

THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

Project Management Practices in Government Organizations of Developing Countries: A Systematic Review

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Abstract:

Public sector project management is increasingly becoming an important subject matter for both the project management environment as well as the public sector, due to the demands for improvement in accountability and organizational effectiveness in public organizations. Project practitioners executing government projects in developing countries encounter various challenges, both internal and external to the project. This article analyses previous studies on project management practices in developing countries government organizations (DCGOs) published in academic journals and/or conference proceedings. Factors having an impact on project management practices in public organizations of developing countries were identified and categorized into; structural factors, government control procedures, contractor issues and lack of project management knowledge and project manager's expertise. It was also observed that a majority of the studies applied a positivist methodology, using statistical measures to collect and analyse data. Based on the studies reviewed, the findings suggest that a combination of the factors identified will be required to enhance project management practices in public organizations of developing countries. In addition the article posits that an alternative research methodology should be applied to studying project management practices in differing contexts.

Keywords: *project management practice, developing countries, government organizations, review*

1. Introduction

Since its inception more than 40 years ago, the concept of project management has gained popularity both in the private and public sector (Morris et al., 2012; Crawford and Helm, 2009). While private organizations seem to be more well-informed in utilizing project management practices, the situation is contrary in the latter setting (Rosacker and Rosacker, 2010; Wirick, 2011) plausibly due to the dissimilarity of both sectors. Project management was indirectly introduced into the public sector due to the demand for public organizations reforms by western governments (Baranskaya 2007; Crawford, L. et al., 2003). An element in these reforms was the use of private business techniques (such as cost benefit estimates and performance indicators) to tackle government spending costs and improve efficiency in service delivery. This led various public organizations to embark on developmental projects as a means to improve accountability and organizational effectiveness in the public sector (Crawford and Helm, 2009; Arnaboldi, 2004). Some authors claim that other potential benefits of utilizing public projects include the creation of socio-economic value through effective public service which consequently produces an environment that fosters investment and improves the standard of living of people in a society (Ofori, 2013; Graham and Englund, 2013). In view of this, the concept of project management in public organizations is promoted by various governments. Although, some developed nations such as UK and Australia have a record of achievement in managing government developmental projects (Klakegg et al., 2015), there is still the need for better understanding of project management practices that relate to public projects specifically in developing countries. Public organizations in various developing nations still struggle to understand and implement project management in public projects (Ika, 2012; Rwelamila and Purushottam, 2012; Muriithi and Crawford, 2003) with the expectation of deriving the benefits of delivering projects on time, on budget, within scope and delivering value to the public.

The concept of project management has diverse but parallel definitions. It is described by the Association for Project Management as the application of tools, techniques, processes, methods and experience in achieving the desired purpose of a project (APM, 2012). In the same vein, PMI (2013) defines project management as an application of skills, knowledge, tools and techniques to project endeavours in order to achieve the project prerequisites. Kerzner (2013) adopts the definition of the classical approach to management to describe project management as planning, organizing, directing and monitoring of an organization's resources for a temporary purpose that will eventually achieve specific goals and objectives. In general, these definitions all describe project management as 'a

means to an end'. Project management has been recognised as an essential requirement for organizations in order for them to achieve their objectives through managing projects (Pulmanis, 2014; Bocquet et al., 2007). Consequently, there have been claims about the relationship between project management practice and public sector projects. Reilly (2005) identified that poor project management practice contributes about 30% towards public sector project failure. A survey by Price Waterhouse Cooper showed that 50% of the reasons for project failure was due to project management practices and that public sector had the lowest project management levels compared to other sectors. In addition, the survey uncovered that the use of project management practices increases the likelihood of project success (Price Waterhouse Cooper, 2012& 2004).

1.1. Project Management Practices (PMP)

The term 'project management practice' is construed in several ways. Some authors associate it with project management competence and use it synonymously with demonstrable performance (Crawford, 2005), while others refer to it as simply the use of project management tools and techniques on project activities (Olateju, 2011; Abbasi and Al-Mharmah, 2000). The term 'approaches' has also been used in the place of 'practice' but with the same interpretation. G. Ofori and Deffor (2013). In addition, the term has been associated with the project management maturity model, suggesting that the level of continuity and capability of an organization in dealing with its projects strongly depends on project management practice (Brookes and Clark, 2009).

Besner and Hobbs (2006) identified the value of project management practices through investigating the use of tools and techniques. Other aspects of project management practice identified in the literature include: the use of processes (Winch, 2004) and the use of human side or personnel (Thamhain 2004). According to Jarzabkowski (2004) 'practice' is defined as a range of customs and rules or bodies of knowledge that state, clearly or implicitly, how the practitioner should operate or work in a certain situation. These practices can be written in documents stating best or preferred practice in the organization or are narratives demonstrating how things are done in the organization. Relating the definition by Jarzabkowski and the varying descriptions of 'project management practices', it can be stated that the use of tools and techniques is an indication of clearly informed bodies of knowledge, the use of processes indicates a range of customs and rules, and the use of personnel is the action of the practitioner. Therefore, for the current study, project management practice in a public organization is defined as a '*project management system demonstrating specific project management tools and techniques that will enhance management processes through the actions of a project manager or professional in order to support government organizations in managing public projects*'.

1.2. PMP in Developing countries government organizations (DCGOs)

Claims about the use of project management practices having an impact on project success (Milosevic and Iewwongcharoen, 2004), and providing strategic and valuable benefits for an organization (through the use of measurement tools and techniques) by the project management process (Besner and Hobbs, 2006) have led to various organizations adopting the principles of project management. In developing countries, the application of project management is still at an immature stage although the general awareness of the concept seems to permeate within various industries. One of the earliest citations of a study on project management in developing countries is that of Stuckenbruck and Zomorrodian in 1987. Although no empirical investigation was conducted, the study suggested that plans for implementing project management in a developing country should take into consideration cultural factors as well as its economic, political and administrative system. More than two decades later, the need for better understanding of project management practices in government institutions of developing countries remains (Rwelamila and Purushottam, 2012; Ika, 2012). Project management is an effective approach for developing countries to use in improving their management capabilities and facilitate the successful completion of projects, thereby achieving developmental goals. However, research has identified that there is a lack of knowledge of project management techniques and tools, and insufficient time spent on reporting and controlling in certain context (Abbasi and Al-Mharmah, 2000). Other findings, such as inadequate personnel qualifications, low level of project management competence, and identification of a lack of appropriate organization structure were reported following the assessment of the nature of project management practices in an infrastructure department in South Africa. The conclusion being that most public organizations in non-industrialized countries will experience challenges in project management practices (Rwelamila 2007). Similar research has been conducted in public organizations in West African countries and project management practices in this context seems to fall short in providing the expected benefits. In Ghana, Ofori (2013) argues that more emphasis should be placed on senior management commitment, competency and coordination in order to improve the quality of project management, while in Nigeria, Olateju (2011) identified a lack of in-depth knowledge of project management in public organizations amongst other factors affecting project management practice.

1.3. Research Objectives and Rationale

This paper puts forward an analysis of previous studies on Project management practices in Government Organizations of developing countries in order to provide useful insight into fundamental elements that influence project management practices. The public sector approach of management, particularly in developing countries, has expressed concerns for the need to embed standardized project management practices deeply in public organizations to enhance successful delivery of projects (Gale, 2012; Wirick, 2011; Fraser-Moleketi, 2003). Therefore, the current study aims to establish characteristics of previous studies that investigated project management practices in a developing country by presenting are view of those research. The extent of work done in this area is assessed in order to identify the factors that impact/constrain project management practices in government organizations.

Against this background, the paper intends to answer the following research questions:

1. What are the characteristics of previous studies on Project Management Practices in DCGOs?

2. What factors impact on Project Management Practices in DCGOs?

The rationale for this study is to identify and categorize factors previously identified in past research that impact on project management in government institutions in order to obtain a comprehensive view of issues affecting its development, thereby, contributing to project management trends and providing a platform for government decisions in the area of public sector project management. This review is of interest to the project management community because it responds to Morris et al's (2012, p 340) suggestion of the need for more clarity on project management with regards to different context, and Söderlund's (2004) recommendation for the search for broad factors impacting project management by identifying important characteristics of an organization.

For this study, classification of countries was according to their level of development as measured by per capita gross national income (GNI). According to World Bank (2013), countries with a Gross National Income (GNI) of \$1,036 to \$4,085 are classified as low and middle income countries or developing countries, while those with a GNI of \$12,616 and above are classified as developed. Furthermore, in comparing against strong social indicators (health, education and work measures) in developed countries, developing countries have significantly weaker social indicators and majority of the citizens achieve far less income (The Library of Congress, 2008). However, countries in this classification do not form a homogenous category because variance exists between level of development of their organizations, industries, resource status, level of technology advancement, practices and working environment.

2. Research Method

In order to achieve the objective of the paper, a systematic review of past studies on Project Management Practices in the context of government organizations of developing countries was carried out through an extensive search of published literature. Analysis of previous papers comprised of a chronological and interpretative approach to represent data. Although a systematic review is often offered as a numerical combination of the findings of individual studies, Tranfield et al (2003) states that it can also be used to draw contrast from a collection of studies and synthesis can be achieved through interpretive means.

This process of review provides a comprehensive summary of a topic area and includes an extent of thematic analysis and conceptual innovation (Grant and Booth 2009). The current review covered a period of 16 years from 2000 to 2016.

In identifying the appropriate research study to include in the review, the basic search criteria considered for inclusion were:

- The study should address project management practices within a public sector environment and should be based on identification of factors that determine how project objectives are achieved and/or challenges of achieving project objectives in a government organization.
- Main source of articles for the review was from an online scholarly database i.e. scholarly peer reviewed articles

Based on the search criteria, the major online databases assessed were: Business Source Complete, Science Direct, Emerald and Taylor Francis Online database. These databases contain reputable Project Management and African Journals. Articles related to Project Management were first gathered and subsequently those relating to projects in a government organization of a developing country were filtered using any of the key phrases 'Project Management', 'Public sector projects' and 'Public projects' within the article title, abstract or keywords. Nevertheless, articles that utilized other terms associated with public projects such as project governance (Young et al., 2012) and mega/complex projects (Van Marrewijk et al. 2008) were reviewed and included if its focus was on project management practices in a developing country's public organization. All journals were considered for this review and no selection criterion was used for specific or high rank journals. Google Scholar was used as a tool to identify other studies that fell within the inclusion criteria but not previously identified. Since it is customary for a study of a particular topic to cite similar studies, each research article was reviewed and its references examined to identify any relevant study not yet discovered.

The current paper sets out to analyse previous literature using an interpretative means to represent the reoccurring trend of factors that impact on project management practices in government organizations of developing countries. Data was thematically analysed so as to identify and report latent and manifest patterns within the content (Vaismoradi 2013). The question; "What are the issues /challenges in practicing project management in a government organization of a developing country?" was used to direct the analysis process.

3. Findings

In order to extract the characteristics of studies on project management practices in DCGOs, findings of relevant studies based on the literature search were identified.

Data from the reviewed studies were described based on the type of research method used for enquiry and factors impacting on project management in government organizations. Methods of enquiry identified from the reviewed articles included questionnaire surveys, focus group and mixed methods. It is observed that research on project management practices in developing countries has concentrated on investigating the current state or level of its use in the country of inquiry, hence the predominance of positivist methodologies. From a total of 17 articles retrieved for the review, 9 studies utilized quantitative research methods, 2 studies used qualitative research method and 2 conducted a mixed study. The remaining 4 papers were either a conference discussion paper or a review paper. (See Table 1)

The findings from the survey by Babatunde and Dandago (2014) revealed that the internal control system in public organizations largely affects project management. It emphasizes irresponsibility of the government and financial intricacy as areas that need to be improved on when managing public projects. Unab and Kundi (2014) conducted a review of project management practices in Pakistan by comparing existing practices in specific public organizations with generally accepted Project management practices. The PM knowledge areas were utilized in Unab and Kundi's study to map the current state of how project management is practiced. Abbasi and Al-Mharmah (2000) and Olateju et al. (2011) both conducted similar studies in public organizations of Jordan and Nigeria

respectively. In these studies, Project management tools and techniques were investigated by generating a questionnaire to measure the extent of use and PM tools and to identify challenges and benefits of project management practices. In South Africa and Ghana, a similar positivist approach was used to gather relevant information about project management practices in public organizations.

The studies highlighted above all used a positivist approach, focusing on identifying existing processes, hindrances to project success and/or levels of project management. It can be argued that these studies do not present a complete picture of project management practice in the respective countries but investigated project management from a linear thinking approach. Therefore, identifying specific explanations and finding causality in the particular contexts is vague (Smyth and Morris 2007).

An analyses of the two qualitative studies showed that, the first qualitative study used a focus group to investigate current trends in project management practice in a developing country and proposed that project management practices should not merely transfer from developed countries but should consider atypical cultural factor that affects developing countries (Zuofa, 2012), while the other employed the use of a Delphi method involving the participation of project executives to propose a structure that would enhance the sole use of conventional project management practices for fast tracking engineering projects (Dey 2000).

In addition, their view revealed that in appropriate organizational structure, access to resource, sufficient human resources (Emuze and Smallwood 2013, Van Zyl 2007, Tembo and Rwelamila, 2007), competency of project practitioners, project management awareness and knowledge, senior government officials support (Anyanwu 2013, Ofori 2013, Olateju et al. 2011, Abbasi and Al-Mharmah 2000) were some of the factors impacting on project management practices in public organizations of developing countries.

Authors	Country	Research Subject Matter	Factors that impact on Project Management Practices.	Research Method	Publication source
1 Kissi, E. and Ansah, S. 2016	Various African countries	Reviewing professional project management practices in developing African countries.	Misunderstanding of PM concepts, lack of PM knowledge, leadership, organisational culture, inadequate software, bureaucratic, political and economic challenges.	Review paper	Covenant Journal of research in the Built Environment
2 Babatunde, S.A. and Dandago, K.L., 2014.	Nigeria	To investigate the effects of internal control system deficiency on project management practice in the Nigerian public sector.	There is a positive effect of internal control system deficiency in terms of management responsibility of government on project management in the Nigerian public sector.	Quantitative study	Procedia - Social and Behavioral Sciences
3 Unab and Kundi 2014	Pakistan	To explore the Project Management (PM) practices in public sector organizations	Lack of project management practices awareness, limit of existing practices originally based on policy of organisation.	Quantitative study	Journal of Strategy & Performance Management
4 Emuze, F. and Smallwood, J., 2013	South Africa	To investigate and assess construction project performance in South African public sector environment.	In-adequate documentation and transfer of experience results in low Project management skills shortage. Inappropriate organisational culture, non-inclusive decision making within project teams and inappropriate staff motivation and empowerment.	Quantitative study	Journal of the South African Institution of Civil Engineering
5 Ofori, D.F., 2013	Ghana	To identify and evaluate the quality of project management practices as well as project success factors in Ghana	Good leadership, monitoring and feedback, client involvement, competency and experience of project personnel, usage of appropriate technology, senior management support/commitment, obligation to standards and regulations to ensure quality.	Quantitative study: Survey method	Int. Journal of Business and Management
6 Dada 2013	Nigeria	To investigate the perception of client and contracting organisations regarding public project implementation in Nigeria.	Client and Contracting organisations do not have different expectations of identified priorities in project implementation when expectations are assessed against cost, time and quality.	Quantitative study: Survey method	Organization, Technology & Management in Construction: An International Journal
7 Anyanwu, C.I 2013	Nigeria	How project management and the project manager can be used to improve building and infrastructural projects and the challenges facing this objective.	Poor planning and scheduling of project activities, project management training, stakeholders' awareness of project management, incompetent contractors, inadequate management tools and project manager's proficiency.	Discussion paper	Scientific Research Journal (In African Journals Online)

Table 1: shows a chronological order of data extracted from the review.

8	Zuofa, Tarila 2012	Nigeria	Investigating Project Management practices in developing countries.	Incompetence of project management practitioners, political and economic uncertainties and a lack of understanding of the fundamentals of project management.	Qualitative study : Focus group	PMI Conference paper
9	Ogege, S 2011	Nigeria	Identifying and analysing project management constraining factors in public sector construction.	Contractors don't use project management tools, lack of project professionals in project execution, unpatriotic behaviour of some policy makers toward the award and planning of projects.	Quantitative study	Journal of Research in National Development (In African Journals Online)
10	Olateju et al. 2011	Nigeria	To investigate the application of project management practice in Nigerian public sector	Vital hindrance to the application of project management practices is the lack of project management knowledge and application, lack of professional training, bribery and corruption, lack of leadership/government commitment and rigid organizational structure.	Quantitative study: Survey method	Australian Journal of Business and Management Research
11	Ahadzie, D. K and Amoa-Mensah, K 2010	Ghana	Critical review of management practices in Ghanaian building industry which includes an assessment of professional project management services.	Contractors limited knowledge of applying project management, no improvement of project management knowledge.	Critical Review	Journal of Science and Technology (In African Journals Online)

	Authors	Country	Research Subject Matter	Factors that impact on Project Management Practices.	Research Method	Publication source
12	Tembo, E. and Rwelamila, P., 2007	Botswana	Investigating the level of project management competency in public organisations of Botswana.	Lack of authority/power by project manager in decision making, lack of project management guidelines established by a project office.	Mixed method study	CIB Commissions
13	Nguyen 2007	Vietnam	Discusses how project management systems and knowledge can be transferred to developing countries and challenges associated with it	Lack of transfer of project management expertise, principles and methodologies	Conference discussion paper	Proceedings 2007 PMI Global Congress
14	Rwelamila, P.M.D., 2007	South Africa	To investigate project management competence levels of a public sector infrastructure department in South Africa.	Complicated tendering procedure, lack of financial and managerial skills, lack of technical skills, improper scrutiny and absence of a filtering mechanism for contractors.	Mixed method study	Construction Management and Economics
15	Van Zyl, H., 2007	South Africa	To categorise the important dimensions/variables for efficient project management practice in a South African public organisation.	Organisational support for project management, access to resources needed to execute projects and adequacy of human resources have a major impact on the efficiency of project management practice.	Quantitative study	Journal of Economic and Financial Sciences.
16	Dey, P.K., 2000	India	Article proposes a system to accomplish the phases of a project concurrently in order to address the deficiency for the sole use of conventional project management practices.	A lack of sufficient cost, non-involvement of the project staff in the planning stage, changes in government policy, poor contract administration, lack of project management knowledge	Qualitative study: Delphi technique, case study	International Journal of Public Sector Management
17	Abbasi, G.Y. and Al-Mharmah, H., 2000	Jordan	Exploring Project Management tools and techniques used by the public sector in Jordan.	Lack of project management knowledge, change in authorities, difficulty in estimating activity cost.	Quantitative study	International Journal of Project Management

Table 1: Chronological data of articles reviewed

Table 2 presents a wide view of authors that studied Project Management practices in DCGOs. The study identified five categories of factors that impact on project management practices. Although, a majority of the studies highlighted a lack of project management skills, knowledge and competence as key factors, factors relating to contractor's inadequacy in project management knowledge, the internal process of public organizations, the climate of the organization and the project manager are identified also as important factors.

Authors	Factors
	Factors related to the Climate of the Organisation
Kissi, E. and Ansah, S. (2016), Emuze and Smallwood (2013), Ofori (2013), Zuofa and Ochieng (2012), Ogege (2011), Olateju et al. (2011), Van Zyl (2007), Abbasi and Al-Mharmah (2000)	One-directional communication mediums, non-inclusive decision making within project teams, Good leadership, Client involvement, senior management support/commitment, political and economic uncertainties, unpatriotic behaviour of some policy makers toward the award and planning of projects, bribery and corruption, lack of leadership/government commitment, rigid organizational structure, organisational support for project management, change in authorities.
	Factors related to the Internal processes of the Organisation
Unab and Kundi (2014), Emuze and Smallwood (2013), Babatunde and Dandago (2014), Anyanwu (2013), Tembo and Rwelamila (2007), Rwelamila (2007), Van Zyl (2007), Rahman,S (ND)	Deficiency of internal control systems, In-adequate documentation, monitoring and feedback, obligation to standards and regulations, inadequate management skills and tools, lack of project management guidelines, complicated tendering procedure, improper scrutiny and absence of a filtering mechanism for contractors, inadequacy of human resources. Limit of existing practices originally based on policy of organisation.
	Factors related to Project management knowledge
Kissi, E. and Ansah, S. (2016), Unab and Kundi (2014), Emuze and Smallwood (2013), Ofori (2013), Anyanwu (2013), Zuofa and Ochieng (2012), Olateju et al. (2011), Abbasi and Al-Mharmah (2000), Dey, P.K., (2000)	Project management skill shortage, lack of understanding of the fundamentals of project management, inappropriate staff motivation and empowerment, usage of appropriate technology, poor planning and scheduling of project activities, stakeholders' awareness of project management, slackness in preparation of stakeholder management plan, human development plan, project communication management, risk management plan and other risk related contract decisions.
	Factors related to the Contractor
Dada (2013), Anyanwu (2013), Ogege (2011), Ahadzie and Amoa-Mensah (2010), Dey, P.K., (2000)	Expectations of contractors, incompetent contractors on the use of project management tools, Contractors limited knowledge of applying project management
	Factors related to the Project Manager
Ofori (2013), Anyanwu (2013), Zuofa and Ochieng (2012), Ogege (2011), Tembo and Rwelamila (2007)	Incompetence of project management practitioners, project management training, project manager's proficiency, lack of project professionals, Lack of authority/power by project manager in decision making,

Table 2: Classification of factors impacting DCGOs

4. Discussions

Project management research is populated by positivist methodologies. The limited number of studies found on project management practices in public organizations of developing countries could be due to the manner in which investigations have been conducted. According to Fineman (2004) the use of quantitative methods to investigate a system undervalues the development of that system. Positivism is utilized in project management literature to examine traditional project management views which emphasize tools and techniques used as control mechanisms, rather than the social setting and human side of project management. The findings resonate with concerns about the nature of research methods on how project management is investigated in government organizations of developing countries. Blomquist et al (2010) argue for a complimentary method to rational approaches, which focuses on the people within the context of projects. In other words, it was suggested that research on what practitioners do in projects will enhance knowledge about project management practices rather than on affirmation of best practice standards for project management. Likewise, Smyth and Morris(2007) proposed that alternate methodologies such as critical realism should be applied to researching projects and their management.

Critical realism argues that the world is socially constructed, even though not entirely. It proposes that sometimes objects or entities need to be explored from a perspective of external and observable behaviours of people, systems and effects as they happen (Easton, 2010). Due to its capability to engage with causality and complexity in relation to structure and processes (Smyth and Morris, 2007) the application of critical realism is suggested as a plausible methodology in investigating project management practice because it examines the entities that define the context, and explains their relationship and their significance. Furthermore, based on the current study, it is arguable that in order to enhance successful embedding of project management practices in government organizations of developing countries, issues of climate of the organization, internal process of the organization, project management knowledge and issues relating to the contractor and project manager ought to be addressed or explored in a more integrative and holistic way. The findings of this review suggest that a combination of the identified themes is required to enhance project management practices in DCGOs.

4.1. Categories of Factors Impacting DCGOs

4.1.1. Climate of the Organization

Organizational climate is the perception of the work environment which is understood as a key variable between the milieu of an organization and the conduct of its workers, it is an understanding of how staff/workers experience their organization (Rousseau, 1988). The climate of public organizations is depicted by the extent to which their activities are structured and the centralization of a system of authority. An organization's climate is affected by macro elements (such as political and economic factors) and micro elements (such as technological factors), although in some cases the distinction between the two is not always specific (Walker and Kalinowski, 1994). Therefore, in a public organization, it can be argued that some external elements such as political factors will intersect with the internal boundary.

Based on the review, factors identified as impacting on project management practices categorized under climate of the organization include; regular change in authority which consequently affects government policy, formal and informal structure which represents the internal configuration of the organization, environmental regulations and economic condition. These factors constitute the governance of an organization and are the means by which the organization's goals and monitoring of performance are determined (OECD, 2004). Nevertheless, the hierarchical structure operating in most government organizations hinders the project-based matrix structure fostering successful project delivery (Van der waltd, 2011). For instance, projects in the public organizations are classically executed on the operational level of public departments but due to the common red-taping nature in such a context, senior government officials such as Executive Directors and Senior Managers are expected to assume the role of project managers. However, in practice, these representatives of the public organization share no familiar grounds with the concerns of a project manager (Young et al., 2012) and therefore do not possess the adequate skills to manage projects.

4.1.2. Project Management Knowledge and Project Manager Expertise

Factors associated with project management knowledge emerged in almost all the articles reviewed. It is thus a major concern for government organizations. While some authors referred to a general deficiency of project management knowledge in government organization staff (Rwelamila, 2007), others emphasized a lack of awareness and professionalism of project sponsors (Ofori, 2013). The problem of shortage of adequate project management knowledge seems to be significant in developing countries (Olateju et al., 2011; Rwelamila, 2007; Abbasi and Al-mharmah, 2000). One could argue that this is due to the economic circumstance of the environment and/or conditions in which projects are embedded. Grabher (2002) refers to these contextual conditions in his concept of 'project ecology', suggesting that they have an impact on the development and diffusion of project management knowledge and practices. Factors that associate with the project manager and lack of project management knowledge correlate somewhat to the climate of the organization. For instance, the lack of authority of a project manager in decision making in public organizations is often due to the structure of the organization. Employing alternative methodologies to studying project manager's actions and in identifying what frameworks and concepts emerge from those actions will add to understanding how project management is practiced in different context (Blomquist et al., 2010).

4.1.3. Internal Control Processes of the Organization

An evaluation of the literature observed that most projects conducted in government organizations of developing countries did not have adequate control and monitoring mechanisms. Arguably, this could be due to the traditional administrative system (associated with hierarchical, technocratic and rule bound structures) still rooted in government institutions (Hughes, 2012). This theme is based on the issue of poor management control systems for public projects (Pülmanis, 2014; VanZyl, 2007). In some cases, the lack of an independent control system resulted in fraud and corruption (Babatunde and Dandago, 2014) while inadequate management skills and improper scrutiny rendered an ineffective internal control process in others (Anyanwu, 2013). Theoretically, the establishment of a Project Support Office and/or Project Implementation Unit in public organizations will have an effect in the application of project management methodologies and improve control processes, specifically, in developing countries (Tembo and Rwelamila, 2007; Baranskaya, 2007).

4.1.4. Issues Related to the Contractor

Issues relating to the contractor regarding project management development in the government organizations of a developing country seemed to recently emerge in published articles. This may be due to collaborative forms of contractual agreement such as partnering, project alliances and outsourcing (Lahdenperä, 2012; Akintoye et al., 2000) which emerged in the 1990s as a means of improving project performance in construction projects (Gadde and Dubois, 2010). The development of collaboration in the organizational milieu of a complex project is associated with; institutional processes, structural arrangement, key suppliers, regulatory agencies and institutional logics (Morris et al., 2011), therefore an investigation into collaborative forms of contractual agreement in order to develop project management practices and enhance projects in public organizations of a developing country would be a relevant study.

5. Limitation

The study has limitations with regard to using only online scholarly peer reviewed papers. Thus publication bias (Field and Gillett, 2010) commonly associated with some types of review processes may occur. A second limitation is due to the parameters and keywords/phrases used in the article selection process. Nevertheless, incorporating other keywords such as 'mega/complex projects' and 'project governance' as search keywords allowed for varying issues of project management practices in government organizations

to enter the dataset. The method of search and criteria used could be refined for future studies, and future data generated can then be compared with the current study.

6. Conclusion and Recommendation

The current study reviewed existing literature for knowledge on factors that impact on project management practices in government organizations of developing countries. An exploration into various levels of literature analysis which consist of journal type and publication period, location of study and research method used in enquiry are presented. In addition, factors responsible for impacting on project management practices were identified and categorized. The categories are; Climate of the Organization, Project management knowledge and Project manager expertise, Internal control processes of the Organization and issues relating to the contractor. The identification of these themes is a step forward in developing project management practices in public organizations of developing countries. This study proposes that a combination of the identified themes is required to enhance project management practices in DCGOs. However, the study also highlights that the advancement of the concept of project management practices in a specific context depends on the methodology used in investigation. Concerns are raised about the predominance of positivist methodologies identified in existing project management literature. Positivist methodologies do not support interpretations of contextual characteristics relevant for specific explanations and development of project management (Smyth and Morris, 2007). Critical realism which places emphasis on contextual situation is proposed as an approach to exploring project management practices in government organizations of developing countries. This method seeks to measure the underlying powers in the essence of the object of study, according to structure and process. It identifies what processes work, what practitioners or agents do, and what produces change. Some authors suggest that this approach is arguably a pragmatic one (Easton, 2010).

The present condition of the methodological approach applied in government organization research in developing countries in relation to project management may explain the difficulty in understanding and implementing project management in public projects in such contexts. Specifically, in Africa, these challenges, referred to as "African Project Syndrome" (Rwelamalia and Ssegwa, 2014) limit the goal of delivering projects on time, on budget, within scope and delivering value to the public. Research in project management tends to mostly take on a rational approach, which seems paradoxical with the belief that projects are basically open systems consisting of many contextual inter related dependencies and individual variances (Engwall, 2003). Exploring the interaction between project practitioners, contextual dynamics and how tools and techniques are applied will offer greater insight and explanation on the management of projects in diverse context.

7. References

- i. Abbasi, G. Y., & Al-Mharmah, H. (2000). Project management practice by the public sector in a developing country. *International Journal of Project Management*, 18(2), 105-109.
- ii. Ahadzie, D., & Amoa-Mensah, K. (2010). Management practices in the Ghanaian house building industry. *Journal of Science and Technology (Ghana)*, 30(2).
- iii. Akintoye, A., McIntosh, G., & Fitzgerald, E. (2000). A survey of supply chain collaboration and management in the UK construction industry. *European Journal of Purchasing & Supply Management*, 6(3-4), 159-168.
- iv. Anyanwu, C. (2013). Project management and the project manager. A strategy for addressing the problem of building and infrastructural collapse in Nigeria. *International Journal of Development and Management Review*, 7(1)
- v. APM. (2012). What is project management? Association of Project Management, Inc. Retrieved from <http://www.apm.org.uk/WhatIsPM>
- vi. Arnaboldi, M., Azzone, G., & Savoldelli, A. (2004). Managing a public sector project: The case of the Italian treasury ministry. *International Journal of Project Management*, 22(3), 213-223.
- vii. Baranskaya, A. (2007). Project management in public administration of transitional countries. Moscow State University, Russia.
- viii. Babatunde, S. A., & Dandago, K. I. (2014). Internal control system deficiency and capital project mis-management in the Nigerian public sector. *Procedia - Social and Behavioral Sciences*, 164, 208-221
- ix. Besner, C., & Hobbs, J. B. (2006). The perceived value and potential contribution of project management practices to project success.
- x. Blomquist, T., Hällgren, M., Nilsson, A., & Söderholm, A. (2010). Project-as-practice: In search of project management research that matters. *Project Management Journal*, 41(1), 5-16.
- xi. Bocquet, J., Marle, F., & Ramirez, N. (2007). Assessing project management maturity: A case study. Chatenay-Malabry, France: Ecole Centrale Paris,
- xii. Brookes, N., & Clark, R. (2009). Using maturity models to improve project management practice. POMS 20th Annual Conference, Florida USA.
- xiii. Crawford, L., Costello, K., Pollack, J., & Bentley, L. (2003). Managing soft change projects in the public sector. *International Journal of Project Management*, 21(6), 443-448.
- xiv. Crawford, L. (2005). Senior management perceptions of project management competence. *International Journal of Project Management*, 23(1), 7-16.
- xv. Crawford, L. H., & Helm, J. (2009). Government and governance: The value of project management in the public sector. *Project Management Journal*, 40(1), 73-87.
- xvi. Dada, M. O. (2013). Expected success factors for public sector projects in Nigeria: A stakeholder analysis.

- xvii. Dey, P. K. (2000). Managing projects in fast track-A case of public sector organization in India. *International Journal of Public Sector Management*, 13(7), 588-609.
- xviii. Easton, G. (2010). Critical realism in case study research. *Industrial Marketing Management*, 39(1), 118-128.
- xix. Emuze, F., & Smallwood, J. (2013). Management concepts and project performance: Perceptions from the South African public sector environment. *Journal of the South African Institution of Civil Engineering*, 55(2), 21-28.
- xx. Engwall, M. (2003). No project is an island: Linking projects to history and context. *Research Policy*, 32(5), 789-808.
- xxi. Field, A.P., & Gillett, R. (2010). How to do a meta-analysis. *British Journal of Mathematical and Statistical Psychology*, 63(3), 665-694.
- xxii. Fineman, S. (2004). Getting the measure of emotion-and the cautionary tale of emotional intelligence. *Human Relations*, 57(6), 719-740.
- xxiv. Fraser- moleketi, G. (2003). Project management in the public sector. Input by the Minister of the Department of Public Service and Administration at the IQPC conference on Project Management in the public sector. Retrieved from: <http://www.polity.org.za/article/frasermoleketi-parliamentary-media-briefing-february-2003-19022003-2003-02-19> .
- xxv. Gadde, L., & Dubois, A. (2010). Partnering in the construction industry—Problems and opportunities. *Journal of Purchasing and Supply Management*, 16(4), 254-263.
- xxvi. Gale, F. (2012). Capital Gains. Facing public scrutiny and shrinking budgets, federal governments tap the private sector to bolster their project management. PM Network, Project Management Institute
- xxvii. Grabher, G. (2002). The project ecology of advertising: Tasks, talents and teams. *Regional Studies*, 36(3), 245-262.
- xxviii. Graham, R. J., & Englund, R. L. (2013). *Creating an environment for successful projects* John Wiley & Sons.
- xxix. Grant, M. J., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal*, 26(2), 91-108.
- xxx. Hughes, O. E. (2012). *Public management and administration* Palgrave Macmillan.
- xxxi. Ika, L. A. (2012). Project management for development in Africa: Why projects are failing and what can be done about it. *Project Management Journal*, 43(4), 27-41.
- xxxii. Jarzabkowski, P. (2004). Strategy as practice: Recursiveness, adaptation, and practices-in-use. *Organization Studies*, 25(4), 529-560.
- xxxiii. Kerzner, H. (2013). *Project management: a systems approach to planning, scheduling, and controlling*. John Wiley & Sons.
- xxxiv. KISSI, E. and ANSAH, S.K., 2016. Professional Project management Practices and its Constraints in Developing African Countries: A Literature Review. *Covenant Journal of Research in the Built Environment*, 1(2),
- xxxv. Klakegg, O. J., Williams, T., & Shiferaw, A. T. (2015). Taming the ‘trolls’: Major public projects in the making. *International Journal of Project Management*,
- xxxvi. Lahdenperä, P. (2012). Making sense of the multi-party contractual arrangements of project partnering, project alliancing and integrated project delivery. *Construction Management and Economics*, 30(1), 57-79.
- xxxvii. Milosevic, D., & Iewwongcharoen, B. (2004). Management tools and techniques: The contingency use and their impacts on project success. *Proceedings of the 3rd PMI Research Conference, London, England*.
- xxxviii. Morris, P. W., Pinto, J. K., & Jonas, S. (2012). *The oxford handbook of project management* OUP Oxford.
- xxxix. Muriithi, N., & Crawford, L. (2003). Approaches to project management in Africa: Implications for international development projects. *International Journal of Project Management*, 21(5), 309-319.
- xl. Nguyen, N. M. (2007). The challenges of transferring modern project management principles and methodologies to developing countries. *PMI Global Congress*,
- xli. OECD. (2004). *G20/OECD Principles of Corporate Governance*. Retrieved from <http://www.oecd.org/daf/ca/Corporate-Governance-Principles-ENG.pdf> .
- xl.ii. Ofori, D., & Deffor, E. W. (2013). Assessing project management maturity in Africa: A Ghanaian perspective. *International Journal of Business Administration*, 4(6), 41.
- xl.iii. Ofori, D. F. (2013). Project management practices and critical success Factors—A developing country perspective. *International Journal of Business and Management*, 8(21), p14.
- xl. iv. Ofori, D., & Deffor, E. W. (2013). Assessing project management maturity in Africa: A Ghanaian perspective. *International Journal of Business Administration*, 4(6), 41.
- xl. v. Ogege, S. (2011). Project management in bayelsa: Issues and challenges. *Journal of Research in National Development*, 9(1), 148-152.
- xl. vi. Olateju, O. I., Abdul-azeez, I. A., & Alamutu, S. A. (2011). Project management practice in Nigerian public Sector—An empirical study. *Australian Journal of Business and Management Research*, 1(8), 01-07.
- xl. vii. Oloruntobi Dada, M. (2013). Expected success factors for public sector projects in Nigeria: A stakeholder analysis. *Organization, Technology & Management in Construction: An International Journal*, 5(2), 852-859.
- xl. viii. PMI. (2013). *A Guide to the Project Management Body of Knowledge (PMBOK Guide) 5th ed.* PMI: Pennsylvania.
- xl. ix. Pūlmanis, E. (2014). Public sector project management efficiency problems, case of Latvia. *Regional Formation and Development Studies*, 11(3), 177-188.
1. PWC. (2012). *Insights and Trends: Current Programme and Project Management Practices*. Retrieved from: http://www.pwc.com/en_US/us/people-management/assets/programme_project_management_survey.pdf

- li. PWC. (2004). Boosting Business Performance through Programme and Project Management. Retrieved from: <http://www.pwc.com/us/en/operations-management/assets/pwc-global-project-management-survey-first-survey-2004.pdf>
- lii. Reilly, J. (2005). Cost estimating and risk management for underground projects. Proc., International Tunneling Conference,
- liii. Rosacker, K. M., & Rosacker, R. E. (2010). Information technology project management within public sector organizations. *Journal of Enterprise Information Management*, 23(5), 587-594.
- liv. Rousseau, D. M. (1988). The construction of climate in organizational research. In C. L. Cooper, & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol.3, 139–158). New York:Wiley.
- lv. Rwelamila, P. D., & Ssegawa, J. K. (2014). The African project failure syndrome: The conundrum of project management knowledge Base—The case of SADC. *Journal of African Business*, 15(3), 211-224.
- lvi. Rwelamila, P., & Purushottam, N. (2012). Project management trilogy challenges in Africa—Where to from here? *Project Management Journal*, 43(4), 5-13.
- lvii. Rwelamila, P. M. D. (2007). Project management competence in public sector infrastructure organisations. *Construction Management and Economics*, 25(1), 55-66.
- lviii. Söderlund, J. (2004). Building theories of project management: past research, questions for the future. *International Journal of Project Management*, 22(3), 183-191.
- lix. Smyth, H. J., & Morris, P. W. (2007). An epistemological evaluation of research into projects and their management: Methodological issues. *International Journal of Project Management*, 25(4), 423-436.
- lx. Stuckenbruck, L. C., & Zomorrodian, A. (1987). Project management: The promise for developing countries. *International Journal of Project Management*, 5(3), 167-175.
- lxi. Tembo, E., & Rwelamila, P. (2007). Project management maturity in public sector organisations: The case of botswana'. *Proceedings of CIB Conference W*, 65
- lxii. Thamhain, H. J. (2004). Linkages of project environment to performance: Lessons for team leadership. *International Journal of Project Management*, 22(7), 533-544.
- lxiii. The Library of Congress., 2008. Collections Policy Statements, Developing countries. [online]. Retrieved from <http://www.loc.gov/acq/devpol/cpsstate.html>
- lxiv. The World Bank. (2013). New country classification. [online]. Retrieved from <http://data.worldbank.org/news/new-country-classifications>.
- lxv. Tranfield, D., Denyer, D. and Smart, P. (2003) Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management* 14(3), 207-222.
- lxvi. Unab, W., & Kundi, M. F. A. (2014). Review of project management (PM) practices in public infrastructure development organizations of pakistan. *Journal of Strategy and Performance Management*, 2(4), 144.
- lxvii. Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398-405.
- lxviii. Van der Waldt, G. (2011). The uniqueness of public sector project management: A contextual perspective. *Politeia*, 30(2), 66-87.
- lxix. Van Marrewijk, A., Clegg, S. R., Pitsis, T. S., & Veenswijk, M. (2008). Managing public–private megaprojects: Paradoxes, complexity, and project design. *International Journal of Project Management*, 26(6), 591-600.
- lxx. Van Zyl, H. (2007). The ranking of dimensions for project-management efficiency in the public sector. *Journal of Economic and Financial Sciences*, 1(1), 39-49.
- lxxi. Walker, A., & Kalinowski, M. (1994). An anatomy of a hongkong project—organization, environment and leadership. *Construction Management and Economics*, 12(3), 191-202.
- lxxii. Winch, G. (2004). Rethinking project management: Project organizations as information processing systems. *Proceedings of the PMI Research Conference*.
- lxxiii. Wirick, D. (2011). *Public-sector project management: Meeting the challenges and achieving results* John Wiley & Sons.
- lxxiv. Young, R., Young, M., Jordan, E., & O'Connor, P. (2012). Is strategy being implemented through projects? contrary evidence from a leader in new public management. *International Journal of Project Management*, 30(8), 887-900.
- lxxv. Zuofa, T. (2012). Towards the advancement of project management practice in developing countries the case of Nigeria. *PMI conference paper*.