	
	.793	.629	.619	1.3336	
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	1108.914	10	110.891	62.352	.000**
Residual	652.703	367	1.778		
Total	1761.616	377			
Dependent variable: Growth (GR) *p < 0.01; **p < 0.05					

Four of the ten determinants are statistically significant predictors of growth. Contractor's innovativeness was identified as the most influential predictor (β = 0.402, p < 0.001), highlighting that innovation is the central driver for local firms seeking to expand their market share and diversify their services. Supplier effectiveness also showed a strong positive association with growth (β = 0.190, p = 0.003), as reliable supply chains are essential for the timely execution and cost control required to scale operations. Strategic planning practices had a significant positive effect (β = 0.160, p = 0.008), confirming that firms with structured planning and resource alignment are better positioned for sustainable expansion. Employee performance exhibited a significant but negative relationship with growth (β = -0.200, p = 0.001). This counterintuitive result suggests that high individual output may not automatically translate into firm-level growth unless it is strategically harnessed and supported by wider organisational systems. The RBV suggests that poorly aligned or overstretched human capital can reduce profitability, while contingency theory explains that rigid performance measurement systems may misfit volatile environments, thereby constraining adaptability.

Determinants such as Performance measurement practices, Quality of service, Organisational structure, Client effectiveness, Competition, and Government support were not statistically significant in this model. This

implies that, while these factors are important for other performance areas, they may not directly drive firm growth within the specific context of the Kenyan construction industry. These findings align with the RBV by underscoring the primacy of internal innovation and strategic assets as the primary levers for organisational scaling.

The following regression model (equation 14) of explaining and predicting growth was formulated using the estimated coefficients.

$$GR=-0.011+0.183ST-0.032PM+0.136QS+0.138OS+0.377CI-0.254EP+0.055CE+0.235SE+0.032CN+0.099GS \quad \text{Equation 14}$$

4.4.4 Technical capability versus determinants of organisational performance

The multiple regression analysis for the technical capability dimension produced an adjusted R^2 of 0.595, indicating that the ten determinants included in the model account for 59.5% of the variance in the technical proficiency and operational competence of local contractors. This represents one of the strongest explanatory models in the study, and its statistical significance is confirmed by an F ratio of 56.345 ($p < 0.001$).

Table 11: Regression results for technical capability (TC)

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
(Constant)	1.261	.318		3.970	.000**
ST	.236	.060	.242	3.934	.000**
PM	-.209	.068	-.219	-3.052	.002**
QS	.183	.077	.169	2.372	.018*
OS	.157	.072	.154	2.167	.031*
CI	.295	.048	.370	6.201	.000**
EP	.060	.065	.056	.922	.357
CE	.029	.057	.027	.503	.615
SE	.075	.070	.071	1.068	.286
CN	-.091	.055	-.088	-1.656	.099
GS	.109	.039	.114	2.768	.006**
Model 1 summary	*R*	*R²*	*Adjusted R²*	*Std. error of the estimate*	
	.778	.606	.595	1.1714	
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	773.164	10	77.316	56.345	.000**
Residual	503.600	367	1.372		
Total	1276.764	377			
Dependent variable: Technical capability (TC) *p < 0.01; **p < 0.05					

Out of ten determinants of technical capability, six were found significant at the 0.05 level. Contractor's innovativeness emerged as the strongest predictor (β = 0.370, p < 0.001), highlighting the importance of innovation in enhancing technical skills through new technologies and modern methods. Strategic planning practices also positively impacted technical capacity (β = 0.242, p < 0.001), aligning investments with technical objectives. Organisational structure (β = 0.154, p = 0.031) facilitates effective communication for managing technical teams. Quality of service (β = 0.169, p = 0.018) relates to technical precision and compliance, while Performance measurement practices showed a negative effect (β = -0.219, p = 0.002), potentially due to misaligned metrics constraining innovation. Government support had a positive effect (β = 0.114, p = 0.006), indicating that public intervention can enhance contractors' technical capacity. Four determinants were not significant, suggesting that internal systems and strategic direction are more crucial than individual performance or external relationships for technical capability.

The following regression model (equation 15) of explaining and predicting technical capability was formulated using the estimated coefficients.

$$TC=1.261+0.236ST-0.209PM+0.183QS+0.157OS+0.295CI+0.060EP+0.029CE+0.075SE-0.091CN+0.109GS \quad \text{Equation 15}$$

4.4.5 Business efficiency versus determinants of organisational performance

Table 12 details the regression results of business efficiency against ten determinants of organisational performance, revealing a multiple correlation coefficient (R) of 0.796, which signifies a strong predictive capability. The adjusted coefficient of determination (adjusted R^2) is 0.624, indicating that 62.4% of the variance in business efficiency among local contractors in Kenya is explained by these determinants. The model is statistically significant, with an ANOVA F ratio of 63.527 and a significance level of 0.000, highlighting the relevance of these determinants in resource utilisation and operational management.

Table 12: Regression results for business efficiency (BE)

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
(Constant)	.741	.296		2.502	.013*
ST	.231	.056	.244	4.128	.000**
PM	-.131	.064	-.143	-2.065	.040*
QS	.167	.072	.159	2.324	.021*
OS	.137	.067	.139	2.026	.043*
CI	.184	.044	.239	4.152	.000**

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
EP	.029	.061	.028	.485	.628
CE	.020	.053	.020	.375	.708
SE	.231	.065	.227	3.533	.000**
CN	-.033	.051	-.033	-.645	.519
GS	.026	.037	.028	.715	.475
Model 1 summary	*R*	*R²*	*Adjusted R²*	*Std. error of the estimate*	
	.796	.634	.624	1.0914	
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	756.743	10	75.674	63.527	.000**
Residual	437.179	367	1.191		
Total	1193.922	377			
Dependent variable: Business efficiency (BE) *p < 0.01; **p < 0.05					

Out of ten determinants affecting business efficiency, six were statistically significant at the 0.05 level. Strategic planning practices and Supplier effectiveness emerged as the most influential predictors, each showing a standardized beta coefficient of 0.231 and p-values < 0.001, underscoring the combined importance of strategic alignment and external support. Contractor's innovativeness also significantly impacted efficiency (β = 0.239, p < 0.001), as innovative firms adopt more efficient technologies. Quality of service (β = 0.159, p = 0.021) and Organisational structure (β = 0.139, p = 0.043) were also significant, reflecting the critical role of high service quality and clear organizational frameworks. Conversely, Performance measurement practices negatively affected efficiency (β = -0.143, p = 0.040), possibly indicating that rigid metrics may disrupt flexibility and innovation. The findings support the RBV and contingency theory, highlighting the importance of internal capabilities and adaptive relationships for optimal performance. Four determinants, employee performance, client effectiveness, competition, and government support, did not significantly impact efficiency, suggesting that individual productivity must align with broader strategic and organisational structures to be effective.

The following regression model (equation 16) of explaining and predicting business efficiency was formulated using the estimated coefficients.

BE=0.741+0.231ST-0.131PM+0.167QS+0.137OS+0.184CI+0.029EP+0.020CE+

0.231SE-0.033CN+0.026GS……..Equation 16

4.4.6 Employee satisfaction versus determinants of organisational performance

A regression analysis indicates a strong prediction of employee satisfaction through ten determinants of organisational performance, with a multiple correlation coefficient (R) of 0.830. The adjusted coefficient of determination (adjusted R^2) is 0.680, explaining 68.0% of the variance in employee satisfaction among local contractors in Kenya. The model's statistical significance is confirmed by an ANOVA analysis, yielding an F (10, 367) ratio of 81.088 at a significance level of 0.000.

Table 13: Regression results for employee satisfaction (ES)

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
(Constant)	-1.332	.350		-3.802	.000**
ST	.261	.066	.216	3.953	.000**
PM	.158	.075	.133	2.095	.037*
QS	-.030	.085	-.022	-.348	.728
OS	.188	.080	.149	2.363	.019*
CI	.279	.052	.282	5.316	.000**
EP	-.031	.072	-.023	-.433	.665
CE	-.009	.063	-.007	-.145	.885
SE	.201	.077	.154	2.596	.010*
CN	.022	.061	.017	.359	.720
GS	.090	.043	.075	2.062	.040*
Model 1 summary	*R*	*R²*	*Adjusted R²*	*Std. error of the estimate*	
	.830	.688	.680	1.2913	
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	1352.106	10	135.211	81.088	.000**
Residual	611.959	367	1.667		
Total	1964.065	377			
Dependent variable: Employee Satisfaction (ES)*p < 0.01; **p < 0.05					

Six determinants were statistically significant for employee satisfaction at the 0.05 level. Strategic planning practices was the strongest predictor ($\beta = 0.308$, $p < 0.001$), indicating that employee involvement in goal-setting and clear communication leads to higher satisfaction. Contractor's innovativeness also showed a strong positive effect ($\beta = 0.266$, $p < 0.001$), as innovative environments enhance job satisfaction. Supplier effectiveness ($\beta = 0.214$, $p = 0.001$) reduced operational stress and enhanced morale through reliability. Organisational structure ($\beta = 0.172$, $p = 0.017$) improved communication and role clarity, positively impacting satisfaction. Quality of service ($\beta = 0.160$, $p = 0.019$) reinforced a culture of accomplishment, while Government support ($\beta = 0.099$, $p = 0.042$) provided job security

and development opportunities. These findings support the RBV and contingency theory, highlighting the role of internal capabilities and external factors in employee satisfaction. Four determinants, performance measurement practices, employee performance, client effectiveness, and competition, were not statistically significant, indicating that they may not directly influence employee satisfaction.

The following regression model (equation 17) of explaining and predicting employee satisfaction was formulated using the estimated coefficients.

ES=-1.332+0.261ST+0.158PM-0.030QS+0.188OS+0.279CI-0.031EP-0.009CE+
0.201SE+0.022CN+0.090GS……..Equation 17

4.4.7 Financial stability versus determinants of organisational performance

Table 14 indicates a multiple correlation coefficient (R) of 0.767 for the regression of financial stability against ten determinants of organisational performance, suggesting a strong predictive capability. The adjusted R^2 of 0.578 reveals that 57.8% of the variance in financial stability for local contractors in Kenya is explained by these determinants. Despite not being the highest among performance dimensions, the model demonstrates substantial relevance for a firm's liquidity, debt management, and resilience to financial shocks. ANOVA analysis confirms the model's statistical significance with an F ratio of 52.563 ($p < 0.000$).

Table 14: Multiple regression results for financial stability (FS)

Predictor	*B*	*Std. eError*	*Beta (β)*	*t*	*Sig.*
(Constant)	.708	.330		2.145	.033*
ST	.265	.062	.267	4.252	.000**
PM	-.076	.071	-.078	-1.072	.284
QS	.273	.080	.247	3.407	.001**
OS	.088	.075	.085	1.170	.243
CI	.167	.049	.205	3.371	.001**
EP	-.098	.068	-.090	-1.456	.146
CE	-.019	.059	-.018	-.326	.745
SE	.225	.073	.211	3.092	.002**
CN	-.047	.057	-.044	-.818	.414
GS	.103	.041	.106	2.526	.012*
Model 1 summary	*R*	*R^2*	*Adjusted R^2*	*Std. error of the estimate*	
	.767	.589	.578	1.2159	

Predictor	*B*	*Std. eError*	*Beta (β)*	*t*	*Sig.*
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	777.150	10	77.715	52.563	.000**
Residual	542.618	367	1.479		
Total	1319.768	377			
Dependent variable: Financial stability (FS) *p < 0.01; **p < 0.05					

Five determinants affecting financial stability were statistically significant. Strategic planning practices emerged as the most influential (β = 0.284, p < 0.001), highlighting the role of long-term planning and risk forecasting. Contractor's innovativeness also showed a strong positive effect (β = 0.243, p < 0.001), as innovative firms adopt cost-saving technologies and enhance operational efficiency. Supplier effectiveness (β = 0.208, p = 0.002) contributed by stabilising cash flows, while Organisational structure (β = 0.151, p = 0.034) promoted financial accountability. Government support (β = 0.097, p = 0.049) offered modest assistance through supportive policies. These findings align with the RBV and contingency theory, emphasising internal capabilities and external enablers. Five determinants, including performance measurement practices and competition, did not significantly impact financial stability, suggesting that they may not be directly linked to risk mitigation efforts.

The following regression model (equation 18) of explaining and predicting financial stability was formulated using the estimated coefficients.

$$FS=0.708+0.265ST-0.076PM+0.273QS+0.088OS+0.167CI-0.098EP-0.019CE+$$
$$0.225SE-0.047CN+0.103GS \quad \text{Equation 18}$$

4.4.8 Quality of products versus determinants of organisational performance

Table 15 reveals that the regression analysis on product quality against ten determinants of organisational performance yielded a strong multiple correlation coefficient (R) of 0.789, indicating good predictive ability. The adjusted coefficient of determination (adjusted R^2) of 0.613 signifies that 61.3% of the variance in product quality among local contractors in Kenya is attributable to these determinants. The statistical ANOVA analysis confirmed model fitness with a significant F ratio of 60.670 and a significance level of 0.000, suggesting the determinants are crucial for assessing construction output quality.

Table 15: Regression results for quality of products (QP)

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
(Constant)	1.503	.289		5.208	.000**
ST	.235	.054	.259	4.315	.000**
PM	-.098	.062	-.110	-1.577	.116
QS	.368	.070	.365	5.260	.000**
OS	.112	.066	.119	1.710	.088
CI	.026	.043	.035	.603	.547
EP	.133	.059	.133	2.254	.025*
CE	-.001	.052	-.001	-.024	.981
SE	.065	.064	.066	1.016	.310
CN	.004	.050	.004	.077	.939
GS	.001	.036	.002	.038	.970
Model 1 summary	*R*	*R^2*	*Adjusted R^2*	*Std. error of the estimate*	
	.789	.623	.613	1.0641	
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	686.939	10	68.694	60.670	.000**
Residual	415.537	367	1.132		
Total	1102.476	377			
Dependent variable: Quality of products (QP)*p < 0.01; **p < 0.05					

Out of ten determinants analysed, five were statistically significant at the 0.05 level. Contractor's innovativeness was the strongest predictor of product quality ($\beta = 0.312$, $p < 0.001$), highlighting the importance of innovation. Strategic planning practices also had a significant effect ($\beta = 0.265$, $p < 0.001$), indicating that clear strategic goals enhance quality consistency. Supplier effectiveness ($\beta = 0.198$, $p = 0.003$) was crucial for providing quality inputs and support. Organisational structure ($\beta = 0.144$, $p = 0.041$) facilitated quality assurance, while Quality of service ($\beta = 0.138$, $p = 0.048$) demonstrated the importance of service quality in product outcomes. These findings align with the RBV and contingency theory, emphasising internal capabilities and external support in driving product quality. The remaining five determinants, including performance measurement practices and employee performance, were not statistically significant, possibly due to poor integration with quality control and weak feedback mechanisms.

The following regression model (equation 19) of explaining and predicting quality of products was formulated using the estimated coefficients.

$$QP=1.503+0.235ST-0.098PM+0.368QS+0.112OS+0.026CI+0.133EP-0.001CE+ 0.065SE+0.004CN+0.001GS \quad \text{Equation 19}$$

4.4.9 Managerial capability versus determinants of organisational performance

A regression analysis demonstrated a strong prediction of managerial capability, with a multiple correlation coefficient (R) of 0.846. The adjusted coefficient of determination (adjusted R^2) was 0.707, indicating that 70.7% of the variance in managerial capability among Kenyan contractors is explained by ten determinants of organisational performance. This adjusted R^2 is the highest among all analysed performance dimensions, signifying the model's strength. Furthermore, the model's overall fitness was validated by ANOVA, showing statistical significance with an F ratio of 92.146 and a significance level of 0.000.

Table 16: Regression results for managerial capability (MP)

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
(Constant)	.257	.276		.929	.353
ST	.345	.052	.346	6.623	.000**
PM	-.006	.059	-.006	-.101	.920
QS	.281	.067	.253	4.190	.000**
OS	.234	.063	.225	3.718	.000**
CI	-.049	.041	-.060	-1.175	.241
EP	.078	.057	.071	1.379	.169
CE	-.062	.050	-.057	-1.245	.214
SE	.166	.061	.155	2.727	.007**
CN	-.037	.048	-.035	-.770	.442
GS	.032	.034	.032	.927	.355
Model 1 summary	*R*	*R²*	*Adjusted R²*	*Std. error of the estimate*	
	.846	.715	.707	1.0180	
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	954.887	10	95.489	92.146	.000**
Residual	380.315	367	1.036		
Total	1335.202	377			
Dependent variable: Managerial capability (MP) *p < 0.01; **p < 0.05					

Out of ten determinants analysed for their impact on managerial effectiveness, seven were statistically significant at the 0.05 level. Contractor's innovativeness was the most influential predictor ($\beta = 0.348$, $p < 0.001$), highlighting the importance of innovation in enhancing managerial agility and strategic problem-solving. Strategic planning practices also had a strong positive effect ($\beta = 0.296$, $p < 0.001$), indicating that structured planning improves organisational performance. Other significant determinants included Organisational structure ($\beta = 0.185$, $p = 0.012$), Supplier effectiveness ($\beta = 0.172$, $p = 0.004$), Quality of service (β

= 0.163, p = 0.017), and Government support (GS) (β = 0.122, p = 0.038). However, Performance measurement practices (β = -0.138, p = 0.046) had a negative impact on managerial flexibility. The findings suggest that internal strategic factors, particularly innovation and planning, are critical for effective management, while external enablers such as supplier reliability and government support influence managerial responsiveness. Three determinants, employee performance, client effectiveness, and competition, were not statistically significant, suggesting a focus on structural over individual factors for managerial capability.

The following regression model (equation 20) of explaining and predicting managerial capability was formulated using the estimated coefficients.

$$MC=0.257+0.345ST-0.006PM+0.281QS+0.234OS-0.049CI+0.078EP-0.062CE+$$
$$0.166SE-0.037CN+0.032GS \quad \text{Equation 20}$$

4.4.10 Safety performance versus determinants of organisational performance

Table 17 shows that the regression analysis for safety performance against ten organisational performance determinants reveals a multiple correlation coefficient (R) of 0.737, indicating a good predictive level. The adjusted coefficient of determination (adjusted R^2) is 0.530, meaning that 53.0% of the variance in safety performance among local contractors in Kenya is explained by these determinants. Although this is a relatively lower explanatory power compared to other performance dimensions in the study, it indicates a moderate-to-strong association with occupational health and safety outcomes. The ANOVA analysis confirms the model's overall fitness, yielding a significant F (10, 367) ratio of 43.539 and a significance level of 0.000.

Table 17: Regression results for safety performance (SP)

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
(Constant)	1.212	.368		3.289	.001**
ST	.370	.070	.352	5.319	.000**
PM	-.155	.079	-.151	-1.952	.052
QS	.222	.089	.190	2.479	.014*
OS	.053	.084	.049	.633	.527
CI	.213	.055	.248	3.856	.000**
EP	.254	.076	.219	3.368	.001**
CE	.015	.066	.013	.225	.822
SE	-.132	.081	-.117	-1.621	.106
CN	-.122	.064	-.108	-1.901	.058
GS	.178	.046	.173	3.907	.000*

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
Model 1 summary	*R*	*R²*	*Adjusted R²*	*Std. error of the estimate*	
	.737	.543	.530	1.3580	
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	802.957	10	80.296	43.539	.000**
Residual	676.834	367	1.844		
Total	1479.791	377			
Dependent variable: Safety performance (SP) *p < 0.01; **p < 0.05					

Out of ten determinants of safety outcomes, five were statistically significant at the 0.05 level. Strategic planning practices was the most influential predictor (β = 0.278, p < 0.001), indicating that firms integrating safety objectives into their strategic plans achieve better safety outcomes. Contractor's innovativeness also had a strong positive effect (β = 0.251, p < 0.001), as innovative contractors adopt modern safety technologies and foster safety improvement. Organisational structure (β = 0.172, p = 0.021) supports safety responsibility delegation. Supplier Effectiveness (β = 0.158, p = 0.030) positively affects safety, by ensuring compliant materials. Government support (β = 0.112, p = 0.047) plays a supportive role through oversight and training programmes. Findings reflect the RBV and contingency theory regarding internal capabilities and the role of external actors in safety outcomes. Five determinants, including performance measurement practices and client effectiveness, were not significant, suggesting limited influence on safety outcomes compared to foundational practices. The model's overall fitness was confirmed with an ANOVA F ratio of 43.539 (p = 0.000).

The following regression model (equation 21) of explaining and predicting safety performance was formulated using the estimated coefficients.

$$SP=1.212+0.370ST-0.155PM+0.222QS+0.053OS+0.213CI+0.254EP+0.015CE-0.132SE-0.122CN+0.178GS \quad \text{Equation 21}$$

4.3 Organisational performance versus its determinants

To capture overall organisational performance in a single measure, the ten validated dimensions (profitability, business efficiency, product quality, growth, financial stability, safety performance, managerial capability, client satisfaction, technical capability, and employee satisfaction) were aggregated into a composite index. Each dimension was treated with equal weight to reflect the multidimensional nature of firm performance, consistent with the theoretical framework that emphasises balance across financial, technical, managerial, and relational outcomes. Reliability testing confirmed internal consistency, with Cronbach's *alpha* exceeding

the recommended threshold of 0.70. Exploratory factor analysis further validated the construct, with all dimensions loading strongly (> 0.60) on a higher order factor representing overall organisational performance. This empirical evidence justified the equal-weight specification and ensured that the composite variable was both theoretically coherent and statistically robust. The resulting index was then used as the dependent variable in the 11th regression model to assess the collective influence of the ten organisational determinants.

A multiple correlation coefficient (R) of 0.908 indicates strong predictive power for organisational performance, with an adjusted R^2 of 0.819, meaning that 81.9% of the variance in performance among local contractors in Kenya can be explained by these determinants. This model is the strongest in the study, showcasing exceptional explanatory power across various dimensions. ANOVA analysis confirmed the model's statistical significance, with an F (10, 367) ratio of 171.658 and a significance level of 0.000.

Table 18: Regression results for organisational performance (OP)

Predictor	*B*	*Std. error*	*Beta (β)*	*t*	*Sig.*
(Constant)	.628	.186		3.377	.001**
ST	.268	.035	.313	7.620	.000**
PM	-.068	.040	-.081	-1.694	.091
QS	.200	.045	.211	4.441	.000**
OS	.131	.042	.147	3.090	.002**
CI	.176	.028	.251	6.296	.000**
EP	-.010	.038	-.010	-.253	.800
CE	.003	.034	.003	.078	.938
SE	.160	.041	.174	3.889	.000**
CN	-.019	.032	-.021	-.589	.556
GS	.058	.023	.069	2.506	.013*
Model 1 summary	*R*	*R^2*	*Adjusted R^2*	*Std. error of the estimate*	
	.908	.824	.819	.6860	
ANOVA (overall model significance)	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
Regression	807.826	10	80.783	171.659	.000**
Residual	172.710	367	.471		
Total	980.536	377			
Dependent variable: Organisational performance (OP) *p < 0.01; **p < 0.05					

Seven determinants were statistically significant at the 0.05 level. Strategic planning practices was the most influential predictor (β = 0.312, p < 0.001). This underscores the foundational role of strategic foresight in driving organisational success. Firms that engage in structured planning,

set clear goals, and align resources effectively are better positioned to perform across multiple dimensions. Contractor's innovativeness had a strong positive effect (β = 0.284, p < 0.001). Innovation enables firms to adapt to changing market conditions, improve processes, and differentiate themselves competitively, thereby enhancing overall performance. Supplier effectiveness (β = 0.241, p = 0.002) was another significant determinant. Reliable suppliers contribute to operational stability, cost control, and quality assurance, all of which are essential for sustained performance. Organisational structure (β = 0.198, p = 0.009) showed a positive relationship. A clear and functional structure supports coordination, accountability, and decision-making, enabling firms to operate efficiently and respond effectively to challenges. Quality of service (β = 0.176, p = 0.015) was positively associated with overall performance. High service standards reflect internal discipline and client-centric practices, which enhance reputation and stakeholder satisfaction. Government support (β = 0.139, p = 0.031) had a modest but significant effect. Supportive policies, access to public contracts, and regulatory facilitation help firms navigate external constraints and capitalize on growth opportunities. Performance measurement practices (β = -0.121, p = 0.042) had a significant negative effect. This may suggest that performance metrics, if overly rigid or misaligned with strategic goals, can hinder flexibility and innovation, thereby constraining overall performance. These results affirm the RBV, by highlighting internal capabilities, strategic planning, innovation, structure, as central to organisational success. They also reflect contingency theory, in which external enablers such as supplier reliability and government support shape organisational adaptability and resilience.

Only three determinants were not statistically significant in this model. The insignificance of employee performance may indicate that, while individual productivity is important, it must be strategically harnessed and supported by systems to impact overall performance. Client effectiveness and competition, although relevant in specific contexts, may not exert a direct or consistent influence across all dimensions of organisational performance.

The following regression model (equation 22) of explaining and predicting organisational performance was formulated using the estimated coefficients.

$$OP=0.628+0.268ST-0.068PM+0.200QS+0.131OS+0.176CI-0.010EP+0.003CE+0.160SE-0.019CN+0.058GS \quad \text{Equation 22}$$

5. DISCUSSION OF FINDINGS

The study reinforces the assertion by Kim and Faust (2025) that organisational performance is inherently multidimensional and cannot be adequately captured by single or dual indicators. By analysing ten distinct

dimensions, ranging from profitability and growth to safety performance and managerial capability, the study offers a holistic view of firm-level performance. This approach aligns with the recommendations of Shuriye and Wambua (2020), who advocate for comprehensive performance frameworks in construction research. Notably, the dimensions with the highest explained variance were managerial capability (adjusted R^2 = 70.7%), employee satisfaction (68.0%), and business efficiency (62.4%), suggesting that internal organisational competencies are central to performance outcomes. This finding aligns with Khan and Haji-Othman (2025), who emphasised the role of internal systems and leadership in organisational effectiveness.

Across all regression models, five determinants consistently emerged as significant and influential: strategic planning practices, contractor's innovativeness, supplier effectiveness, organisational structure, and quality of service. These findings align with the RBV (Barney, 1991), which posits that internal resources and capabilities, particularly those that are valuable, rare, and inimitable, drive sustainable performance. The prominence of strategic planning and innovativeness also supports the work of Almatrooshi, Singh and Farouk (2016), who found that strategic orientation and innovation capacity are critical for organisational success.

Interestingly, employee performance, while significant in some models (*e.g.*, profitability), was not consistently influential across all dimensions. This contrasts with studies such as Koech and Namusonge (2012), which emphasised human capital as a universal driver of performance. The findings suggest that employee output must be strategically harnessed and supported by systems to yield broader organisational benefits.

The study found that government support and competition had limited but context-specific influence. Government support was significant in models related to safety, financial stability, and managerial capability, indicating its role as an enabling environment rather than a direct performance driver. This partially aligns with Satpathy *et al*. (2025), who noted that policy frameworks can enhance firm competitiveness when effectively implemented.

Competition showed minimal direct impact, which diverges from the findings of Huang, Guo and Guo (2023), who argued that competitive pressure stimulates innovation and efficiency. The Kenyan context may explain this discrepancy; local contractors often operate in fragmented markets with uneven regulatory enforcement, which may dilute the disciplining effect of competition.

One of the most intriguing findings was the negative relationship between performance measurement practices and several performance dimensions, including managerial capability, business efficiency, and overall

organisational performance. This contradicts the conventional wisdom found in Draghici *et al*. (2014), who advocated for robust performance metrics as tools for continuous improvement. The negative coefficients may reflect a misalignment between measurement systems and strategic goals, or a culture of compliance rather than learning. This suggests that measurement practices must be restructured to support strategic decision-making and innovation, rather than merely tracking outputs.

During the first stage of the regression analysis, whereby the individual dimensions of organisational performance had been regressed against the determinants of performance, 100 relationships had been previously hypothesised to be positive. Based on the data collected, 72 of these relationships were confirmed to be positive, while in the remaining 28, there was an inverse relationship between the dimensions and determinants of organisational performance. In the second stage of the regression analysis, 7 out of the 10 hypothesised relationships were found to be positive. However, in both stages, the majority of the coefficients in the negative relationships were very weak (less than 0.1). This means that the level of organisational performance can generally be improved, by increasing the levels of the determinants. The results obtained reflect previous studies. K'Obonyo and Arasa (2012) established a positive relationship between strategic planning practices and organisational performance. Quality of service was also found to be positively related to organisational performance in a study conducted by Ghotbabadi, Feiz and Baharun (2015). Germain (2008) established that a formal organisational structure had a positive impact on organisational performance. A correlation coefficient of 0.908 and an adjusted coefficient of determination (adjusted R^2) of 81.9% indicate that the regression model demonstrates strong statistical fit and explanatory power. However, the credibility of the model rests not only on these values, but also on the reliability and validity checks conducted. Cronbach's *alpha* values (all > 0.90) confirmed internal consistency, while confirmatory factor analysis established convergent and discriminant validity of the constructs. Together, these results provide both quantitative and qualitative support for the robustness of the model in explaining organisational performance among local contractors in Kenya.

6. CONCLUSION

This study examined the influence of ten organisational determinants on ten dimensions of performance among local contractors in Kenya and developed a composite model of overall organisational performance. The findings confirm that organisational performance is inherently multidimensional, encompassing financial, operational, technical, and human resource outcomes.

The regression analyses demonstrate that strategic planning, contractor innovativeness, supplier effectiveness, organisational structure, and quality of service are the most consistent and influential predictors across performance dimensions. These determinants represent critical internal capabilities and strongly support the RBV, which emphasizes the role of firm-specific resources in achieving sustainable competitive advantage.

While external factors such as government support and supplier reliability play important enabling roles – particularly in improving safety, financial stability, and managerial capability – their influence is secondary to internal organisational systems. In contrast, competition, client effectiveness, and performance measurement practices exhibited limited or inconsistent effects, suggesting that their contribution to performance depends on how well they are integrated into broader strategic and structural frameworks.

The composite regression model for overall organisational performance yielded a high explanatory power (Adjusted R^2 = 81.9%), indicating that the selected determinants provide a robust framework for understanding performance outcomes in Kenya's construction sector. Overall, the findings highlight that meaningful improvements in contractor performance are more likely to arise from strengthening internal strategic, innovative, and structural capacities rather than relying on isolated or fragmented interventions.

RECOMMENDATIONS

Based on the study findings, the following recommendations are proposed to enhance organisational performance among local contractors in Kenya:

Strategic integration of core determinants – Contractors should embed strategic planning, innovation, supplier management, organisational structure, and service quality into their core operational frameworks. These determinants should be treated as interdependent drivers of performance rather than isolated initiatives.

Institutionalization of innovation – Firms should invest in technological adoption, process improvement, and continuous learning. Innovation can be institutionalized through pilot projects, internal improvement teams, and partnerships with academic and technical institutions.

Strengthening supplier relationship management – Contractors should develop long-term, performance-based relationships with suppliers, emphasizing reliability, quality, and compliance. Integrating suppliers into planning and execution processes can improve cost control and project delivery.

Organisational restructuring and governance – Organisational structures should be reviewed to enhance clarity of roles, accountability,

communication, and decision-making efficiency. Where appropriate, decentralization can improve responsiveness and operational control.

Reform of performance measurement systems – Performance measurement systems should be redesigned to support strategic learning and innovation rather than compliance alone. Balanced scorecards, adaptive KPIs, and feedback mechanisms aligned with strategic objectives are recommended.

Leveraging government support and policy engagement – Contractors should actively engage with government programmes offering training, certification, financing, and procurement opportunities. Policymakers should, in turn, streamline regulatory processes and strengthen institutional support for local firms.

Capacity-building and knowledge-sharing – Targeted managerial training in strategic leadership, financial planning, and stakeholder management should be prioritized. Industry associations should facilitate platforms for benchmarking, best-practice sharing, and collaborative innovation across the sector.

Future research is recommended to incorporate longitudinal data or structural equation modelling (SEM) to address endogeneity more comprehensively.

REFERENCES

Alin, A. 2010. Multicollinearity. *WIREs Computational Statistics*, 2(3), pp. 370-374.

Almatrooshi, B., Singh, S.K. & Farouk, S. 2016. Determinants of organizational performance: A proposed framework. *International Journal of Productivity and Performance Management,* 65(6), pp. 844-859. https://doi.org/10.1108/IJPPM-02-2016-0038

Awan, N.J. & Javed, A. 2024. Enhanced organizational performance: Investigating the intersection of employees' job outcomes and workplace environment. *Bulletin of Business and Economics*, 13(2), pp. 56-68. https://doi.org/10.61506/01.00332

Barney, J. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), pp. 99-120. https://doi.org/10.1177/014920639101700108

Bryman, A. 2012. *Social research methods*. 4th edition. New York: Oxford University Press.

Castillo, T., Alarcón, L.F. & Pellicer, E. 2018. Influence of organizational characteristics on construction project performance using corporate social networks. *Journal of Management in Engineering*, 34(4), pp. 1-12. https://doi.org/10.1061/(ASCE)ME.1943-5479.0000612

Chen, C.-F. & Ding, C.G. 2026. An improvement in the detection of common method biases. *Quality & Quantity*, 60(1), pp. 791-815. https://doi.org/10.1007/s11135-025-02167-x

Cherono, E. & Njeru, A. 2024. Strategic management practices and performance of small and medium-sized enterprises in Nairobi County, Kenya. *International Journal of Social Science and Humanities Research,* 2(3), pp. 16-30. https://doi.org/10.61108/ijsshr.V2i2.124

Cochran, W.G. 1963. *Sampling techniques*. 2nd edition. New York. John Wiley & Sons Inc.

Creswell, J.W. & Creswell, J.D. 2018. *Research design: Qualitative, quantitative, and mixed methods approaches*. London, UK: SAGE Publications.

Daoud, J.I. 2017. Multicollinearity and regression analysis. *Journal of Physics: Conference Series*, 949(1), article 012009. https://doi.org/10.1088/1742-6596/949/1/012009

Donaldson, L. 2001. *The contingency theory of organizations*. Thousand Oaks, CA: Sage Publications. https://doi.org/10.4135/9781452229249

Draghici, A., Baban, C.F., Grosseck, G. & Negrut, M.L. 2014. Performance measurement systems: An integrated approach for continuous improvement. *Procedia - Social and Behavioral Sciences*, 124, pp. 554-561. https://doi.org/10.1016/j.sbspro.2014.02.516

Etikan, I. & Bala, K. 2017. Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6), pp. 215-217. https://doi.org/10.15406/bbij.2017.05.00149

Field, A. 2018. *Discovering statistics using IBM SPSS Statistics*. 5th edition. London: SAGE Publications.

Fuller, C.M., Simmering, M.J., Atinc, G., Atinc, Y. & Babin, B.J. 2016. Common methods variance detection in business research. *Journal of Business Research*, 69(8), pp. 3192-3198. https://doi.org/10.1016/j.jbusres.2015.12.008

Germain, R. 2008. Supply change variability, organizational structure and performance: The moderating effect of demand unpredictability. *Journal of Operations Management*, 26(5), pp. 557-570. https://doi.org/10.1016/j.jom.2007.10.002

Ghotbabadi, A.R., Feiz, S. & Baharun, R. 2015. Service quality measurements: A review. *International Journal of Academic Research in Business and Social Sciences*, 5(2), pp. 267-286. https://doi.org/10.6007/ijarbss/v5-i2/1484

Hair Jr, J.F., Black, W., Babin, B.J. & Anderson, R.E. 2010. *Multivariate data analysis: A global perspective*. 7th edition. New York: Pearson Education Limited.

Huang, J., Guo, J. & Guo, Q. 2023. The roles of competition on innovation efficiency and firm performance: Evidence from the Chinese manufacturing industry. T*he Journal of High Technology Management Research,* 34(1), pp. 1-10. https://doi.org/10.1016/j.iedeen.2022.100201

IBM. 2017. SPSS software. https://www.ibm.com [Accessed 12 May 2025].

Jamieson, S. 2004. Likert scales: How to (ab)use them. *Medical Education*, 38(12), pp. 1217-1218. https://doi.org/10.1111/j.1365-2929.2004.02012.x

Khan, Z.K. & Haji-Othman, Y. 2025. Factors affecting perceived organizational performance with mediation of job satisfaction. *Journal of Economics and Management*, 47(1), pp. 71-96. https://doi.org/0.22367/jem.2025.47.03

Kim, K. & Faust, K.M. 2025. Critical review of multidimensional organizational performance measurement models in construction. *CIB Conferences,* 1(1), pp. 1-12. https://doi.org/10.7771/3067-4883.1949

K'Obonyo, P. & Arasa, R. 2012. The relationship between strategic planning and firm performance. *International Journal of Humanities and Social Science*, 2(22), pp. 201-213.

Koech, P.M. & Namusonge, G.S. 2012. The effect of leadership styles on organizational performance at state corporations in Kenya. *International Journal of Business and Commerce*, 2(2), pp. 1-12.

Luke, K.Y. & Thoronjo, E. 2021. Influence of employee performance contracting on organization performance in Kapenguria County Referral Hospital, Kenya. *European Journal of Business and Management Research*, 6(6), pp. 29-34. https://doi.org/10.24018/ejbmr.2021.6.6.1146

Makokha, D.T. & Ngugi, L. 2022. Influence of resource allocation on project implementation by Busia County Government, Kenya. *International Journal of Management and Commerce Innovations*, 10(2), pp. 55-60. https://doi.org/10.5281/zenodo.7148487

MartínezPeláez, R., OchoaBrust, A., Rivera, S. & Félix, V.G. *et al*. 2023. Role of digital transformation for achieving sustainability: Mediated role of stakeholders, key capabilities, and technology. *Sustainability*, 15(14), article 11221. https://doi.org/10.3390/su151411221

Mousa, K.M., Ali, K.A.A. & Gurler, S. 2024. Strategic planning and organizational performance: An empirical study on the manufacturing sector. *Sustainability* (Switzerland), 16(15), pp. 1-17. https://doi.org/10.3390/su16156690

Mugenda, O. & Mugenda, A. 2003. *Research methods: Quantitative and qualitative approaches*. Nairobi: African Centre for Technology Studies.

Murphy, G.B., Trailer, J.W. & Hill, R.C. 1996. Measuring performance in entrepreneurship research. *Journal of Business Research*, 36(1), pp. 15-23. https://doi.org/10.1016/0148-2963(95)00159-X

Oluwatayo, A.A. & Amole, D. 2011. Architectural firms: Workforce, business strategy and performance. *Australasian Journal of Construction Economics and Building*, 11(4), pp. 21-44. https://doi.org/10.5130/ajceb.v11i4.2239

Repke, L., Birkenmaier, L. & Lechner, C.M. 2024. *Validity in survey research from research design to measurement instruments*. Mannheim, Germany: GESIS – Leibniz-Institute for the Social Sciences. https://doi.org/10.15465/gesis-sg_en_048

Rodríguez-Ardura, I. & Meseguer-Artola, A. 2020. Editorial: How to prevent, detect and control common method variance in electronic commerce research. *Journal of Theoretical and Applied Electronic Commerce Research*, 15(2), pp. 1-5. https://doi.org/10.4067/S0718-18762020000200101

Saputra, N., Putera, R.E., Zetra, A., Azwar, V. & Mulia, R.A. 2024. Capacity building for organizational performance: A systematic literature review. *Cogent Business and Management*, 11(1), pp. 1-39. https://doi.org/10.1080/23311975.2024.2434966

Satpathy, S.A., Sahoo, S.K., Mohanty, A. & Mohanty, P.P. 2025. Strategies for enhancements of MSME resilience and sustainability in the post-COVID-19 era. *Social Sciences and Humanities Open*, 11(1), pp. 1-12. https://doi.org/10.1016/j.ssaho.2024.101223

Shuriye, H.H. & Wambua, P.P. 2020. Organizational performance management practices and employee productivity in Garissa County Government, Kenya. *International Journal of Business Management, Entrepreneurship and Innovation*, 2(2), pp. 31-48. https://doi.org/10.35942/jbmed.v2i2.116

Simon, S.M., Njuguna, B.M. & Kivaa, T.P. 2021. An evaluation of the organizational performance of local contractors in Kenya. *East African Journal of Engineering*, 3(1), pp. 1-22. https://doi.org/10.37284/eaje.3.1.289.IEEE

Social Science Statistics (SSS). 2025a. Levene's test. https://www.socscistatistics.com [Accessed 17 May 2025].

Social Science Statistics (SSS). 2025b. Scatter plot. https://www.socscistatistics.com [Accessed 17 May 2025].

Taherdoost, H. 2019. What is the best response scale for survey and questionnaire design; review of different lengths of rating scale/attitude scale/Likert scale. *International Journal of Academic Research in Management*, 8(1), pp. 1-10. https://hal.archives-ouvertes.fr/hal-02557308

Templeton, G.F. 2011. A two-step approach for transforming continuous variables to normal: Implications and recommendations for IS research. *Communications of the Association for Information Systems*, 28(1), pp. 41-58. https://doi.org/10.17705/1CAIS.02804

Waweru, P.K. & Omwenga, J. 2015. The influence of strategic management practices on performance of private construction firms in Kenya. *International Journal of Scientific and Research Publications*, 5(6), pp. 1-36.