

FACTORS INFLUENCING USE OF ALTERNATIVE DISPUTE RESOLUTION IN CONSTRUCTION PROJECTS: CASE OF IMENTI NORTH SUB COUNTY, MERU COUNTY

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ABSTRACT

Regarded as a frequent occurrence, disputes in construction projects occasioned by substandard communication of impractical clients' expectations, defective works and delays in architectural designs significantly contribute to adverse effects on project results. Despite these and the numerous demerits linked to litigation majority of clients, contractors and construction consultants in Kenya still opt for it as opposed to Alternative Dispute Resolution (ADR) approaches to resolve disputes in construction projects. The purpose of this study was to establish the factors influencing use of alternative dispute resolution in construction projects in Imenti North Sub-County, Meru County, Kenya. In particular it examined the influence of: lack of awareness, preservation of business relationships, cost minimization and communication and documentation issues on the use of ADR in construction projects disputes. The research was guided by two theories; Theory of Planned Behavior and Transaction Cost Economics Theory and will be support by the Stair-Step Model of Dispute Resolution. The research embraced use of descriptive survey research design. Target population is of 255 respondents. The sample size was of 45 (n=45), Contractors, 12 (n=12) Consultants (Architectures, Quantity Surveyors and Structural Engineers) and Construction Projects Clients 75 (n=75) that was singled out to take part in the investigation. Stratified sampling and Simple random sampling were made use of to pick the sampled subjects. Questionnaires were used to collect primary data in the study locale. Data was analyzed

qualitatively and quantitatively by employing SPSS version 22.0, it was then presented in Frequency and Percentage tables and a multivariate regression model used. The study found that scarcity of knowledge on mediation does influence use of alternative dispute resolution in construction projects disputes. The study found that reduced adversarial attitudes and hostility between client, contractor, quantity surveyor and architecture influence use of alternative dispute resolution in construction projects disputes. The study also found that elimination of litigation costs influences use of alternative dispute resolution in construction projects disputes. The study also found that privacy of the proceedings influences use of alternative dispute resolution in construction projects disputes. The study concluded that preservation of business relationships had the greatest influence on use of alternative dispute resolution in construction projects in Imenti North, followed by costs minimization, followed by communication and documentation issues while lack of awareness had the least influence on the use of alternative dispute resolution in construction projects in Imenti North. The study recommended that there was need for high profile public promotional campaigns. The campaigns would need to be continuous since most users of ADR services tend to believe that they are one-off users who may never again have a significant land dispute. The study also recommends that supplies should be exhaustively elaborated and detailed in the contract conditions, designs and specifications i.e. nullify, if possible,

opportunities for differing interpretations of the requirements of the documents.

Key Words: *alternative dispute resolution, construction projects, Imenti North Sub County, Meru County*

INTRODUCTION

According to Blake, Browne and Sime, (2014) Alternative Dispute Resolution (ADR) is a collection of normally discretionary or intentional private procedures of conflict resolution approaches employed with the aim of settling conflicts or disputes. These include; dispute resolution/review boards (DRBs), expert determination, mediation, adjudication, arbitration and negotiation (Tolson, 2017). Informed by their inherent merits especially those related to costs and time, Alternative Dispute Resolution (ADR) approaches are becoming common in settling construction projects disputes (Chan, 2014). In United States of America (USA) Harrison (2011), reported the need for cost minimization and that of preservation of business relationships significantly influenced the use of ADR in resolving construction projects disputes.

In Russia, Yaskova and Zaitseva (2017) reported lack of awareness on alternative dispute resolution (ADR) particularly on its application procedures significantly influenced its use in solving construction projects disputes. In the Czech Republic, Nabatova (2017) established communication and documentation issues influenced the use of ADR in settling of construction projects disputes. In United Kingdom (U.K), Safinia (2014) observed the need for preservation of business relationships and cost minimization resulted to the significant use of ADR in settling construction projects disputes. Further, lack of awareness on ADR particularly on arbitration limited its use to solve construction projects disputes in Germany as compared to those in Sweden (Magg and Schmitt, 2010).

In Australia, Gill, Gray, Skitmore and Callaghan (2015) report cost minimization and the need for preservation of business relationships predominantly influenced the use of alternative dispute resolution (ADR) to address construction projects disputes. Additionally, in her study, She (2011) reported communication and documentation issues that affected operations of Dispute Review Boards (DRBs) led to most disputes in the construction industry settled using litigation which significantly influenced the use of alternative dispute resolution (ADR) in Australia. Further, in New Zealand Gillies (2015) communication and documentation issues coupled with the need to preserve business relationships significantly influenced use of ADR in solving construction projects disputes.

In Malaysia, Barough, Shoubi and Preece (2013) observed the need to reduce costs and time linked to litigation influenced the use of ADR in solving of disputes in construction projects. In Sri Lanka, Gunasena (2010) report the need for preservation of business relationship and cost minimization significantly influenced the use of ADR in solving of disputes in construction projects. In Pakistan, Farooqui, Umer and Lodi (2012) lack of awareness on ADR and its inherent benefits did significantly limit its use in the solving of construction projects. Additionally, the need to preserve business relationship and documentation issues were identified

to have significantly influenced use of ADR in solving of disputes in construction projects in Indonesia (Kurniawan 2015).

Lack of awareness on alternative dispute resolution (ADR) in the construction industry influenced its adoption in the settling of disputes in construction projects in Kuwait (Sayed-Gharib, Lord and Price 2011). In Saudi Arabia, Alshahrani (2017) reported lack of awareness on ADR coupled with communication and documentation issues resulted to the preferred use of litigation which significantly influenced the adoption of ADR in settling of disputes in construction projects. In the United Arab Emirates (UAE), Zeidan (2015) reported the need to cut down costs associated with litigation emanating from time used resulting to project overruns influenced the use of ADR in solving disputes in construction projects.

In Nigeria, Idowu, Ogunbiyi and Hungbo (2015) reported lack of awareness on alternative dispute resolution (ADR) had significantly influenced its use in construction projects disputes. Ezeokoli and Ugochukwu (2018) established cost minimization and the need to maintain business relationships worked as critical factors that significantly influenced use of ADR in resolving construction projects' disputes in Nigeria. Similarly, in Ghana Kodwo (2017), observed the need to realize cost minimization related with litigation and preservation of business relationships as critical factors that significantly influenced the use of ADR to solve disputes within construction projects.

In South Africa, Maiketso and Maritz (2012) report lack of awareness on alternative dispute resolution (ADR) especially among industry practitioners and their clients influenced its adoption in the settling of disputes that relate to construction projects. In Swaziland, Mashwama, Aigbovboa and Thwala (2015) observed the need to realize cost minimization and that of preservation of business relationships resulted to the significant use of ADR in solving disputes in construction projects. Further, Musonda and Muya (2011) reported lack of awareness and minimal knowledge on benefits limited adoption of ADR significantly influencing its use in solving construction projects disputes in Zambia.

In Egypt, Elziny, Mohamadien, Ibrahim and Abdel Fattah (2014) report communication and documentation issues in terms of the linking of construction contracts with alternative dispute resolution (ADR) influenced its use in settling construction projects disputes. However, Marzouk, El-Mesteckawi and El-Said (2011) had observed the need to realized benefits a cost minimization through adoption of ADR as the critical factor that significantly influenced its use in settling disputes in construction projects in Egypt. Further, the need to realize cost minimization and that of preservation of business relationships worked as critical factors that influenced use of ADR in solving of construction projects disputes in Ethiopia (Getahun, Macarubbo and Mosisa, 2016). In Uganda, Mulolo, Alinaitwe and Mwakali (2015) report communication and documentation issues coupled with the need for cost minimization were the critical factors that influenced use of ADR in settling of construction projects disputes.

STATEMENT OF THE PROBLEM

The predominant goal of parties to construction projects at their outset is fluid running of the same to their completion. However, dissimilar purposes of groups involved and the inherent complexity of construction projects that are often characterized by substandard communication of impractical clients' expectations, defective works and delays in architectural designs results to contractual conflicts. These disputes in most cases lead to diverse claims from parties involved whose attempt to resolve them usually results to litigation; a very expensive and time consuming undertaking. Despite these demerits and others associated to it, the continued utilization of litigation especially in Africa is attributable to limited knowledge on existence of Alternative Dispute Resolution (ADR). In Kenya, the continued use of litigation in settling disputes related to construction projects has continually led to both a backlog of cases in the judiciary and images of stalled expensive projects. Litigation which is considered an adversarial approach; lacks in privacy and is characterized by unending court hearings has also significantly contributed to damaged business relationships in the construction industry. Notwithstanding, in Imenti North Sub County also the level of utilization of Alternative Dispute Resolution (ADR) in resolving construction projects' disputes is still wanting (National Construction Authority (NCA), 2017). This has substantially been attributed to failure by both clients and practitioners in the construction industry to appreciate the efficient and effective nature of ADR in resolving disputes resulting also to stalled construction projects (NCA, 2017). Further, non-existence of trainings by the judiciary and government construction authorities has also impeded the adoption of ADR. Subsequently, the current research study seeks to investigate critical factors influencing use of Alternative Dispute Resolution (ADR) in settling construction projects' disputes. Specifically, this research investigated on the influence of; lack of awareness, preservation of business relationships, cost minimization and communication and documentation issues on use of alternative dispute resolution in construction projects disputes.

PURPOSE OF THE STUDY

The purpose of the study was to establish factors influencing use of alternative dispute resolution in construction projects in Imenti North Sub County, Meru County.

OBJECTIVES OF THE STUDY

1. To determine the extent to which lack of awareness on alternative dispute resolution influences its use in construction projects in Imenti North;
2. To establish how preservation of business relationships influences the use of alternative dispute resolution in construction projects in Imenti North;
3. To assess the extent to which cost minimization influences the use of alternative dispute resolution in construction projects in Imenti North;

4. To examine how communication and documentation issues influence the use of alternative dispute resolution in construction projects in Imenti North;

LITERATURE REVIEW

Use of Alternative Dispute Resolution in Construction Projects

Alternative Dispute Resolution (ADR) is prominent in managing disputes in construction projects. In a study, Callum (2013) observed ADR was gaining popularity in construction projects in United Kingdom (U.K). Specifically, he asserts arbitration and mediation were more preferred than adjudication because of their duration in proceedings (Callum 2013). Similarly, in their study Scherer and Moss (2014) established there was an increased use of ADR in construction projects in Switzerland. Further, they argued this predominantly emanated from advantages associated with ADR approaches such as duration of proceedings and irrevocability of settlements (Scherer and Moss, 2014).

Wong (2011) established ADR had gained popularity in construction projects in Sri Lanka. In particular, he argued because of its nature of ensuring irrevocability of settlement, adjudication had been increasingly used in construction projects (Wong, 2011). Lee (2017) established there was an increase in the use of ADR in construction projects in Malaysia. Specifically, he asserts construction projects in the country had witnessed an increased use of negotiation and mediation due to the inherent merits of the two procedure that allow a short duration in settling disputes (Lee, 2017).

Keršuliene, Zavadskas and Turskis, (2010) established that lack of awareness presented a substantial adverse influence on decisions to embrace alternative dispute resolution (ADR) in resolving disputes in construction projects in Lithuania. Specifically, they assert scarcity of knowledge in the negotiation, mediation, conciliation and arbitration processes significantly contributed to the limited use of these ADR approaches in settling construction projects' disputes (Keršuliene et al., 2010). Similarly, Tazelaar and Snijders (2010) found evidence demonstrating that lack of awareness had significantly influenced the use of ADR in determining disputes in construction projects in both Netherlands and Germany. In particular, they assert minimal understanding of the advantages of the conciliation and mediation processes and lack of knowledge on how to effectively undertake arbitration proceedings significantly contributed to most disputes in construction projects resolved using litigation as opposed to ADR (Tazelaar and Snijders, 2010). However, Spillane et al., (2011) observed concerted efforts to develop awareness on had presented a substantial positive influence on use of ADR in determining disputes in construction projects in Ireland. Additionally, they assert awareness workshops, conference and seminars on mediation had significantly contributed to the embracing of this ADR method in settling of conflicts in construction projects (Spillane et al., 2011).

In their study, Hussin and Ismail (2015) found evidence postulating that lack of awareness had significantly influenced use of alternative dispute resolution (ADR) in resolving conflicts in construction projects in Malaysia. Additionally, they observed the scarcity of knowledge in mediation had resulted to limited use of this ADR method in settling of conflicts in construction projects (Hussin and Ismail, 2015). Similarly, Sarmiento (2013) asserts lack of awareness had a substantial adverse influence on decision to embrace ADR in settling disputes emerging in construction projects in the Philippines. Further, he argued scarcity of knowledge on mediation, minimal knowledge on conciliation and insufficiency of understanding of arbitration negatively influenced the use of these ADR methods in resolving construction disputes (Sarmiento, 2013). In their study, Khekale and Futane (2015) also established lack of awareness presented a significant adverse influence on use of ADR in settling disputes in construction projects in India. In particular, they assert minimal knowledge on conciliation, mediation and negotiation had a considerable contribution to the limited embracing of these ADR methods in solving construction disputes (Khekale and Futane, 2015).

Almutairi, (2015) observed lack of awareness on the possibility of embracing alternative dispute resolution (ADR) in determining disputes in construction projects had led to an adverse influence on its use in Saudi Arabia. Specifically, he asserts scarcity of knowledge in the mediation process, inadequacy of understanding in negotiation and minimal knowledge on how to carryout conciliation proceedings significantly contributed to the limited use of these ADR methods in determining construction disputes (Almutairi, 2015). Similarly, Sayed-Gharib, Price and Lord, (2010) asserts lack of awareness had significantly limited the use of ADR in resolving disputes emerging in construction projects in Kuwait. In particular, they contend that the existence of minimal knowledge on how to conduct conciliation proceedings and insufficient understanding of arbitration, negotiation and mediation negatively influenced decisions to adopt these ADR methods in determining disputes in construction projects (Sayed-Gharib, et al., 2010). However, Saeb, Mohd Danuri, Zakaria and Mohamed (2019) found evidence demonstrating that efforts to create awareness had presented a substantial positive influence on use of ADR in determining disputes in construction projects in Iran. Additionally, they assert awareness seminars and workshops had played a pivotal role in disseminating and enhancing knowledge on negotiation, mediation, arbitration and importance of Dispute Review Boards (DRBs) in determining construction disputes (Saeb, et al., 2019).

In his study, Onukwube (2011) found evidence demonstrating lack of awareness significantly influenced embracing of alternative dispute resolution (ADR) for the resolving of disputes in construction projects in Nigeria. Specifically, he notes minimal knowledge on conciliation, inadequacy of knowledge in negotiation and insufficiency of understanding of arbitration had a substantial contribution to the limited use of these ADR methods in settling disputes in construction projects (Onukwube, 2011). Similarly, Baffour-Awuah, Vroom and Otchere (2011) established that lack of awareness presented considerable influence on decisions to adopt ADR in settling conflicts in construction projects in Ghana. In particular, they argued minimal

knowledge on adjudication significantly contributed to limited use of this ADR method in resolving disputes in construction projects (Baffour-Awuah, et al., 2011). Further, lack of awareness had presented a substantial adverse influence on use of ADR in settling disputes in construction projects in South Africa (Bvumbwe and Thwala, 2011). Additionally, Bvumbwe and Thwala (2011), assert minimal knowledge in conducting of arbitration, conciliation, mediation and negotiation proceedings significantly contributed to the limited use of these ADR methods in resolving construction disputes resulting to the increased use of litigation.

Preservation of Business Relationships and Use of Alternative Dispute Resolution in Construction Projects

In his study, Overcash (2015) found evidence postulating desire to realize preservation of business relationships presented a significant influence on the use of alternative dispute resolution (ADR) in settling conflicts in construction projects in United States of America (USA). Further, he observed arbitration played a pivotal role in reducing adversarial attitudes among parties and ensuring fairness in settlement of construction disputes leading to its adoption for resolving of majority of disputes in construction projects (Overcash, 2015). Similarly, Tanielian (2012) established that the need for preservation of business relationships had a substantial influence on decision to adopt ADR in determining disputes emerging during the implementation of construction projects in Canada. In particular, he argued that arbitration was considered the most appropriate ADR method for maintenance of business relations due to its inherent advantageous features that facilitate flexibility of proceedings and elimination of hostile enforceability of dispute settlements (Tanielian 2012).

Cunningham (2015) found evidence indicating preservation of business relationships had a significant influence on the use of ADR in resolving disputes in construction projects in Ireland. Specifically, they assert clients and contractors adhered to guidelines provided by the Royal Institution of Chartered Surveyors (RICS) on implementation of arbitration for binding decisions after conciliation and mediation proceedings leading to the extensive use of these ADR methods in construction disputes (Cunningham, 2015). She, (2011) established that preservation of business relationship significantly influenced the embracing of alternative dispute resolution (ADR) in resolving conflicts in construction projects in Australia. Specifically, they identified Dispute Review Boards (DRB), mediation and negotiation as having been effective in reducing adversarial attitudes between contractors and clients and facilitated flexibility of proceedings and ensured fairness was upheld subsequently contributing to preservation of business relationships (She, 2011). Similarly, Jelodar (2015) found evidence indicating preservation of business relationships influenced use of ADR in settling disputes in construction projects in New Zealand. Additionally, they argued inherent attributes of mediation, negotiation and arbitration that enabled avoidance of diminution of respect among parties and the reducing of adversarial attitudes between contractors and clients substantively contributed to the use of these ADR methods in resolving of disputes in construction projects (Jelodar, 2015).

In his study, Amaradiwakara (2017) observed preservation of business relationships significantly influenced the embracing of alternative dispute resolution (ADR) in resolving disputes in construction projects in Sri Lanka. In particular, he argued the inherent advantages of negotiation that facilitated flexibility of proceedings and were pivotal in reducing adversarial attitudes between contractors and clients contributed to the use of this ADR method in settling disputes (Amaradiwakara, 2017). Similarly, Nihaaj (2018) found evidence that the need to maintain business relationships presented a considerable influence on adoption of ADR in settling disputes in construction projects in the same country. Specifically, he contends underlying valuable attributes of arbitration that enabled avoidance of diminution of respect among parties and elimination of hostile enforceability led to the use of this ADR method in solving disputes in construction projects (Nihaaj, 2018). However, in their study Main and Hossian (2015) found evidence that there was limited use of ADR methods in settling disputes in construction projects for purposes of maintenance of business relationships in Bangladesh. Additionally, they contend this was because existing ADR implementation mechanisms were weak and could therefore not eliminate hostility in enforceability of decisions and ensure fairness in settlement of conflicts (Main and Hossian, 2015).

In their study, Javadian and Hussein (2014) found evidence demonstrating preservation of business relationship significantly influenced the adoption of alternative dispute resolution (ADR) in resolving conflicts in construction projects in Iran. Specifically, they contend the inherent characteristics of dissimilar ADR methods including; enabling flexibility of proceedings and ensuring fairness, reduced adversarial attitudes between contractors and clients and avoidance of diminution of respect among parties led to their use in conflict resolution in construction projects (Javadian and Hussein, 2014). Further, Alfadhli (2013) observed the need to preserve business relationship presented a substantive influence on the use of ADR in resolving disputes in construction projects in Kuwait. In particular, they argued inherent attributes of ADR methods such as the elimination of hostile enforceability, flexibility of proceedings and avoidance of diminution of respect among parties resulted to their adoption in settling construction disputes (Alfadhli, 2013). However, Besaiso, Fenn and Emsley (2016) established that failure to appreciate the need for preservation of business relationship presented a substantial adverse influence on use of ADR in settling disputes in construction projects in The Palestine State. Additionally, they assert the ineffective application of mediation proceedings that witnessed hostile enforceability of decisions, resulted to suspicions of unfairness in dispute settlement and increased occurrences of diminution of respect among parties significantly contributed a negative influence on its use in resolving construction disputes (Besaiso, et al., 2016).

Okpaleke, Otegbulu and Emele, (2016) established the strong desire to realize preservation of business relationships presented a substantial influence on use of alternative dispute resolution (ADR) in resolving conflicts in construction projects in Nigeria. In particular, they contend the inherent advantageous features of ADR methods that ensure fairness in settlement of disputes

and reduced adversarial attitudes between clients and contractors were pivotal in the adoption of negotiation and mediation in settling disputes in construction projects (Okpaleke, et al., 2016). In a study, Balogun, Ansary and Thwala (2017) found evidence demonstrating that the need for preservation of business relationships presented considerable influence on use of ADR in resolving conflicts in construction projects in South Africa. Specifically, they argued ADR methods; mediation, negotiation and arbitration had facilitated flexibility of dispute proceedings and eliminated hostile enforceability contributing to their use in solving conflicts in construction projects (Balogun, et al., 2017). Similarly, Ntiyakunze (2011) observed the need for preservation of business relationships significantly influenced the use of ADR in settling of disputes in construction projects in Tanzania. In particular, they argued due to its numerous advantages such as avoidance of hostile enforceability and ensuring of fairness, negotiation was adopted in solving several disputes in the construction industry (Ntiyakunze, 2011).

Cost Minimization and Use of Alternative Dispute Resolution in Construction Projects

In their study, du Preez, Berry and Oosthuizen (2010) found evidence demonstrating that objectives geared towards cost minimization lead to the use of alternative dispute resolution (ADR) to solve conflicts in construction projects in the Netherlands. Specifically, they observed the need to eliminate costs associated with litigation and those linked to project cost-overruns informed decision to adopt ADR for resolving of construction projects disputes (du Preez, et al., 2010). Similarly, Henry Fisher (2017) found the need to put in place measures that would ensure costs are minimized in the event of disputes significantly contributed to the use of (ADR) in solving conflicts in construction projects in both England and Wales. In particular, they argued parties involved in construction contracts adopted ADR mainly driven by the desire to eliminate costs associated with litigation, reduce occurrences of projects costs-overruns and project related losses (Henry Fisher, 2017). However, Cavaleri (2018) found evidence that established most parties involved in construction disputes opted out of ADR at a later stage due to high hidden costs associated with it in Denmark. Specifically, she argued that arbitration presented extra management costs that were considered high in comparison to the contract financial position resulting to most disputes been litigated (Cavaleri, 2018).

In his study, Abeynayake (2017) observed parties in construction disputes were more inclined to adopt alternative dispute resolution (ADR) to solve their conflicts emerging within the construction projects in Sri Lanka. In particular, he argued the need to uphold contract financial standing, eliminate litigation costs and avoid occurrences of project cost-overruns informed decisions by majority clients and contractors to use ADR in resolving their issues (Abeynayake, 2017). Similarly, Hayati, Latief, Rarasati and Sasmita (2017) established predominant project goal of cost minimization significantly influenced the use of ADR in resolving disputes emerging in construction projects in Indonesia. Additionally, they contend the need to eliminate high costs linked to litigation and to avoid project related losses led to the adoption of ADR methods such as negotiation and mediation in solving of conflicts at construction sites (Hayati, et

al., 2017). In a study Zuhairah, Azlinor and Rozina (2010) also found evidence demonstrating that project's cost minimization objectives influenced the use of ADR in settling disputes in construction projects in Malaysia. Specifically, they postulate the need to uphold contract financial standing and avoid high costs associated with litigation led to the adoption of arbitration, mediation and negotiation in resolving a substantive number of conflicts in construction projects (Zuhairah, et al., 2010).

Saeb, Mohamed, Danuri and Zakaria (2018) established the need to reduce costs associated with litigation significantly influenced the adoption of alternative dispute resolution (ADR) to solve disputes in construction projects in the Iran. Additionally, they contend requirements to uphold contract financial standing, the need to avoid occurrences of project cost-overruns and other project related losses had informed decision to embrace ADR in resolving of construction disputes (Saeb, et al., 2018). Further, in his study Salem (2015) found evidence indicating project goals of costs minimization significantly influenced the use of ADR in resolution of disputes that emerged in construction projects in the Kingdom of Bahrain. Specifically, he argued the need to avoid high costs associated with litigation and occurrences of project cost-overruns lead to the embracing of ADR in resolving majority of disputes in construction projects (Salem, 2015). However, Taş and Firtına (2015) in their study established that there was limited use of ADR in resolving of disputes in construction projects in Turkey. Specifically, they observed despite the cost minimization nature of Dispute Review Boards (DRB) majority of parties involved in construction disputes opted for litigation in resolving their conflicts (Taş and Firtına, 2015).

In their study, Ezeokoli, Ugochukwu, Kaetonna and Agu (2018) observed cost minimization objectives predominantly influenced the adoption of alternative dispute resolution (ADR) to solve disputes in construction projects in Nigeria. Specially, they note the desire to avoid high costs linked to litigation and incidences of project cost-overruns significantly contributed to embracing of mediation, negotiation and arbitration in settling of conflicts in construction (Ezeokoli et al., 2018). Further, Mashwama, Aigbavboa and Thwala (2016) found evidence that indicated projects' goals whose main aim was to reduce costs influenced the use of ADR to solve disputes in construction projects in the Swaziland. In particular, they observed the need to address projects' diminishing profit margins brought about by project cost-overruns and requirements to uphold contract financial standing significantly contributed to the formation of Dispute Review Boards (DRB), negotiations and mediations for resolution of construction disputes (Mashwama, et al., 2016). Similarly, Rwelamila (2010) established project aims linked to costs minimization significantly influenced the embracing of ADR in resolving of disputes in construction projects in South Africa. Specifically, they identified the need to avoid high costs associated with litigation, occurrences of project cost-overruns and related losses as to have informed decision to adopt mediation in settling disputes in construction projects (Rwelamila 2010).

Communication and Documentation Issues and Use of Alternative Dispute Resolution in Construction Projects

In their study, Menassa and Peña Mora (2010) established that communication and documentation issues influenced the use of alternative dispute resolution (ADR) to determine disputes in construction projects in the United States of America (USA). In particular, they argued that desire to uphold confidentiality and privacy of proceedings informed decisions to adopt extensive use of Dispute Review Boards (DRBs) to settle construction disputes (Menassa and Peña Mora, 2010). Aitken and Stitchkin (2018) also observed communication and documentation issues presented a substantial influence on the use of ADR to solve disputes in construction projects in Chile. Additionally, they contend the inherent features of litigation that entails voluminous documents, the need for both confidentiality and privacy in proceedings significantly contributed in the embracing of Dispute Review Boards (DRBs) and mediation as the approaches of determining construction disputes (Aitken and Stitchkin, 2018). Similarly, Gray, Bravo and Alarcón (2015) established communication and documentation issues had a considerable influence on decisions to adopt ADR in resolving construction projects in Peru. Specifically, they assert the need to uphold confidentiality in dispute areas, privacy in proceedings and avoidance of voluminous documentation associated with litigation informed decisions for the extensive embracing of ADR methods such as DRBs and negotiations in construction disputes (Gray, et al., 2015).

Agapiou and Clark, (2011) found evidence postulating that communication and documentation issues influenced the use of alternative dispute resolution (ADR) to determine disputes in construction projects in Scotland. Specifically, they assert strong desire for confidentiality and privacy of proceedings coupled with voluminous documentation linked with litigation presented a substantial contribution to decisions to adopt mediation to resolve majority of construction disputes (Agapiou and Clark, 2011). However, in their study Gregory-Stevens, Frame and Henjewe (2016) established issues related to communication and documentation presented a substantial adverse influence on use of ADR in resolving disputes in construction projects in England. Additionally, they assert erroneous reporting of information coupled with the unavailability of support documents contributed to the limited embracing of mediation as a dispute resolution approach in construction projects (Gregory-Stevens, et al., 2016).

In his study, Ameer Ali (2010) found evidence demonstrating issues related to communication and documentation had significantly influenced decisions to adopt alternative dispute resolution (ADR) to determine disputes in construction projects in Malaysia. Additionally, he asserts that the need to uphold privacy and confidentiality in proceedings coupled with desire to avoid voluminous documentation associated with litigation contributed to an increase in the use of mediation to resolve construction disputes (Ameer Ali, 2010). However, Cheung and Chow (2011) observed communication and documentation issues presented a considerable adverse influence to the use of ADR in resolving disputes in construction projects in Hong Kong. Specifically, they assert Construction Project Dispute Negotiations (CPDN) failed predominantly

due to erroneous reporting of information and unobtainable support documents significantly contributing to minimal use of this ADR method in determining construction disputes (Cheung and Chow, 2011). Similarly, Sakate and Dhawale (2017) found evidence postulating issues associated with communication and documentation had a substantial adverse influence on the use of ADR in resolving disputes in construction in India. In particular, they assert erroneous recording of information and the unavailability of support documents informed decisions to litigate as opposed to embrace mediation, negotiation, conciliation and arbitration as dispute determining approaches in construction projects (Sakate and Dhawale, 2017).

In their study, Dikbas and Ilter (2010) found evidence postulating that issues linked to communication and documentation presented a significant negative influence on use of alternative dispute resolution (ADR) in resolving disputes in construction projects in Turkey. In particular, they observed erroneous reporting of information coupled with unobtainable support documents adversely influenced decisions to adopt mediation as a dispute resolving approach in construction projects (Dikbas and Ilter, 2010). Al-Humaidi (2014) also established that issues linked to communication and documentation presented a substantial negative influence on use of alternative dispute resolution (ADR) in resolving disputes in construction projects in Kuwait. Additionally, they observed faulty recording of information, substandard communication in presenting claims and unavailability of support documents adversely influenced the embracing of arbitration in determining construction disputes (Al-Humaidi, 2014). Similarly, Besaiso, Fenn and Emsley, (2018) observed dissimilar findings noting issues emerging from communication and documentation had a considerable adverse influence on decisions to adopt ADR to solve disputes in construction projects in the state of Palestine. Specifically, they assert erroneous recording of information and substandard communication in presenting claims linked to some ADR methods significantly contributed to the use of litigation as opposed to arbitration in construction disputes (Besaiso, et al., 2018).

Isa and Emuze, (2016) established that communication and documentation issues influenced the use of alternative dispute resolution (ADR) in resolving disputes in construction projects in Nigeria. In particular, they argued that the strong desire for confidentiality and privacy of proceedings coupled with voluminous documents linked to litigation informed decisions to embrace negotiation and mediation in determining of construction disputes (Isa and Emuze, 2016). Similarly, Nyarko (2015) found evidence demonstrating that communication and documentation issues substantially influenced decisions to adopt ADR in determining disputes in construction projects in Ghana. Specifically, they assert the need to avoid voluminous documents related to litigation and desire to realize privacy in proceedings significantly contributed to the use of conciliation, mediation and negotiation ADR methods in solving construction disputes (Nyarko, 2015). However, in their study Du Preez (2012), observed issues linked to communication and documentation presented a considerable adverse influence on use of ADR in determining disputes in construction projects in South Africa. Additionally, he contends substandard communication in presentation of claims and erroneous recording of information

significantly contributed to the minimal employment of ADR methods in resolving of construction disputes (Du Preez, 2012).

THEORETICAL FRAMEWORK

Theory of Planned Behavior (TPB)

Developed by Ajzen and Fishbein, (1980) the Theory of Planned Behavior (TPB) is anchored on the premise that individuals espouse distinct behaviors that are subject to the overriding control of their inclinations or views towards those behaviors and the personal norms surrounding those behaviors. Further, Ajzen (1991) assert the more intense an intention that a person has to perform a particular behavior, the higher the probability the individual will become involved in the behavior. Desire or aspiration according to this theory is anchored on three aspects; attitudes with respect to the behavior, individualized or distinctive standards and deemed behavioral control (Ajzen, 1985).

Marzouk and Moamen, (2009) proponents of the use of the Theory of Planned Behavior (TPB) in studying disputes in construction projects, assert TPB is embraced to argue that selection and application of Alternative Dispute Resolution (ADR) approaches is well-thought-out and intentional. Additionally, they argue TPB is appropriate for researching adoption of ADR in resolving disputes in construction projects as it clearly elucidates; attitude, subjective norm and deemed behavioral control in the decision making process of settling on which ADR method to use (Marzouk and Moamen, 2009). Marzouk, El-Mestekawi and El-Said, (2011) other proponents argued decisions to embrace a particular ADR approach that arises from social coercions or obligations such as; legal systems, local customs and culture are considered to be under the subjective norm of TPB. They also observed the application of ADR approaches in resolving construction disputes is also guided by their inherent merits that allow for cost minimization and fairness these categorized under attitude (Marzouk, et al., 2011).

In adopting this theory to the current research, it is argued that decision on which ADR approach to use by parties to a construction dispute are anchored by; their frame of mind, subjective norm and deemed behavioral control which are guided by their knowledge of Alternative Dispute Resolution (ADR), past experience on flexibility of proceedings, fairness, level of hostility involved during enforceability of decisions and the inherent capability of ADR to preserve relationships. Additionally, the theory is used to argue that parties to a construction project dispute settle on ADR depending on their financial status this predominantly defining their desire to engage to litigation and costs associated with it. Research questions one, two and three that is; lack of awareness, preservation of business relationships and cost minimization were adequately answered by this theory.

Transaction Cost Economics Theory (TCE)

Formulated by Williamson (1975), the Transactions Cost Economics Theory (TCE) is based on the premise that the preferred among optional institutional arrangements (governance structures) is arrived at by contrasting of the costs of transacting found within a distinct structure. Further, Williamson (1996) asserts transactors prefer management frameworks as a way of reducing the costs of making their transactions. Under the TCE costs are categorized as; production costs which encompass land, labour, capital and materials and the transaction costs which he linked with contriving as well as administering the business relationship (Williamson, 1996). Additionally, Conlin, Langford and Kennedy (1996) proponents of the Transaction Cost Theory argued in construction projects disputes, Transaction costs refer to the costs that are linked to litigation, those that are associated in establishing partnerships and Dispute Review Boards (DRBs). In particular, they embody; financial, legal, and technical advisory costs incurred by contractors, consultants and or clients involved in construction contract dispute (Doree, 1994; Yates, 1998). In adopting this theory to the current research, it is argued that in order to minimize costs associated with litigation clients, contractors and consultants in the construction discipline should be ready to adopt alternative dispute resolution (ADR) approaches that provide for this. The ADR approaches embraced must assist in; elimination of litigation costs, avoidance of project costs-overruns and lead to the realization of reduced construction projects' related losses Research questions three is adequately answered by this theory.

Stair-Step Model of Dispute Resolution

Formulated by O'reilly and Mawdesley, (1994) the Stair-Step Model of Dispute Resolution is anchored on the premise that different types of Alternative Dispute Resolution (ADR) methods present dissimilar levels of animosity and cost.

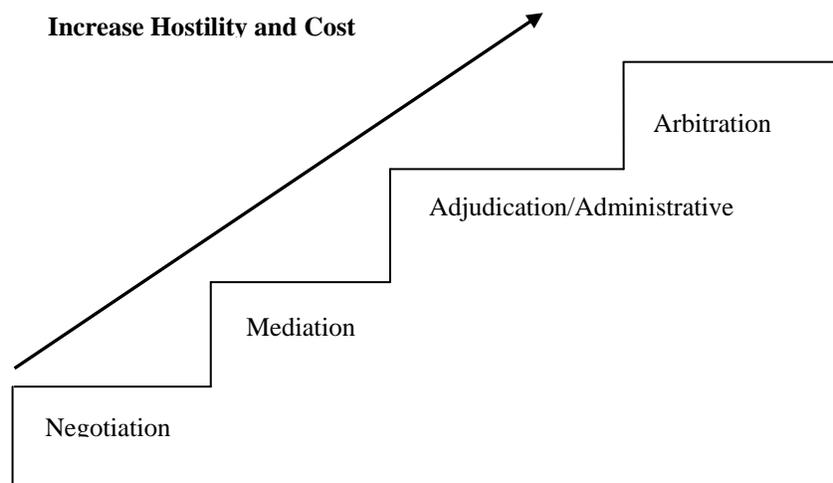


Figure 1: Stair-Step Model of Dispute Resolution

Cheung (1999) a proponent of the Stair-Step Model of Dispute Resolution argued that as parties to a construction dispute chose an ADR method and rise from negotiation towards arbitration so does hostility towards each other increase and the costs involved in resolving the dispute. This adversely affects relationship among contractors, consultants and their clients (Cheung 1999). Uff (2005) another proponent of the model observed communication and documentation issues also arise as parties to a dispute move from negotiation towards arbitration. The model was used to support study variables preservation of business relationships, costs minimization and communication and documentation issues.

RESEARCH METHODOLOGY

Research Design

A research design is defined as the blueprint chosen by a researcher providing guide lines to the collection, measurement and analysis of data with the overall objective of effectively addressing the research problem (Leedy & Ormrod, 2010). It is composed of the outline or layout for the gathering, evaluation, as well as analysis of data. To achieve study objectives, this research adopted a descriptive survey research design. Survey design guided the process of undertaking an investigation on critical factors influencing use of alternative dispute resolution in construction projects disputes in Imenti North Sub County, Meru County. Descriptive survey design was the optimal design for this study in that it facilitated the gathering of both qualitative and quantitative data establishing the link between study variables and study problem (Christensen, Johnson & Turner, 2011). Descriptive survey research design was also espoused because it facilitated the process of information gathering on the current state of affairs and thoroughly depicting traits of the study population (Salaria, 2012).

Target Population

Population is defined as the entire categorization of persons or items to which a researcher has interest in generalizing findings (Kothari, 2012). The target population of this study was 255 consultants and contractors working in the target construction projects and the clients of these projects. The choice of these respondents was informed by the expectation that they are familiar with the variables under study and therefore provided the necessary data required.

Sample Size and Sampling Procedure

Sampling refers to the techniques used to select a subset of individuals or objects from the larger study population with the goal of depicting the particular population (Emmel, 2013). The sample size for the investigation was 155 drawn from a targeted population of 255 respondents. The figure was obtained by applying the Yamane (1967) formula;

$$n = \frac{N}{1 + Ne^2}$$

This was calculated as illustrated in 3.4.2 on sampling procedure. The accessible population for this study was 255 respondents. For proportionate selection of respondents, Yamane (1967) recommend the formula:

$$n = \frac{N}{1 + Ne^2}$$

According to the formula: n= the calculated sample size; N= the size of the target population; e= the error of 5 percentage points

Using the formula the sample size was:

$$n = \frac{255}{1 + 255 \times 0.0025} = 155.72$$

$$\text{Contractors} = \frac{87 \times 156}{255} = 53$$

$$\text{Consultants (Architecture, Quantity Surveyor and Structural Engineers)} = \frac{23 \times 156}{255} = 14$$

$$\text{Clients} = \frac{145 \times 156}{255} = 88$$

The sampling approaches that were employed in this research were; Stratified and Simple Random sampling techniques. This was because the target population was grouped into three dissimilar categories; stratified sampling ensured accurate and or adequate representation of the dissimilar study's respondents to enhance representation of variables linked to them. Simple random sampling was then employed to single out the sampled subjects proportionately from different strata (Lohr, 2010).

Research Instruments

Questionnaires were used to collect primary data. Krosnick and Presser (2010) define a questionnaire as a structured research tool that is used for research purposes to collect data from respondents on issues affecting them or others. The choice of this research instrument was informed by its inherent advantages including; inexpensive, non-laborious to administer to a large sample and respondents have sufficient time to provide meticulously thought out responses. (Krosnick & Presser, 2010). This research study's questionnaire embodied closed as well as open ended questions. Closed questions integrated a fixed set of questions on which sampled subjects was required to provide their responses in a particularized sequence and with pre-defined response alternatives. Open ended questions do not confine or limit the respondents to certain perspectives but grant them with the possibilities to reveal data in a realistic manner. Questionnaire is sub-divided in 6 segments. The first segment requested the sampled subjects to fill in his or her bio data, while the remaining 5 segments were composed of variables on which the study investigated. Portions of the questionnaire were; Lack of Awareness, Preservation of

Business Relationships, Cost Minimization and Communication and Documentation Issues and Alternative Dispute Resolution in Construction Projects.

Data Collection Procedures

Primary data was collected by applying the utilization of questionnaires and these were distributed both in person and with the help of research assistants. The interactive approach to the sampled subjects was employed. Structured questionnaires were utilized guided by the fact they are easy to administer as individual items are accompanied by optional answers and are additionally economical with respect to time and financial resources. As a measure of securing an appropriate or agreeable response rate, a register of distributed questionnaires were developed as this aided in trailing of this data gathering instrument.

Data Analysis Techniques

Data analysis is elucidated as the procedure that involves the packaging of collected data, formulating and classifying its main elements to such an extent that it is comfortably and effectively conveyed (Steven, Brady and Patricia, 2010). Primary data was categorized, compiled, coded and analyzed to enhance the elimination of data errors and the inconsistency of elements. To ensure that primary data was analyzed in a reliable way; SPSS version 22.0 was used (Pallant, 2011). Analyzed data presentation used descriptive statistic consisting of; frequencies, mean, standard deviation and variance. Results of the analysis made it easy to make valid conclusions, deductions and inferences on the problem been researched by the study. Data from open ended questions was analyzed by applying the content analysis approach. This entailed open coding, creating categories and abstraction. Results using this technique were presented in themes guided by the research's objectives individually. Frequencies and percentages were applied to encapsulate information. With the view of determining the unique influence and significance of distinctive research study's four variables with respect to alternative dispute resolution in construction projects and obtain inferential statistics, a multivariate regression model was employed. This is an adjustable technique of data analysis that was applicable in the occasion that one sought to examine the association between the dependent variable any other factors. The correlation was linear which was translated that the magnitude to which the variations in the dependent variable was connected to the variations in the independent variables (Brian & Graham, 2010). The analysis aided in arriving at valid inference on the topic being researched on. The regression model was presented as:

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

Where: Y = Alternative Dispute Resolution in Construction Projects; β_0 = Constant Term; β_1 , β_2 , β_3 and β_4 = Beta coefficients; X1= Lack of Awareness; X2= Preservation of

Business Relationships; X3= Cost Minimization; X4= Communication and Documentation Issues'; ε = Error term

RESEARCH RESULTS

The study sought to establish the influence of lack of awareness on use of alternative dispute resolution in construction projects in Imenti North Sub County. The study found that insufficiency of understanding of arbitration does not influence alternative dispute resolution in construction projects disputes. The study also found that scarcity of knowledge on mediation does influence use of alternative dispute resolution in construction projects disputes. Further, the study found that minimal knowledge on conciliation influences use of alternative dispute resolution in construction projects disputes. Also, it was found that inadequacy of understanding of negotiation influences use of alternative dispute resolution in construction projects disputes.

The study also aimed at examining the influence of preservation of business relationships on use of Alternative Dispute Resolution in Construction Projects in Imenti North Sub County. The study found that reduced adversarial attitudes and hostility between client, contractor, quantity surveyor and architecture influence use of alternative dispute resolution in construction projects disputes. Also, the study established that flexibility of proceedings and fairness influences use of alternative dispute resolution in construction projects disputes. The study found that avoidance of diminution of respect among parties influence use of alternative dispute resolution in construction projects disputes and that elimination of hostile enforcement influences use of alternative dispute resolution in construction projects disputes.

The study sought to determine the influence of cost minimization on use of Alternative Dispute Resolution in Construction Projects in Imenti North Sub County. The study found that extra management costs do not influence use of alternative dispute resolution in construction projects disputes. The study found that elimination of litigation costs influences use of alternative dispute resolution in construction projects disputes and that reduction of project related losses influences use of alternative dispute resolution in construction projects disputes. The study found that project costs over-runs influence use of alternative dispute resolution in construction projects disputes and that contract financial standing influences use of alternative dispute resolution in construction projects disputes.

The study sought to establish the influence of communication and documentation issues on use of Alternative Dispute Resolution in Construction Projects. The study found that privacy of the proceedings influences use of alternative dispute resolution in construction projects disputes. Also, the study found that erroneous reporting of information influences use of alternative dispute resolution in construction projects disputes and that voluminous litigation documents influences use of alternative dispute resolution in construction projects disputes. Further, the study found that unobtainable support documents do not influence use of alternative dispute

resolution in construction projects disputes and that confidentiality of dispute issues/areas and proceedings influences use of alternative dispute resolution in construction projects disputes.

The research sought to establish the extent of reliability that measures of use of alternative dispute resolution had in construction projects disputes in Imenti North Sub-County. The study found that the number of disputes resolved using mediation and the duration of the proceedings were reliable measures of use of alternative dispute resolution in construction projects disputes in Imenti North Sub-County to a very great extent. Also, the study found that irrevocability of the settlement, increase in the number of negotiated disputes in construction and disputes resolved using arbitration were reliable measures of use of alternative dispute resolution in construction projects disputes in Imenti North Sub-County to a great extent.

INFERENCE STATISTICS

The researcher conducted both Pearson moment correlation analysis and the multiple regression analysis. Pearson moment correlation was conducted to establish the strength of the level of association while multiple regression was done to establish the relationship between variables.

Pearson’s Product Moment Correlation

A correlation is a number between -1 and +1 that measures the degree of association between two variables. A positive value for the correlation implies a positive association while a negative value for the correlation implies a negative or inverse association. The findings were as shown in Table 1.

Table 1: Correlation Coefficients Matrix

			Alternative Dispute Resolution in Construction	Lack of Awareness	Preservation of Business Relationships	Costs Minimization	Communication and Documentation Issues
Alternative Dispute Resolution in Construction	Pearson Correlation	1					
	Sig. (2-tailed)	.					
Lack of Awareness	Pearson Correlation	.786	1				
	Sig. (2-tailed)	.047	.				
Preservation of Business Relationships	Pearson Correlation	.865	.637	1			
	Sig. (2-tailed)	.009	.008	.			
Costs Minimization	Pearson Correlation	.836	.451	.523	1.		
	Sig. (2-tailed)	.012	.019	.016			
Communication and Documentation Issues	Pearson Correlation	.825	.518	.597	.531	1	
	Sig. (2-tailed)	.039	.005	.028	.014	.	

The analysis of correlation results between the use of alternative dispute resolution in construction projects in Imenti North and lack of awareness shows a positive coefficient 0.786, with p-value of 0.047. It indicates that the result is significant at $\alpha = 5\%$ and that if the lack of awareness increases it will have a positive impact on the use of alternative dispute resolution in construction projects in Imenti North. The correlation results between preservation of business relationships and the use of alternative dispute resolution in construction projects in Imenti North also indicates the same type of result where the correlation coefficient is 0.865 and a p-value of 0.009 which significant at $\alpha = 5\%$.

The results also show that there is a positive association between costs minimization and the use of alternative dispute resolution in construction projects in Imenti North where the correlation coefficient is 0.836, with a p-value of 0.012. The results also show that there is a positive relationship between communication and documentation issues and the use of alternative dispute resolution in construction projects in Imenti North where the correlation coefficient is 0.825, with a p-value of 0.039. Nevertheless, the positive relationship indicates that when the practice of the afore-mentioned factors is in place the use of alternative dispute resolution in construction projects in Imenti North increases.

Multiple Regression Analysis

The multiple regression analysis was used to test the relationship between the variables where it shows how the dependent variable is influenced by the independent variables. The results were as shown in Table 2, 3 and 4.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.893	0.797	0.791	0.808

From the results, the adjusted R square was 0.791. This implies model highly fits the data since the Adjusted R square was more than 0.7 and that lack of awareness, preservation of business relationships, costs minimization and communication and documentation issues explain 79.1% of the variation in use of alternative dispute resolution in construction projects in Imenti North. The remaining 20.9% accounted for the factors influencing use of alternative dispute resolution in construction projects in Imenti North that are not covered in this study.

Table 3: ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	323.133	4	80.783	120.857	.000
	Residual	82.216	123	0.668		
	Total	405.349	127			

From the ANOVA Table, the p-value was 0.000 and the calculated F-value was 120.857. This shows that the overall regression model was significant in predicting the outcome of use of

alternative dispute resolution in construction projects in Imenti North based on the values of lack of awareness, preservation of business relationships, costs minimization and communication and documentation issues since p-value was less than 0.05 and F-calculated was greater than F-critical (2.445).

Table 4: Coefficients of Determination

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.136	0.182		6.242	.000
Lack of Awareness	0.612	0.208	0.739	2.942	.004
Preservation of Business Relationships	0.736	0.296	0.784	2.486	.015
Costs Minimization	0.701	0.311	0.680	2.254	.030
Communication and Documentation Issues	0.675	0.239	0.718	2.824	.007

The established model for the study was:

$$Y = 1.136 + 0.612X_1 + 0.736X_2 + 0.701X_3 + 0.675X_4$$

Where: Y= Use of alternative dispute resolution in construction projects in Imenti North; β_0 =constant; X_1 = Lack of Awareness; X_2 = Preservation of Business Relationships; X_3 = Costs Minimization; X_4 = Communication and Documentation Issues

The regression equation above has established that taking (lack of awareness, preservation of business relationships, costs minimization and communication and documentation issues), use of alternative dispute resolution in construction projects in Imenti North will be 1.136. The findings presented also show that taking all other independent variables at zero, a unit increase in the lack of awareness significantly leads to an increase in the score of use of alternative dispute resolution in construction projects in Imenti North as shown by B=0.612 and p-value of 0.004.

Further, the study revealed that a unit change in preservation of business relationships would significantly lead to 0.736 increase in the score of use of alternative dispute resolution in construction projects in Imenti North since p-value (0.015) was less than 0.05. Moreover, if all other factors are held constant at zero, a unit increase costs minimization significantly leads to increase in use of alternative dispute resolution in construction projects in Imenti North as shown by a regression coefficient of 0.701 and p-value of 0.030. The study also revealed that a unit change in communication and documentation issues would significantly lead to 0.675 increase in the score of use of alternative dispute resolution in construction projects in Imenti North since p-value (0.007) was less than 0.05.

Overall, preservation of business relationships had the greatest influence on use of alternative dispute resolution in construction projects in Imenti North, followed by costs minimization,

followed by communication and documentation issues while lack of awareness had the least influence on the use of alternative dispute resolution in construction projects in Imenti North.

CONCLUSIONS

The study concluded that lack of awareness has a positive and significant influence on use of alternative dispute resolution in construction projects in Imenti North Sub County. The study concluded that minimal knowledge in conducting of arbitration, conciliation, mediation and negotiation proceedings significantly contributes to the limited use of ADR methods in resolving construction disputes resulting to the increased use of litigation.

The study concluded that preservation of business relationships has a strong and positive significance on the use of alternative dispute resolution in construction projects in Imenti North Sub County. The study deduced that inherent characteristics of dissimilar ADR methods including; enabling flexibility of proceedings and ensuring fairness, reduced adversarial attitudes between contractors and clients and avoidance of diminution of respect among parties lead to use in conflict resolution in construction projects.

The study concluded that cost minimization has a positive significance on the use of alternative dispute resolution in construction projects in Imenti North Sub County. The study concluded that there is need to avoid high costs associated with litigation, occurrences of project cost-overruns and related losses as to have informed decision to adopt mediation in settling disputes in construction projects.

The study concluded that communication and documentation issues influence use of Alternative Dispute Resolution in Construction Projects significantly. The study concluded that erroneous recording of information and the unavailability of support documents informs decisions to litigate as opposed to embrace mediation, negotiation, conciliation and arbitration as dispute determining approaches in construction projects.

RECOMMENDATIONS

The study recommends that there is need for high profile public promotional campaigns. The campaigns would need to be continuous since most users of ADR services tend to believe that they are one-off users who may never again have a significant land dispute. A promotional campaign specifically targeted at those people who are regular users of the justice system including National and County government agencies and the public. There is also need for the development of information materials about ADR, including the various sorts of ADR, and about the sorts of services they provide. There is also need for development of pamphlets, videos, or booklets setting out people's basic legal entitlements in relevant areas.

The study also recommends that supplies should be exhaustively elaborated and detailed in the contract conditions, designs and specifications i.e. nullify, if possible, opportunities for differing

interpretations of the requirements of the documents. There is also a need that site investigations and designs should be adequately complete prior to processing construction contracts,

The study recommends that the clients, contractors and consultants should ensure that they have adequate and correct appreciation of their respective professional and ethical obligations. Both contractors and consultants should attend seriously to their tasks and assignments as outlined in the contract document. The study also recommends that documentation of project's progress work force, weather, equipment, correspondence all events on timely bases should be kept meticulously by the contractor and copy to the consultant timely.

The study recommends that there should be an improvement on the long processes of payment approval and effecting by consultants and clients respectively. The study also recommends that the contacts should be clear in the costs as parties involved in construction tend to opt out of ADR due to high hidden costs this is because arbitration presents extra management costs that were considered high in comparison to the contract financial position resulting to most disputes been litigated.

The study recommends that partnering works well to prevent disputes. Accordingly, best adjudication or arbitration approach for construction projects would be started with partnering and relying on direct negotiation. Clients have to consider contractors as their fellow business collaborates, where they have called them to fill the gap they want them in their project set-ups. There shall be mutual understanding in their contract agreement. No one is subordinate to the other, those who made contractual agreement possess equal legal right. This requires the clients to be reasonable in discharging their contractual obligation diligently.

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