



REFITTING STAKEHOLDER INTEGRATION STRATEGIES: CASE ICT PROJECTS IN KENYA.

Ominde Diana Kageha

*Strathmore University
Strathmore Business School, Kenya*

Ochieng Edward Godfrey

*Faculty of Business and Law
The British University in Dubai (BUiD) Dubai, United Arab Emirates*

Omwenga Vincent

*Strathmore University
Faculty of Information and Technology, Kenya*

Abstract

The ICT sector in Kenya is projected to be a leading contributor of the country's developmental blueprint yet despite this, ICT projects that have been initiated in the country continue to face several challenges. In a review of the sustainability of these projects initiated in the country suggest that the biggest challenge in the ICT project implementation is relatable to the issues of stakeholder management. Particularly, the integration of various stakeholder clusters within the project schema still remains a challenge for the implementation of these projects. The research study examined existing stakeholder management models within the context of stakeholder integration from the ICT projects in Kenya. A Delphi (Qualitative) research model was employed to obtain data. Forty senior project practitioners were interviewed through the Delphi technique. The responses were analyzed through content analysis. The study has proposed a strategic stakeholder management model that could be used to enhance existing stakeholder integration practices in Kenya.

Keywords: Information Communication Technology, Stakeholder management, Stakeholder integration.

Introduction

Stakeholder integration is vital to the achievement of project objectives (Mukherjee, 2019). Since developing an effective stakeholder integration model entails the collection of all the project definitions as well as approvals, stakeholder integration thus offer the project implementing teams an opportunity to identify the expectations of the stakeholders and their needs within the project (Zwikael and Smyrk, 2009). As a subset of stakeholder engagement, integration of the stakeholder within the project management plan fundamentally influences the directions of the project in its entirety (Bourne, 2016). It essentially develops a framework through which those who have interests within the project can effectively contribute to the progress of the project.

Recent research studies such as Derakhshan *et al.*, (2019), Luyet *et al.*, (2012), El-Gohary *et al.*, (2016) and Sunder (2016) have linked stakeholder integration as an element of stakeholder project engagement. They have proposed that the quality of the project outcomes is directly related to the stakeholder integration framework adopted in the project. Indeed, the last decade has seen immense focus on project stakeholder integration as a tool in enhancing project delivery and improving the project outcomes. Accordingly, Davis *et al.*, (2010) posit that the very essence of stakeholder integration is the alignment that it does within the project delivery



model. By talking of alignment, Jonas *et al.*, (2016) seem to be echoing the discussions of Cuppen *et al.*, (2016) and Vink *et al.*, (2008) which suggest that through a stakeholder integration model, the stakeholder expectations are considered in the project versus the project aims. In effect therefore, the development of a stakeholder integration concept within any project would mean that some sense of sustainability is injected within the project since stakeholder integration aids in buttressing what Zwikael and Smyrk (2009) infer to as “long-term” shareholder value and sustainability of the project.

Stakeholder integration in ICT: A review of Kenyan context

Advances in research suggest that the future of project management will be clearly defined by the stakeholder integration theories in the discipline (Adam and Mubila, 2017). This has been further discussed by Tengan and Aigbavboa (2017) who noted that the conceptualisation of stakeholder integration models in academia is meant to empower the parties involved in the project to “advance their stakes” in as far as the project deliverables in the project is concerned. To engage and integrate stakeholders, furthers, Akamanzi *et al.*, (2016) essentially confines integration as a concept to “partnerships” and this has increasingly become a very critical research in the project management discipline.

Within the confines of ICT project management, there has been a lot of interest in the development of a stakeholder integration theory to improve the outcomes of ICT projects. This is hinged on the notion that the development of an effective ICT stakeholder integration model would aid in the enhancement of the delivery of these projects in the sector. Several project management approaches theorised by researchers in ICT in the past decade have consistently called for the establishment of a well-defined stakeholder integration model to be able to respond to the emerging project management issues in the ICT sector. Within the developing economies, so to say, the project implementation challenges have identified several strategies of incorporating efficiencies in these ICT projects key amongst them being the adoption of a practical ICT project integration framework in these projects. Specifically, the studies of Akamanzi *et al.*, (2016), scoped within the developing economies, have suggested that the ICT projects in these countries have been inadvertently affected by issues of project sustainability. What this means is that these projects fail to realize their objectives once they are completed, a fact that has been suggested to have its genesis from a poor stakeholder management in these projects.

In contextualising this study within Kenya, there are a number of observations that would help in developing this study. One notable issue, as will be realised in the literature review, is that there has not been a progressive study regarding the issue of stakeholder integration in the context of ICT infrastructure in Kenya. The disclosures of a number of publications such as Akamanzi *et al.*, (2016) and Ochilo *et al.*, (2019) have suggested that there is need for further studies on the extent to which stakeholder integration in ICT in the Kenyan context has advanced. Further, regardless of the suggestions of a number of publications such as Mysore *et al.*, (2016) that Kenya lacks a well-defined stakeholder integration model in its project management matrix, there have never been serious attempts to have a comprehensive study on stakeholder integration in the ICT sector. What is however known and has been the centre of very many studies, Ondego and Moturi (2016), Ramadhan and Robert (2016), and Omariba *et al.*, (2016), infrastructure project management in the country still suffers from sustainability issues. This has however been largely blamed on the inadequate or lack of a well-structured stakeholder integration model to aid in the delivery of these projects.

In terms of stakeholder integration theory, researchers in Kenya have not progressed the theory extensively (Ochilo *et al.*, 2019). This has fundamentally limited the outcome of the delivery of these projects as well. Nonetheless, there have been attempts in academia today to



develop a stakeholder integration theory and model that is specific to the Kenyan ICT operational environment. The increased research in the proposition of a stakeholder integration theory in ICT in Kenya has been pointed towards the uniqueness of the project management issues in the country. As pointed out in studies of Akamanzi *et al.*, (2016) and Ochilo *et al.*, (2019), Kenya's ICT project management landscape, just like other developing countries, is different from the project management dynamics in the developed countries, this therefore prompts the practitioners to come up with an integration model that is contextualised to project management in the Kenyan environment.

To realize this however, a comparison has to be undertaken between the project management schema (stakeholder integration to be precise) in Kenya versus other countries. Attempts have been made by the studies of Gichaiya and Njeru (2016) to discuss the model of managing multicultural projects creating the impression that in the development of any project management and stakeholder integration model, then the environment of operations must be undertaken. Indeed, this was the basis of the works of Akamanzi *et al.*, (2016) and Chipidza and Leidner (2019). Therefore, in this study, the emerging trends in the project and stakeholder management in Kenya were taken into consideration to aid in the construction of a stakeholder integration operational frame in the ICT sector (Ochilo *et al.*, 2019).

Partnerships and the question of Sustainability in ICT infrastructural project delivery in Kenya

Attempts have been made in this research to limit the scope to the Kenyan ICT sector as possible. Based on the emergent themes or earlier research studies regarding ICT project delivery in Kenya, the question of sustainability was a salient theme. Ochilo *et al.*, (2019) noted that these projects in the ICT industry seem to have a very weak footing; this means that the transferability of the projects into a meaningful outcome after completion is a problem that policy has to address to ensure that defined benefits of these projects are realised. Perhaps the works of Ronoh and Mwangi (2017) give a more insightful discussion when he talks of the ability of these projects to “stand on their own.” A review of the government-initiated projects in the last two decades affirm this debate of sustainability. Despite the conclusion of these projects, there seems to be a pattern in which these projects do not translate into meaningful deliverables, an issue that has been attributed to the stakeholder integration process and model (Gichaiya and Njeru, 2016).

A recent review of the problem within Africa noted that donor funded projects not only in the ICT sector progress well but fail to “stand” when they are completed and operationalised, an issue that has been blamed on poor transition within the project delivery framework (Ronoh and Mwangi, 2017). While talking about transition, the report essentially talks about poor integration of the stakeholders because the final beneficiaries of the project are unable to benefit from these projects. What this report has generated in the corridors of project management disciplines is the question on partnerships as a precursor to sustainability in these ICT projects (Ochilo *et al.*, 2019). Perhaps the development of a well thought integration plan for the stakeholders in the ICT sector would aid in buttressing these projects on a pedestal of sustainable operations.

Stakeholder engagement and project delivery

There is no single and agreed definition of stakeholder engagement in project management. The assertions of Heravi *et al.*, (2015) points to a generic term that involves the various processes that are applied in project management to ensure that the parties who are involved in the execution of the project are attended to in terms of harnessing their roles and realising the impact of their responsibility in the projects (Oppong and Chan, 2017). Despite the lack of an agreed definition of stakeholder engagement in project delivery, there seems to be a



uniform point of intersection in their definitions – involvement. For example, Zuofa and Ochieng (2016) suggested that management of stakeholders in any project is meant to develop a matrix through which the involvement of these stakeholders in the project is clearly defined.

According to Tengan and Aigbavboa (2017), the concept of stakeholder engagement is meant to optimise the processes in the project management model in such a way that the involvement of the stakeholders in these projects is further optimised. The discussions of Oppong and Chan (2017) suggest that stakeholder integration in any project espouses the strategies that organisations can employ in order to ensure that all the parties who are “involved” in the project can be effectively engaged in these projects. The suggestions by Welford (2018) seem to be echoing those of Oppong and Chan (2017) to the effect that stakeholder management is about “bringing on board” those who are considered to be having any form of interest or influence on these projects (Tengan and Aigbavboa, 2017).

Mysoreet *et al.*, (2016), while describing the key principles of stakeholder engagement, has however talked of the “interaction” of the stakeholders in order to influence the project outcomes. The development of an interactive platform onto which various stakeholders influence the project means that these stakeholders are provided with a framework through which they can be involved in influencing the progress of the project. This definition by Welford (2018) seem to further suggest that the concept of stakeholder integration is basically founded on the principle of involvement. The underlying concept behind the integration of stakeholders within any project management framework is the issue of involvement. To the project management team, the quality of the integration model that is adopted in any project management model would thus translate into the extent to which these stakeholders find a plane onto which they would be “involved” in all the aspects of the project execution. Thus, stakeholder engagement within any project can be well understood within the lens of stakeholder involvement in the project (Mysoreet *et al.*, 2016).

Advances in research regarding stakeholder integration have however broadened the understanding of project stakeholder engagement. For example, a systematic review undertaken by Mysoreet al (2016) and Zuofa and Ochieng’ (2016) have suggested that stakeholder engagement has to be looked at from the point of view of “influence.” While this is closely related to the earlier suggestions that stakeholder engagement is all about inclusion, it is paramount to suggest that engaging stakeholder’s ale projects to the need to “take into account” the opinions of the stakeholders as well (Mysoreet *et al.*, 2016). Indeed, the focus of the current studies on the stakeholder engagement and management in the past has been the issue of “how much of the interests of the stakeholders have been considered.” Progress in research currently, reveals that stakeholder engagement is more of integrating all the interests of the stakeholders in the project Mysoreet *et al.* (2016).

Stakeholder engagement has been, for a long time, correlated with the outcome of the projects. According to Welford (2018), an effective stakeholder engagement has to be responsive to the interests of the stakeholders. In concept, the studies of Mysoreet *et al.*, (2016) suggest that the project outcomes are defined by the stakeholder engagement model that has been adopted by the implementing team. Akotia and Opoku (2018) and Zuofa and Ochieng’ (2016) further suggested that the advancement of the objectives of a project have to be viewed from the perspectives of the contributions of the stakeholders in the project.

Since stakeholder engagement is an approach used in enhancing the involvement of the stakeholders in the project, it follows that the delivery of the projects will likely be improved. Involvement of the stakeholders in projects provide an avenue through which partnerships between the parties involved in the project are constructed as a way of driving the project



progress. The studies of Oppong and Chan (2017) and Welford (2018) have been able to affirm this by connecting stakeholder integration and engagement to sustainable project outcomes. Borrowing from the works of Welford (2018), the studies seem to suggest that when stakeholders have a chance of being involved in the project, there is a sense of what he calls “stability” in the project which further assures the stakeholders of a sustainable outcomes of the project.

Over time, there have been several discussions revolving around project outcomes and stakeholder engagement with a number of studies, Davis (2017) and Welford (2018) proposing that having a forum for engaging the stakeholders in the project equally limits the conflicts in the project. Through the conflict theories in project management for instance, Doloi *et al.*, (2016) suggest that the stakeholders have an opportunity to engage each other regarding the project thus limiting the conflicts in the project. Through these discussions, Zuofa and Ochieng’ (2016) has proposed that one of the strategies of resolving conflicts in any project is to have a comprehensive stakeholder management model where interests of the stakeholder in the project are deliberated upon by the stakeholders themselves and any form of “grey areas” are addressed by the stakeholders in the project (Welford, 2018). All these actions point towards the relevance of stakeholder engagement in the improvement of the outcomes of projects. When conflicts and stakeholder interests in the project are addressed for instance, it is likely that the project outcomes are improved. Therefore, it is accurate to suggest that stakeholder engagement of whatever form, is a very important aspect of project management that is aimed at enhancing the outcomes of the project (Erkul *et al.*, 2018). Based on the reviewed materials, this can be discussed through conflict resolution and accountability amongst others (Zuofa and Ochieng, 2016).

ICT projects in Kenya, a brief overview

Kenya’s ICT sector has witnessed tremendous growth in the past and is still projected to expand exponentially in the future (Tengan and Aigbavboa, 2017). Indeed, the growth in the ICT sector has been so robust that it has been integrated in almost all the aspects of the economy to support the developmental plans of the country. In almost all its flagship projects of its economic plans, ICT is projected as a leading player in the economic development of the country. This therefore means that the country has to consistently harness all the resources within its capability in order to optimise the operations in the ICT sector. But while there has been significant growth and development in the ICT sector, the country has not been able to make similar strides in terms of research in project management in the ICT sector. According to Eyiah-Botwe *et al.*, (2017) and Oppong *et al.*, (2017), there is a sense in which the development of relevant theories of practice in the ICT project management in Kenya have not been well developed. This is affirmed by the several challenges that have been noted to bedevil the operations in the ICT project management in Kenya.

A review of the progress of ICT projects in the country by Mysore *et al.*, (2016) and Welford *et al.*, (2018) found out that the country still lacks a co-ordinated approach in managing its ICT projects. One notable fact earlier intimated is that the country’s ICT projects are not well hinged on a firm pedestal of sustainable performance. This has seen so many projects in the sector, completed but not realizing the defined benefits that they were envisaged to create. According to Welford *et al.*, (2018), there is still a huge problem in sustainability of these projects. In a number of instances, the projects fail to take off even after their completion. The suggestions by Zuofa and Ochieng, (2017) have so far offered an insight into the execution gap that has been noted in the ICT projects soon after their completion. Citing the examples of government initiated public projects, a report by Welford *et al.*, (2018) seem to be suggesting that there is such a big execution gap soon after ICT projects in Kenya have been launched. What this means is that despite these projects going through the project implementation



lifecycle, they effectively fail to kick off to ensure that the envisaged project goals have been realised. This is a question of sustainability of these projects.

While there has not been a consistent theme in research surrounding ICT projects in Kenya, there seems to be emphasis on stakeholder management as an issue of sustainability. Welford et al., (2018) succinctly puts it that these projects may not be adequately sustainable because of the poor stakeholder engagement model that is adopted by the project implementing teams. A systematic review by Eyiah-Botwe et al., (2017) and Mysore et al., (2016) opined that the ICT projects in Kenya do not have an elaborate framework that engages the various clusters of project stakeholders. What this means therefore is that specific parties to the project are not included in the project adequately despite having a prominent role in the advancement of the project. This is equally noted in the works of Welford et al., (2018) who describe the management of stakeholders in the Kenyan infrastructural projects as “inadequate.” What is evident from these publications is that there is still more to be done in the country in terms of stakeholder management to be able to ensure that these projects do realise their objectives. In terms of sustainability, it is prudent that a more rational approach is developed to be able to improve the outcomes of these projects in the country (Mysore et al., 2016).

The question of accountability has equally emerged as a concern for majority of the players in the ICT sector. There seems to be no proper model of ensuring project accountability in almost all the facets of project execution. Perhaps the suggestions of Zuofa and Ochieng (2016) have offered the clearest indications that the project management model that seems to be employed in the country is shrouded in secrecy. In this regard, monitoring these projects whether they give value for money is almost impossible. Indeed, this has been discussed by Zuofa and Ochieng (2016) who noted that monitoring the progress of these projects in Kenya has never been easy. There seems to be no established framework for ensuring project accountability especially for the public projects in Kenya thus exposing these projects to instances of unethical practices.

Recent research studies in infrastructural project management in Kenya have given more impetus to the idea of developing an evaluation model for stakeholder management (Zuofa and Ochieng, 2016). The significance of stakeholder integration which is a component of stakeholder management, has been deemed to be such an important variable in project management that a framework for evaluating stakeholder integration is paramount. A number of research studies in Kenya are being undertaken to formulate a framework for the management of stakeholders in ICT projects and thereby provide an evaluation model for these projects (Zuofa and Ochieng, 2016).

In view of these reviewed literature, there are a number of key thematic areas arising. Notably, it appears that there is no ICT stakeholder integration theory in the Kenyan ICT sector. This is affirmed in the studies of Eyiah-Botwe et al., (2017) and Welford et al., (2018) who suggests that there is need to develop a theory in ICT infrastructural projects that is contextualised within the Kenyan environment. Moreover, there seems to be no framework developed in managing these projects. Probably, this is why the studies of Tengan and Aigbavboa (2017) appear to be developing and assessment criterion for the integration of stakeholders within the Kenyan ICT infrastructure project management schedule. As can also be witnessed in the literature review, there is no established model for accountability in these projects or so it appears. There are no structures that have been established to enhance accountability in these projects. This, as explained by Oppong et al., (2017), could be the reason as to why having a consummate discussion around these ICT projects has never been easy because it is not easy to find a breakdown of these projects. In deed these have led to a lot of speculations regarding these projects. On the same note, the problem of sustainability of these



projects is evident from these studies reviewed. One would suggest that this is the biggest problem in the Kenyan ICT project management framework. The problem of sustainability, as revealed in the studies of Eyiah-Botwe et al., (2017) and Oppong et al., (2017) stems from the fact that the stakeholder integration platform that is adopted in these projects is not responsive to the dynamics in the project management. It does seem that the various stakeholders within these projects have no well-established platform onto which they are able to have a robust conversation around these projects (Mysore et al., 2016). This is why a significant number of these projects appear not to take off well soon after their completion. In view of these assertions emerging from the reviewed literature, it follows that there is need to refit the current project management models in the Kenyan ICT sector. The literature that is currently existing in academic has not well captured the need to refit the exiting stakeholder integration models within the Kenyan context. There is obviously a gap in theory in terms of developing a good template for stakeholder integration in the Kenyan ICT project management and thereby addressing the emerging issues in the ICT management in the country.

Theoretical framework

Stakeholder management, as discussed by De Gooyert et al., (2017), is currently considered to be a fundamental instrument in defining the trajectory of any project. The complementarity of this relationship is evidently making stakeholder engagement project management an important avenue through which stakeholders can be well managed in relation to achieving the project objectives within the organisation. The development of the stakeholder theory in project management is hinged on the fact that in any project implementation environment, there are several constituencies that are affected by these projects (Fassin et al., 2017). The stakeholder theory can thus be discussed from the point of view that since multiple constituencies have varying interests in the project, it is imperative that they have a locus onto which they are able to deliberate on the various project outcomes. As discussed by Zakhem and Palmer, (2017), the stakeholder theory aims to address the values and morals that are important in the project continuation.

The stakeholder theory proposed by Jahn and Brühl (2018) , hinged on the capitalistic market model, asserts that stakeholders are those groups whose support are necessary to the operations of the organisation and the existence of the organisation is in jeopardy in case the level of support from these groups diminish. This viewpoint, as described by Miles (2017) seem to paint the corporate environment as an ecosystem of groups that are interrelated and they have to be taken into consideration within the project management framework. In essence, for the company or the organisation for that matter, to be able to run smoothly, there is need to bring on board all these groups (Andriof and Waddock, 2017). The works of Freeman (Fassin et al., 2017) on stakeholder theory lays down a structure that ought to be taken into consideration by organisations to be able to enhance the outcomes of their projects - finding a platform onto which all the stakeholders intersect. The stakeholder theoretical framework proposed by Elrick et al., (2016) however differs from the assertions of Friedman (How et al., 2019) who contends that the stakeholders in an organisation are not just only the groups who decisions are essential in the progress of the entity, but includes “just everyone who is affected by the workings and the operations of the organisation.” the works of Fassin et al., (2017) seem to lift the veil on the stakeholder management model especially in the contemporary approaches to project management. Friedman (2016) suggested that a stakeholder management model in any organisation has to be very comprehensive to be able to cover all the stakeholders who are in one way or the other affected by the operations of the project.

In view of the stakeholder theory, this study is cognizant of the need to define stakeholders within any project management schedule. In the ICT infrastructure project



management template, based on the conceptions of stakeholder management, there is need to define and profile the stakeholders in the project (Fassin et al., 2017). Earlier, while discussing the ICT projects in Kenya, it was suggested, based on the studies of Andriof and Waddock (2017) that the ICT projects in Kenya have not developed a comprehensive stakeholder project management theory that fits within the Kenyan environment. What this therefore suggests is that the development of a stakeholder integration model first of all requires that the right perspectives of the project stakeholders are developed. From the suggestions of Andriof and Waddock (2017) and the stakeholder management theories proposed by Zakhem and Palmer, (2017), there is need to have an elaborate profile of project stakeholders to be able to develop a model on how to engage these stakeholders. Specifically, it is imperative that these stakeholders are ranked to be able to match their expectations within the schedule of the project outcomes. Having reviewed various literature on project management, a number of issues are notable that would be pertinent to this research study. One notable fact is that the delivery of ICT projects in Kenya as currently is, has not been well researched. There appears to be a lack of a well-defined project delivery model especially in regard to the stakeholder management and integration. In developing this study, there is a sense in which the concept of stakeholder integration within the Kenyan ICT project management framework was proposed.

Methodology

The overarching objective of the study was to refit the stakeholder integration strategies in Kenyan ICT projects. The study adopted the Delphi (qualitative) research model. The Delphi method relies on what Habibi et al., (2014) refers to as “expert judgement” in any topic issue in research. The method aims to gain consensus regarding the research question by employing a series of questionnaires then providing feedback from the experts in the area of knowledge. The applicability of the Delphi method, as affirmed by Kezar and Maxey (2016), is based on the fact that experts are engaged in the data collection process and underlying assumptions regarding the research topic can be well discovered.

Application requirement

The most important requirement for the Delphi research approach is the need for the judgement of the experts on the proposed research question. In terms of the composition and the panel size, Habibi et al., (2014) contends that there is no established accurate size. *“Although there are some disagreements about the composition and panel size of Delphi technique, a dominant pattern can be detected. It has been recommended that the panel size may vary according to the topics covered, the nature of different viewpoints included, and the time and money available and it is also suggested to use a combination of individuals with multiple specialties and heterogeneous groups better than the homogeneous groups”* Hsu and Sandford (2007) Further suggest that “Delphi subjects should be highly trained and competent within the specialized area of knowledge related to the target issue“(p.4). Moreover, Hogarth (1978) noted that the method requires between six and twelve members in the panel although the suggestions of Clayton (1997) contend that in case a mixture of experts having different specialties is adopted, then between five and ten members are enough (p. 5). Some studies such as Habibi et al., (2014) have considered fewer than ten members in their panels although others suggesting that one can have even more than 100 participants especially in the quantitative Delphi models (McMillan et al., 2016). Notably, the composition of the Delphi panel has to consider the extent to which the panel is competent in the research question. As suggested by Habibi et al., (2014), it is important that the participants “have the knowledge and expertise of the study subject.” The Delphi panel selected for this study consisted of senior project



practitioners selected from a number of ICT infrastructural projects in Kenya. A total of 40 experts were selected for the interview session. These entailed the following: Project management (13), Operations engineers (12), Head of programs (7), Transmission engineers (8).

Delphi stages

The selection criterion for the Delphi panel was based on the years of experience that the individuals had. Those who have stayed longer in terms of their years of experience in ICT project management were prioritised in the research. The selected panel were subjected to an interview (unstructured) interview session where their opinions regarding the current stakeholder integration strategies in the ICT sector were collected. The outcome of the interviews was analysed through a thematic analysis and the level of consensus evaluated. A controlled feedback mechanism model proposed by Habibi et al., (2014) was applied in questions where consensus was not reached. Thematic analyses were undertaken for each of the items in the interview questions at every stage to evaluate the extent to which they agree. For the items where consensus was not reached, the experts were further engaged in a controlled feedback until a statistical “group response” was obtained. The theoretical framework below (*Figure 1*) describes the theoretical framework for the Delphi technique in qualitative research that was followed in the study.

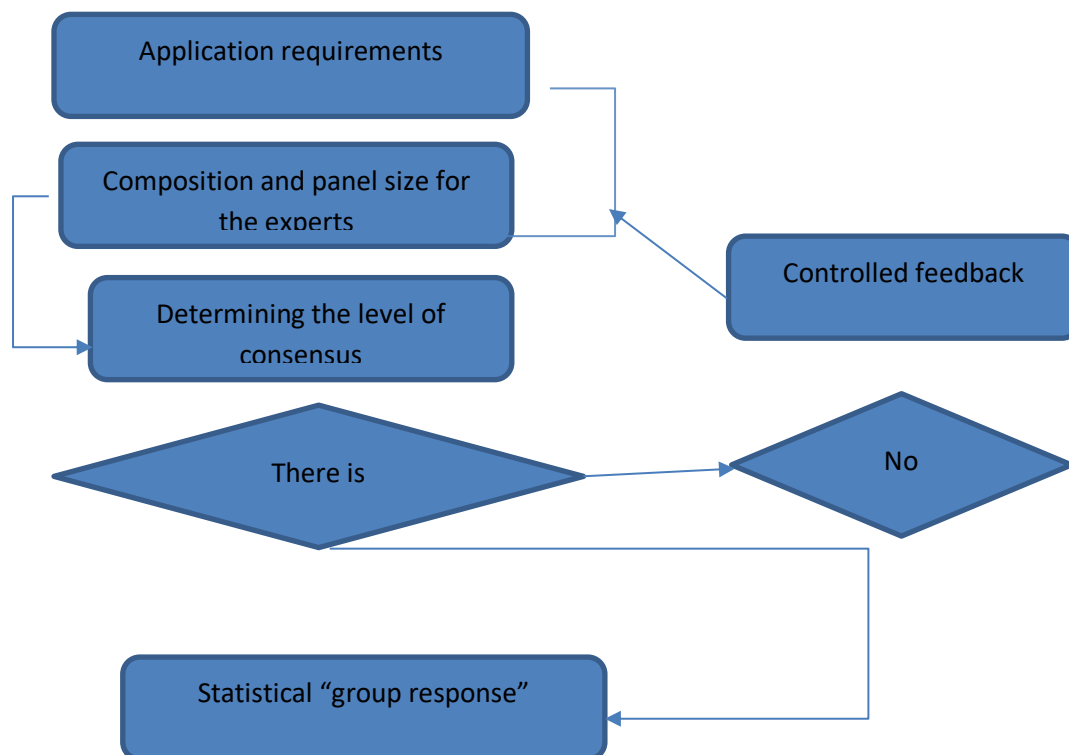


Figure 1: Theoretical framework for the Delphi technique in qualitative research that was followed in the study (Habibi et al, 2014)



Table 1: Interview protocol

	Illustrative Questions
Complexity in project delivery: managing Kenya?	What are the complexities you experience in ICT infrastructure projects in Kenya?
Stakeholder engagement management?	What is your understanding of stakeholder management and engagement in project management?
Stakeholder integration Roles	Describe your role as a project leader in stakeholder engagement
Stakeholder integration mapping:	Does the management method of your stakeholders' impact on the project outcomes?

Findings

It is evident that ICT infrastructure projects in Kenya ought to be structured within a specific theoretical construct. In trying the refit, the stakeholder integration of ICT infrastructure projects in Kenya, several project management aspects ought to be taken into consideration. This section evaluates the salient aspects of stakeholder integration in Kenyan ICT projects and how these can be integrated within the stakeholder management framework in the industry. The outcome of an interview session from 40 participants were used to describe the manner in which these stakeholder management and integration strategies can be constructed in the ICT sector. These findings give an insight into the general outcomes of the interview of 40 project practitioners in the ICT sector.

Table 2:
Stakeholder integration and project complexity in projects managed by the participants

Year Managed	Participant	Type of project	Impact of stakeholder integration	Impact of Project Complexity	Project outcome
2019	1	Public	Impacts were seen	Impacts were seen	successful
2018	2	Private	Impacts were seen	Impacts were seen	successful
2018	3	Public	Impacts were seen	Impacts were seen	unsuccessful
2019	4	Private	Impacts were seen	Impacts were seen	successful
2019	5	Private	Impacts were seen	Impacts were seen	successful
2019	6	Private	Impacts were seen	Impacts were seen	successful better than expected
2015	7	Private	Impacts were seen	Impacts were seen	successful
2016	8	Public	No impact in	No impact in	successful



			project	project	
2019	9	Private	Impacts were seen	Impacts were seen	successful
2019	10	Public	Impacts were seen	Impacts were seen	successful
2018	11	Public	Impacts were seen	Impacts were seen	successful
2019	12	Public	Impacts were seen	Impacts were seen	successful
2019	13	Public	Impacts were seen	Impacts were seen	successful
2019	14	Public	Impacts were seen	Impacts were seen	successful
2018	15	Private	Impacts were seen	Impacts were seen	successful
2019	16	Private	Impacts were seen	Impacts were seen	successful better than expected
2018	17	Public	Impacts were seen	Impacts were seen	successful
2019	18	Private	Impacts were seen	Impacts were seen	successful
2018	19	Private	Impacts were seen	Impacts were seen	successful
2018	20	Private	Impacts were seen	Impacts were seen	successful
2018	21	Private	Impacts were seen	Impacts were seen	successful
2019	22	Private	Impacts were seen	Impacts were seen	successful
2019	23	Private	Impacts were seen	Impacts were seen	successful
2017	24	Public	No impact in project	No impact in project	successful
2016	25	Public	No impact in project	No impact in project	successful
2019	26	Private	Impacts were seen	Impacts were seen	successful
2019	27	Public	Impacts were seen	Impacts were seen	successful
2019	28	Public	Impacts were seen	Impacts were seen	successful
2018	29	Public	Impacts were seen	Impacts were seen	successful
2018	30	Public	Impacts were seen	Impacts were seen	successful
2019	31	Private	Impacts were seen	Impacts were seen	unsuccessful
2019	32	Private	Impacts were seen	Impacts were seen	successful
2018	33	Private	Impacts were seen	Impacts were seen	successful
2019	34	Private	Impacts were seen	Impacts were seen	successful
2016	35	Public	Impacts were seen	Impacts were seen	successful



				seen	
2016	36	Public	Impacts were seen	No impact in project	successful
2016	37	Public	Impacts were seen	No impact in project	successful
2019	38	Public	Impacts were seen	Impacts were seen	successful
2019	39	Private	Impacts were seen	Impacts were seen	successful
2019	40	Private	Impacts were seen	Impacts were seen	successful

Theme 1: Stakeholder integration framework

It is evident from the assertions of all the 40 participants interviewed in the study suggested by the participants, developing a stakeholder integration framework that can be used in managing ICT infrastructure projects in Kenya is paramount. An operational template is imperative in the formulation of a stakeholder integration schedule in the ICT sector. The assertions of participants 1, 5, 13 and 15 further seems to be suggesting that the Kenyan ICT sector ought to have a well-developed framework that considers the very unique operational environment of ICT sector in the country. Majority of the participants in the study (35) noted that despite the fact that several attempts have been made in the past to discuss modalities of developing a stakeholder integration framework from the works of Jonas et al., (2016), there is no agreeable management framework that can be used in the engagement of stakeholders in the ICT projects. As an outcome, the participants in the study contend that there is need to develop a project management framework hinged on the stakeholder management theories that have been proposed. However, the disclosures of 13 and 18 contend that the adoption of these stakeholder integration frameworks have to be undertaken within the context of the Kenyan ICT infrastructure projects. This means that the framework of stakeholder integration to be adopted in Kenya has to reflect the various dynamics within the Kenyan environment

As suggested from the disclosures of participants 5 and 12, there seems to be a systemic failure to have a standard of stakeholder integration in the country onto which the ICT projects can be run and managed. This is probably why all the respondents interviewed in this study opined that the sustainability of the Kenyan ICT infrastructure projects has never been achieved as required. Moreover, 7 and 21 further agrees that there is a sense in which the modalities through which the stakeholder interests in projects cannot be managed adequately limits the objectivity of the ICT projects in the country. In essence, the respondents affirm that the limitation can be described as stemming from the feeble management practice of the parties involved in the ICT unstructured projects.

Participant (1) highlighted that “interaction with third parties is the main challenge that affects the quality of work at ICT authority”

All the interviewed participants in the study suggested that the modalities of dealing with third parties limit the quality of the projects, there is an admission that the developed stakeholder management framework is limited in operationalising modalities through which these projects management teams can relate with the third parties (stakeholders). Further revelations by 9 and 18 noted that there a weak structure that has been established to help the project implementing team deal with other classes of stakeholders referred to as the “third party stakeholders). These findings point out to the greater need of constructing a stakeholder management model that has been contextualised within the Kenyan project management ecosystem.



What is evident therefore is that the biggest problem in project management is the development of a platform through which the stakeholders can be able to adequately interact within each. In terms of interaction, the respondents, 10 and 32 noted that the Kenyan ICT sector should be keen on developing project management framework where the stakeholders in the project, regardless of their roles, have a meaningful platform through which they are able to interact. Interaction offers them a chance not only to share ideas, but equally have knowledge about the progress of the project. In its entirety, this approach resonates well with the suggestions of Bourne (2016), who noted that the interaction model adopted within a project provides an important plank in the improvement of the project outcomes

Participant 16 noted that “stakeholder management practices in the projects limit the objectivity of these projects”

It is evident from all of the participants in the study that developing a conflict management and resolution theory is an important aspect of project management that seems to be missing in the Kenyan ICT project management model. As emphasised by participant 26 in the study, the development of a stakeholder management matrix in ICT infrastructure projects in Kenya. In constructing a management scheme for these stakeholders, an engagement model is key to limiting any form of conflict within these projects. But other than the issue of conflict management, another emergent theme is that in the development of a stakeholder integration strategy in managing ICT infrastructure projects, it is imperative that the concept of accountability is projected to be an important outcome desired. As earlier noted in the works, embedding accountability within the stakeholder management model is an essential aspect of stakeholder integration strategy that the Kenyan ICT sector ought to adopt. Accountability comes with communication as well. The findings of this study suggest that communication paradigms in ICT infrastructure project management is fundamental in entrenching accountability in these projects. Essentially, there is need to develop a communication model and integrate it within the project stakeholder integration template to be able to improve the quality of the project outcomes in the ICT sector.

Participant (23) suggested that “undertaking projects within a multicultural environment challenges the outcomes of these projects”

A number of the respondents in the study (12 and 22) confirmed that the outcomes of projects that are undertaken in multicultural setting vary from those projects that are not dealing with multicultural issues. In essence, culture as a variable has a way of influencing project outcomes. As further disclosed by participants 19 and 25, one gets the impression that the project management team has to fundamentally that within the projects where various cultures intersect, it is important to have a multicultural management framework to guide the project implementation. This is corroborated in the work of Mikhieieva (2017) which has implicitly discussed the modalities of addressing the complexities in infrastructural projects that are undertaken in multicultural environments yet in the ICT sector, there seems to be a lacuna in a theory of managing multicultural projects. Kenya’s operational landscape is unique in itself in that there are several cultural practices that subsist within the project ecosystem.

Notably, as projected in the responses of 6, 8 and 16, the development of a framework for managing multicultural projects is such a huge determinant in the advancement of these projects. Developing a stakeholder integration model for ICT projects, based on the works of Bourne (2016), have to resonate well with the cultural issues in these projects. When Zwikael and Smyrk (2019) talk of the concept of socio-political and cultural legitimacy as a driver in the development of stakeholder management models, the focus is on the issue of culture as a driver of stakeholder management principles in projects. Accordingly, organizations ought to seek linkages with stakeholders considering their cultural subscription to be able to provide a



platform onto which they are able to engage each other in respect to the pursuance of the objectives of the projects.

Theme 2: Stakeholder engagement

All the participants in the study aver that there is need for the policy makers in Kenya to construct a stakeholder management model to be able to guide the project executions within the ICT industry. The development of any stakeholder management and engagement principle has to be well grounded in a deeper understanding of the dynamics of stakeholder management practices in the ICT projects in Kenya. This is probably why it is suggested that the Kenyan policy makers have to have a view of the concept of stakeholder management within the Kenyan project management ecosystem as this will enhance their understanding of the unique features of the Kenyan operational space. All the participants in the study emphasised that the project stakeholder management framework to be developed in Kenya has to be tailored to address the specific needs of the country. In essence, participants 17 and 30 are keen on suggesting a tailored stakeholder engagement that is contextualised within the Kenyan project management matrix. The findings of this study propose that in developing a stakeholder integration strategy, it is imperative that a deeper understanding of the Kenyan project management ecosystem is well understood.

Participants (24 and 38) asserted that “stakeholder engagement is all about building partnerships”

Constructing models through which the relevant partnerships can be developed is an important and strategic approach applicable within the Kenyan ICT infrastructure projects. This is the salient theme in the responses of majority of the respondents in the interview. As earlier admitted, the very essence of stakeholder integration is the development of a conceptual framework through which the partners or the stakeholders for that matter, can be able to operate. The suggestions of the respondents in the study seem to propagate the notion that a platform of partnership and partnership management that is consistent with the project management principles in the ICT industry is paramount in the equation of stakeholder integration. To the entities implementing ICT infrastructure projects in Kenya, developing an integration model for the stakeholders also encompass the conceptualisation of a partnership criterion onto which these projects can be established even as they are implemented.

Participants (14) pointed out that “stakeholder management and engagement entails the management of the expectations of the stakeholders in the project”.

Stakeholder profiling is an important phase in the development of a stakeholder management matrix in projects. By developing a stakeholder expectation form, ICT infrastructure projects are capable of having profiles of these stakeholders in a comprehensive format and further establish the modalities through which these expectations can be integrated within the project outcomes. 35 respondents, out of the 40, contended that there is a sense in which stakeholder management involves having an elaborate engagement with all these stakeholders and having a consummate conversation about what they ought to expect regarding these projects and how to manage these expectations. In principle therefore, it follows that when the stakeholder integration strategies are being developed, it is prudent that one understands what these stakeholders expect within the project; this essentially enables the project to develop a format through which these expectations can be addressed. Further, the majority of the interviewees propose that stakeholder management does not only describe the stakeholder expectations, but also gives the project implementing team an opportunity to evaluating the progress of the project in terms of realizing the defined expectations of these projects by the stakeholders.



Participants (4, 7, 9 and 11) further noted that “stakeholder management includes the construction of cues regarding the progress of the project and addressing the emergent needs of the stakeholders as the project continues.”

In terms of the stakeholder management, 30 respondents opined that the development of a stakeholder integration model entails the provision of an avenue through which the stakeholders can consistently engage one another in terms of discussing the project process. The development of a well thought out stakeholder integration plan ought to offer the stakeholders a chance to “make sense” of the project progress through the formation of project cues. Formation of cues about the project, as discussed by majority of the respondents, offers them an opportunity to reflect upon the project progress and observe the required changes in the project. Within the context of the discussion by respondents 15 and 17, formation of cues is an important consideration in the debate of sustainability as a problem of ICT infrastructure projects in the country. Developing a stakeholder management formula would therefore offer these stakeholders a modality through which they are able to consistently “have a conversation” amongst each other within the framework of project progress. Indeed, all the participants in the interview sessions suggested that the changing needs of the project, together with the expectations can be effectively addressed through a well-designed stakeholder integration and management model in ICT projects. This supports the assertions of Akamanzi *et al* (2016) that project implementing teams ought to be provided with a chance for doing an “inventory” regarding the project process. According to 12 respondents, it is evident that within the Kenyan context, there is a sense in which the project implementing teams need to have a platform through which all the classes of the project stakeholders can build cues regarding the project progress and make the necessary changes regarding the project trajectory.

Stakeholder integration mapping

Stakeholder mapping is considered a modality of the project implementing team to be able to learn some of the perspectives of the stakeholders in terms of their expectations, their concerns and fears as well. This research contends that the stakeholder mapping strategies that are applied in the ICT infrastructure projects in Kenya ought to take into consideration the existing dynamics in the project management environment in the country. The suggestions of all the respondents in the study seem to suggest that proper stakeholder integration strategies have to be cognizant of these perspectives of the stakeholders in the project and this can only occur if these stakeholders are well mapped.

Participants suggested that “through mapping of stakeholders, we get to identify the key stakeholders in these projects and assess the manner in which they can be engaged in these projects”.

All the study participants affirmed that to be able to identify the key stakeholders in ICT infrastructure projects; the mapping of these stakeholders is considered imperative. Key stakeholders in these projects ought to be identified by the implementing teams as they hold the key to the sustainability of these projects. Mapping out these stakeholders is important in the development of an approach of engaging these stakeholders in these projects. Proper project planning, as described in the research, involves having a well-thought out plan of mapping the stakeholders. Even though it is not practical to involve all the stakeholders and mapping them in the project, it is prudent that the major stakeholders are profiled within the project implementation scheme.

It was further highlighted by the participants that “stakeholder mapping is essential in evaluating the relationships amongst the stakeholders in the projects”.

What is evident from the responses of 35 participants is that stakeholder engagement revolves around the need to build relationships for the advancement of the project goals. This is



the crux of project stakeholder engagement that is envisaged in the Kenyan ICT sector. Participant A particularly, suggested that stakeholder mapping, as revealed in the study, aims to evaluate the existing relationships amongst these stakeholders and equally providing a framework through which these relationships can be cemented within the overall objectives of the projects. Mapping out these stakeholders within the project would enable the project implementing teams to be able to understand the currently existing stakeholder relationship levels amongst them. A well-developed stakeholder map describes the manner of relationships that exists amongst the various key stakeholders in these projects. In essence, what this means is that stakeholder mapping enables one to map the relationships that exists between the objectives of these projects as well as the roles of these stakeholders in regard to the objectives of the project. Moreover, it aims to assess the manner in which each of the stakeholders in the project can be able to contribute to the advancement of the key objectives of the Project.

It has been further noted from the assertions of participants 27, 28 and 36 that the prioritisation of the stakeholder engagement ought to be directly informed by the analysis of the extent to which these stakeholders influence the overall project aims. Naturally, those stakeholders with a higher level of influence are treated differently as compared to those with a lower level of influence on the project. Contextualising the stakeholder engagement and integration model in the ICT infrastructure projects require that these stakeholders are mapped in terms of the priority of these stakeholders based on the levels of influence that these stakeholders have regarding these projects. In fact, all the participants proposed that all the stakeholders, notably, contribute to the implementation and advancement of the ICT projects, nonetheless, it is imperative for the project implementing teams to be able to consider the phase and the levels of influence of these stakeholders in the project

There is a general agreement amongst the responses in the interviews to the effect that stakeholder management initiatives that are undertaken in the ICT infrastructure projects are instrumental influencing the project outcomes. Integrating stakeholders in ICT infrastructure projects achieve three critical objectives for the project implementing team as deduced from the responses. The first significance can be viewed from the perspective of information. This essentially means that stakeholder engagement provides a very important platform through which stakeholders can be “informed” on the progress of the project. This informs the assertions of Sunder (2016) who noted that the provision of an environment where the stakeholders are engaged enhances the communication flow amongst these stakeholders thus improving the overall outcome of these projects. Further, from the suggestions of 6, 7 and 10 seems to be suggesting that stakeholder engagement matrix in ICT infrastructure projects provide an avenue of consultation is likely to enhance the project objectives as well. Consultations plays an important role in providing feedback within the mainstream project implementation plan.

While there is a general consensus amongst the interviewees that stakeholder integration mechanisms equally important in the establishment of an “involvement” mechanism in the project. There is a little variation as to the methodological applications of these “involvement mechanisms.” One group suggests that the mechanisms of involvement of these stakeholders ought to differ depending on the class of the stakeholders while the other group suggest that the involvement ought to be uniform across all the stakeholders. What is however notable is that through stakeholder integration, all the relevant stakeholders in the projects have a well-tailored strategy of ensuring that they are engaged in the project in all the stages. These findings have been further described by the discussions of Luyet et al., (2012) who noted that perhaps the most important significance of stakeholder integration strategies in ICT infrastructure projects in Kenya can be attributed to the fact that it provides a platform onto



which the stakeholders are involved in the running of these projects. This is an important factor used in entrenching sustainability of these projects. Moreover, the development of stakeholder integration mechanisms is meant to improve the collaborative strategies of these projects.

In totality and based on the spectrum of stakeholder engagement proposed by Miles (2017), the outcomes of the project can be considered to have been significantly improved if the stakeholders in the project have an environment through which they are able to collaborate with each other to advance the project progress. It is also important to note that stakeholder integration techniques are meant to inform the stakeholders on project variables as well as develop an opportunity through which a consultative framework is developed for these stakeholders in the project. These integration strategies, as adduced in the research are also meant to construct a mechanism through which the stakeholders can be able to get involved in the project implementation process. All these are instrumental in the improvement of the project outcomes in the ICT sector.

Conclusion

This study advances the fact that it is important to develop a stakeholder integration framework to improve the outcome of ICT infrastructure projects in Kenya. Through an intensive interview of 40 project practitioners in various projects, a number of issues arise in the study in terms of addressing the process through which stakeholder integration can be refitted within the Kenyan ICT infrastructure project management context. The outcome of the study suggests that the stakeholder integration framework for the ICT infrastructure projects in Kenya would be significant only if they consider the ICT ecosystem in the country. Most of the participants in the study suggest that there is need to develop a tailored ICT project management model for Kenya that addresses the issue of stakeholder integration. It has been shown that having a localised stakeholder management matrix in the ICT sector will aid in the improvement of the stakeholder management practices in the Kenyan ICT sector in terms of the development of a platform through which the stakeholders in these projects can be provided with sufficient information regarding the project. In this respect, what comes out clearly is that in refitting stakeholder integration strategies to improve ICT infrastructure project management, it is imperative that the Kenyan project management context is well evaluated and a framework contextualised in the Kenyan ICT environment is conceived.

At the same time, as evidenced by the suggestions of the majority of the interviewed project practitioners, the stakeholder integration models will be critical in the development of a framework for consultations in the project. ICT infrastructure projects in Kenya rely on a consultative model to be able to obtain feedback regarding these projects. This means that the development of a stakeholder integration strategy ought to consider the need to expand the consultation framework in the projects. Moreover, there is need to have a well-defined involvement and collaborative model of these stakeholder integration initiatives. In terms of involvement, the stakeholder integration principles in the Kenyan ICT sector ought to consider the need to ensure that the concerns of the stakeholders in the project are considered in the project as well as developing a partnership approach in a bid to improve the decision-making process in the project.

The stakeholder integration mechanisms in the Kenyan ICT infrastructure projects ought to constantly answer the question of project stability and sustainability. This is an emergent issue in the discussions of project stakeholder integration as earlier revealed, Kenyan ICT infrastructure projects are not well grounded on sustainability pillars; this is explained by the failures of these projects to take off after their completion. In this regard, there is a sense in which refitting the stakeholder integration strategies in the Kenyan ICT projects would require a well-grounded sustainability initiative as well. Grounding these projects in a sustainability



foundation is a key policy in the ICT sector today meaning that there is need to have a more consummate discussion regarding the manner in which the stakeholder integration issues can be used to enhance project sustainability.

In terms of practice, the inferences made herein are critical in the advancement of a stakeholder management theory for managing projects in the ICT sector. Most notably, the fact that this study evaluates a strategic model to be taken into consideration in the development of a stakeholder integration strategy in ICT projects in Kenya aids in furthering the debate regarding the salient component of stakeholder integration within the context of Kenya. While discussing the spectrum of stakeholder engagement, a theoretical subset of stakeholder integration provides a key principle that can be applied in academia to develop a meaningful stakeholder management theory that would aim to provide defined benefits for stakeholders in the project.

It is very clear from the inferences made by the participants in the interview that stakeholder integration is a basic ingredient in the formation of relevant partnerships and linkages in project management. The participants seem to emphasise the need to enhance partnerships in projects within the ICT sector but this can only be achieved through a framework for partnerships within the project. What this essentially means is that in practice, the findings of this study will be essential in the development of sustainable projects. Constructing project stakeholder integration mechanisms means that the stakeholders are keen on having these projects undergo the complete project lifecycle and continue to realise the objectives of these projects. In this regard, the findings of this project are essential in the development of a stakeholder engagement theory that is keen on improving the sustainability of these projects.

The outcome of the study also gives an insight into the issue of stakeholder mapping as a way of developing the stakeholder integration model in ICT projects. The Kenyan ICT industry seems not to have a robust framework for stakeholder management, this is emergent in this study; most notably though, as deduced in the findings of the research, is that the process of mapping out these stakeholders has not been well anchored on an effective yet practical project management theory. What is evident is that these projects fail to map out who these project stakeholders are and then fail to construct a stakeholder engagement model as well. What this therefor means is that the policy makers in the Kenyan ICT infrastructure project management ought to have a reflection moment as to the modality of developing a mapping strategy for ICT projects if they are to come up with a stakeholder integration plan.

The question of project sustainability is inescapable in the ICT project management debate in Kenya. The basis of stakeholder management is to develop a framework through which all the project management team have a locus of operations through which they are able to canvass the issues regarding the project as a way of ensuring that the project is sustainable. This is evident in this study within the context of formation of cues by the stakeholders in the project. This research not only find it a meaningful approach in improving the project outcomes, but also affirms that the formation of project cues aids in establishing the project key performance indicators on a sustainable plank. By so suggesting that the formation of cues in the project aids in the establishment of the projects on a firm pedestal of sustainability, the ICT infrastructure project management requires a very elaborate theoretical framework onto which the integration of the stakeholders can be established.



References

- Andriof, J. and Waddock, S., 2017. Unfolding stakeholder engagement. In *Unfolding stakeholder thinking*, **21**(2), pp. 19-42. Routledge.
- Akotia, J. and Opoku, A., 2018. Sustainable regeneration project delivery in UK: A qualitative analysis of practitioners' engagement. *Journal of Facilities Management*, **16**(1), pp.87-100.
- Adam, L. and Mubila, M., 2017. Africa's prospects for infrastructure development and regional integration: information and communications technology sector. *Infrastructure in Africa: Lessons for Future Development*, **10**, p.333.
- Akamanzi, C., Deutscher, P., Guerich, B., Lobelle, A. and Ooko-Ombaka, A., 2016. Silicon Savannah: the Kenya ICT services cluster. *Microeconomics of Competitiveness*.
- Ambira, C.M., Kemoni, H.N. and Ngulube, P., 2019. A framework for electronic records management in support of e-government in Kenya. *Records Management Journal*.
- Bourne, L., 2016. *Stakeholder relationship management: a maturity model for organisational implementation*. Routledge.
- Cuppen, E., Bosch-Rekveltdt, M.G., Pikaar, E. and Mehos, D.C., 2016. Stakeholder engagement in large-scale energy infrastructure projects: Revealing perspectives using Q methodology. *International Journal of Project Management*, **34**(7), pp.1347-1359.
- Chipidza, W. and Leidner, D., 2019. A review of the ICT-enabled development literature: Towards a power parity theory of ICT4D. *The Journal of Strategic Information Systems*.
- Davis, K., 2017. An empirical investigation into different stakeholder groups perception of project success. *International Journal of Project Management*, **35**(4), pp.604-617.
- Davis, J., MacDonald, A. and White, L., 2010. Problem-structuring methods and project management: an example of stakeholder involvement using Hierarchical Process Modelling methodology. *Journal of the Operational Research Society*, **61**(6), pp.893-904.
- De Gooyert, V., Rouwette, E., Van Kranenburg, H. and Freeman, E., 2017. Reviewing the role of stakeholders in operational research: a stakeholder theory perspective. *European Journal of Operational Research*, **262**(2), pp.402-410.
- Derakhshan, R., Turner, R. and Mancini, M., 2019. Project governance and stakeholders: a literature review. *International Journal of Project Management*, **37**(1), pp.98-116.
- Doloi, H., Pryke, S. and Badi, S.M., 2016. The Practice of Stakeholder Engagement in Infrastructure Projects: A comparative study of two major projects in Australia and the UK.
- El-Gohary, N.M., Osman, H. and El-Diraby, T.E., 2016. Stakeholder management for public private partnerships. *International Journal of Project Management*, **24**(7), pp.595-604.
- Elrick, J., Thies, C.F. and Lindsey, E.R., 2018. The Social Responsibility of Business Milton Friedman Reconsidered. *Journal of Markets & Morality*, **21**(2), pp.297-308.
- Erkul, M., Yitmen, I. and Çelik, T., 2016. Stakeholder engagement in mega transport infrastructure projects. *Procedia Engineering*, **161**, pp.704-710.
- Eyiah-Botwe, E., Aigbavboa, C.O. and Thwala, W.D., 2017. Critical success factors for enhanced stakeholder management in Ghana.
- Fassin, Y., De Colle, S. and Freeman, R.E., 2017. Intra-stakeholder alliances in plant-closing decisions: A stakeholder theory approach. *Business Ethics: A European Review*, **26**(2), pp.97-111.
- Gichaiya, E.W. and Njeru, D.A., 2016. Effects of monitoring and evaluation tools on implementation of wireless network projects in institutions of higher learning in Kenya: A case study of Jomo Kenyatta University of Agriculture and Technology Halls of Residence. *Strategic Journal of Business & Change Management*, **3**(4).
- Habibi, A., Sarafrazi, A. and Izadyar, S., 2014. Delphi Technique Theoretical Framework in Qualitative Research. *The International Journal of Engineering and Science*. **3**(4) 8-13
- Haxby, A. and Lekhi, R., 2017, May. Building Capacity in Kenya's ICT Market Using Cross-Border Scrum Teams. In *International Conference on Social Implications of Computers in Developing Countries*, **42** (3), pp. 359-366. Springer, Cham.
- Heravi, A., Coffey, V. and Trigunarsyah, B., 2015. Evaluating the level of stakeholder involvement during the project planning processes of building projects. *International Journal of Project Management*, **33**(5), pp.985-997.



- How, S.M., Lee, C.G. and Brown, D.M., 2019. Shareholder Theory versus Stakeholder Theory in Explaining Financial Soundness. *International Advances in Economic Research*, **25**(1), pp.133-135.
- Huggins, C. and Frosina, N., 2017. ICT-driven projects for land governance in Kenya: Disruption and e-government frameworks. *GeoJournal*, **82**(4), pp.643-663.
- Hsu, C., & Sandford, B. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment, Research and Evaluation*, **12** pp.1-8
- Jahn, J. and Brühl, R., 2018. How friedman's view on individual freedom relates to stakeholder theory and social contract theory. *Journal of Business Ethics*, **153**(1), pp.41-52.
- Jonas, J.M., Roth, A. and Möslin, K.M., 2016. Stakeholder integration for service innovation in German medium-sized enterprises. *Service Science*, **8**(3), pp.320-332.
- Karume, S. and Shisoka, D.A., 2017. Factors Inhibiting the Implementation of Digital Villages in Kenya. Kezar, A. and Maxey, D., 2016. The Delphi technique: An untapped approach of participatory research. *International journal of social research methodology*, **19**(2), pp.143-160.
- Kimani, J.G., 2017. Challenges Facing Integration and Use of ICT in the Management of County Governments in Kenya. *Journal of Information and Technology*, **1**(1), pp.1-11.
- Lemlem, N. and Moronge, D.M., 2017. Determinants of Optimal Implementation of Fibre Optic Projects in Kenya: A Case of Liquid Telecom Kenya. *Strategic Journal of Business & Change Management*, **4**(4), pp231-242.
- Luyet, V., Schlaepfer, R., Parlange, M.B. and Buttler, A., 2012. A framework to implement stakeholder participation in environmental projects. *Journal of environmental management*, **111**, pp.213-219.
- Macharia, J.W., 2016. Role of ICT in Socio-Economic Development in Kenya: Demystifying Gender Empowerment. *Impacts of the Media on African Socio-Economic Development*, p.1.
- Maina, M.T.M., 2018. An Audit of ICT Funding Towards Effective Integration of ICT in Selected TVET Institutions in Kenya. *Commission for University Education*, p.220.
- McMillan, S.S., King, M. and Tully, M.P., 2016. How to use the nominal group and Delphi techniques. *International journal of clinical pharmacy*, **38**(3), pp.655-662.
- Mikhieieva, O., 2017, September. Competency-based approach for managing international project teams. In *2017 12th International Scientific and Technical Conference on Computer Sciences and Information Technologies (CSIT) (. 2)*, pp. 145-149. IEEE.
- Miles, S., 2017. Stakeholder Theory Classification, Definitions and Essential Contestability. In *Stakeholder Management*, pp. 21-47. Emerald Publishing Limited.
- Mongare, C.F. and James, R., 2017. Project management practices and implementation of information technology projects among selected commercial banks in Kenya. *Journal of Information and Technology*, **6**(11), pp.21-31.
- Mukherjee, A.S., 2017. Empowerment: The invisible element in ICT4D projects? The case of public health information systems in India and Kenya. *International Journal of Innovative Research in Science, Engineering and Technology*, **8**(3).
- Mukherjee, S., 2019. How Stakeholder Engagement Affects IT Projects. *International Journal of Innovative Research in Science, Engineering and Technology*, **8**(3).
- Mysore, K., Elmualim, A. and Kirytopoulos, K., 2016, December. Multistakeholder engagement in the face of stakeholder adversities among globally distributed ICT Projects-A conceptual model and a research agenda. In *2016 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)* pp. 1190-1194. IEEE.
- Omariba, A., Ayot, H.O. and Ondigi, S.R., 2016. Teachers' Preparedness in integrating Information Communication Technologies in Public Primary Teacher Training Colleges in Kenya.
- Oppong, G.D., Chan, A.P. and Dansoh, A., 2017. A review of stakeholder management performance attributes in construction projects. *International journal of project management*, **35**(6), pp.1037-1051.
- Ndegwa, A.K.O., Kiriri, P. and Achoki, G., 2017. Factors affecting adoption of donor funded ICT projects in the public sector in Kenya. *Journal of Entrepreneurship and Project Management*, **2**(1), pp.1-19.



- Njoroge, M., Zurovac, D., Ogara, E.A., Chuma, J. and Kirigia, D., 2017. Assessing the feasibility of eHealth and mHealth: a systematic review and analysis of initiatives implemented in Kenya. *BMC research notes*, **10**(1), p.90.
- Njuangang, S., Liyanage, C. and Akintoye, A., 2017. Application of the Delphi technique in healthcare maintenance. *International journal of health care quality assurance*, **30**(8), pp.737-754.
- Ochilo, W.N., Ruffhead, H., Rumsey, A., Chege, F., Lusweti, C., Oronje, M. and Otieno, W., 2019. Can You Ensure that ICT for Development Apps Are Downloaded and Used? A Case Study of the Plantwise Data Collection App for Plant Health in Kenya. *Journal of Agricultural & Food Information*, pp.1-17.
- Ondegö, B. and Moturi, C., 2016. Evaluation of the Implementation of the e-Citizen in Kenya. *Evaluation*, **10**(4).
- Ramadhan, A.H. and Robert, G.A., 2016. Factors Influencing Implementation Of Ict Projects In Kenya Airports Authority. *International Journal of Innovative Research and Advanced Studies*, **3**(10).
- Ronoh, P.K. and Mwangi, K., 2017. Factors Hindering Successful Implementation of Government ict Projects: the Case of Pasha ict Projects of Kenya. *GSJ*, **5**(10), p.30.
- Sunder M, V., 2016. Lean Six Sigma project management—a stakeholder management perspective. *The TQM Journal*, **28**(1), pp.132-150.
- Welford, J., Scotter, J. and Dryden, M., 2018. 'Picture this!' provoking stakeholder engagement through diagrammatic iteration. In *Systems Evaluation Test and Evaluation Conference 2018: Unlocking the Future through Systems Engineering: SETE 2018* p. 486. Engineers Australia.
- Tengan, C. and Aigbavboa, C., 2017. Level of stakeholder engagement and participation in monitoring and evaluation of construction projects in Ghana. *Procedia engineering*, **196**, pp.630-637.
- Vink, P., Imada, A.S. and Zink, K.J., 2008. Defining stakeholder involvement in participatory design processes. *Applied Ergonomics*, **39**(4), pp.519-526.
- Zakhem, A. and Palmer, D.E., 2017. Normative Stakeholder Theory. In *Stakeholder Management* pp. 49-73. Emerald Publishing Limited.
- Zuofa, T. and Ochieng, E., 2016. Sustainability in construction project delivery: A study of experienced project managers in nigeria. *Project Management Journal*, **47**(6), pp.44-55.
- Zwikael, O. and Smyrk, J.R., 2019. Stakeholder Management. In *Project Management* pp. 85-102. Springer, Cham.