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Cost overruns have provided a significant challenge in the construction industries of both developed and developing countries. Financial and Contract Management incorporate designs and approaches which take keen interest on issues associated to Negotiation Strategies which informed the basis of investigation of the concept of Construction Cost Overruns in Real Estate Projects in this study. The purpose of this study was to investigate the influence Negotiation Strategies on Construction Cost Overruns of real estate projects in Nairobi and Kisumu Counties. The study was guided by objectives to establish the extent to which Negotiation Strategies influence construction cost overruns in real estate projects. The study was based on pragmatic paradigm which provides for the use of both qualitative and quantitative research methodologies. The research adopted descriptive survey and correlational research designs.

Keywords: negotiation strategies, construction cost overrun, real estate projects.

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Cost overruns have provided a significant challenge in the construction industries of both developed and developing countries. Financial and Contract Management incorporate designs and approaches which take keen interest on issues associated to Negotiation Strategies which informed the basis of investigation of the concept of Construction Cost Overruns in Real Estate Projects in this study. The purpose of this study was to investigate the influence Negotiation Strategies on Construction Cost Overruns of real estate projects in Nairobi and Kisumu Counties.

*The study was guided by objectives to establish the extent to which Negotiation Strategies influence construction cost overruns in real estate projects. The study was based on pragmatic paradigm which provides for the use of both qualitative and quantitative research methodologies. The research adopted descriptive survey and correlational research designs. The study targeted a population of 4000 project professionals that are 7 from active real estates in Nairobi and Kisumu Counties and 10 key informants from the real estate industry. Using the Krejcie and Morgan table of sampling method, the sample size for this study was 351. The study then adopted stratified, simple random and purposive sampling methods to select appropriate sample sizes from the study population. Structured questionnaire was the main instrument for data collection, supported by interview guide. Hypothesis tested at $\alpha=0.05$ level of significance and the results were: *H₀: There is no significant relationship between Negotiation Strategies and Construction Cost Overruns in real estate projects was rejected since $P=0.000<0.05$. Therefore the study concluded that there is significant influence of all financial and contract management a pproaches**

as well as contracting on construction cost overruns in real estate projects.

Keywords: negotiation strategies, construction cost overrun, real estate projects.

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I. INTRODUCTION

Cost overruns is a significant challenge in construction projects. The significance and linkage of construction industry to economic growth and development of all sectors in a country cannot be underrated ((Durdyev, Omarov, and Ismail, 2017). The constraints of cost, time and quality contribute to performance of projects, the construction industry focuses its lenses on cost constraint as a result of past performances of various studied projects.

Overruns in terms of cost and quality have attracted a wide range of research to an extent that it has become a global phenomenon and therefore proper reduction of construction cost is a recommendation by scholars as an aggregate for the successful completion of projects (Ahady, Gupta, and Malik, 2017). Reduction of construction cost overrun is key to project performance despite the fact that it has proved to be laborious in the construction industry (Alias, Zawawi, Yusof, and Aris, 2014).

Successful projects are supposedly the ones which meet the triple constraint standard where time, cost and quality are adequately achieved. Project success is subject to efficacy in management of the cost element. The main objective of project

owners is to have their projects executed within their approved budgets and this leads them to engage professionals such as quantity surveyors to specifically manage financial aspects of the construction on their behalf; they consider cost certainty very highly. Nevertheless, cost overruns are commonplace on construction projects (Cunningham, 2017).

Negotiation strategies are employed in majority of construction projects in the 20th century where tendering comprises an award of contract to a contractor by the client after meeting a rigorous evaluation process which involves a number of other contractors. There are varied criteria of selection depending on one client to another with basics such as contractor's registration by regulating authorities, experience, financial position and equipment almost featuring in all evaluations. Some clients strictly rely on the competitive tendering processes to select a contractor while others move further to negotiate with a few of the selected contractors to decide on the one that fits in their other requirement (Kang, Elbasher, Tang, Jin and Tang, 2018).

1.1 Research Objective

The objective of the study was to determine how Negotiation strategies influence Construction Cost Overruns in real estate projects.

1.2 Hypothesis of the Study

Ho: There is no significant relationship between negotiation strategies and construction Cost Overruns in real estate projects.

II. LITERATURE REVIEW

2.1 Construction Cost Overruns in Real Estate Projects

This study adopted the definition of Construction Cost Overruns as a structured multidisciplinary analysis of control process aiming to reduce excess of actual construction cost over budget in real estate projects (Khodeir and Ghandour, 2018). Construction Cost Overruns refer to processes that include accurate estimates, complete designs, correct scheduling, planning for scope changes and efficient administration. Different scholars have conducted studies to

assess the causes of cost overruns in construction projects (Khodier and Ghandour, 2018; Niazi and Painting, 2017; Lind and Brunes, 2015; Doloi, 2013 and Rosenfed, 2013).

Out of the studies that were reviewed; Lind and Brunes (2015) and Khodeir and Ghandour, (2018) focused on the importance of competence, skills and value management in the management of cost overruns, Doloi (2013) on the other hand focused on the responsibilities of key stakeholders including clients, consultants, and contractors. On the other hand, Niazi and Painting (2017) established that cost overruns were caused by: corruption; delays in progress payment by clients; difficulties by contractors to financing projects; insecurity; decision by the owners to change order during construction; market inflation; mistakes and discrepancies in design documents; and the type of project bidding awards. Also, Rosenfed (2013) found that premature tender documents, numerous changes in the owners' requirements and unrealistically low tender-winning prices caused construction cost overrun.

Construction Cost Overruns in this study was viewed from the perspective of: accurate project estimates; correct plan; complete project designs; planning for changes in project scope; and efficient administration of projects. The findings of this study concurred with the findings of studies by (Khodier and Ghandour, 2018; Niazi and Painting, 2017; Lind and Brunes, 2015; Doloi, 2013 and Rosenfed, 2013). This study found that low priced projects cost more than expected at the end, project costs are controlled through accepting minimal claims during implementation, strict adherence to comprehensive designs at tendering stage minimize project claim, whenever there is proper coordination at the design level unexpected outcomes during implementation are minimized, escalations are experienced due to errors in project activity scheduling, incorporating scheduling techniques help to save project cost, planning for scope changes is a requisite to minimize project cost, regulation of project cost becomes harder due to wrong initial scope definition, proper coordination of projects minimize project cost and that precisely organized project activities ensure control of un-anticipated expenses. Therefore, this study

established the key indicators of reduction of cost overruns on real estate projects in Kenya's Nairobi and Kisumu Counties.

2.2 Negotiation Strategies and Construction Cost Overruns in Real Estate Projects

Negotiation strategies refer to methods such as structural technique, strategic technique, behavioural/diplomatic treaties, concession exchange and integrative techniques. Numerous scholars have conducted studies with regard to negotiation strategies and Reduction of Construction Cost Overruns. Zillante, Read and Seiler (2019) in their study test the loss aversion premise of prospect theory by considering whether uncertainty in the duration of negotiations with a prospective real estate developer affects the behavior of landowners faced with different fallback positions. The study which used experimental design found that, loss aversion may help explain the negotiating behavior of parties participating in a variety of different markets, including the real estate market where price negotiation is a common practice.

The study which was conducted using 113 respondents postulated that the incentive for landowners to accept offers to avoid eminent domain was limited by the weaker offers made by developers because of the possibility of the completion of assemblage without landowners' consent. The study further revealed that the more advantageous fallback positions tended to increase the bargaining power of landowners participating in land aggregation tasks. They also illustrated the importance of incorporating uncertainty into the duration of negotiations in economic experiments involving purchase and sale transactions, irrespective of whether those transactions involve land aggregation or some other type of proposed acquisition.

The study concluded that pre-contract negotiation was likely to increase the level of favorable outcome received by the contractors from the contract administrators' decision. They associated higher levels of pre-contract negotiation with a higher quality of decision making, which then translated into lower intensity of conflict. Higher levels of pre-contract negotiation were also associated with a higher quality of decision

making, while higher levels of the quality of the decision-making process were associated with a lower intensity of conflict.

In addition to the foregoing, Wachowicz, Kersten and Roszkowska (2018) conducted a study that sought to establish whether different principal's preference visualization schemes influence the accuracy of the agents' ratings. The researchers also wanted to establish the impact of (in) accuracy of the representation of the principal's preferences on the agreements negotiated by the agents and the agents' perception of the negotiation process and these agreements. The study was conducted on a sample of 362 students who were samples from Austria, Canada, China, Great Britain, Holland, Poland, Taiwan and Ukraine.

The study established that the fraction of agents that were able to define the scoring systems in accordance with the principals preferred information. The researchers also noted that over three quarters of the agents made at least one mistake while mapping the ordinal structure of preferences of their principal into the numerical scoring system, while the preference visualization used in the two studies seemed to affect the accuracy of scoring systems built by agents differently. Additionally, it was necessary to put into place additional mechanisms that should be implemented in the pre-negotiation protocol to ensure the increase in ordinal accuracy. The study further revealed that the accuracy of the scoring systems determined by the agents impacted the result that were obtained, both in the virtual quality perceived by both the agents and their principals, (Wachowicz, et al., 2018).

The study concluded that on one hand, the progress seeking and issues focused tactics were determined to be the most versatile. With moderating effects, progress seeking were found to enable negotiators to lower the expectations of the other parties by highlighting the importance of detaching their interests from the issue in focus and negotiating on the basis of positions and compromise.

In a different quantitative study conducted in Kenya, Ndihi and Noor (2019) sought to determine how post-tender negotiations

influenced the performance in commercial State Corporations. Descriptive design was employed on a sample of 108 respondents who were sampled from departments involved in the procurement related matters in 27 commercial state corporations. The study established that past experience in similar assignments and environments, and the proposed team contractors', were among key parameters that were used to select the contractors invited to bid for the work supplier capability and payment terms affected the performance in commercial State Corporations. The study concluded that, delays experienced in the procurement of materials and equipment were as a result of the different parties involved since the contractors were responsible for procurement. Also, the inability of contractors to ensure sufficient cash to meet his financial obligations when implementing the projects was cited as a major cause of cost and time overruns.

Nevertheless, the researchers used descriptive study design which was inappropriate because of the use of regression analysis. Descriptive design focuses on what questions and is concerned with describing the characteristics of a particular individual, or of a group as they are (Kothari, 2004; de Vaus, 2001)). Because of this, the design cannot be used with regression analysis nor can it be used to test hypothesis. The researchers should have used a different design such as ex-post facto or causal comparative. This study used a more robust research design in order to ensure that the results are rigorous enough. While Zillante, et al. (2019); Aibinu (2006); Wachowicz, et al. (2018); Ndihi and Noor (2019), and Cheung, et al. (2009) employed quantitative approaches, Pannebakker (2013) conducted a qualitative study. This study took a mixed method approach in order to capitalize on the strengths of both quantitative and qualitative methods.

The findings of this current study clearly define goals in negotiations, setting measurable targets in negotiations, setting clear expectations during negotiations, upholding negotiated terms, clarified roles and responsibilities during negotiations, adequate education and information on parties roles during negotiation, ensuring proper identification of potential partners mutual

interest during negotiation, availing well developed operational plan of potential partner during negotiation, organized consultative engagement at the beginning of a project and avoiding dictatorial approach in stakeholder engagement ensures proper negotiation techniques. Therefore, this study established all the proposed constructs of proper negotiation techniques positively influenced reduction of construction cost overruns in real estate projects in Kenya's Nairobi and Kisumu Counties.

2.3 Theoretical Framework

This study was guided by the Microeconomic Production Theory proposed by Lerner (1968) and focused on the concept of cost function in that theory. This is a build-up of the works of Cantarelli et al. (2010), and adopted from Lind and Brunes (2015). The theory studies the behaviour of individual firms in regards to fixation of price and output and their reaction to the changes in the demand and supply conditions; thus it seeks to determine the mechanism by which the different economic units attain the position of equilibrium proceeding from individual units to an industry or a market: in our case being the construction industry and specifically real estate projects.

2.4 Conceptual Framework

This study has adopted a conceptual framework outlined in figure 1 indicating the relationship of the independent variables and dependent variable.

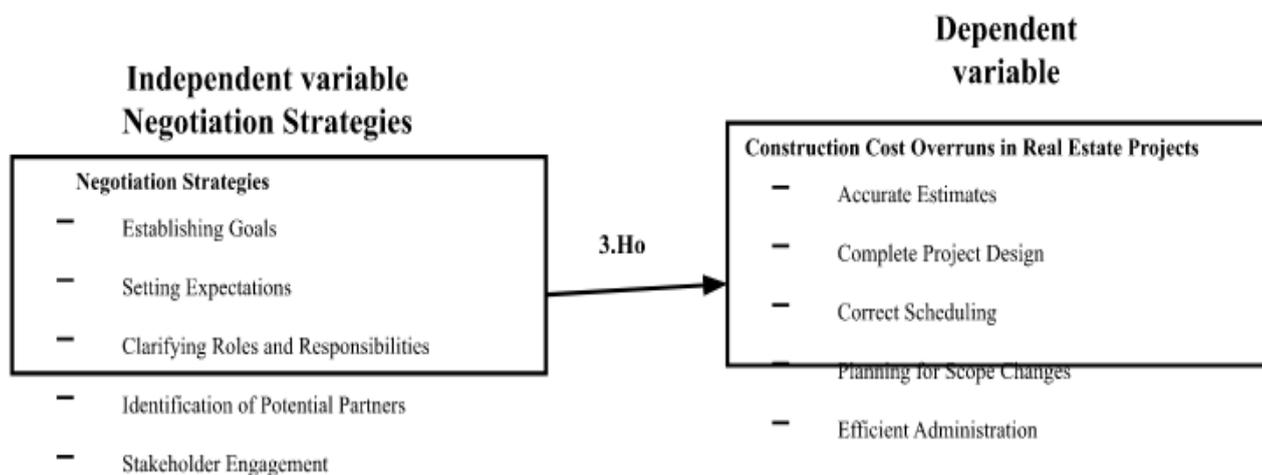


Figure 1: Conceptual Framework for Negotiation Strategies on Construction Cost Overruns in Real Estate Project

III. RESEARCH METHODOLOGY

Data was analyzed using descriptive statistics and inferential statistics. Descriptive statistics used measures of central tendency such as frequency, percentage, mean, standard deviations, composite mean and composite standard deviation. Whereas inferential statistics used spearman correlation and regression analyses. The descriptive research design used in this study helped to explore the link between the variables and report the way it is (Brook, 2013). Target population was based on the register of real estate projects between 2018 and 2019 held by the National construction Authority (NCA) which had 570 active real estate projects comprising of 95 in Kisumu and 475 in Nairobi Counties. In general, a typical real estate project structure comprises Project professionals such as Construction manager, clerk of works, Quantity Surveyor, Architect, Mechanical and Electrical engineer, structural Engineer, Contractor and Subcontractors. The 570 active real estate projects in Kisumu and Nairobi Counties each have at least one of the project professional. Thus a minimum of 7 project professional per real estate project constituted a target population of 4000 = (570×7) project professional as well as 10 key informants.

A sample size of 351 was drawn from a target population of 4000 project professional and key informants in Nairobi and Kisumu Counties. The sample size for the study was determined using Krejcie and Morgan table (Krejcie and Morgan,

1970). Based on the table, for a given population of 4000, a sample size of 351 was obtained and was further confirmed through hyper-geometric formula for a sample size as follows;

$$n = \frac{Z^2 N.P.(1-P)}{e^2(N-1)+Z^2P(1-P)} \frac{NZ^2 Pq}{(E^2(N-1)+Z^2)Pq}$$

Proportionate stratified and simple random sampling technique was used to select sample sizes from different strata (project professionals) out of the 570 active real estate projects registered and operating in Nairobi and Kisumu Counties; Purposive sampling was used to select key informants from a targeted population of ten having prerequisite experience in real estate development. Data for this study was collected in phases; pre-field work phase, field work phase and post-field work phase. The data collection was done by using survey questionnaire and interview guide.

IV. RESULTS AND DISCUSSIONS

4.1 Questionnaire Return Rate

Out of the sample size of 351 from the target population, 8 key informants were interviewed whereas 343 participants from the seven active real estates licensed to operate within Kisumu and Nairobi Counties by National Construction Authority were issued with questionnaires of which 336 dully filled and returned the questionnaires giving a return rate of 98%. Table 1 shows the Questionnaire Return Rate for the

Project professionals from the seven active real estates licensed to operate within Kisumu and

Nairobi Counties by National Construction Authority that were responded to and returned.

Table 1: Questionnaire Return Rate

County	Sampled	Returned	Return Rate%
Nairobi	287	281	81.92
Kisumu	56	55	16.04
Total	343	336	97.96

The high return rate was attained because the researcher consistently followed up all the sampled respondents during data collection. The high return rate of 98% facilitated gathering of sufficient data that could be generalized to determine the influence of Financial and Contract Management on Construction Cost Overruns in Real Estate Projects in Kisumu and Nairobi Counties. The Questionnaire return rate was considered adequate as per Mugenda and Mugenda (2003) and Kothari (2004) who recommended that a Questionnaire return rate beyond 50% is acceptable in research and subsequently satisfactory and contributes towards gathering of sufficient data that could be generalized to represent the opinions of participants.

4.2 Demographic Characteristics of the Respondents

In order to understand the characteristics of participants the researcher was dealing with in the

study, their background information was necessary. The study sought information from the participants on distribution by, position category in real estate projects, duration of profession in the organization and kind of construction projects conducted in real estate projects. The participants were asked to provide these demographic information.

Distribution of Respondents by Position Category
 It was imperative to investigate the respondents' position category to establish how financial and contract management of real estate projects were related with cadre of the project professional whose information were considered to be significance to the construction agencies for policy decision making. The respondents were therefore asked to state their position category and the results are presented in Table 2.

Table 2: Distribution of Respondents by position category

Position category	Frequency	Cumulative frequency	Valid Percent	Cumulative percentage
Quantity Surveyor	41	41	12.20	12.20
Construction Manager/Clerk of works	66	107	19.60	31.80
Structural Engineer	49	156	14.60	46.40
Contractor	81	237	24.10	70.50
Architect	35	272	10.40	80.90
Mechanical and Electrical Engineer	40	312	11.90	92.80
Other Staff	24	336	7.20	100
Total	336		100.00	

Table 2, shows that 81(24.10%) were categorized as contractor project professionals, 66(19.60%) were categorized as Construction Manager/Clerk of work project professionals, 49(14.6%) were

categorized as structural Engineers project professionals, 40(11.9%) were categorized as Mechanical and Electrical Engineer project professionals, 41(12.2%) were categorized as

quantity surveyors, 35 (10.4%) were categorized as architects project professionals project professionals and 24(7.2%) were categorized as other staff by project professionals. The findings on position category indicates that real estate projects are undertaken by qualified project professionals capable of responding to information sought on financial and contract management, project environment, organization capacity and construction cost overruns in real estate projects. Dolo (2012) established that position category by project professional is a contributing factor on the relationship between financial contract management and construction cost overruns in real estate projects.

4.3 Basic Tests for Statistical Assumptions of Regression Analysis

The study was based on a set of assumptions of regression analysis that must be met to ensure the data collected is appropriate for the statistical analysis. When these assumptions are violated the results of the analysis can be erroneous. The assumptions tested include normality, linearity, multi-collinearity and independence of errors.

Assumptions of Normality

An assessment of the normality of data is a prerequisite for many statistical tests because

normal data is an underlying assumption in parametric testing. The test for normality of data distribution was conducted on all the predictor variables, moderating variables using Kolmogorov-Smirnov test statistics (KS-test) and Shapiro-Wilk test (SW-test).

4.4 Negotiation Strategies and Construction Cost Overruns in Real Estate Projects

Negotiation strategies in this study is defined as negotiation methods such as structural technique, strategic technique, behavioral/diplomatic treaties, concession exchange and integrative technique. This was the third objective that the study sought to achieve; therefore, the participants were requested to give their opinions on their level of agreements or disagreements with the ten statements of Negotiation techniques on a Likert scale of 1-5 where Strongly agree (SA)=5, Agree(A)=4 Neutral(N)=3, Disagree (D)= 2and Strongly disagree. (SD)=1. The results were analyzed and presented using frequency, percentage, mean and standard deviation for each response in each item. The item mean as well as the standard deviation were also computed and presented alongside as provided in Table 3.

Table 3: Negotiation Strategies and Construction Cost Overruns in Real Estate Projects

ITEMS	SA	A	N	D	SD	Mean	Std. dev
I clearly define goals in negotiations	160(47.6%)	146(43.5%)	27(8.0%)	3(0.9%)	0(0.00%)	4.38	0.671
I set measurable targets in negotiations	137(40.8%)	176(52.4%)	21(6.2%)	2(0.6%)	0(0.00%)	4.33	0.620
I set clear expectations during negotiations	138(41.1%)	164(48.8%)	32(9.5%)	2(0.6%)	0(0.00%)	4.30	0.663
I uphold negotiated terms	136(40.5%)	169(50.3%)	29(8.6%)	2(0.6%)	0(0.00%)	4.31	0.650
I clarify roles and responsibilities during negotiations	147(43.8%)	162(48.2%)	24(7.1%)	3(0.9%)	0(0.00%)	4.35	0.652
I give adequate education and information on parties roles during negotiation	140(41.7%)	158(47.0%)	33(9.8)	5(1.5%)	0(0.00%)	4.29	0.702
I ensure proper identification of potential partners mutual interest during negotiation	144(42.9%)	161(47.9%)	27(8.0%)	4(1.2%)	0(0.00%)	4.32	0.673

I avail well developed operational plan of potential partner during negotiation	145(43.1%)	136(40.5%)	55(16.4%)	0(0.00%)	0(0.00%)	4.27	0.725
I organize consultative engagement at the beginning of a project	199(59.2%)	101(30.1%)	36(10.7%)	0(0.00%)	0(0.00%)	4.49	0.682
I avoid dictatorial approach in stakeholder engagement	190(56.6%)	106(31.5%)	36(10.7%)	4(1.2%)	0(0.00%)	4.43	0.730
Composite mean & composite standard deviation						4.35	0.673

The results in Table 3 indicates that the composite mean and composite Standard deviation for the Negotiation strategies were 4.35 and 0.673 respectively; implying that using the Likert scale a majority of participants at least agreed (mean=4.35) that Negotiation strategies influences Construction Cost Overruns in Real Estate Projects. Similarly ten statements were developed to measure the extent to which Negotiation strategies influences Construction Cost Overruns in Real Estate Projects.

Statement (1) that ‘I clearly define goals in negotiation’ had a mean of 4.38 and a standard deviation of 0.671. This results indicate that out of 336 study participants, 160(47.6%) strongly agreed, 146(43.5%) agreed, 27(8%) were neutral and 3(0.9%) disagreed that they clearly define goals in negotiation. This results shows that the line statement mean score of 4.38 was higher than the composite mean of 4.35. The implication of this result to the study is that clearly defined goals in negotiation positively influence management of Construction Cost Overruns in Real Estate Projects. The study results supports finding by Famiyeh, et.al.,(2015) who found out that clearly defined goals in negotiation enhances Cost Overruns in Real Estate Projects.

Statement (2) that ‘I set out measurable targets in negotiation’ had a mean of 4.33 and a standard deviation of 0.620. This results indicate that out of 336 study participants, 137(40.8%) strongly agreed, 176(52.4%) agreed, 21(6.3%) were neutral and 2(0.6%) disagreed that they set out measurable targets in negotiation. This results shows that the line statement mean score of 4.33 was lower than the composite mean of 4.35. The implication of this result to the study is that there

is need to set out measurable targets in negotiation in order to positively influence management of Construction Cost Overruns in Real Estate Projects. The study results contradicts finding by Ahmed (2020) who found out that the use of key performance indicators (KPIs) which are also known as measurable targets; deployed to support the management of the outsourced maintenance was clearly designed to motivate the outsourcing contractor to achieve more financial benefits when meeting a defined set of KPIs while also delivering operating cost savings and other qualitative benefits to the outsourcing company.

Statement (3) that ‘I set clear expectations during negotiation’ had a mean of 4.30 and a standard deviation of 0.663. This results indicate that out of 336 study participants, 138(40.8%) strongly agreed, 164(48.8%) agreed, 32(9.5%) were neutral and 2(0.6%) disagreed that they set clear expectations during negotiation. This results shows that the line statement mean score of 4.30 was lower than the composite mean of 4.35. The implication of this result to the study is that there is need to set out clear expectations during negotiation in order to positively influence management of Construction management of Cost Overruns in Real Estate Projects. The study results supports finding by Kumar and Thakkar (2017) who found out that economic factors such as “Project delays,” “Unexpected incidents” and “Conflicts” have the highest influence on schedule and cost overrun.

Statement (4) that ‘I uphold negotiated terms’ had a mean of 4.31 and a standard deviation of 0.650. This results indicate that out of 336 study participants, 136(40.5%) strongly agreed,

169(50.3%) agreed, 29(8.6%) were neutral and 2(0.6%) disagreed that they uphold negotiated terms. This results shows that the line statement mean score of 4.31 was lower than the composite mean of 4.35. The implication of this result to the study is that there is need to uphold negotiated terms in order to positively influence management of Construction Cost Overruns in Real Estate Projects. The study results supports finding by Miller (2014) who found out that it is a common occurrence for contracts to undergo many revisions, often times quite severe, which cause costly hold-up problems such as renegotiation frictions and dampened incentives cost reducing investments. Therefore it is necessary to uphold negotiated terms for cost reductions.

Statement (5) that 'I clarify roles and responsibilities during negotiation' had a mean of 4.35 and a standard deviation of 0.652. This results indicate that out of 336 study participants, 147(43.8%) strongly agreed, 162(48.2%) agreed, 24(7.1%) were neutral and 3(0.9%) disagreed that they clarify roles and responsibilities during negotiation. This results shows that the line statement mean score of 4.35 was similar to the composite mean of 4.35. The implication of this result to the study is that clarifying roles and responsibilities during negotiation positively influence management of Construction Cost Overruns in Real Estate Projects. The study results supports finding by Hoezen, Voordijk and Dewulf (2012) who found out that complex construction project with critical events show that problems of understanding are caused by differences between the formal legal and the informal psychological contract of one of the parties involved.

Statement (6) that 'I give adequate education and information on parties roles during negotiation' had a mean of 4.29 and a standard deviation of 0.702. This results indicate that out of 336 study participants, 140(41.7%) strongly agreed, 158(47.0%) agreed, 33(9.8%) were neutral and 5(1.5%) disagreed that they give adequate education and information on parties roles during negotiation. This results shows that the line statement mean score of 4.29 was lower than the composite mean of 4.35. The implication of this

result to the study is that there is need to give adequate education and information on parties' roles during negotiation in order positively influence management of Construction Cost Overruns in Real Estate Projects. The study results also supports finding by Hoezen, Voordijk and Dewulf (2012) who further explain that cooperative working relationship as a result of complete information reduces cost overruns in large construction projects.

Statement (7) that 'I ensure proper identification of potential partners mutual interest during negotiation' had a mean of 4.32 and a standard deviation of 0.673. This results indicate that out of 336 study participants, 144(42.9%) strongly agreed, 161(47.9%) agreed, 27(8%) were neutral and 4(1.2%) disagreed that they ensure proper identification of potential partners mutual interest during negotiation. This results shows that the line statement mean score of 4.32 was lower than the composite mean of 4.35. The implication of this result to the study is that there is need to ensure proper identification of potential partner's mutual interest during negotiation in order positively influence management of Construction Cost Overruns in Real Estate Projects. Cheng and Li (2001) in their study found out that construction partnering has some critical factors such as mutual trust and open communication that should be embraced for success in construction projects.

Statement (8) that 'I avail well developed operational plan of potential partner during negotiation' had a mean of 4.27 and a standard deviation of 0.725. This results indicate that out of 336 study participants, 145(43.1%) strongly agreed, 136(40.5%) agreed and 55(16.4%) were neutral that they avail well developed operational plan of potential partner during negotiation. This results shows that the line statement mean score of 4.27 was lower than the composite mean of 4.35. The implication of this result to the study is that there is need to avail well developed operational plan of potential partner during negotiation in order positively influence management of Construction Cost Overruns in Real Estate Projects. The study results supports finding by Khan (1995) who found out that that some basic operational measures need to be put in

place to deal with the difficult and challenging problems of implementation, which would ensure more dependable and successful plan/policy/programme/project implementation.

Statement (9) that ‘I organize consultative engagement at the beginning of a project’ had a mean of 4.49 and a standard deviation of 0.682. This results indicate that out of 336 study participants, 199(59.2%) strongly agreed, 101 (30.1%) agreed and 36(10.7%) were neutral that they organize consultative engagement at the beginning of a project. This results shows that the line statement mean score of 4.49 was higher than the composite mean of 4.35. The implication of this result to the study is that organizing consultative engagement at the beginning of a project positively influence management of Construction Cost Overruns in Real Estate Projects. The study results supports finding Foster and Jonker (2005) who found that the dialogue of stakeholder engagement should be communication that is linked to mutual understanding as the basis of agreeable action. When this is done at the initial stages of the project then performance is assured.

Statement (10) that ‘I avoid dictatorial approach in stakeholder engagement’ had a mean of 4.43 and a standard deviation of 0.730. This results indicate that out of 336 study participants, 190(56.6%) strongly agreed, 106(31.5%) agreed,

36(10.7%) were neutral and 4(1.2%) disagreed that they avoid dictatorial approach in stakeholder engagement. This results shows that the line statement mean score of 4.43 was higher than the composite mean of 4.35. The implication of this result to the study is that avoiding dictatorial approach in stakeholder engagement positively influence management of Construction Cost Overruns in Real Estate Projects. The study results supports finding by Trushell, Clark and Agapiou (2016) who found out that mediations in construction failed because of ignorance, intransigence and over-confidence of the parties.

Barriers to greater use of mediation in construction disputes were identified as the lack of skilled, experienced mediators, the continued popularity of adjudication and both lawyer and party resistance.

4.5 Correlation analysis of Negotiation Strategies and Construction Cost Overruns in Real Estate Projects

The study sought to examine the relationship between Negotiation strategies and construction cost overruns in real estate projects. Pearson correlation coefficient was used to test the relationship between Negotiation strategies and construction cost overruns in real estate projects at 95% level of confidence. The correlations results obtained are shown in Table 4.

Table 4: Correlations of Negotiation Strategies and Construction Cost Overruns in Real Estate Projects

Negotiation techniques statements		Construction cost overruns in real estate projects
1. I clearly define goals in negotiation	Pearson correlation	0.011*
	sig. (2-tailed)	0.843
	n	336
2. I set out measurable targets in negotiation	Pearson correlation	0.018*
	sig. (2-tailed)	0.748
	n	336
3. I set clear expectations during negotiation	Pearson correlation	0.038*
	sig. (2-tailed)	0.490
	n	336
4. I uphold negotiated terms	Pearson correlation	0.142*
	sig. (2-tailed)	0.010
	n	336
5. I clarify roles and responsibilities during negotiation	Pearson correlation	0.261*
	sig. (2-tailed)	0.000
	n	336
6. I give adequate education and information on parties roles during negotiation	Pearson correlation	0.227*
	sig. (2-tailed)	0.000
	n	336

7. I ensure proper identification of potential partners mutual interest during negotiation	Pearson correlation	0.172*
	sig. (2-tailed)	0.002
	n	336
8. I avail well developed operational plan of potential partner during negotiation	Pearson correlation	0.287*
	sig. (2-tailed)	0.000
	n	336
9. I organize consultative engagement at the beginning of a project	Pearson correlation	0.216*
	sig. (2-tailed)	0.000
	n	336
10. I avoid dictatorial approach in stakeholder engagement	Pearson correlation	0.277*
	sig. (2-tailed)	0.000
	n	336
Negotiation Strategies (overall correlation)	Pearson correlation	0.286*
	Sig.(2-tailed)	0.000
	n	336

*Correlation is significant at 0.05 level (2-tailed)

To test the extent of the relationship between Negotiation strategies and reduction of construction cost overruns in real estate projects; several characteristics of Negotiation strategies and reduction of construction cost overruns in real estate projects were analyzed based on the following hypothesis; Ho: There is no significant relationship between Negotiation strategies and reduction of construction cost overruns in real estate projects. The corresponding mathematical model for the hypothesis was identified as follows: reduction of construction cost overruns in real estate projects = f (Negotiation strategies).

In order to determine the correlation between Negotiation strategies and construction cost overruns, Pearson correlation coefficient was run on the scores of each scale. The total scores of the scales were computed as a summation of the individual scores on each item by the respondent at 95% level of confidence. The study found a positive overall correlation($r=0.286$) which was statistically significant as $P<0.05(p=0.000)$ between Negotiation strategies and construction cost overruns in real estate projects ;implying that there is a significant relationship between Negotiation Strategies and construction cost overruns in real estate projects leading to rejection of the null hypothesis (Ho : There is no significant relationship Negotiation strategies and construction cost overruns in real estate projects) and acceptance of the alternative hypothesis, and hence the research findings conclude that there is

a significant relationship between Negotiation strategies and construction cost overruns in real estate projects. The study results supports finding by Sambasivan, Deepak, Salim and Ponniah (2015) who found that cost overruns in construction projects can be explained by consultant-related and material-related factors; disputes and arbitration can be explained through consultant-related factors whereas litigation can be explained by client-related factors; therefore implying that there is a significant relationship between negotiation techniques and cost overruns.

4.6 Regression Analysis of Negotiation Strategies on Construction Cost Overruns in Real Estate Projects

Simple linear regression was adopted to investigate how Negotiation strategies influence the construction cost overruns in real estate projects. It was necessary to get the views of the participants on the influence of Negotiation strategies on construction cost overruns in real estate projects. The rational of using the simple regression model was to establish how Negotiation strategies as a predictor significantly or insignificantly predicted the construction cost overruns in real estate projects.

4.6.1 Model Summary of Negotiation Strategies on Construction Cost Overruns in Real Estate Projects

The model summary sought to determine how Negotiation strategies is a predictor that

significantly or insignificantly predicted construction cost overruns in real estate projects. The regression model summary results are presented in Table 5.

Table 5: Regression Model Summary table of Negotiation Strategies and Construction Cost Overruns in Real Estate Projects

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.286 ^a	0.082	0.079	3.50432
a. Predictors: (Constant), Negotiation techniques				

The model summary results from Table 5 suggest that there is a positive correlation(R=0.286) between Negotiation strategies and construction cost overruns in real estate projects and those predicted by the regression model. In addition, 8.2% of the variation in the reduction of construction cost overruns in real estate projects is explained by Negotiation strategies. The results are consistent with the findings of a study Sambasivan, et. al., (2015) who found out that negotiation techniques contribute to the reduction of cost overruns in Tanzanian construction industry.

4.6.2 ANOVA of Negotiation Strategies and Construction Cost Overruns in Real Estate Projects

The study sought to establish if the regression model is best fit for predicting construction cost overruns in real estate projects after use of Negotiation strategies. The ANOVA results are presented in Table 6.

Table 6: An ANOVA of the Regression of Negotiation Strategies and Construction Cost Overruns in Real Estate Projects

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	364.386	1	364.396	29.673	0.000 ^b
	Residual	4101.602	334	12.280		
	Total	4465.988	335			
a. Dependent Variable: construction cost overruns in real estate projects						
b. Predictors: (Constant), Negotiation strategies						

The study sought to establish if the regression model is best fit for predicting construction cost overruns in real estate projects after use of Negotiation strategies The ANOVA results indicated that (F-statistics (1,334) =29.673 is significant since the P -value 0.000< 0.05 implying that the predictor co-efficient is at least not equal to zero. and hence the regression model results in significantly better prediction of construction cost overruns in real estate projects. The results are consistent with the findings of a

study by Steininger, Groth and Weber (2019) who found out that one cause of cost overruns in infrastructure projects was as a result of disagreements on parties' interest; this could be mitigated through application of Negotiation strategies.

4.6.3 Coefficients for Regression of Negotiation Strategies and Construction Cost Overruns in Real Estate Projects

Construction cost overruns in real estate projects. The regression coefficients results are presented in Table 7.

The study sought to establish whether there was influence of Negotiation strategies and

Table 7: Coefficients for the Regression of Negotiation Strategies and Construction Cost Overruns in Real Estate Projects

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.450	2.097		15.472	0.000
	Negotiation strategies	0.262	0.048	0.286	5.447	0.000

The study sought to establish whether there was influence of Negotiation strategies on construction cost overruns in real estate projects. The simple linear regression coefficients result indicated that there was significant influence of Negotiation strategies on construction cost overruns in real estate projects. It was therefore concluded that Negotiation strategies and construction cost overruns in real estate projects were positively and linearly related. Lu, Zhang and Bai (2016) found that the learning ability on Negotiation strategies guarantees cost reduction through contribution to accelerating construction claim negotiations in the win-win situation.

This therefore indicate that Negotiation strategies and construction cost overruns in real estate projects were positively and linearly related.

V. CONCLUSIONS AND RECOMMENDATIONS

The research objective was to examine the extent to which Negotiation Strategies influence Construction Cost Overruns in Real Estate Projects. The simple linear regression coefficients as well as the Pearson correlation results indicated that there was significant influence of Negotiation Strategies on Construction Cost Overruns in Real Estate Projects. The small p-values; implied that there was a significant influence of Negotiation Strategies on Construction Cost Overruns in Real Estate Projects.

Considering the study findings and conclusions, the following recommendations were made: Project professionals and other relevant real estate project stakeholders should ensure measurable targets in negotiation and proper identification of potential parties' mutual interest during negotiation to positively manage construction cost overruns in real estate projects.

VI. LIMITATIONS OF THE STUDY

The study involved project professionals in interviews, these are busy people and therefore adequate time was required to schedule meetings with them. The challenge was mitigated through allocating sufficient time for appointments and increased use of online technology for both communication and data collection. The period when the proposed study was envisioned to take place was marred with great uncertainty of events due to corona virus pandemic but this was mitigated through flexibility of adapting the most effective and functional technology to reach the proposed respondents.

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