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**ENABLING GOVERNMENT – PUBLIC
COLLABORATION IN PUBLIC PROJECT
PROCESSES IN DEVELOPING ECONOMIES
– A CASE STUDY OF NIGERIA**

Master's Thesis

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**ARENGUMAADE VALITUSTE
VÕIMALDAMINE KOOSTÖÖKS
ÜLDSUSEGA AVALIKE PROJEKTIDE
PROTSESSIS – JUHTUMIPÕHINE
VÄITEKIRI NIGEERIAST**

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Tallinn 2018

Author's declaration of originality

I hereby certify that I am the sole author of this thesis. All the used materials, references to the literature and the work of others have been referred to. This thesis has not been presented for examination anywhere else.

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Abstract

Infrastructural development which is a significant determinant of economic growth remains an elusive pursuit for many developing and under-developed economies suffering frequent public infrastructural project failures. Although the causes of failures are identifiable, it is shocking to note that the failures in public infrastructural project are still persistent to date. While government corruption is identified as the chief cause amidst a host of other causal factors, the call for transparent systems in public infrastructural projects planning and delivery cannot be over-emphasized. This research uses a case study methodology to examine the importance, appropriateness, and effectiveness of public involvement in public infrastructural project planning and delivery in addressing the causes of failures and in the long run; promoting the economic growth of developing economies. Collaborative public governance as the suggested approach provides the potential for a government and its citizens with novel ways for enhancing the provision of public goods. This potential is framed by governments' willingness, ability to participate in such arrangements and provide sufficient, genuine information to its populace. Nigeria being the selected case, qualitative data was collected from expert interviews and analyzed using an open-source data analysis tool (RQDA). The findings support the proposition of a collaborative approach in addressing the causes of public infrastructural project failures through the institutionalizations of transparent systems in government and public involvement in the processes of public infrastructural project planning, decision making, and delivery.

This thesis is written in English and is fifty-eight (58) pages long, including five (5) chapters, two (2) figures and one (1) table.

Annotatsioon

Arengumaade Valituste Võimaldamine Koostööks Üldsusega Avalike Projektide Protsessis – Juhtumipõhine Väitekiri Nigeeriast

Infrastruktuuri areng, mis on majanduskasvu oluline tegur jääb saavutamatuks paljudes arenevate ja vähearenenud majandustega riikides, kus sagedasti kannatatakse avaliku infrastruktuuri projektide läbikukkumiste all. Vaatamata sellele, et nurjumiste põhjused on teada, on hämmastav, et ebaõnnestumised infrastruktuuri projektides jätkuvad pidevalt. Valitsussektori korrupsioon on nende läbikukkumiste teadaolevalt peamine põhjus. Seetõttu ongi raske üle hinnata läbipaistust avalike projektide planeerimisel ja läbiviimisel. Käesolevas väitekirjas kasutatakse juhtumipõhist meetodikat, et uurida avalikkuse kaasatust ühiskondlike infrastruktuuri projektide plaaneerimisse ja teostusse. Töös püütakse leida ebaõnnestumiste põhjuseid ja pikemas perspektiivis mõju arenguriikide majanduskasvule. Soovitav lähenemine on koostööl põhinev ühiskondlik järelevalve, mis pakub valitsusele ja selle kodanikele uusi tõhusamaid avalike hüvede võimalusi. Sellele potentsiaalile seab piirid valitsuse huvi ja võime antud ettevõtmistes osaleda ning pakkuda küllaldast, algupärast informatsiooni tema elanikkonnale. Antud töös toetatakse Nigeeria näitele. Kvalitatiivne informatsioon on kogutud ekspertintervjuudest, mida analüüsiti, kasutades vaba andmeanalüüsi programmi RQDA. Uuritu järeldused toetavad väidet, et avaliku infrastruktuuri projekti ebaõnnestumiseid saab ennetada realiseerides koostöölist lähenemist. Seda on võimalik saavutada läbi avatud süsteemi ning üldsuse kaasamisega avaliku infrastruktuuri projekti plaanimise, otsuste tegemise ja teostamise protsessi.

See väitekiri on inglisekeelne jakoosneb viiekümne kaheksa (58) leheküljest, sealhulgas viiest (5) peatükist, kahest (2) joonisest ja ühest (1) tabelist.

List of abbreviations and terms

PPP	Public Private Partnership
GDP	Gross Domestic Product
GaaP	Government as a Platform
IAP2	International Association for Public Participation
ICT	Information and Communications Technology
RQ	Research Question
SRQ	Sub Research Question

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1 Introduction

There are overwhelming evidences that a lot of public infrastructure projects in many developing economies have suffered a lot of failures which has resulted into declining economic growth and societal development. These government infrastructure projects represent part of the criteria or factors for measuring and assessing a country's growth, economic standard and are identified as the "building blocks of development without which developing economies would remain stagnant or in regress" [1]. A key indicator of economic growth and good standard of living is the Gross Domestic Product(GDP) of any country; infrastructural development is a crucial underlying contributor to the GDP.

Over the last decade, Nigeria has budgeted an average of 28 percent of its annual budget on infrastructure development [2]. This is an initiative of the government to improve public infrastructure development for better living conditions for its people. This will-power has not yielded the expected outcome, in addition, this problem has not only been existent since the inception of independence but is still persistent till present day. Even after over 40 years of independence, Nigeria only has 15 percent of paved road [3].

From previous research, some of the factors impeding public infrastructural project success are quite common with different developing countries. Identified as recurring factors are: corruption (including non-transparency, unaccountability, and budget overruns), inadequate monitoring, change in government and political interferences and poor communication between different stakeholders [4]–[6]. Although these conventional causal factors are identifiable, very little or nothing has been done to address them. While some researchers have emphasized as an antiseptic solution, the importance of transparency and accountability in infrastructural project delivery [7] by the government, others have pointed to public participation in the delivery of public service as a more efficient approach to governance [8], [9]. Similarly, scholars have argued, "participatory development, as a mechanism for bypassing market and government failures by "harnessing" civic capacity, ought to be seen instead as a mechanism that, if done right, could help to repair important civil society failures" [9],

[10]. Notwithstanding, governments have limitedly employ approaches towards establishing transparency, accountability and public involvement in public project processes.

Perhaps if governments aim to turn the tides from underdeveloped or developing to a developed economy, then, better, more accountable and transparent ways of project management systems and public participation must be implemented. As a potential solution to consider, establishing public involvement in governance depicts an open, accountable system, "aiding improved quality of decisions, minimizing cost and delays, anticipating public concerns and attitudes, increases ease of implements, consensus building" [20]. This style of governance translates good governance, increases public trust in the government and most importantly economic growth. With this as a background, the institutionalization of public participation through collaborative governance will positively impact the delivery of public infrastructural project in developing economies – the hypothesis of this research.

This thesis identifies and validates the common causes of public project (physical infrastructural development projects) failures in developing countries, using a single case and suggests public participation through collaborative public governance as a panacea. It also tries to give value to this interaction between government and citizens with the focus to increase government's transparency, accountability and on the long run its effect on improving the success rate of public projects. It acknowledges collaboration as a model for establishing checks and balances in the project life cycle, leading to dispersed knowledge sharing and collective expertise in public project delivery. Consequently, the general aim of this thesis is to explore, measure the impact and justify the institutionalization of collaboration between government and public in public project process in developing economies through the collection of qualitative data using survey interviews and performing a thematic analysis with an open source qualitative research software (RQDA). It initiates this process by exploring the theoretical framework in Chapter 2. This chapter begins with a review of differently related works of literature giving profound insights, thoughts, and background about related research papers; it reviews different theories and practices and practical examples of collaboration. The Chapter 3 of this thesis reveals the research methodology selected; outlines the research questions, data collections techniques, analysis and validity procedures. Chapter 4 provide the background of the case, subject descriptions, and result discussions. Chapter

5 presents the conclusion and summary of findings, impact and implications of the research, limitations of the research, recommendations and suggestions for future research.

1.1 Problem Statement

Infrastructure developmental projects suffer failures in developing countries caused by a wide range of identifiable factors which are still persistent and unaddressed – leaving most developing economies either in a perpetual state of economic regress or stagnation. With these factors to failures in place, developing countries might never turn their tides towards becoming an improved economy. Also, these infrastructural development projects with very high costs are considered a loss not only to developing countries and international bodies but also to citizens with high expectations on delivery. The backlash of these project failures has reduced public trust on government, discouraged many stakeholders and has left a negative mark on governance.

Developing countries struggle to improve their standards of living; increase infrastructural development and indices of total economic well-being. However, these dreams remain elusive as infrastructural development projects suffer frequent failures, inhibiting them from achieving these goals. The question thus remains, how can developing nations overcome these challenges?

This paper hopes to explore some issues that have bedeviled developing nations in the effort to transform their economic situation through infrastructural development, and as well, proffer a possible solution to tackle these problems.

1.2 Research Objectives

This research seeks to contribute to the existing literature on collaborative public governance and public participation in developing economies. More increasingly, the need to incorporate public ideas, values, and concerns in public sector decision making has become imperative and valuable. Pursuing a steady uprising pace of infrastructural development, economic growth in developing economies demands to establish stronger networks of interaction and public engagement. From the statement of the problem, the research objectives are drafted with the aim to understand the overall impact of a

proposed collaborative system between government and citizens in public project processes. In a nutshell, this research aims to select an implementable and suitable collaborative method/approach for developing economies, determine the impact of public-government interactions and give credit to government-public collaboration as a potential solution to address the failures in public infrastructural project delivery. To this end and to adequately guide this research, the following objectives were developed:

- To identify the success rate of public infrastructural projects and factors inhibiting their successful delivery.
- To identify a model for collaboration between government and the public for public project planning in developing economies.
- To examine the impact of public inclusion/participation in public project planning and delivery.
- To determine the impact of government-public collaboration in addressing the factors inhibiting successful public project delivery.

1.3 Context

The numerous challenges of contemporary governance have necessitated the implementation of ways to include those who are subjects to laws and policies to participate in making them. Public participation has received a lot of emphasis by researchers as the new paradigm in governance [12], implementing the incorporation of public values, needs, and concerns into governmental and corporate decisions making. This process demands to establish two-way communication and interaction between both parties(public and government), with the ultimate goal of making better decisions that are supported by the public [11]. In democratic systems of government, citizens have the right to participate in the decision which affects them, most especially when the government seems to be part of the problem impeding socio-economic growth. Seeking deliberative, more direct models of public participation and analyzing the different approaches towards implementing such programs has introduced a new phenomenon “collaborative public management.”[13]

The term collaboration is multi-disciplinary, cutting across different facets of disciplines pursuing the interaction between two or more actors/group(s) towards a productive end. Although the subject of collaborative governance or collaborative public management is relatively recent phenomena, over the past two decades, research in both fields has been predominantly flourishing due to the formalization of consensus-oriented decision-making systems between different groups and the increasing importance of public engagement in governance. Since research in both fields has focused more on single case studies, establishing sector-specific collaborative management, the definition of the subject has remained very wide and amorphous. However, most definitions have emphasized some essentially common criteria without which collaborative governance or collaborative public management isn't existent – the ability of the public to contribute to the decision making process [13]–[16].

Collaborative governance does not directly reference Public Private Partnerships(PPP) or interactions but more holistically interactive management which "incorporates public values and knowledge into decision-making processes, builds trust, reduces conflicts, and assures cost-effective decision-making" [16]. Interchangeably termed “deliberative governance” [12], [17], by many researchers, with the aim to give voice to the public, and allowing public responsiveness, accountability, and transparency. Collaborative or deliberative governance serves as a remedy to the declining public trust on democratic governance, practiced in most developing economies and declared as the new paradigm for democratic systems of governance. Many conceptual frameworks of collaborative management have also been established [15], providing a vivid explanation of the subject, and researchers in the field have also understudied fair practices of collaborative public governance overtime [18]. Studying the existing literature in this field also revealed that a lot of collaborative networks had been researched upon [20] and quite a few created or even tested in different countries [19]. A few of collaborative studies and applications in various public domains include the collaborative network for Department of Homeland Security [20], government contracting network [21], human service delivery and organizations [22], and more relatedly collaboration planning public projects [23]. However, none has directly tested implementation on whole public project processes – this research aims to fill this gap by suggesting collaboration between government and public in public projects (Infrastructural development projects) delivery.

2 Related Work

Before starting a research work, it is vital to understand, understudy the existing body of knowledge leading the gap currently research. This chapter presents an understudy and review of relevant literature and theories related to collaborative governance. It also tries to discuss the factors to consider before implementing a collaborative network. The chapter starts by firstly reviewing several related literatures and theories in the field of collaborative governance and public participation. It continues by identifying and examining some factors to consider before implementing a collaborative system categorized into three focus areas. Finally, the chapter provides a brief review of some forms of public collaborative networks and identifies their flaws which serves as a guideline in selecting an appropriate and sustainable network for collaboration between government and public.

2.1 Literature Review

The term "collaboration" has considerably received a lot of attention for decades now, not particularly in public governance, but also in diverse fields including environmental management, conflict resolution, private sector or business collaboration, education, and research. The wide application of this term has ensued several definitions based on the purpose served or goals to which it was applied. Collaboration in public governance has also become prominent, and volumes have been written about its importance and essence of public participation in public programs [15], [24]–[26] founded on the theories of "collaborative advantage" and "non-expert knowledge" [23].

Collaboration in public governance stems from the phrase "Public Participation" with predominance right from the early 40's [27]. Proposed by scholars in the field of public administration as the new paradigm of democratic governance [28] in reaction to previous government failures [15], and as a model for problem-solving in this digital and post-industrial age [29]. Proposed at that time when the society became more aware that "their interests were not being addressed adequately by professional experts or

elected officials" [30], and the bureaucracy, complexities and multifaceted challenges of contemporary governance had also become more visible [31]. Though the earliest forms of public participation were characterized by the representation of political party members [27], this system has been innovatively reformed over the years, seeking more active and deliberative ways of public engagement in diverse spheres.

The terminology depicts varied meanings; [15] defines collaborative public governance as "A governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets." Quite similarly, the constructive engagement of people in public policy decision making to accomplish purposes that could not be otherwise accomplished are the opinions of [13]. [14] [32] and [33] posits collaborative public governance as networks that cut across the public, private and voluntary sectors, and operate across different levels of decision making towards increasing public value. [15] is of the opinion that collaborative public governance is never merely consultative, collaboration implies two-way communication and influence between agencies and stakeholders and also opportunities for stakeholders to talk to each other.

Although the definitions are somewhat varied, they all establish some commonalities, in simpler terms, "the institutionalization of deliberative decision-making by different actors within the collaboration network – central to all definitions." The strengths of collaborative public governance networks as suggested by [23] are established on the theories of "Collective Intelligence – a group based intelligence derived from collaborative processes which emerge in consensus decision making." Also on the theory of "Crowd Wisdom – an idea that when talents are gathered efficiently, people become collectively smarter" [34]

Regularly, Collaborative public governance is interchangeably referred to as Public Participation and vice versa. Whereas public participation is dynamic, having different forms and levels depending on the purpose for which it is created to serve. In unambiguous and specific terms, the only criteria that can validate public participation as a collaborative form of governance are the consideration of public input in the decision-making process and level of deliberativeness between actors. Civic

engagement does not just mean polling the public view on a particular project but the continuous and conscious effort to carry the public along every step of the project.

Quite repeatedly, public participation in governance is assumed as just informing the public. To clarify this notion and provide a clear thought of what collaboration truly mean, the International Association for Public Participation (IAP2) provides a spectrum to help groups better define public's role in the public participation process. The figure below shows the different levels and functions of participants in the participatory process.

		INCREASING IMPACT ON THE DECISION				
		INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL		To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
	PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Figure 1: International Association for Public Participation (IAP2) Public Participation spectrum. [35]

IAP2 relayed public participatory process as a program which may include several levels public participation and different stakeholders may choose to participate at different levels. This spectrum provides an understanding of shared responsibilities and authorities between government and citizens. These levels of participation, selected by public planners depends on the context and aim for civic engagement. [36] notes that project planners may often ignore the need for widespread participation or barely comply with the state and federal participation requirements. [37] also emboldens this point when he notes that for most planners, public involvement in governance is merely iterating through the motions and [38] implied that most public participation processes such as general conferences and polling are both wasteful and worthless.

Though most studies have tended to view collaborative public governance through positive lenses, a very few arguments emphasize the difficulties in managing the complexities of the process [36], [39]–[43]. Extensively, some researchers have identified specific problems it creates. For example, there is the problem of ethnic rivalry as [44] argues that the manner in which a particular group's ideas are presented can bring a divide between the minorities and the mainstream. [43] warns that there is a lack of empirical evidence that reveals the successes of public participation and points to the fact that negotiating which can culminate into high levels of argument, slows down the project and frustrate project managers. [45] reveal that public participation can be blissful or hindered, based on culture. As an extension, [46] sees collaborative public governance as consensus-seeking, where a consensus is usually not reached, and the government still reserves the authority to make the final decision. He further counteracts his point, positing collaborative approaches as a way of increasing the level of acceptance in public decision making. He continued that, public opinions are usually considered during the decision-making process and influences decisions taken. It is also significant to note that most times, the public's indifference can also hinder public participation and many other reasons can be attributed to this.

[47] indicates that different countries have varying levels of transparency and obstacles to the public involvement. In developing countries like Nigeria, public participation is believed to be highly hindered by lack of transparency in government processes. According to research done by [48], corruption is rooted deeply in the Nigerian polity and is a significant obstacle in the country's economic and political space, and this has been for a long time. [49] argue that all shades of corruption and unethical practices are embedded in every sphere of the Nigerian workforce and why the Nigerian state has failed to meet its economic potentials, limited infrastructure and project failure is due to the high level of corruption. It is then safe to say that corruption has blunted the interest of Nigerians to participate in public projects as they no longer have confidence in the corrupt system. The reason being that “effective governance can be seen as another remedy for corruption reduction as it supports sustainability and predictability of the nation's developmental efforts as well as transparency” [5].

Much of the scientific literature in collaborative public governance focus on the species rather than the genus. The substance of research within this subject relates to single-case studies concentrating on sector-specific collaborative management, more so, solving

individual problems within the public sector and governance. These trends, however, are justifiable as the first public collaborative networks are centered on delivering public inclusion in public agencies' decision-making processes, elicited by the increasing public frustration on futile efforts in maintaining government status quo, increased size and bureaucracy of government [27]. Not too long after, the growing importance of public participation and idea became a jewel, attracting new case study research in public administration with several pieces of evidence supporting the involvement of citizens in planning and decision-making processes, relaying the assurance of a more widely accepted programs, policies or projects [19], [50].

While wide implementation of collaborative public governance over the years, appears to be significantly low, conversely, collaborative networks directed towards solving specific persistent problems in public governance took an upward turn. [51] try to bridge the knowledge gap by exploring the multifaceted nature of collaboration across governments and the inter-governmental networking component of economic development, mainly focusing policymaking in 237 cities located in Illinois, Indiana, Michigan, Ohio, and Wisconsin. They exemplify how governments resolve complex societal and economic problems including policy making, infrastructural planning, capacity building and service delivery through contractual relationships, strategic partnerships, and other forms of networks. What was perceived to be more central to the researcher seemed not to be the importance or essence of the systems and different ways of inter-organizational activity as essential elements of governance but the effectiveness of these collaborations in local government policymaking, defined by number and type of networks that exist within the policymaking realm. Similarly, collaborative systems are suggested in the public health sector and social services service delivery. Likewise, [52] supports public consultation and participation in Kenya's health care service delivery, using a case study based methodology to explore the level of collaboration, structures, and interests on public involvement in the provision of primary health care delivery. The findings revealed the existence of participation through committees profoundly influenced by former political leaders or retired government officials; nonetheless, the call for strengthening public involvement is still profound towards improving healthcare delivery. In social service delivery, [22], [53], [54] also provides credence to interagency public collaboration, developing frameworks and theories for effective management of networks. [20] notes the challenges of The Department of

Homeland Security(DHS) soliciting support from other federal agencies with dissimilar, clearly defined goals and missions when there is a need for an adaptive approach when solving problems in an environment marked with uncertainties. Recognizing the differences in regulations and authority, he suggests collaboration over adaptability by developing structures and process that provides incentives and rewards for consultation and cooperation among agencies. In his exact words, “collaboration and consultation are most likely when the participants perceive that the potential gains are at least as valuable as the potential costs.” Equally, [55] provides knowledge backing collaboration in crisis and emergency management as a recommendation after analyzing the government failures in addressing the Hurricane Katrina incident. From the empirical data derived from conducted interviews, recommendations supported an adaptive, collaborative and citizen engaging approach toward managing hyper-uncertainties and unknowns. In government contracting, [21] identifies three factors (public values and interest, strong and effective markets and defining strong institutions) that accounts for effective collaboration in government contracting. The base of argument is that all factors are not isolated in practice but interrelated in producing contracting outcomes. [56] provides to the body of knowledge, preconditions that structures collaboration in natural resource management in India. Findings reveal a significant level of collaboration between lead governmental agencies and citizens. Similarly, [57] sought answers to the question "To what extent does collaboration lead to improved environmental outcomes." Their conclusion, though not decisive is that the success or failure of collaborative environmental management must establish solid pieces of evidence of claims compared with other management approaches. Studying public agency resistance to public collaboration, [57] analyzed participatory approaches using a case study methodology and questionnaire survey to examine behaviors of resistance among administrative professionals. Findings indeed support opposition by professionals with four factors identified as personality traits, socialization factors, organizational factors and external environmental factors.

Quite evidently, the existing body of knowledge on collaborative public governance has focused primarily on inter-agency or inter-organization collaboration towards resolving specific public problems, and a considerable gap remains in engaging the public more directly to address issues that directly concern them.

2.2 Theoretical Overview

Collaborative governance roots from management practices, identified from management theories such as group theory, the logic of collective action, and game theory which postulates human conflict resolution, cooperation and interaction, independent and competing actors in interest-based negotiations and bargaining of mutual benefits [58], [59]. Also, collaborative governance roots from the management theory which idolizes the significances of intergovernmental relations and networks in policy implementation – Collaborative Imperative [18]. These ideas have shaped the meaning and purposes of collaborative governance significantly, propagating studies in horizontal network and collaborative public management.

Following several pieces of research in the field of public governance, collaborative governance became a much broader concept, upheld as the new paradigm for public management [28], and a potential solution to solving complex government problems and an alternative to the failing traditional democratic governance structures [30], [31]. These ideas stimulated different forms of public engagement and involvement in deliberative democratic structures [12] with promises of a more accountable, and transparent public governance, offering an opportunity to citizens to exercise. Contemporarily, scholars have argued that collaborative management is a healthy response to public policy gridlock and complexities of public governance. Grounded on the pluralism of network participants, collaborative advantage, collective intelligence, crowd wisdom and the inclusion of non-expert knowledge [23], [29], [34], [60]. Contrarily, several other scholars have identified the complexities of collaboration in public governance, [43] advised that deliberation in collaborative networks culminate into high levels of argument and usually consensus is reached. In similar thoughts, [46] believes government still reserves the right to make the final decision and other scholars identified the difficulties in managing the complexities of the network [36], [40]–[42]. Although these thoughts require due consideration and can be valid, [57] suggests that solid evidence of claims compared with other management approaches needs to be presented and researched on.

Indisputably, the theoretical background of collaborative governance presents several valuable theories supporting its implementation and providing reasons why it is more productive compared to traditional forms of governance. Perhaps these theories can be

factual or not; it cannot be justified theoretically but only after implementation of a collaborative network. One of such arguments is "collaborative advantage" argued by scholars as a decisive factor towards making a widely accepted public policy, and better decisions, [41], [60]–[62] were of the opinion that, public governance and problems are quite complex to resolve singularly by public officials. However, these problems are solvable by gaining collaborative advantage through the collaboration with the public. Equally, [23], [34], [63] introduced the theory of "collective intelligence" and "crowd wisdom" with the idea that collaborative public governance networks helps to harness the collective intellect embedded in the public circle and that people become collectively smarter. [34] notes that individuals are imperfect and often let emotions cloud their judgments. However, despite these limitations, when all imperfect judgments are accumulated and aggregated rightly, collective intelligence is often excellent. Extending these notions further, [23] also introduced the concept of "Non-expert knowledge" as a benefit to public participatory networks. He justified his opinion by explaining that the inclusion of citizens accompanies non-expert or non-mainstream knowledge in the creative problem-solving process is valuable as it delivers insights about the environment, non-expert knowledge about planning disciplines and perspectives of future users that might not have been considered by professional planners.

From a general perspective, theories in collaborative public governance are also related and backed by public participation theories, relaying the values and benefits of engaging and involving citizens in the public decision-making process [64], [65]. While many scholars have theorized the idea that public participation delivers public trust on government, facilitates government transparency and accountability, among other benefits, [11] noted that public participation improves public policy decision quality, minimizes cost and delays. He illustrates this by comparing unilateral decisions and decisions with public involvement. His views are depicted in the figure below.

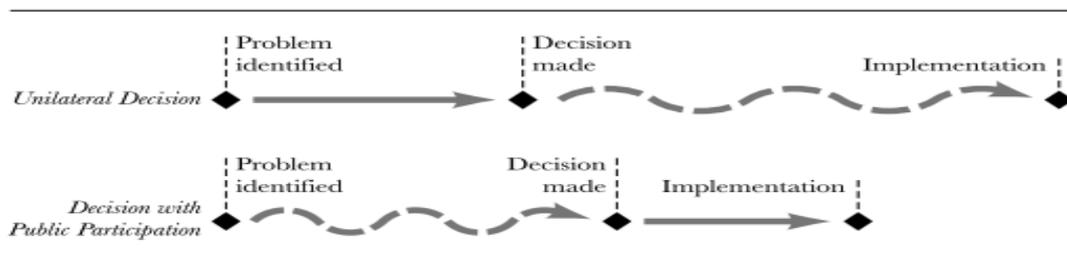


Figure 2: Comparison of Length of Time: Unilateral Decision Versus Public Participation. [11]

He advances that decisions made unilaterally by public officials suffer delays in implementation due to resistance, controversy, and litigation and in some cases, these decisions never get implemented. Though, resolutions with public participation sustain certain level of delay in reaching a consensus; conversely, implementation runs smoothly and quickly. What seems to be more significant is the fact that unilateral decisions are highly consequential in the long run, as following policies or projects will start out with ill will and hostility, exhibited by citizens. Although time and cost do not only measure efficiency, it is important to note that decisions with public participation backed by the public and projects remain sustained by future users with expressions of trust on government.

As already mentioned, the importance of a successful public project increases public trust and more importantly the GDP of the economy. [27] reveals that: "In general, citizen participation in local government has decreased over time" and according to [66], this mirrors the feeling of apathy and alienation from government. However, the government is saddled with delivering certain democratic principles which [36] spells out as "basic concepts of fairness; the rights of individuals to be informed and consulted and to express their views on governmental decisions. Also, the need to better represent the interests of disadvantaged and powerless groups in governmental decision making; and the contributions of participation to citizenship."

Although some project executors may argue that public consultation in project execution is professionally hazardous, the importance of civic engagement is very vital. For one, there is the case of stronger plans and increased chances of proper implementation when there is public inclusion. [67] believes that public participation would ensure that local knowledge is embedded in project plans and culminating in better ideas as there is learning due to the continuous exchange of information between the public and project executors. It is worthy to remember –

“as a baseline definition, it can be taken that governance refers to the rules and forms that guide collective decision-making. That the focus is on decision-making implies that governance is not about one individual making decisions but rather about groups of individuals or organizations or systems of the organization making decisions.” [68]

2.3 Collaborative Network Between Government and Public: Factors to Consider Before Implementation

Every idea comes with certain preconditions or factors that must be adequately covered to accomplish the aims and objectives for which the plan would be developed. Collaborative public governance is not excluded from this notion, and in that sense accompanies several factors which have to be well-thought-out before implementation. These factors considered with the understanding that economic, political and social standards are different with different countries; thus, the application of public programs or policies might also produce different outcomes and impact depending on the existing political, social, and economic standards [33].

The significant factors towards implementing collaborative public governance are multi-varied with different emphasis on the purpose of the collaborative network. Conversely, most of these factors are encapsulated and derived from the three (3) phases or critical areas of focus established by [69] “Design Guidelines for public participation.” These focus areas will be adequately discussed, covering various factors that must be studied before implementing a collaborative public network or public participation network.

2.3.1 Defining the Context and Purpose of Collaboration

Primarily, all collaborative or public participatory network are context based and not generic, limited or focusing on a species rather than the genus. This antecedence suggests that the network should be based on a solid understanding of a challenge or problem related to a specific context which then forms the basis for aims and objectives for which the network is developed. In a nutshell, the first step towards planning a collaborative network is defining the context or field for collaboration and enlisting the challenges or problems associated with the context. To adequately and efficiently deliver a solution through the collaborative network, then, it is imperative to sufficiently

understand the issue or challenges to be addressed and staying alert to the changes in them – as unique problems call for different solution responses [70].

The context as emphasized by [69] must match the needs of participation process, and it is also essential to justify whether participation is needed or even possible at all. Following an affirmative response to the latter, the purpose of civic involvement should be considered and defined as a response to the challenges and problems formerly outlined. These processes help to avoid discussing the delivery or implementation of an inappropriate solution, wastage of effort and resources and establishing conflicting ideas as a result of a vaguely defined purpose. More specifically, the factors that can be drawn out from this focus area include: firstly, the consideration of context for collaboration which helps to study the challenges more critically and justify if public participation is needed or will even be possible in the first place. Secondly, outlining the challenges and problems associated with the context to implement a practical solution and finally the precise definition of purpose to avoid wrong outcomes or impact. These factors set the foundation for the collaborative network.

2.3.2 Resource Allocation and Managing the Process of Participation

This focus area postulates setting the right framework for collaboration by developing rules of engagement and how citizens will be engaged, and network managed, defining the different stakeholders, and interests, leading available resources, establishing legal procedures and rules for engagement, defining leadership and more importantly, how decision making will take place.

Firstly, the Identification and involvement of appropriate stakeholders not only during collaboration but also during the formative process in public collaboration is crucial – more so, providing an answer to the question surveyed by [71] – “who participates?” is critical towards the implementation of any collaborative network. This question references the individuals or groups eligibility, common characteristics, skills, competence, discursive practices and practices of participation that defines who should participate. Though stakeholders can be involved in different ways and stages of the process, [72] suggests it is central to engage the totality of stakeholders most especially when consensus is the prime method of decision-making. [31] In his paper, describing who can participate, presented five methods collectively conceived as “mini-public,” representatives of related interests and public officials described. He describes them

thus: professional stakeholders - citizens with deep interests and concerns in public affairs representing the majority of those with similar interests but that are unwilling to participate. Lay stakeholders - subgroups with less likelihood of participation - selective recruit, randomly-selecting participants from the population for graphic representation and leaving the floor open to all and sundry who wishes to participate - self-selected. In the same vein, stakeholders from the side of the government were categorized and selected in two ways through competitive elections, selecting technical staff from public bureaucracies or civil service – expert administrators and those who hypothetically represent the interests of the public – professional politicians. Whichever the approach used towards selection, it should be discussed, agreed upon by all stakeholders. Extending from the question about “who participates,” likewise the size of participants has to be defined and agreed by stakeholders before implementation. Since collaborative networks are diverse and contingent to the proportion of participants, the selection of a system for participation should include the consideration of participants' size as some networks are limited to involving a higher number of participants in the process.

Secondly, establishing the legitimacy of the process and leadership of the networks is also a vital factor to consider. To a reasonable extent, the commitment of leadership to the full range of activities and legitimacy of the process serves as a motivation and source of trust for participants. Contemporarily, the success of many public service programs and projects are reliant on the leadership championing, sponsoring and facilitating the program [73]. [74] Suggests, the effectiveness of leadership in public service programs, translates increased levels of participation, trust, and public involvement. With this idea, the different roles of leadership (Champions, Sponsors, and Facilitators) and their functions must in the collaborative network has to be defined. Also, legitimacy is not automatically assumed by participants, its establishment in the process builds trust and authenticity of purpose. Ensuring that both factors are in place and well formulated, levels of participation can change from ignoring to engaging [69].

Thirdly, providing and securing resources for participation and develop rules and structures to guide the collaborative process should be considered as a factor in successful implementation. Ideally, governments allocate resources to public projects or programs which certain times are insufficient to run these programs until the end and other times, allot more than is required, most likely misused and programs abused. The allocation of adequate resources (information, skill, and availability of management

team, finance) in many public programs underpin the lifespan and relays its importance. With the understanding of the bureaucratic nature of public governance and numerous inconsistencies, it is essential to outline the needed resources for implementation and ensure a steady supply to sustain this program as any form of seizure will result in a backlash and immensely affect the continuity of the collaborative network. In simpler terms, there has to be a predefined budget and sufficient resources set aside and constant for managing and conducting the process of collaboration.

Furthermore, one of the most significant challenges to the implementation of public collaboration is setting the right rules and structures of the process, defining the public's role and deciding how to engage participants productively (access to the process). These challenges are quite ambiguous to overcome and very delicate; as they do not only define the network itself but are also the lifeblood of the network [70]. For the system to thrive, the rules and enabling structures of the process need to be defined after consulting with stakeholders about how participation will be conducted and how a decision will be made. While this seems simple literally, it is a complex task which forms the foundation of the network, promoting transparency, accountability and serves as a template to go by in time of crisis and disputes. [69] suggests the establishment of an appropriate set of rules and structures to define the roles and responsibilities of participants, bound by legal mandates.

In another hand, similarly accruing the same level of importance, the different stages to follow in the decision-making process and schedule should be predefined and specified explicitly. By doing so, various stakeholders are aware of how decisions will be made and how their participation matters. Also, how to design and implement the collaborative process, delivering the requisite communication skill, knowledge and understanding to the public on how to participate effectively. Naturally, creating a robust network that is accessible and open to diverse participation, highly inclusive and engaging diversity productively. Doing so increases the participation outreach, optimizes the accessibility of the process and making inputs diverse with different variations of possible solutions. In a nutshell, it supports the theories of collective intelligence and crowd wisdom [23].

Additionally, it is evident that public participation accompanies mixed reactions, disputes and crisis and these problems mainly contribute to the complexities of public

involvement [39], [41], [42]. Although the level of transparency and accountability of the network reduces the occurrence of these problems [15], [69], as a primary measure, implementing conflict management and negotiation techniques are mandatory [58]. Also, incorporating consensus-oriented approaches that establish the representation of common interest by stakeholders is vital [75]. To summarize this point, the sustenance and survival of the network are reliant on implemented crisis management techniques, approaches and consensus building systems.

The level of democracy across countries is uneven, this also fundamentally translates that the level of public trust on government which contributes to the falling response rate of public participation in governance [76]. From the position of understanding about the declining levels of civic engagement, it is crucial to design the process of participation to encourage active participation by those with interests at stake. Some approaches to this include making the process effortlessly and readily accessible and making sure that public opinions are duly considered in decision making.

Finally, managing the power dynamics determines whether the process of participation is authentically participatory, shapes who participates and how their inputs are received [69]. Arguably, the exhibition of power disparities is harmful to the health of public collaborative networks as some groups are frequently suppressed and disadvantaged. This act reduces the desire for lower powered groups or individuals to participate and questions the fairness, accessibility, and independence within the network. Trust should be built through a balance of power between the different stakeholder and managed throughout the process to avoid conflicts.

2.3.3 The Evaluation of Outcomes and Impact

The structured process of establishing success against predefined criteria - Evaluation and assessing the returns yielded on the investment of resources in designing and implementing a collaborative public network is only logical, and the limitations to the realization of the expected/desired outcomes cannot be overemphasized. The idea that the whole process of designing, implementing and then evaluating a collaborative public network using technical approaches is debatable, and equally, the undertaker of the evaluation process and circumstance frequently argued [77]. Whether evaluation is summative (measuring efficacy and effectiveness) or formative (measuring success against set goals) and the purposed reasons being ethical or moral, it is essential to

ascertain the fairness of the process implemented, and how equitably participants are represented in the decision-making process. To public participants, evaluation relates merely to interests as to whether their involvement makes any difference and if outcomes represent their expectations [78]. This beliefs and perceptions are a crucial factor that requires consideration and adequate management to promote trust and maintain participation. Similarly, to sustain the scope and objectives of the network, there should be a precisely defined theoretical benchmark to evaluate effectiveness, efficacy, and success.

While the interests and ideas of stakeholders might be conflicting and reaching a set of effectiveness criteria can be elusive, the indications of a shared understanding are not too far to reach [77]. The differing evaluation criteria of the public and government must reach a consensus and widely established. This active is compulsive and will ensure acceptability by stakeholders and also increase commitment right from the formative stages of building the collaborative network.

Furthermore, an evaluation can either relate to the overall process of collaboration or outcome of collaboration. As [69] posits different forms of outcomes (Individual-level, process-oriented, content-oriented, user-oriented, first-, second-, and third-order outcomes), it is imperative to sort the differences between outcomes and formulate evaluation criteria to measure them singularly. [70] highlighted specific criteria including cost-effectiveness, structured decision making, task definition, resource accessibility, influence, independence, representatives which should all serve as a basis for evaluation. To reiterate, the standards and criteria for assessment are not specific to any form of collaboration and are extensive. However, they should be in consensus with all stakeholders' values. This procedure reduces conflicting ideas in the evaluation process and settles the subjective question of how "good" is defined and by whom.

The significant factors towards the implementation of collaborative public governance or public participation are plenteous and almost not possible to cover completely, and this is accredited to the differences in context and environment of implementation. Nonetheless, the principal, crucial factors are highlighted in this chapter, and without due consideration of the factors established within this section, with very little time, the collaborative public network is bound to break, return negative impact or outcomes. As identified, the factors to consider include and is not limited to: the consideration of

context definition, defining the purpose and negotiating participatory requirements with the public, understanding and communicating the idea of collaboration with stakeholders. In the second focus area, factors identified include: defining the selection on participants, defining the size of participants and enabling open participation, establishing legitimacy, rights, and privileges of different stakeholders in the network, defining and continuously allocating required resources, defining and setting rules and structures for participation. Finally, other factors are establishing transparency and accountability by sharing information openly, managing the decision-making process and ensuring citizens' involvement in the decision-making process and more importantly, involving all stakeholders throughout the process from planning to implementation and evaluation of outcomes and impact. In a nutshell, the keywords here are openness, transparency and deliberative decision making.

2.4 Collaborative and Public Participatory Approaches towards Addressing Contemporary Societal Problems

The existence of societal problems in every state is obvious, and the government must obligatorily develop and implement solutions to address these problems. Arguably, many government responses to contemporary economic issues have produced less than the expected result or an adverse effect, leading to the persistence of these societal problems and even creating a much greater problem in some cases. Perhaps, it is imperative to develop and implement solutions that precisely addresses societal and economic issues and are sustainable.

This section presents some collaborative and public participatory solutions suggested by scholars or implemented by governments to address societal problems. Although these approaches are somewhat useful, they are considered inappropriate and unsustainable. The criteria that account for their inappropriateness and unsustainability serves as lessons learned and will help as a guide during the suggestion of a collaborative approach for developing economies.

2.4.1 Crowdsourcing the Public Participation Process for planning Projects by Daren C. Brabham (2009) [79]

This paper identifies the complexities of public project planning and the setbacks of traditional public engagement methods to resolve the problems with project planning presenting a web-enabled crowdsourcing model as a suitable method. Established on the theories of Non-Expert Knowledge, Collective Intelligence and crowd wisdom, the paper suggests as an approach, where the design specifications and timetable of the public project are communicated publicly through a web-enabled platform, and an open call is made seeking public ideas in the form proposal submission. The call for solutions from the public is presented as a contest, with various in-kind prizes for winners or best solution. With the different proposals available online in a kind of gallery, the selection of the best solution is based on votes collected online. However, the final decision is still reserved by the planners and best solutions used as an advisory element in designing the actual plan.

Although this method incorporates the full length of the public using a web-enabled approach, it also eliminates the provision for deliberativeness between facilitators and participants in decision making. Relatedly, crowdsourcing limits the acquisition of public ideas on what seems to be a more vital need before deciding on a project to implement. It is imperative to seek public opinion about their needs in order to validate the alignment of civic programs with values and interests. Also, the process of contest, voting and proposal selection can be biased, inorganic, and manipulative. Debatably, this method will be more suitable for the private sector, and businesses, as the organization completely understands the problem, predefines the criteria for developing solutions and controls the whole process of engagement - arguably a closed process. Though this method is built on some theories presented by the researcher, contextually, the subsistence of these theories is questionable and limited as only tech-savvy, highly intelligent participants can contribute their ideas by writing and submitting a proposal for consideration.

2.4.2 Towards participatory geographic information systems for community-based environmental decision making by Piotr Jankowski (2009) [80]

The objectives of Participatory Geographical Information System (PGIS)/Public Participation Geographical Information System (PPGIS) are emphasized by researchers to provide deprived groups in society with added knowledge-based resources for communicating with public institutions, planning, negotiating, decision-making, and influencing public policies. Much of the use cases of PPGIS, mainly presented by the researcher are related to operating and managing utilities, transportation networks, cadastral infrastructure, and natural resources. Designed with the purpose to address the deficiencies of the traditional participatory methods including public meetings/hearings and representation, and to reinvigorate these models, PPGIS applies as its method, the use of "data processing and visualization tools to assist the public to become engaged in influencing processes and outcomes of place-based decision making." [80]. This method leverages Geographical Information System (GIS), application programming interfaces (APIs), analytical, communication and decision support tools to deliver a photo-realistic view of contemporary issues, proffering users with a better understanding of the spatial consequences of proposed projects, evaluate alternatives, and aid better decisions. Due to the complexity of these tools, it is imperative to provide adequate assistance to lay users during the process of participation.

This study centers on experimenting the comparative effectiveness of the processes in collaborative decision support software when used individually by group members (test group) and a facilitator on behalf of group members (control group). The findings reveal that the control group was more satisfied and developed fewer decision options with the software than the test group. The interpretation is that deliberation is promoted at the expense of creativity of users with the facilitated use of decision support tools in participatory problem-solving. Additionally, it is logical to generalize that the usability of software technologies either by the experienced or inexperienced, is mainly dependent on facilitation and assistance provided to users.

While PPGIS has attracted a lot of interest and support by researchers, it is also evident that technical assistance by experts is required to promote participants' willingness to use the software due to technical challenges. Additionally, the influence of experts

during the process of participation reduces public trust in process outcomes. This method of collaboration hinges on the theory of creative intelligence, and the inclusion of non-expert knowledge as the opinion and ideas of participants undoubtedly influenced. Disputably, PPGIS is not purely/practically deliberative as facilitators can control participants and secondly, due to the criticism of PPGIS representing the privileged knowledge of experts and institutions. Established by other writers, one of the significant barriers of PPGIS is the uncertainty about quality of the spatial data generated [81]. To conclude, conventional deliberative and participatory approaches should offer little or no facilitation in order promote the creativity of participants.

2.4.3 Coproducing "clean" collaborative governance: Examples from the United States and China by David Rosenbloom and Ting Gong (2013) [82]

Collaborative public governance as a subject has blossomed right from the early 90's. As opposed to its deficiencies, many pieces of literature have supported the new system of governance to more suitable and efficient. Contrary to these ideas, this paper examines the risks of corruption associated with collaborative public governance. It presents collaborative public governance as a new platform for corruption to thrive and also to expand older forms of corruption. The writers postulate two areas of corruption with a collaborative system of governance. They pointed out that corrupt dealings may grow beyond single individuals or agencies to engage more people as the collaborative network flourishes on mutual hostages and shared benefits. Also, they stated that the cost of monitoring and controlling corruption might increase with collaborative public governance due to protracted, attenuated and intertwined chains of the principal agents of corruption.

The paper suggests Co-production as a clean public administrative approach by incentivizing private individuals to combat corruption. Using a case study methodology as the research design on two cases, Qui tam lawsuits in the United States and jubao (“accusing and reporting”) centers in China, the paper recommends punitive measures in curtailing corruption and rewarding members of the public who expose corruption. Their findings reveal the positive impact of this strategy in both case studies and the reduction of corruption.

Rethinking the strategy of co-production and incentivized whistle-blowing, considerably, this approach of punitive co-production might not be sustainable as the

web of corruption eventually will get too large to manage and maintain. Also, since collaborative public governance is built on establishing government transparency, the public is aware of government activities and can hold public officials and their elected representatives accountable for their elected function. Similarly, in a collaborative system, the private sector is upright and keen to establish and maintain reliable references with members of the community to preserve their corporate integrity and values. Additionally, because the whole system of collaborative public governance provides a platform for different stakeholders to checkmate themselves, the growth of corruption can be significantly reduced and curtailed as opposed to the writers' views.

Although co-production (the joint provision of public services by government and citizens) is acknowledged an excellent approach to public governance and likened to what is suggested in the thesis, however, including punitive measures and encouraging rewarded whistleblowing may defeat the purpose of the collaboration. Likewise, it can also divert the focus of participants from participating actively to particularly identifying corrupt activities to get these rewards. Finally, co-production is not entirely an open system, and hence, transparency is not assured.

2.5 Conclusion

The chapter began with the definition and conceptualization of collaborative public governance and related terminologies, providing a clear definition of collaboration to include the criteria of deliberativeness and collective decision making by all actors. It continued with the review of different collaborative approaches implemented in some countries to address contemporary social problems and provides a theoretical background for public involvement in governance and its relevance.

On reviewing several pieces of literature, it was evident that the factors to consider before implementing a participatory network are not defined. Some general factors to consider before implementation were discussed by reviewing their importance from various literatures. These factors do not only ensure a sustainable participatory process but resolves most drawbacks of the approach identified from reviewed literatures in section 2.1 of this thesis. Finally, a review of participatory methods/approaches were presented; three related works of literature were selected and reviewed, giving value to the research gap of this thesis.

3 Research Methodology

The initial part of the development of this thesis we presented a problem statement of public infrastructural project delivery in developing economies and suggests as a potential solution, collaborative public management. Although backed by reviewed pieces of literature and theories, this proposition still has to be tested and validated. This part of the research covers the testing of that proposition. The process starts by selecting the case and providing the research questions that drive this thesis. It also presents the research methodology chosen to collect data and how the data will be analyzed.

3.1 Case Study Design

A single intrinsic case study is the design for this research. The research is naturally qualitative, and it involves primary data collection methods. Having the understanding that it is difficult to conduct a cross-case study of developing economies, a case study is selected to allow the generalization of theoretical propositions. Although the case is decided (Nigeria), the case selection procedure involved the consideration of cross-case characteristics of developing economies - criteria that must reflect the case [83].

A **case study**, in general terms, “focuses on understanding the dynamics present within single settings” [84][85]. Referred to as a naturalistic design, [86] defined a case study as “an approach used to generate an in-depth, multifaceted understanding of a complex issue in its real-life context”. Comparably, [87] described it as an “instance of a class of events where the term class of events refers to a phenomenon of scientific interest that the investigator chooses to study with the aim of developing theory regarding causes of similarities or differences among instances (cases) of that class of events.” [88] posits that a case study can either be designed as a single or multiple case study and can be further defined based on the goal of the research. He theorizes a case study research designs to be suitable when “a ‘how’ or ‘why’ question is asked about contemporary sets of events, and in which cases, the investigator has little or no control.” Furthermore, he continued by stating that a case study is appropriately used to help “contribute to our knowledge of individual, organizational, social, group, political and related phenomena.” These ideas are widely supported and adopted in the methodological design of this research.

The selection of the research methodology for this thesis is justifiable by comparing the aforementioned criteria with the objectives and substances surrounding this thesis. Firstly, the research question presented in this thesis is a 'how' research question. Secondly, the research deals with contemporary sets of events existing within a single setting. Thirdly, the researcher has little or no control over the events as it is a naturalistic study. Lastly, the research centers on processes which deal with political, social, economic and organizational phenomena. The presence of this criteria validates the use of a case study research methodology for this thesis as postulated by [88] definition of the criteria that define case study based research.

3.2 Research Questions

In this section, the research question that guide this thesis will be presented. This thesis has one main question and three sub-questions. The following is the main question:

- **RQ:** How can government-public collaboration contribute to the success of public infrastructural projects and in the long run, economic growth?

To develop well-structured survey interview questions and ensure the main research question is accurately answered, the main research question was further divided into three sub questions outlined below:

- **SRQ1:** How to examine the existing government-public participatory approaches in public project planning and delivery.
- **SRQ2:** How to study the inherent challenges and causes of failures in public infrastructural project delivery.
- **SRQ3:** How can government-public collaboration contribute to successful public infrastructural project delivery and economic growth.

The first sub-question intends to identify the existing participatory approaches or methods. This question was developed to provide a background of the current public participatory method(s) and also to evaluate its importance, level of participation and effectiveness before suggesting a collaborative public governance approach. Our second sub-questions try to identify and understand the challenges and causes of public infrastructural project failure. It is essential because, exploring how government-public

collaboration can improve public infrastructural project success requires first identifying the common problems and causes of failures - the second sub-question fills this gap. Finally, the third sub-question examines how government-public collaboration can improve the success rate of public infrastructural projects and economic growth. It does this by trying to measure the effectiveness, benefits, and suitability of the network in addressing the challenges to public infrastructural project success.

3.3 Case and Subject Selection

The selected case for this thesis is Nigeria – a typical example of a developing economy with a high population and large economy. The case selection was not random but reflects the selected case to extend the theory to the broad range of developing economies. Selected as a sample representative of other developing economies, a second consideration in selection relates with the limited time and access for field work – a constraint for all research.

The case resides within the Western Africa Sub-region and commonly compared with developing economies including Saudi Arabia, Brazil, Ghana, Malaysia, India, Ghana, Nepal, and Bangladesh. The case reflects a wide range of developing economies and has suffered numerous public infrastructural failures over the years. More detailed information about the case will be provided in subsequent chapters.

3.4 Data Collection Procedures

A primary procedure for ensuring the validity of research is to employ the use of multiple data sources. Referred to as data triangulation, this procedure reduces the limitation of making interpretations from a single data source and increases the trustworthiness of the results. The data collection procedure in this study will be using an interview survey (Primary data collection) which is a first-degree or direct data collection technique and also document reviews (secondary data collection).

3.4.1 Interviews

The usefulness of interview surveys in describing the characteristics of a large population justifies its selection. Surveys ensure a more accurate sample to gather targeted results and provide more honest and valid answers due to respondents'

anonymity. Also, a survey is selected as the research covers a different forms of research questions, maintains the inability of the researcher to control events and focuses on contemporary events. Finally, due to the unevenness in infrastructural development across the different regions of the case (Nigeria), using a survey validates the generalisability of the results on the case in general.

[89] introduced as a research design, “qualitative survey” and his ideas will be adopted in the collection of data and sample definition. Obviously, the collected data is qualitative in nature and the sample will be structured to cover the diversity of population. A small sample will be used to provide sufficient saturation of the whole population. Survey interviews will be conducted with government and private sector actors to provide non-biased and accurate results. Interviews are commonly used in case study for providing a sufficient explanation, description or an exploration of events or phenomena in its everyday contexts [88]. For this research, the interviews questions will be semi- structured. Semi-structured interviews questions are also suitable for exploratory case studies as they provide a good picture of the research subject. The interview questions are drawn to cover the main research question and consist of both closed and open-ended questions, structured in categories/sections which forms central components to this research as shown in Appendix 1.

The sample size for data collection is ten respondents, from the four (north, south, east, west) different regions of the case. Three experts from the private sector will be interviewed, five (5) public service officials related to the field and also from the different regions will be interviewed. Finally, two members of the public with much knowledge about public infrastructural projects will be interviewed.

3.4.2 Document Review

As a second approach in data collection, document review as a technique will be employed. This process involves the collection of information by reviewing existing documents related to the study. In this research, the documents reviewed are the constitution, newsletters, performance indicators, and ratings, budget sheets, and financial statements.

This approach provides background information and helps to collaborate data collected from other sources [88]. In this thesis, document review from online academic articles,

peer-reviewed journals, newspapers, government budget and financial sheets is used to provide information about the research topic and theoretical background. Similarly, its use in describing the case, the rate of infrastructural development in Nigeria, infrastructural project failures over the years and economic growth is indisputable. Additionally, document review is used to develop the general factors to consider before implementing a collaborative network and in suggesting a suitable method for collaboration.

3.5 Data Analysis and Procedure

In this thesis, the collected data from respondents will be analyzed using RQDA, an open source qualitative data analysis software. The process involves performing a thematic analysis using defined categories and codes from transcribed responses of respondents. To analyze data collected, a coding manual by [90] was studied, and some coding methods were selected to analyze data that will be collected. Due to the multifaceted nature of the interview questions, three coding methods were selected. A Descriptive coding method was chosen, with codes that are generated from identifications of the topic. Secondly, In Vivo coding was also selected with codes from the content of the response. Lastly, Evaluation coding method will be employed from the qualitative commentary provided by the participants.

The use of RQDA as a data analysis tool accompanies some advantages outside being a free tool and its compatibility with various operating systems as opposed to other CAQDAS software. RQDA allows the analysis of textual data as a primary or secondary analytical tool and meets the needs of most qualitative researchers. It also allows users to import a large number files using a simple syntax. As RQDA integrates with R, statistical analysis of the codes and other data manipulation functions can be carried out efficiently without any support from external applications. Additionally, the usage of RQDA is intuitive and straightforward and also suitable for non-programmers and novice researchers.

In conducting data analysis, the six (6) phase guide described by [91] will be followed. The guide serves an analysis procedure and provides a step by step illustration of how data can be analyzed using RQDA. The phases of the data analysis are described in six steps which are: step 1: Become familiar with the data, Step 2: Generate initial codes,

step 3: Search for themes, step 4: Review themes, step 5: Define themes, and step 6: Write-up.

The first step involves reading and re-reading the transcripts to be familiar with data collected. Following the advice that was given by [91], notes will be made of early impressions, also observed repetitions and what seems relevant in the results. Secondly, the data will then be organized in a meaningful and systematic way. Codes will be developed based on repeated statements on transcripts, something interesting about research questions and based on data that are relevant to be captured from research questions defined. This process makes the data more organized and meaning. The third step involves selecting themes/code categories (Patterns of similar, relevant or interesting data and research question) which describe some set of related codes and are significant topics to discuss in response to answering the research questions. The next two steps involve reviewing the selected theme to ensure they are important in the research, defining reviewed themes and grouping related codes under defined themes. Finally, a report of the results will then be presented from the logically structured themes and codes.

3.6 Validity Procedure

Case study research presents a set of logical statements which are tested or analyzed, however, it is necessary to ensure the quality and practicality of the design according to some logical tests [85]. These logical tests determine whether the research accurately measures what it is intended to measure and the trustworthiness of the results. The process requires some countermeasures to be introduced to minimise the effect of dangers on the validity of the research. Case study, being an empirical research, four tests are commonly used to ensure the quality of any empirical social research. These tests will be covered in this chapter and the processes of dealing with them when conducting a case study-based research will be discussed.

3.6.1 Construct Validity

The construct validity tests the sufficiency of operational set of measures, in general terms, it tries to establish a common understanding between the researcher and interviewees. This test ensures that the objectives of the research logically connects with the research and interview questions. The interview questions must also be clearly

interpreted by interviewees as intended by the research. [88] developed three criteria for ensuring construct validity which are: using multiple sources of evidence, establishing a chain of evidence and having the draft case study report reviewed by key informants.

With this research, the objectives of the research match the main research questions and sub research questions were also structured from the main question. Secondly, the interview questions were drawn from the sub questions using a mind map, with propositions and hypothesis defined. Additionally, the data collection technique used for this research is a survey which collects multiple sources of evidences. and chain of evidence establish some level of triangulation.

3.6.2 Internal Validity

This test deals with the relationships between variables, especially with qualitative data that are useful for understanding why or why not relationships hold. During the investigation, individual factors and their impact on the variables of the research must be cover or studied by the researcher. When relationships are identified, the qualitative data often provide a good understanding of the "why" of what is happening. In this thesis, we focus on suggesting a collaborative network between government and public in public infrastructural project processes and delivery. Although the relationships are not explicitly deducible from the primary research goal, some factors were defined in the first and second chapters of this thesis.

3.6.3 External Validity

Case studies focus on understanding the dynamics of a subject within a single setting. However, there is the problem of considering whether it's findings are generalizable beyond the immediate case study. [88] suggest external validity as a major problem, with criticism that case studies offer a poor basis for generalization. While this is strongly linked with surveys with samples and statistical generalisation, conversely, case studies rely on analytical generalisation with results generalised to some broader theory. This research also relies on analytical generalisation and hence assures external validity.

3.6.4 Reliability

This test assures the correctness and reliability of data collected by the researcher. It attempts to minimize the errors and biases in the study. The objective is to ensure that if the case is conducted all over again by a second researcher, following same procedures as described by the first, the second researcher should arrive at the same findings and conclusions. To validate this correctness and reliability of this thesis, the guidelines in conducting case study based research developed by [88] was adopted.

4 Results, Case and Subject Description

This chapter provides a comprehensive view of the case studied, its characteristics, composition, and contemporary facts related to the area of study. It also contains the relevant subject descriptions of the research. The chapter starts by rendering the style of governance and some general characteristics of the case and further delivers the current state of infrastructural project delivery. It provides some statistical information of about the rate of public infrastructural project failures, the frequent causes of these failures and suggested remedies. It also presents the research results from collected data and provides the discussion of results based on the analysis procedure defined in chapter 3.5. It interprets the results in a logically understandable form and also includes literature that supports the findings. The last section of this chapter evaluates the validity procedures used in conducting the research.

4.1 Background of The Case

In highlighting the importance of public participation on the success of public infrastructural projects, this essay will use Nigeria as a case study. Nigeria is a country in the western region of Africa and is home to about 250 ethnic groups. Endowed with an abundance of various mineral resources, yet, having many of her population living impoverished. According to the country's National Population Commission, Nigeria's estimated population stands at 194 million.

Many have argued that the country's poor infrastructural state is largely due to the Military rule for many years. However, the advent of democracy in 1999 has only seen the rise in corruption and alienation of the populace as it is primarily alleged that massive rigging has marred the various elections held in the country. It is safe to say that the leadership does not truly reflect the votes of the people. The leadership in the country reflects the poor infrastructural state which has culminated in the continuous decline of the economy as every year, the country experiences variances of inflation. Therefore, it can be argued that government as a project in the country has failed and this is because there is little or no public participation. To support this argument, it is apt to understand project failure and [92], Project Lead Advisor of United Nations Industrial Development Organization adequately explains it:

“In project management, a project fails not only when the project delivery refuses to meet the use or the needs of the project or when the project’s product refuses to satisfy the end-user, but when the project is not accomplished within the allowed time frame, project budget, scope defined for the project and even when the outcome of the project is rejected by the stakeholder.”

In Nigeria, about 60 – 80% of projects fail. According to Vanguard Newspaper in the country, dated 24th Aug 2015 [93], project managers have claimed that the nation achieves only a 39% success on projects. [92] puts it like this:

“The country invests millions of dollars to projects, brings on board the services of international expatriates using local resources to meet the compelling demands of these projects, yet we have experienced over 80% project failure within the framework of governmental systems.”

Ajaokuta Steel Complex, Rivers State Monorail, Federal Medical Centre, Ohambele community, Bayelsa International Hotel, Enyimba International Hotel, the Ibom Specialist Hospital, Lagos Ibadan Highway, and the East-West Road Highway are amongst the thousands of failed projects scattered all over the country. According to a report from [94], [95], about 56,000 government projects are abandoned in the country, and this has cost the nation a whopping 12 trillion Naira which is approximately \$3.4 billion US dollars. Some of these failed projects have been handed over to the private sector in an attempt to improve the economy because as earlier stated in this paper, the economy is proportional to the level of infrastructure. [96] buttressed this when they said that: Projects such as transport, power generation and distribution, health, education, defence, water services and waste disposal are vital to the development of any nation.

Listing the 56,000 abandoned projects all over Nigeria has been quite a challenge due to access to complete data; however, existing works of literature point to common factors that plague them all. Although [97] observed that many years of military rule had caused the country prolonged periods of economic stagnation, rising poverty levels and the decline in public institutions, significant references say the epidemic corruption in the country has, in no small extent impaired the success of projects and the economy.

According to reports from [94] some members of the government have resonated the fact that corruption is top amongst other factors that have slowed or stopped the progress of projects. It is vital to mention that several governments have attempted to reduce corruption to its barest minimal but have failed because as [48] would put it, Corruption in Nigeria is endemic. It has permeated every sphere of the Nation, including religious houses; [98] in their research would agree that corruption now seems standard in the country, as if it were legal. [99] observes that Nigeria is listed as the most corrupt country in the world on three different occasions: 1996, 1997 and 2000. However, this not just a Nigerian problem, as corruption has eaten deep into many developing economies and [100] argues that corruption, bad governance, and lack of (project) management capacity has also been singled out as silent killers of projects and growth in Africa.

Other issues affecting effective completion of projects, according to [5] are lack of professionalism, inexperienced project executors and lack of requisite skills. [101] points to project procurement error and the lack of the required institutional framework to handle these projects as reasons to why projects fail. [102] reveals that some of the causes of project abandonment are: Location/Site of projects; embarking on a project without proper analysis of what people of the community need; improper financial analysis; Imposition of the project on the people instead of carrying them along and lack of technical analysis.

For the justification of this study, the solution to the problems that affect project success in Nigeria as listed in this essay lies in the inclusion of the community where these projects are undertaken. On the issue of corruption, Nigerian elections are marred with electoral apathy, and this gives room for rigging, leading to a government that does not represent the voice of the people. These governments go on to make policies and embark on projects that alienate the people. Due to alienation, the people find it difficult to hold the government accountable for projects mismanagement. However, the inclusion of the people in policies and the everyday running of the government will help reduce corruption to its barest minimum.

To broaden the research, this essay looked at other solutions some scholars had to proffer. [5] proffered the introduction of governance mechanisms that incorporate process and guidelines that do ensure that project goals are met, and the interest of all

stakeholders are satisfied; the creation of a project management office by the government and its organizations as this will ensure the implementation of these government projects. Furthermore, [5] explains that the introduction of an enhanced project management communication strategy that will enable effective communication between stakeholders and government should not fail to put punitive measures in place for erring project contractors and managers.

[102] lists project analysis or planning as a solution to the project failure in Nigeria. He argues that this planning should meet social needs and behaviours; should meet the economic needs of the community where the projects are undertaken; the cost of the entire project should be known and planned for, and the technology needed for these projects should also be identified and defined.

4.2 Subject Description

As established in previous chapters, the case for this study is Nigeria. Data will be collected to ascertain the current level of public involvement and its overall impact on stakeholders and project planning and delivery. Also, data will be gathered to identify the challenges and causes of public infrastructural project failure. As a remedy, a collaborative network between government and public is proposed to address the deficiencies of the existing public participatory approach. The subjects of this study are primarily the government of Nigeria as the policymakers, and members of the public with the expectation of government meeting their needs, promoting the growth of the economy and increasing living standard in the society. Secondly, other subjects are the private sector liaising with and interacting with both government and citizens in the provision of public infrastructural projects and international organization that has contributed massively towards the delivery of infrastructural projects and general development of the country.

4.3 Results and Discussion

In this section of the thesis, the results will be presented and discussed after analysis using the data analysis tool selected in the previous chapter. The six (6) phase guide to performing thematic analysis (getting familiarized with the transcripts, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report) was followed. Conducting the analysis, several codes were identified and created from interview transcripts. These codes were then categorized in themes according to their relatedness. Table 1 presents the selected themes which helps to answer the research questions of this thesis.

Table 1. Created Themes for Analysis.

Themes
Level of economic development
Rate of project delivery/success
Importance of public involvement
Current participatory approach
Collaboration as a potential solution
Measuring efficiency and effectiveness
Challenges with using the web/internet

With the themes or code categories defined from the transcript codes, logical inferences can be made from data gathered or transcripts. In the following section, the results will be presented and discussed simultaneously, based on the defined themes/categories as shown on the table above.

Economic Development

In the preliminary stages of this thesis, assertions and inferences were made from previous pieces literature regarding the economic state of Nigeria and the contribution of public infrastructural development to economic growth. While these notions might be accurate, they remain untested and somewhat arguably in this research. This theme or code category draws from the responses of respondents, the validity of this statement and more knowledge about the economic situation of the case studied.

The results endorse our statement that Nigeria is in a perpetual state of economic stagnation. All respondents bolstered the country's under-development and significantly low pace of economic development, regardless of its natural endowments and support from international organizations. Respondents from the west are of the opinion that economic development within the region is average, while, other respondents believe the rate of economic development is below the average mark. In the words of one respondent from the south, "economic growth is dismal to say least," and other respondents emphasized their dissatisfaction with the pace of economic growth over the years. While this was the focal point of respondents' responses, some stated that public potentials are not realized by the government due to lack of certain infrastructures and public engagement.

While the slow pace of economic growth has been a challenge to the growth potential and productivity of the populace – as highlighted by respondents, they stressed the causes of the slow or low economic growth to corrupt practices by the government, tribalism, high rate of public infrastructural failures, and inadequate communication between the government and public. Proffering a remedial solution to these problems, respondents underscored "government transparency" as the watchwords in turning the current economic condition of the country. This idea that instituting transparency in governance as a measure to promote economic growth is not new and has also gained support from reviewed literatures with the belief that, it is the only means by which corruption can be addressed in Nigeria and ensuring urban development [5], [47].

Furthermore, every government intends to deliver the benefits of good governance, increase the growth of the economy and standards of living of the populace and it is worthy to note that these intentions can be met without public engagement. However, it

is arguably not possible to deliver good governance without promoting transparency and accountability. This thought accentuates the engagement of the public in governance and decision-making process of policies.

Current Participatory Approach

Before suggesting an approach to address contemporary societal problems, it is imperative to understudy the existing systems and methods to get a better insight into the problem. This theme provides answers to our first research sub-question in section 3.2 of this thesis. It studies the existing participatory approaches in public infrastructural projects delivery, their relevance to the society, how decisions are made by participants during planning public infrastructural projects, the scope, and purpose of these networks. It also identifies the level of public participation with these approaches, communication between participants of the network and how participation affects the delivery of public infrastructural projects.

The results reveal several participatory approaches are existent in public infrastructural project planning and delivery. From respondents' responses, two (2) different approaches were identified (town hall meetings and public hearing) as implemented methods for public participation in infrastructural project planning and delivery. Representatives are elected to serve as custodians of these networks and mandated to bridge the communication gap between government and the populace. While representatives are expected to regularly conduct a needs assessment of their constituents, collect their opinions, and ideas during meeting and hearings; however, the expectations of the public to participate are eluded as representatives fail to perform their responsibilities. Respondents believe this failure has also contributed to the reducing public interest in participation, trust, and confidence on governance more generally. It is also evident from respondent's responses from the north, west and eastern part of the country that public participation is only a constitutional theory and not a practice in Nigeria. Most respondents also stressed that this approach is not ineffective, not relevant and does not in any way influence the delivery of public infrastructural projects. A few other respondents believe the approach is relevant as it is a more efficient way of making public decisions. However, public participation still needs to be strengthened or increased with the approach.

Furthermore, the definition of purpose, scope, roles, and responsibilities of participants was a major subject of concern. Also, how decisions are made with the current approach of public participation in public infrastructural project planning and delivery is a major topic of discussion with respondents. The results indicate that the scope and purpose of the participatory process are constitutionally defined, likewise roles and responsibilities of participants. Although respondents confirmed this document is widely accessible by members of the public, they accentuated public unawareness of their roles and responsibilities in the participatory process and government negligence in communicating the roles and responsibilities of citizens and overall importance of public participation. Respondents also revealed citizens are spectators in the process of participation as there is no public involvement, communication is not present or inadequate in some areas, and the current approach is not purpose driven. They stated that decisions are made singularly by the government based on inputs from special advisers, policymakers, and representatives. Additionally, decisions are also made based on emergency or emergent public needs, what government thinks is important to the society or public at that time.

With very few words, respondents expressed the low level of participation by the public with these approaches, caused by the low interest of citizens to participate, lack of public trust and confidence on government and the belief that their (Citizens') opinions and ideas will not be adequately considered by the government. Secondly, government unwillingness to participate and show of non-transparency, summed up by corrupt practices has limited and also contributed to public reluctance to participate when platforms are created.

To summarize of findings for this theme, respondents assert that the current approach is not effective, irrelevant, does not serve its purpose and is not a sustainable method for public participation considering the large number of the populace, power dynamics, and non-transparency with these approaches. These ideas validate our criticism of physical approaches of public participation in the third chapter of this thesis and subsequently the suggestion of an online approach as a more suitable method.

Importance of Public Involvement

The substance of this thesis indicates the relevance and importance of public involvement in planning public infrastructural projects and proposes this as a remedial solution to addressing the challenges in infrastructural project delivery. While this idea can be seen to be merely theoretical, it is essential to ascertain its importance to the case in this study and how it can address these challenges. This theme or code category relays the importance of public participation/involvement in infrastructural project planning and its benefits. Also, it provides the factors and criteria to consider during participation and before the implementation of a public participatory approach or method.

The findings show that all respondents consider public participation to play a significant role in public infrastructural project delivery, more so, in the democratic systems of governance practiced in Nigeria. Quite unfortunately, public participation is not a common practice in Nigeria and is only a theory as stated by one respondent; with strong notions that Nigeria is not truly practicing a democratic system of governance. Another notion which cuts across many respondents is that the public non-inclusiveness in governance has facilitated government non-transparency and unaccountability which in all promotes corruption – a household term in public organizations.

While public participation is elusive to the Nigerian citizenry, certain criteria and factors were identified by respondents to be crucial before implementing a participatory network and also during the process of participation. Many respondents acknowledged the definition and communication of roles and responsibilities of participants before the implementation of any participatory network – a notion discussed in previous chapters and lacking in the existing approach of public participation in infrastructural project delivery. Also, some respondents believed it is vital to define the purpose, rules, and regulations, ascertain the number of participants and define the evaluation criteria of the participatory network before implementation. Similarly, some respondent stated that the success of the participatory network is contingent on several factors that must be present. These factors include governments will to provide sufficient and genuine information during the propose of participation to increase public trust, confidence and interest; government transparency and will to participate actively; government commitment to provide the resources for maintaining the network of participation; and

most importantly, public education about their roles and responsibilities, re-orientation of participation and governance.

Furthermore, respondents stressed many benefits of public participation in infrastructural project planning and delivery. The most common benefits are the wide acceptance of policies and decisions made – a theory presented in previous chapters, government’s implementation of relevant policies and addressing the most important needs of the public, the possibility for the public to checkmate government activities through the transparency system, increased public will to contribute toward project success, share the responsibility and take ownership of public programs, and achieving better quality of decisions due to sampling a wider pool of knowledge. Respondents strongly believe public participation (an open system) will promote government transparency, accountability and will reduce corruption which is pronounced as the chief cause of public infrastructural project failure. As one respondent will put it:

“Transparency is the bedrock of any system that will address these challenges. The challenges we face is because citizens are not appropriately involved in these projects. If citizens are involved, then, they will have a sense of responsibility to ensure the project is delivered. Regarding corruption, if you intend to bribe, then you will need to bribe an entire community.”

Categorically, these notions support the theories of crowd intelligence/wisdom presented in chapter two of this thesis. Also, the criteria mentioned by respondents which should be considered before and during participation validates some factors mentioned in previous chapters. Conclusively, it is certified that public involvement in project delivery will produce positive results in project planning and delivery.

Rate of Project Delivery/Success

The second sub-question of this research presented in chapter three is to study the inherent challenges and causes of failures in public infrastructural project delivery. This theme provides answers to this question, it offers a collective definition of infrastructural project success by respondents and tries to identify the existing implemented approaches to mitigating the challenges to project failures. It also measures the effectiveness of these approaches, discusses their relevance and collects the suggestions from respondents.

From previously discussed results, it is evident many public infrastructural projects fail in Nigeria. What seems to be more valuable to understand is the causes of these frequent failures, which has remained unaddressed for decades. The results of this research revealed numerous factors which validates what has been mentioned in the literature review of this thesis. Responding to the question “what causes public infrastructural project failures?” all respondents, with very strong statements, declared as a chief cause of failure “corruption in government” which includes unaccountability, budget overruns, and transparency. Other factors mentioned with a lighter tune include organization bureaucracy and complexities, government instability, market fluctuations, poor implementation and monitoring, nepotism, tribalism and public exclusion from the process of planning and delivery. Respondents declared these factors have been the deterrents of public infrastructural projects success in Nigeria for many years and have also proven their persistence over time.

While the approaches implemented by the government to the address causes of failures are not plenteous to mention. Respondents all indicated constituted government organizations, mandated to monitor the implementation of these public projects, ensuring that they meet the predefined standard and are completed timely. Although these institutions are legally mandated and backed by the government, their effectiveness is still unseen. As one respondent rightly stated “there are some monitoring bodies and public organizations constituted by the government to keep track of the project implementation, but it will be surprising to note that, regardless, there are still lots of failed project. This is to say that they are not working or ineffective.” Another respondent supports a public inclusive approach where “the people will be the watchmen of the project like what is done in Singapore and having the beneficiaries (locals) monitor the project will be more effective than employing or constituting an agency.” This notion, emphasize the importance of public ownership on government programs, delivered by public inclusion in the decision-making process.

The success level of public infrastructural projects as described by respondents is below average, with a high failure rate of more than 60%. Defining what constitutes successful infrastructural projects, respondents commonly mentioned some factors including the accessibility to the infrastructure by citizens, public satisfaction, the cost-effectiveness and benefit analysis of the project as many public infrastructural projects are luxuries rather than a necessity, the quality of the project, the project’s timely completion, the

general impact of the project and meeting the public need, the sustainability of the project, meeting predefined standards and not sub-standard compared to international standards. As a collective definition, these criteria must be met for a public infrastructural project to be deemed successful. Equally, some of these criteria were mentioned as factors that should be considered before the implementation of a public project. Other factors are the credibility of contractors, targets for monitoring and the feasibility of project execution and completion.

Though the success criteria are widely known by the government, ironically, these criteria for measuring success are far-fetched in the country as government fails to communicate or collect the opinions and ideas of the public. Respondents buttressed transparency as the panacea to addressing these problems driven by high levels of government corruption and irregularity.

Collaboration as a Potential Solution

This research centers on enabling a collaborative network between government and public in planning and delivering public infrastructural projects in Nigeria. Our third research sub-question try to investigate the contribution of this approach in the successful delivery of projects and economic growth. This theme presents an answer to the research sub-question by examining how the collaborative approach will address the causes of public infrastructural failures in Nigeria and ascertain if this contribution will promote economic growth.

In previous sections, we presented the causes of failures and criteria which underlines success with regards to public infrastructural projects. For the collaborative approach to be considered successful, not only the causes of failure must be addressed but also criteria that underlines successful public infrastructural project has to be met. Respondents reiterated the importance of public involvement and institutionalization of government transparency as the driver of change in the process of project planning and delivery. The respondents stated that, through public involvement in the process of infrastructural project planning and delivery, the most important projects will be addressed, public needs will be met, and hence, public satisfaction as a criterion for success will be achieved. Likewise, the project will impact the populace and economy positively. Additionally, since there is shared responsibility, citizens will take

ownership of public projects, which will directly affect project quality, cost-effectiveness, project standard and timely completion. It is a wide conviction on most respondents that public involvement will allow citizens to checkmate government activities and hold them accountable for their actions.

Responding to the proposition of a collaborative approach in addressing the causes of project failures, most respondents believe it is a step in the right direction. Addressing government corruption as the chief cause of public infrastructural failures, respondents upheld government transparency and public inclusion in project planning and delivery as the remedy through collaborative public governance. Most respondents surmised collaborative public governance would positively contribute to public project success by addressing the causes of public project failures and promote economic growth.

Opposed to the notions of most respondents, two respondents (from the west and north) believe collaboration may not address the causes of failures in public infrastructural delivery completely. Suggesting as a secondary and complete pack of the solution, punitive measures which is similar to what was described in a reviewed literature in chapter two and stronger monitoring institutions were both presented as a complete solution. Some other suggestions were stringent legal actions against corrupt practices by government officials and the need to develop a timeline for monitoring the process of infrastructural project delivery.

Measuring Effectiveness and Efficiency

In the previous section, a collaborative network between government and public was presented as a remedial solution to the causes of public infrastructural project failures, while this remains untested and evaluated, it was logical to question its effectiveness and the areas where this will be visible or can be evaluated. This section tries to respond to these issues.

From the results, one commonality from responses is that the effectiveness and efficiency of the approach are evident in the institutionalisation of a transparent system that will curb corrupt practices and in the long run, deliver positive outcomes in public infrastructural project delivery. Although this thought is established by most respondents, some also stated there is no metric for evaluation until after implementation. Most respondents alleged that effectiveness, and efficiency cannot be

measured before implementing the participatory network. Emphasizing the consequence of the poor implementation of the collaborative network, respondents believe, if rightly implemented, its effectiveness will be visible in the standard of living, improved economic indices, improve mortality rate, increased human development index, employment, and higher economic productivity.

Additionally, respondent mentioned some benefits of public involvement in public infrastructural project planning and delivery, stressing higher levels of public interest in governance and government accountability as other impact areas of collaborative approach.

Challenges with Using the Web/Internet

Over the years, it has become evident that traditional approaches to public participation are inadequate due to several practices that impedes open and free participation. Contemporarily, it can be argued that the web/internet as a tool, has presented the best platform for public participation which has produced great results in many countries. However, this approach introduces several challenges that have to be considered. In this section, we explore the challenges with this approach and question how they can be resolved.

As referred by respondents, the internet is a luxury in Nigeria, and its accessibility is limited to a significantly high number of citizens in the country, mostly to the older generations. More generally, the digital divide is the most common challenge with using the web/internet as a participatory approach. Information technology (IT) literacy, cost of access, and level internet coverage are specified factors by respondents.

Although these challenges are real and unarguable, most respondents believe they can be addressed, and the government has the resources to address them. While some respondents underlined the importance of public education and re-orientation with this approach, they also emphasized government will to participate; providing sufficient and genuine information to the public during collaboration. Contrary to these opinions, one respondent from the north believes these challenges cannot be addressed. In his words “It can't be addressed as far as I know for now. It is just about the general reflection of the society. I think to a very large extent; things are changing as far as internet tools and how people access the internet and not just access to the internet but also being afforded

and use the internet productively. I think the younger generation can easily use it and participate in public related issues using the internet but for the older generation, it is not something they feel will be the right tool, they will rather do it the old way but I think in the next few years, maybe in ten years, it should be something viable, it should be a tool, a very good tool for such thing.” As a suggestion, implementing a secondary approach to allow this and other groups of citizens that are unable to participate in this approach need to be considered.

Conclusively, the results collected from respondents proved their expertise in the field, providing not only notions which support the hypothesis of this research but also new insights to the study which help tailor good recommendations. In a nutshell and most importantly, the results provide support for the implementation of a collaborative network between government and public in planning and delivering public infrastructural projects.

5 Conclusion and Future Work

This chapter provides the summary of the research findings and also some recommendations drawn from reviewed literature and the results of this research. It also discusses the implications/impact of findings on the field study and presents the limitations of the research and potential areas for future research.

5.1 Summary of Findings

In the third chapter of this thesis, research questions were developed and presented to serve as a guide for this thesis. Executing the research methodology and collecting data revealed several answers which were then discussed in chapter four. This section provides a brief summary of the findings of this research.

The results indicate Nigeria's current level of infrastructural development is incredibly low, regardless of the country's natural endowment and international support. Caused by the frequent failures of public infrastructural projects, it was deduced that causes of these failures are identifiable. These factors include corruption as a chief cause, public organizational bureaucracy, and complexities, government instability, market fluctuations, poor implementation, and monitoring, nepotism, tribalism and public exclusion from the process of public infrastructural project planning and delivery. As an approach to address these factors, organizations were formed by the government to monitor the public infrastructural project, ensure their timely completion and project standard. While this seemed achievable theoretically, the failures in delivery remained persistent, hence, rendering these government monitoring organizations irrelevant and ineffective.

Findings revealed that government transparency is the watchword in resolving the problems of project failures, leading to the general emphasis by respondents on public involvement in the process of public infrastructure project planning and delivery. Respondents widely believe that public participation/involvement in public project planning and delivery is constitutional, through organized public hearings and meetings by elected representatives who serve as a communication bridge between them and the government. Conversely, it is important to note that this is not clearly stated in the constitution on a review but only an assumption by the populace. Similarly, the roles

and responsibilities of elected representatives to engage members of their constituents in a debate on priority needs are also not constitutionally founded. Findings further suggest that the current participatory approach is not an effective one and hence irrelevant to a majority of the populace. While there have been public calls for public engagement in the process project planning and delivery with benefits including government awareness of the most essential public needs to address; securing public ownership on government programs and policies; shared responsibility leading to increased public commitment, trust, and confidence on government and better quality of decisions. These benefits to date, are unrealized and the causes of project failures remain persistent in the country.

The findings also support the proposition of collaborative public governance as an approach to addressing the challenges in public infrastructural project failures. It was gathered that collaboration between government and citizens would contribute to public success by addressing the causes of failures and improve economic growth. Interview participants also mentioned some underlying criteria that should be considered before implementing a participatory approach, including the definition and communication of roles and responsibilities of stakeholders, the purpose, and scope of the network, rules, and regulations to guide the process of participation, the evaluation criteria, and the number of participants. It was also deduced that the collaboration between government and public would establish transparent systems that will address corrupt practices and increase government accountability. Likewise, the needs of the public would be met, a wide acceptance of public projects by citizens; citizens can also checkmate government activities and take ownership of the delivery of public projects. Addressing the challenges with using the web/internet-based approach for collaboration, it was confirmed that the challenges (digital divide) can be addressed through government willingness to participate by providing the infrastructure and ensuring accessibility, providing sufficient and genuine information, educating and re-orienting the public about the new system.

The results show there are no metric for evaluating the effectiveness and efficiency of the proposed approach. Therefore, evaluations of outcome cannot be taken or considered valid until implementation. Nonetheless, it was suggested that effectiveness could be seen in the economic indices of the country, a higher standard of living, public

satisfaction, improved mortality, increased human development index, and in the long run economic growth.

5.2 Conclusion and Recommendations

In the first chapter of this thesis, we presented the hypothesis of the research, “collaboration governance will positively impact the delivery of public infrastructural projects in developing economies.” The results did support not only the hypothesis but also introduced new concepts and ideas that can be considered as secondary approaches to solving the problems with public infrastructural projects delivery. From the collection of results and ideas already established in previous chapters of this thesis, recommendations will be presented, and an appropriate, sustainable collaborative approach suggested.

From the findings, it is undeniable that the collaboration between government and the public using the web will not be a complete approach for public participation due to some challenges, most importantly, digital divide. Therefore, to ensure the inclusiveness of some groups of citizens that are unable to participate using this method, other methods of participation should also be implemented a secondary approach. Some examples of approaches include and are not limited to: taking surveys, administering questionnaires, conducting public hearings for the elderly. Also, the factors to consider before implementation of a participatory network discussed in chapter two of this research should studied to prevent the occurrence of drawbacks and overcome non-explicit challenges.

Furthermore, although collaboration will foster government transparency, hence, making the government more accountable to their electorates, it is still imperative to implement strong punitive actions using legal instruments to serve as a disciplinary measure for public officials or contractors engaging in corrupt practices.

Additionally, stronger institutions should be set up to monitor the delivery of these public infrastructural projects. These institutions should provide progress reports to the public regularly and also answer their questions and concerns with regards to the delivery of public project. Monitoring should also cover post project completion factors

such as the sustainability and maintenance of the project. Equally, the overall impact of the project in the society and accessibility by public should be also measured.

Finally, it is crucial to implement a robust legislative and regulative framework to serve as a background and guide for the participatory approach. This also assures and preserves government commitment to participation. It is also necessary for the government to carry out the implementation of the participatory approach gradually rather than radically. The gradual implementation of the participatory approach will provide the public with time to prepare, get to familiarize with the new system and manage the change.

As a recommendation and to achieve one of the objectives of this research which is to suggest a suitable collaborative approach for government and its citizens in developing economies, the following section, examines several approaches considering the factors discussed in previous chapters and the findings of the research. It suggests an appropriate, suitable and sustainable collaborative approach between government and public in developing economies and provides reasons why the same approach is considered to be more suitable and adequate.

5.2.1 Suggesting a Collaborative Public Network for Nigeria

Choosing the right mode of collaborative public governance is considered a critical process to undertake before implementing any public collaborative network. This process suggests the most efficient and productive way(s) through which government can collaborating with the public and manage the whole process by considering unique criteria hinging successful implementation based on factors discussed in results and reviewed literatures. Although there are many possible modes of public collaboration, not all will produce positive outcomes or impact; therefore, the understudy of the most productive approach to implement is necessary if the expected result, aims, goals, and objectives must be met accordingly. In this section, different possible modes of collaboration and public inclusion in governance will be discussed as a recommendation for developing economies.

5.2.1.1 Round Tables and Workshops

These modes of collaboration or public participation involve a face-to-face, direct, deliberative process between the government and public and justifies many criteria that

qualify government-public interactions as a collaborative form of governance. However, they accompany many criticisms which throws questions to the transparency, authenticity, and effectiveness of the interactive network. A few of these hindrances include identity politics, facilitators' influence on meetings, special interests, the marginalization of inclusiveness of some potential participants due to logistics and peer intimidation [63]. Holistically, with the considerations that many developing economies are highly populated, conducting collaborative processes at physical locations will be almost impossible due to several factors that cannot be efficiently managed during the process of participation [36], [43]. Similarly, these approaches can easily be manipulated by public officials using power dynamics during meetings, hence, reducing public interests and making it difficult for them to participate or present their ideas and opinions freely.

5.2.1.2 Public Hearing, Opinion Surveys, Advisory Committees and Focus Groups

Likened to collaborative public governance due to their shared factor of public engagement, conversely, these modes of civic engagement are limited to individual elements that out-rightly suggests collaborative management. Public opinion surveys and hearings are government developed avenues for gathering public perceptions, opinions, and needs regarding a subject area. While this process can be difficult to control and somewhat ineffective accrued to the fact that the likelihood of participation is relatively low due to lack of public trust on government amongst other contributing factors, [76] also provides a congruent on the rapidly falling response rate of participants on public opinion surveys over the years. Additionally, public inquiries and hearings are limited to the size of participants which can be questionable and considered not an openly accessible approach. Finally, [103] suggested that opinions pulled from public meetings and hearings do not in most cases represent the view of the general public as some social groups and individuals fail to participate in such meetings due to demographic factors including ethnicity, income, and gender.

Unlike public hearings and opinion surveys, focus groups are small groups constituted by public participants with professional leadership, tasked to uncover some issues that are of concern to a broader community, region or predefined geographical area. They are mandated to identify the needs of people, provide necessary advice and widely gather insights or perceptions from a set of population. They deliver detailed knowledge

about these issues on consultation, proffer solutions and advice based on information collected. This mode of public inclusion can be likened to the representatives approach already in practice in Nigeria and it eliminates the object of an all-inclusive public participation and crowd wisdom which introduces creative problem solving – a valuable asset in collaboration [23]. In summary, while these modes of participation are used, depending on the purpose of the involvement and are sufficient for population-focused interventions, approving the views and needs of those that may be otherwise silent [104], they are also discriminative and challenging to control. Another significant drawback is that they are all limited to size and access which are essential criteria in instituting openness and transparency of every collaborative network. Finally, it is ineffective in today's busy society to use traditional forms or public participation due to the inability to get a full attendance of participants in a meeting held at a fixed time and location or citizens' lack of confidence to express themselves during such meetings freely.

5.2.1.3 Crowdsourcing

Borne out of the rising interest on taking charge of the creative and productive capabilities of the internet and its users, naturally, Crowdsourcing is a mechanism for obtaining collective intelligence from a large number of people or users for effective decision-making or towards the desired end. Usually online, and involving a large number of participants, this form of public inclusion differentiates itself as it is a top-down or bottom-up, hierarchical management process with control residing between the organization crowdsourcing and public/participants [63]. Unlike the traditional public participatory process where citizens are included in a more direct, deliberative way and control withheld by the facilitators, crowdsourcing is commonly assumed as a model for businesses, leveraging on the collective intelligence of online communities towards solving their problems for profit making. Although its application has transcended from business models into the realms of public governance in recent times, there are no coherent set of best practices and recommendations for public managers [63]. Disparate from other forms of collaborative networks, crowdsourcing is not purely deliberative as it is hypothetical a contest of ideas [29] and the crowdsourcer sets their needs and task without prior consultation with the participants. Also, the level of participation and participants are not predefined before making an open call for voluntary participation in the crowdsourcing process. Though there are returns of mutual benefits to both parties,

communication between stakeholders is limited, and participation voluntarily is undertaken. Additionally, the context is short lived for a specific period, not sustained or a promised continuous process.

[23] argued about the capabilities of a crowdsourcing model for public participation, where the process will involve an open call for public ideas via an online channel. He continued by suggesting a selection process for the best solution which will then be implemented, and winner(s) rewarded. Though this process might yield positive results, it falls short of the criteria of deliberativeness, collective intelligence, crowd wisdom and inclusion of non-expert knowledge. Conclusively, this process is can also be manipulated if implemented in public governance, and the selection process non-transparent and biased – eradicating the definitive factors on which productive collaborative public governance is built on.

5.2.1.4 Government as a Platform (GaaP)

GaaP is an online or web-enabled environment leveraged by a government to create better outcomes by facilitating collaboration, connections with citizens, providing and coordinating efficient and effective public service delivery models. The capabilities of the World Wide Web are unspoken and evidently speaks for itself, with much hope placed on the advent of social media, ubiquitous mobile connectivity and web 2.0 interactivity. Its benefits created to the private sector are enormous and in retrospect, [23] argued that policymakers and planners can as well sort talents for their projects from the web as a lesson learned from businesses investing heavily on the internet to deliver them enough customers. While this notion has yet been extensively experimented and justified. [105] postulates that “the Web has opened remarkable channels for harnessing the creativity of people in groups and models for reshaping our economy,” soliciting public participation and making government more transparent. Extending this notion, [23] suggests the web as “an ideal medium which fosters creative planning, efficient participation, increased access, asynchrony, anonymity, interactivity and its ability to carry every other form of content.” He continued that the web enables two-way communication (bottom-up and top-down) between policymakers and the public and encourages an on-going co-creation of new ideas. Although, he further presents some deficiencies of the web, alienating interpersonal communications and the approach by companies seeing “web users as consumers ripe for profit,” counteracting

these points and in summary, he advocates the transparency of the web and presents web users to be potential problem solvers and creative.

Although Gaap is an extensive terminology, with varying meanings, our emphasis resides on the collaborative and collective action between government and the public in making laws, building economic institutions, managing and resolving common problems that are too large to solve individually. [105] presents these ideas as "Government 2.0", a collaborative technology which sits at the heart of web, delivering a new level of transparency and public inclusion in government deliberations and decision making. This model of collaboration, brands government as an enabler and convener of civic action rather than the first mover of all civic activities – a deliberative style of collaborative governance. [105] continued to give value to Government 2.0 as a model which provides open standards and as a result sparks innovation and growth. Upholding three (3) primary design principles: participation, transparency, and collaboration, what is instrumental and significance to this model is the introduction of openness which does not only spur transparency but also innovation through reuse of open government data in unanticipated ways.

In summary, various models of collaboration were briefly discussed as potential approaches of collaborative governance for developing economies, their strengths and deficiencies also presented. Though the factors to be considered before implementing a collaborative network are not widely developed and context-specific, the most general factors are discussed and used as a guideline in selecting a collaborative system. From the analyzed modes of collaboration, GaaP provides the most widely accepted style of collaboration judged by its openness to access, transparency and inclusion of deliberativeness. Why this is important, is because firstly, citizens can only participate based on trust which built by establishing transparent structures and government openness. Secondly, knowing that crisis and conflicting interests are inevitable, it is essential to set up open standards and transparent structures from start to allow a widely acceptable setup of the collaborative network and collaborative process. Also, to realise the theories of crowd wisdom and collective intelligence in the collaborative process which emphasizes the size of the participants, it is vital to enable open access or allow the full length of public participants which is possible with GaaP. Furthermore, it validates and fosters deliberativeness between both parties and the consideration of public opinions in the decision-making process. While there are several other factors

mentioned in previous section that can be considered before implementing a collaborative network, not all can be addressed by the mode of collaboration itself but by facilitators themselves.

5.3 Impact/Implications

This study explores the ideologies and theories around public participation, its benefit in ensuring an effective implementation and wider acceptance of public policies, increasing public trust on governance and drawing ideas from the large pool of public knowledge – collective intelligence, crowd wisdom and non-expert knowledge. Secondly, it tries to uncover the challenges and causes of public infrastructural failures in Nigeria and proffers a solution to this problem.

Although it was discovered that government corruption is the principal cause of public project failure in Nigeria and most developing countries, and this thought widely supported by many other researchers [1], [5], [99], [106]–[111], it was also deduced that the cause of corruption is government non-transparency which has contributed to aiding unaccountability and corrupt practices. Constitutionally, Nigeria is a democratic nation where public involvement in governance is a constitutional obligation of the government. However, this is not practiced, as government, with the ulterior agenda to defraud the public through corrupt dealings, have neglected to enable public involvement or establish transparent systems in governance.

The term corruption is multifaceted, ambiguous and this makes it difficult for researchers and policy makers to develop a precise and complete solution to curb its occurrence. Established by scholars in the field of public governance, corruption thrives on non-transparent systems [7], [8], [111], [112]. Invariably, this implies that government transparency will limit the occurrence of corrupt practices in the public governance.

[113] suggests transparency "sheds light into the dark box of politics and governance which allows accounting actors to apply enforcement." Since public officials are elected to manage public resources, then their activities should be monitored by the public and they should be answerable to their electorate (the public). [114] posits accountability helps to explain the role transparent systems can play in governance. He further asserts

that accountability is upheld by two words: answerability – “the right to receive information and the corresponding obligations to release details” and enforcement – “the idea that accounting actors do not just ‘call into question’ but also ‘eventually punish’ improper behaviour.” This approach in dealing with corruption and its actors summarises the findings of this thesis which is built on the keyword ‘transparency’.

With this thought as our background, it can be implied that government non-transparency drives corrupt activities and the latter hinders the success of public infrastructural projects and impedes on economic growth. Consequently, it is logical to explore solutions to establish transparent systems in public governance alternatively to combating corruption as the causal factor of public infrastructural project failures and many other societal problems in developing countries.

5.4 Limitations

The limitations of this research can be drawn directly from the criticisms of single case study-based research. Single case studies have been argued to be subject to some criticism often regarded as limitations of its use as a research methodology, the most common of which concerns the methodological rigor and external validity [85]. The first limitation relates to the absence of multiple sources of evidence and faults the absence of a general systematic procedure in conducting single case study research – lacking methodological rigor. Although this research employed the use of multiple data collection techniques (expert interview survey and document review), this limitation to some extent can still be argued and thus, absolves the author from any methodological consideration.

Secondly, and the most prominent limitation of case study-based methodologies is the issue of external validity or generalisability. This limitation questions the generalisability of the single case study findings to the entire population or universe. While this can be possible with theoretical propositions, it is not possible to generalize findings or result over the whole population or universe.

Other limitations of this research are largely anchored on the sparse availability of data in Nigeria, and as such, collation of data on abandoned projects or why they are

abandoned was almost impossible to obtain. The level of corruption that has eaten deep into every sphere of the country is another major limitation as even the minute data that is available is hoarded to cover up corrupt practices carried out by government officials. The location of the author has also impeded the research as distance proved to be a barrier.

5.5 Future Works

In the course of this research, some future research areas were identified, and it is also vital that we state the obvious; that more research can be done on why projects are abandoned in various developing economies and suggesting potential solutions to address this problem. Thus, future research can encompass the following:

As the focus of this thesis is to determine the impact of implementing a collaborative approach to solve the problems with public infrastructural projects delivery, a related area of research will be the development of a collaborative framework for public infrastructural project planning and delivery.

Secondly, legal or other instruments that would ensure punitive actions against project managers and government officials who make these projects fail can be an area for future research.

Thirdly, since it was obvious that there was no defined structure for public project planning and delivery, future research can be done to create mechanisms that will provide a standard public project planning structure.

It is important to note that suggesting the collaborative approach does guarantee its successful and effective implementation. Hence, it is necessary also to examine the readiness of the government and public to participate using the collaborative network proposed.

With the low public interest, trust and confidence on government, another area of research work is an approach for incentivizing the public to do away with apathy and be consciously involved in the different stages of projects planning carried out in their communities.

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Appendix 1 – Interview Questions

Context Level questions

1. Which part of Nigeria are you from?
2. What is your opinion about the current level of infrastructural development in Nigeria?
3. Can you briefly describe the current process of public projects planning and delivery in Nigeria?
4. What approaches does the government leverage on to engage the public in collecting their ideas and opinions?
5. What do you know about collaborative public management/governance or public participation?
6. What is your opinion about public involvement in government programs and decision making?
7. More specifically, what is your opinion about public involvement in public infrastructural project planning and decision making?
8. How rarely do you use the internet? Always () Often () Rarely ()
9. How interested are you about public project planning and decision making? Very Interested () Moderately Interested () Not interested ()
10. Are you willing to contribute in the process of public project planning, decision making and in what ways can you contribute?
11. What do you think might be the challenges with public participation in project planning and decision making using the web/internet?
12. Do you think these challenges can be addressed and how?

Section 1: Understanding the Existing Methods of Public Participation in Project Planning and Delivery

13. What methods or approaches do government currently employ in involving the citizens during public project planning and decision making?
14. What is the level of participation with the existing systems/methods of public involvement?
15. Can you describe the role of the public in the participatory process?
16. Do you think public opinion and ideas are adequately considered?
17. Do you think the current participatory approach is relevant and why?
18. For what purpose(s) were the existing public participatory networks implemented?
19. Is the scope of the network clearly defined according to the intended purpose?
20. What medium is used in communicating the purpose of the participatory network to stakeholders?
21. Are the roles and responsibilities of stakeholders clearly defined and communicated?
22. Do you think it is important to define and communicate the scope, roles and responsibilities of stakeholders?
23. How important is the existing participatory approach to you?
24. How efficient and effective is the current participatory process?
25. Do you think the current participatory process contributes significantly or positively to public infrastructural project delivery?
26. To ensure an effective participatory system, what are the criteria to be considered and features that should be in place during the process of public participation?

Section 2: Determining the Causes of Project Failures

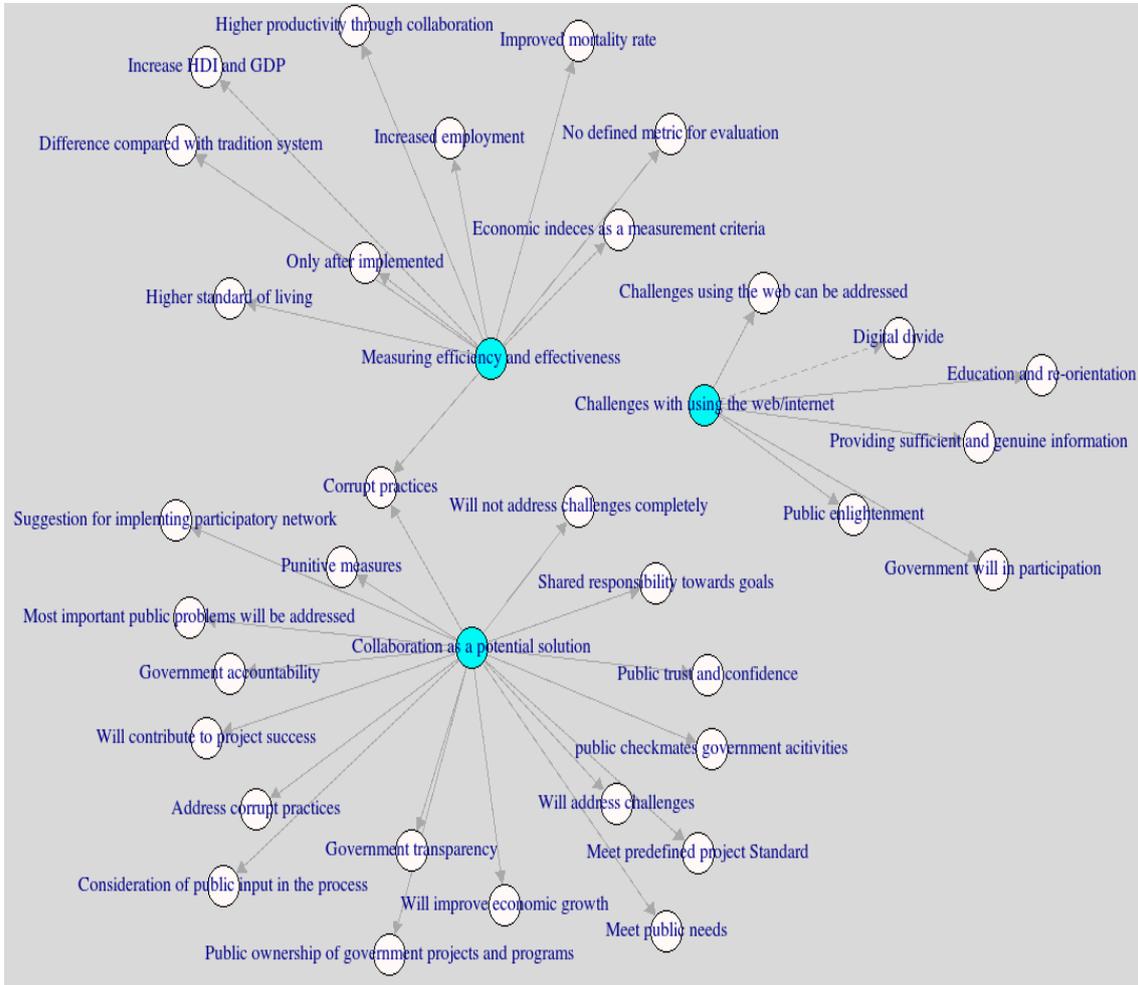
27. What is your level of knowledge about ongoing public projects around you?
28. How would you describe a successful project?
29. What criteria is most important with your definition of a successful project?
30. What is the level of abandoned, delayed and uncompleted projects around you?

31. From a scale of 0-10, with zero being unsuccessful and ten being successful, what is the success rate of public infrastructural projects in Nigeria generally?
32. What do you think are the challenges and causes of public infrastructural project failures, delays and abandonment?
33. What factors should be considered during the planning and delivery of public infrastructural projects?
34. What are the existing approaches, implemented to mitigate the causes of infrastructural project failures?
35. Do you think these methods or approaches adequately addresses the causes of project failures?
36. In your opinion, what ways can the challenges to successful project delivery, causes of project failures be better addressed?

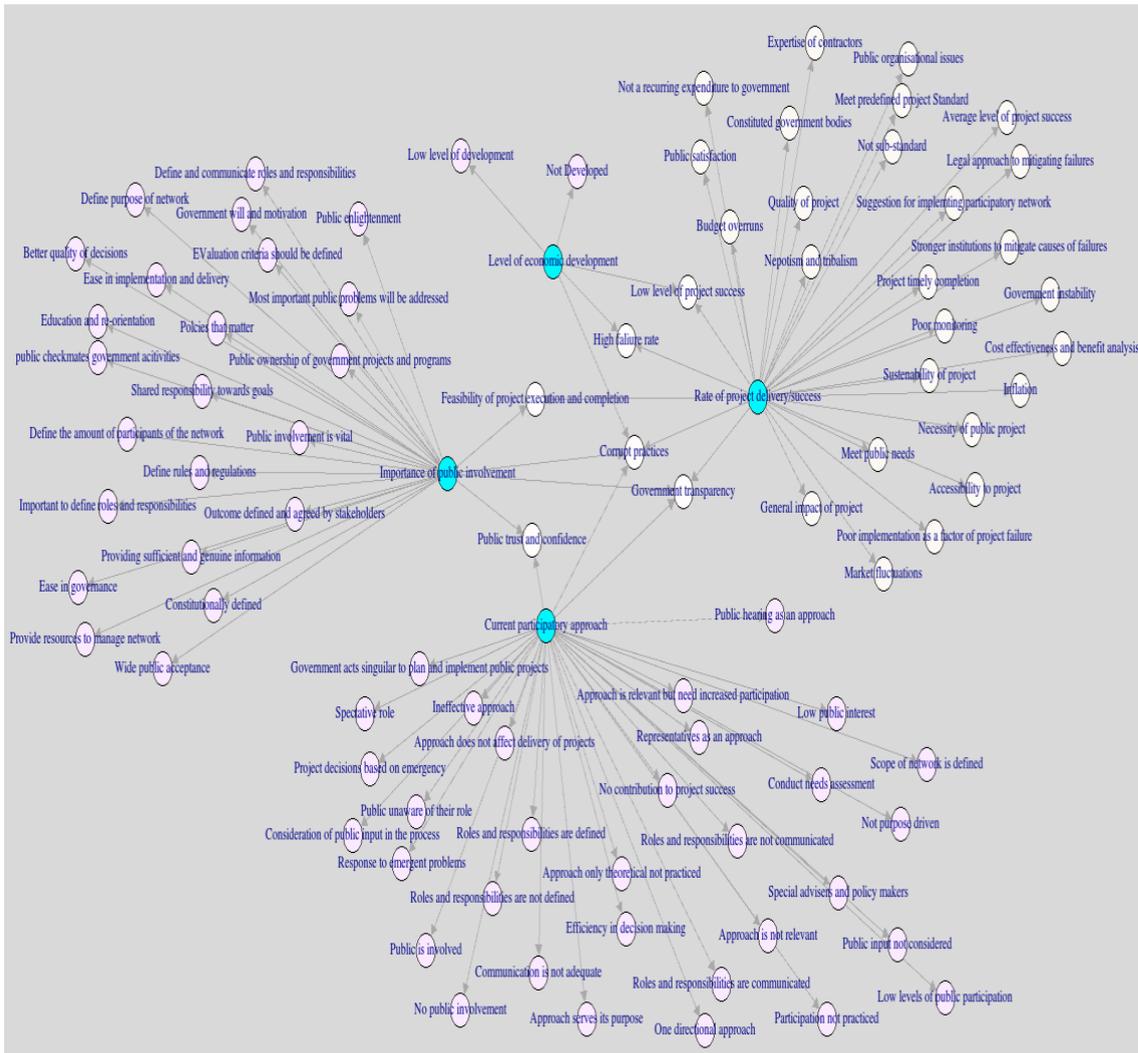
Section 3: Proposing the Collaborative Approach

37. Do you think government-public collaboration can help overcome the challenges and causes of public project failures and how? if yes.
38. How can the effectiveness and efficiency of government-public collaboration in public project planning and delivery be measured?
39. Do you think government-public collaboration will significantly contribute to public project success and how?
40. Do you think government-public collaboration in public project planning and delivery is important and beneficial to you?
41. What benefits can you derive from government-public collaboration in public project planning and delivery?
42. Can you also describe the benefits that can be derived by other stakeholders?
43. Do you think collaboration in public project delivery will significantly improve economic growth and how?
44. In which areas of the economy are these improvements visible and how can they be measured?

Appendix 2 – Thematic Map of Three Categories and Codes



Appendix 3 – Thematic Map of Four Categories and Codes



Appendix 4 – Link to Audio Interview Files

[Click Here to access files](#)

Alternatively, the following link provides access to all audio files.

<https://drive.google.com/open?id=1i3K0Vku8qDBh4BUe112wBL12Z--6f40w>