



## CRITICAL SUCCESS FACTORS FOR ENHANCED STAKEHOLDER MANAGEMENT IN GHANA

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### Abstract

*Though construction projects undertaken in developing countries are aimed at socio-economic growth, the benefits cannot be realized without carefully considering project stakeholders management for successful delivery. This study identified and evaluated Critical Success Factors CSFs as part of a broader study aimed at “Developing Sustainable Stakeholder Management Framework for Developing Countries”. An exploratory, qualitative survey was adopted. A questionnaire survey was used to validate 35 CSFs identified from the literature reviewed and Relative Importance Index for analysis. Early stakeholders’ identification; managing culture and political environment; communication; project managers’ competence; formal stakeholder management process was highly ranked. Five groups were also confirmed. The study contributes to the body of knowledge by validating CFSs for the Ghanaian construction industry.*

**Keywords:** *Critical Success Factors, developing countries, project success, stakeholder management.*

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Contact: [caigbavboa@uj.ac.za](mailto:caigbavboa@uj.ac.za). The authors declare that he has no relevant or material financial interests that relate to the research described in this paper. Also, the authors declare that the submitted paper is their original work and that, upon publication, nothing contained in it will not constitute an infringement of any copyright. Paper received **07.01.2016**. Approved **05.03.2016**. This paper is licensed under the Creative Commons Attribution-Non Commercial-No Derives 3.0. License. This paper is published with Open Access at [www.socioeconomica.info](http://www.socioeconomica.info).

## 1. Introduction

Ghana as a developing country continue to undertake construction projects as a development intervention for improved physical infrastructure provision and socio-economic growth. The success of construction projects undertaken is critical as it impacts on the economy and output of the construction industry and the vice versa. Notably are the construction industry's contribution towards the GDP, socio-economic development, direction of the economy due to the huge investment, effect on other sectors as a result of linkages and employment due to the labour intensive nature (Ofori, 2012). To achieve project success there have been several attempts to consider the technical aspect of project management. Interestingly, several studies by scholars have identified critical success factors CFSs aimed at addressing shortfalls in project delivery without considering the perception, role and influence of the many stakeholders involved in the project delivery (Davis, 2013). In spite of the studies and efforts to find solution for successful project delivery, there are records of many project failures in developing countries which calls for a new approach.

Project failures and poor delivery of construction projects in developing countries have been attributed to several factors such as cost and time overruns, poor quality of delivery, late scope changes, poor and late payment, relocation of projects, delays and poor planning of projects which are attributed to the numerous participants involved in a project: project manager, client, owner, sponsor, consultants, contractors, sub contractors and suppliers referred as stakeholders (Fugar and Agyakwah-Baah, 2010). Othman (2013) attributes mega-project delivery failures to political, lack of human resource, technical and managerial challenges. In addition projects have been considered failure when measured against the stakeholders' satisfaction and needs (PMI, 2013). Construction projects have several firms, individuals and participants who affect or are affected by the project outcome (Freeman, 1984; Yang, 2010). Construction projects cannot be successfully established and accomplished without carefully considering and dealing with all the stakeholders involved (Eslerod and Jepsen, 2013). Enhancing project delivery then calls for the need for developing countries to consider stakeholder management as done in the developed countries and project managers embrace stakeholder management as a soft project management skill aimed at enhancing project delivery.

Stakeholder management is not just about managing the individuals and firms involved in a project, nor an event. Rather it is a process that entails a systematic approach to identifying all stakeholders, prioritising their needs and interest, analysing and monitoring all activities carried out in connection with the stakeholders aimed at project success (Lock, 2007; Eslerod and Jepsen, 2008). There are several factors that influences the outcome of successful stakeholder management process. In addition there are equally different approaches suggested by different scholars and countries (Yang, 2010). It is therefore pertinent identifying and considering the critical success factors CSFs for enhanced stakeholder management process. Though there is a study that has identified CSFs for construction projects, the study was carried out in developed countries region

specific and recommends a similar study for developing countries. This has necessitated a study to confirm and identify additional CSFs for developing countries.

This research aims at identifying and evaluating CSFs for effective stakeholder management in developing countries as part of a broader study aimed at “Developing sustainable stakeholder management framework for developing countries“. Three research objectives were formulated as: to identify CSFs for an effective stakeholder management process, (2) categorize the factors identified and (3) evaluate the identified CSFs to determine the extent of impact of each factor. The study contributes towards the body of knowledge by making available to project managers the identified, evaluated CSFs for SM process in developing countries and the subsequent development of a framework to be used for an effective stakeholder management process for enhanced project delivery. The research design approach selected employed a combination of a systematic integrative literature review, quantitative thematic analysis as phase one. Identified and additional critical factors were validated and sought for from interviewing key industry players. Evaluation of the impact was however addressed from a questionnaire survey employed and analysed using a relative importance index. There were however limitations as research participants involved were from one selecter region in Ghana.

Identifying and evaluating critical success factors for successful delivery of construction projects in developing countries cannot be over emphasized. This is because of the infrastructure development role in the socio-economic realization coupled with the construction industry’s contribution towards the nation’s growth (Ofori, 2012). Further, these projects support governments in achieving their development objectives (Othman, 2013). Public sector government sponsored projects range from small to mega scale thereby requiring improved project management controls to avoid mega-costs and schedule (Relle, 2014). According to Mok et al, (2015) mega construction projects for instance, involves various stakeholders of diverse occupational and professional backgrounds with different levels, types of interests in the project which is complicated in nature hence impacting on project delivery. Project team members usually meets for the first time, from different geographical locations, varying cultural background, notwithstanding the pressure of external and complex stakeholder environment (Aaltonen, 2011). Some projects embarked by governments in developing countries have failed or at least there is perception and the major causes attributed to role of stakeholders involved which calls for further investigation (Davis 2014; Eyiah-Botwe, 2015).

The lack of success and what constitutes critical success criteria especially relating to public sector projects delivery has raised several concerns (Amoa-Mensah, 2011; Adinyira et al, 2012). Reasons assigned as responsible for project delivery failure in developing countries include, time, cost overruns, poor quality and project management issues, time, perceived as mainly technical (Davis, 2014). Ahadzie (2010) argues that the central theme for any project success criteria must focus on the needs of the project, client or user. This is confirmed as client satisfaction is identified as a main project success criterion (Newcombe 2003: Adinyira et al, 2012). Though different stakeholders have different perception of project success, the client and end users have many common success factors including stakeholder satisfaction, communication, cost and time budgets (Davis, 2014). Project managers as key stakeholders have a responsibility to ensure project success; meeting stakeholder needs and satisfaction (PMI, 2008). A project cannot be established and successfully delivered without carefully considering and dealing with project stakeholders (Eslerod and Jepsen, 2013). This calls for the need to evaluate and understand the complexities of the stakeholders involved which is critical for project success.

Stakeholders in construction are individuals and groups who have interest or whose interest can affect or be affected by the outcome of a project (Freeman, 1984; Yang 2010). In addition, stakeholders have power, legitimate, and urgent claim, stake, expectation and can be antagonistic to project outcome (Mitchell et al, 1997, Newcombe, 2003). Following this definition several project stakeholders have been identified to include client, contractor, sponsor, local community member, lobbying organization, and government agency, project managers, designers, sub-contractors, suppliers, funding bodies, users and the community (Newcombe, 2003 ;Cova & Salle, 2005).

Considering the complexity, diverse stakeholders, threats and opportunities to be managed within the set targets of cost, time and performance, stakeholder management is required for successful project delivery (OGC, 2003; Chapman and Ward 1997). Olander (2006) mentions that construction projects attract interest from various stakeholders whose expressed needs and expectations are often in conflict with each other and managed through a stakeholder analysis process. Lock (2007) suggest the systematic identification, analysis, planning actions, communication, and negotiation aimed at stakeholders influence. Chyiniio and Olomolaiye (2010) opines a process of identifying and classifying stakeholders for initial and subsequent engagements with stakeholders; timely, planned and in a coordinated manner. Eskerod and Jepsen (2013) argues by broadening the definition as consisting all purposeful activities carried out in connection to the project in order to enhance project success. Nevertheless, stakeholder management has its own challenges including the several processes emanating from industry practices among others (Oyegoke, 2008). Each project is unique in nature, no two projects are ever the same hence the need for additional efforts to build effective project teams and generate trust, both within and between the team and the project stakeholders within the limited duration of projects requirements (Grabher, 2002; Yang 2011). This calls for the need to identify critical factors for successful implementation of any stakeholder management process.

Critical Success Factors CSFs in terms of stakeholder management, are viewed as those activities and practices that should be addressed in order to balance stakeholders' interests and further ensure that projects are moved forward (Yang, 2011). Several critical success factors for project delivery have been identified by scholars compared with stakeholder management (Davis, 2014). Pinto and Slevin (1987), Chan et al. (2002) are among recognized authors of the most widely used success factor list (Jugdev and Müller, 2005; Turner and Müller, 2005). It is worth noting that some of these identified factors were though for successful project management, they are related to managing stakeholders hence worth considering for stakeholder management. Managing project stakeholders is one of the important task of project management since project success depends on the many stakeholders involved.

Karlsen (2008) from an empirical study aimed at exploring critical success factors for building trust in project stakeholder relationship identified reliable behavior; good communication; sincerity; competence; integrity; commitment and benevolence in that order. Following a review of literature on stakeholder management, Yang (2009), identified ; Managing stakeholders with social responsibilities (economic, legal, environmental and ethical); Formulating a clear statement of project missions; Identifying stakeholders properly; Understanding area of stakeholders' interests; Exploring stakeholders' needs and constraints to projects; Assessing stakeholders' behavior; Predicting the influence of stakeholders accurately; Assessing attributes (power, urgency, and proximity) of stakeholders; Analyzing conflicts and coalitions among stakeholders; Compromising conflicts among stakeholders effectively; Keeping and promoting good relationships; Formulating appropriate strategies to manage stakeholders; Predicting stakeholders' reactions for implementing the strategies; Analyzing the change of stakeholders' influence and

relationships during the project process; Communicating with and engaging stakeholders properly and frequently as fifteen critical success factors.

**Table – 1.** Findings of CSFs from studies on Public Private Partnership for construction projects PPP from 1990 to 2013 (years inclusive).

CSF no.	Critical Success Factors CSFs	Publications	Total
1	Political support /stability		
2	Public/community support		
3	Favorable legal framework		
4	Competitive/ Transparent/ Procurement approaches		
5	Good feasibility studies Selecting the right project/ Clear project brief and design development		
6	Open and constant communication		
7	Trust		
8	Detailed project planning		
9	Strong commitment by both		
10	Clarity of roles and responsibilities among parties		
11	Good leadership and entrepreneurship skills		
12	Consistent monitoring		
13	Environmental impact of project		
14	Good governance		
15	Clear goals and objectives		

Source- Osei-Kyei and Chan, (2015)

**Table – 2.** Findings of CSFs for construction stakeholder management studies (developed countries)

CSF no.	Critical Success Factors CSFs	Mean Rank
1	Managing stakeholders with social responsibilities (economic, legal, environmental and ethical)	4.43 1
2	Exploring stakeholder needs to projects	4.26 2
3	Communication with and engaging stakeholders properly and frequently exploring stakeholder needs to projects	4.26 2
4	Understanding area of stakeholder interest	4.22 4
5	Properly identifying stakeholders	4.21 5
5	Keeping and promoting a good relationship	4.17 6
8	Analyzing conflicts and coalitions among stakeholders	4.04 7
7	Accurately predicting the influence of stakeholders	4.02 8
9	Formulating appropriate strategies for the management of stakeholders	3.97 9
10	Assessing attributes (power, urgency, and proximity) of stakeholders	3.91 10
11	Effectively resolving conflicts between stakeholders	3.88 11
12	Formulating a clear statement of project mission	3.87 12
13	Predicting stakeholder reactions to implementation of the strategies	3.83 13
14	Analyzing the changes in stakeholder influences and relationships	3.83 13
15	Assessing stakeholder behaviour	3.80 15

Source: Yang (2009)

**Table – 3.** Findings of CSFs for Cost of Poor Quality in construction projects delivery (COPQ) in South Africa

CSF no.	Critical Success Factors CSFs	Mean Rank
1	Providing effective leadership	4.26 1
2	Clearly defining project objectives	4.26 1
3	Identification of process and skills	4.22 2
4	Providing effective PM process	4.21 3
5	Team work	4.20 4
5	Use of integrated procurement process	4.17 5

Source: Aigbavboa and Thwala, (2014)

Similarly, Aigbavboa and Thwala, (2014) developed CSFs for Cost of Poor Quality in project delivery in South Africa construction industry. The five CSFs had “providing effective leadership as the highest ranked. Considering the fact that quality is a major success factor, this research did a review of the CSFs as stated above. Similarly, Gudiene et al, (2013) in developing a CSF model for construction projects in Lithuania identified 41 variable grouped under 9 CSFs as responsible for successful construction project delivery. 31 variables and 7 CSFs groups were stakeholder related. This confirms the fact that project success is largely dependent on effective stakeholder management. The factors were categorized as: external factors, internal factors, institutional factors, projects related factors, project management/ team members related factors, project manager related factors, client related factors, contractor related factors and stakeholder related factors. The variables within each group were found as interrelated (Gudiene et al, 2013).

**Table – 4.** CSF model for construction projects in Lithuania

CSF no.	CSFs Themes (groups)	Critical Success Factors CSFs
1	External factors	Economic environment
2		Social environment
3		Political environment
4		Legal environment
5		Cultural environment
6		Nature ecological environment
7	Project management/ team members related factors	Relevant past experience
8		Competence
9		Trouble shooting
10		Risk identification and allocation
11		Technical capability
12		Personnel issues
13	Projects manager related factors	Competence
14		Experience
15		Technical capability
16		Delegation of authority and responsibility
17		Perception of role and responsibilities
18		Trust

19		Contract management
20	<b>Client related factors</b>	Competence
21		Experience
22		Type
23		Clear and precise goals/objectives
24		Risk attitude
25		Ability to participate in different phases of project
26		<b>Contractor related factors</b>
27	Technical and professional capability	
28	Experience	
29	Work conditions	
30	70 Advanced technologies	
31	71 Extent of subcontracting	

Source: Gudiene et al. (2013)

Finally, the study also critically reviewed CSFs for housing project in Nigeria. This is useful as the research considers other CSFs from a developing country and a sector so crucial for developing countries where governments have a backlog of housing delivery and undertake housing projects as a development intention.

**Table – 5.** Findings for Project Management Success Factors for sustainable housing

CSF no	Critical Success Factor	No. of authors
1	Project understanding	5
2	Top management support	5
3	Information/communication	4
4	Client involvement/participation	5
5	Competent project team	8
6	Project manager/leader authority	6
7	Realistic cost and time estimates	4
8	Adequate project control	2
9	Problem solving abilities	2
10	Project risk management	3
11	Adequate resources for project	4
12	Adequate project planning	3
13	Project monitoring recital and feedback	3
14	Project mission/common goal	5
15	Project ownership	3

Source: Bakar et al. (2009)

**Table – 6.** CPMSF for housing project in Nigeria

CSF no	Critical Success Factor	No. of authors
1	Housing project ownership	7
2	Project team composition	4
3	Cultural difference	2
4	End users involvement and other Issues	6

5	Top management support	7
6	Project team competency	5
7	Project leader stability	5
8	Project information and communication	4
9	Adequate project monitoring and Feedback	7
10	Project information and communication	5

Source: Ihuah et al, (2013)

Based on the review, the study identified the common CSFs from previous studies and reviews by the several scholars. Thirty-five CSFs were found as useful for the study and categorized into seven groups of related factors or activities as follows.

**Table – 7.** Proposed CSFs and categorization for Construction Stakeholder Management (Ghana)

CSF no	CSFs groups/ category	Critical Success Factors CSFs
1	<b>Pre-conditions (External factors)</b>	Managing stakeholders by considering first pre-conditions of political and cultural environment (in addition to economic, legal, social, and ethical issues already identified)
2	<b>Pre-stakeholder identification</b>	Good feasibility studies Selecting the right project/ Clear project brief and design development/ procurement approach.
3		Detailed project planning.
4		Strong commitment by both parties after education to embrace SM
5		Competitive/ Transparent/ Procurement approaches
6		Good leadership and entrepreneurship skills
7		Clear goals and objectives
8		Top management support
9		Public/community support
10		<b>Stakeholder identification</b>
11	Formulating appropriate strategies for the management of stakeholders	
12	Predicting stakeholder reactions to implementation of the strategies	
13	Project manager's competence (experience, technical ability, leadership style)	
14	Project team related factors	
15	<b>Stakeholder assessment and prioritization)</b>	Exploring stakeholder needs to projects
16		Assessing attributes (power, urgency, and proximity) of stakeholders
17		Understanding area of stakeholder interest
18		Predicting stakeholder reactions to implementation of the strategies
19		Accurately predicting the influence of stakeholders
20		Assessing stakeholder behavior
21	<b>Stakeholder engagement</b>	Communication (with and engaging stakeholders properly and frequently; Open and constant communication)
22		Keeping and promoting a good relationship and trust
23		Information and communication approach/ dissemination
24		Analyzing conflicts and coalitions among stakeholders
25		Engaging stakeholders by considering critical success and barrier factors
26		Clarity of roles and responsibilities among members
27		Implementing fully stakeholder management process and strategies



28	<b>Implementation, monitoring and evaluation</b>	Identify and analyze changes in stakeholder influence
29		Identify and analyze changes in stakeholder interest
30		Consistent monitoring and feedback
31		Evaluate attainment of objectives stakeholder needs and satisfaction
32		Consider documentation and implementation of feedbacks
33	<b>Continuous support</b>	Realize stakeholder changes, communicate and engage with frequently, adapt new strategy where necessary
34		Continue top management support, increase PM and stakeholders knowledge in SM,
35		Formal SM process (Establish an approach profile and SM process conducive for procurement approach and project type)

Source; Authors

## 2. Methodology

An exploratory and qualitative research approach was employed for this study. The first phase involved a theoretical study consisting of an in-depth literature review on stakeholder management and critical success factors CSFs for stakeholder management. In addition, a review of studies on CSFs for project management was conducted due to lack of studies on CSFs for stakeholder management and also being a soft project management skill. A three-stage approach was used for the content analysis of publications on the subject area (Yi and Wang, 2013; Osei-Kyei and Chan 2015). Using keywords such as “success factors”, “critical success factors”, “stakeholder management”, “project management”, over fifty (50) publications were retrieved from the institutional database for the period 1990-2015. The second stage was further screening using a combination of the key words “success factors” and “stakeholder management” or “success factor” and “project management” (Yang, 2009). Emphasis was on journal publications that have reviewed critical success factors or project success factors. In addition, journals on different construction areas were considered such as Public Private Partnership PPP, public projects, housing and empirical studies from different geographical regions since the developed framework aims at different procurement approaches and construction industries in developing countries. The third stage entailed a content analysis for the selected publications considering the objective, methodology, list of factors identified among others. The research considered factors relating to project stakeholders and stakeholder management for publications on critical success factors for project management since some identified factors are not stakeholder related.

A successful compilation of thirty-five (35) critical success factors from literature reviewed was done. A set of questionnaire with five sections: invitation to respondents, objectives and brief information on stakeholder management: respondents’ background; 35 set of questions on the factors identified; 7 set of questions on the themes developed and an open-ended question on what respondents considered as the most critical factor was used for primary data. The objective for each set of questions was stated to direct the respondents and research participants informed of the aim of the paper as part of a broader study to develop a sustainable stakeholder management plan. Regarding the themes, the respondents were asked to either agree or disagree with the the proposed themes or categorization as needed to be considered during a stakeholder management process.

On the CSFs, research participants were asked to rate their degree of opinion against each CSF identified on a Five-point Likert scale with (1)= strongly disagree and (5)=strongly disagree. This method has been used for similar studies on critical success factors (Yang, 2009; Aigbavboa and Thwala, 2014). Research respondents were randomly selected from a list of professionals obtained online and from known consultants. The purpose was for broad opinion and true reflection of response from critical success factors from key stakeholders namely, project managers, architects, engineers, quantity surveyors, clients, sponsors, end-users and contractors. 100 semi-structured questionnaires were in all distributed with the assistance of enumerators and using e-mails. Firstly, respondents were to evaluate the 35 CSFs identified and the 7 groups as necessary for successful stakeholder management process using a five-point Likert scale. Sixty-Two questionnaires were returned and sixty were assessed as successfully completed. A 60% response rate achieved was found as consistent with the norm of more than the 20%-30% and above the 40% required but limited to key players in only two major cities in Ghana namely Accra and Kumasi (Akintoye, 2000; Yang, 2009).

The research was conducted within a month with the assistance of two enumerators. The returned questionnaires were analyzed using two different methods for the two main set of questions. The main critical success factors were analyzed using a Relative Importance Index (RII) and the Kish (1965) formula as it aimed at evaluating the level of impact on the success of the stakeholder management process.

$$RII = \sum W (0 \leq RII \leq 1) / A * N$$

Where: W – is the weight given to each factor by the respondents and ranges from 1 to 5, (where “1” is “strongly disagree” and “5” is “strongly agree”); A – is the highest weight (i.e. 5 in this case) and; N – is the total number of respondents. Kish (1965) formula;  $n = n^1 (1 + n^1 / N)$ , N = the total population size, n= the sample size,  $n^1 = S^2 / V^2$ , V= the standard error of sampling distribution assumed to be 0.05, S= the maximum standard deviation of the population size (Total error of 0.05 @ 95% confidence level),  $S^2 = P (1 - P)$  where, P= the proportion of the population elements that belong to the defined class. A descriptive method was used to identify in the opinion of the respondents the themes evolved were useful in the process and also to consider what in the opinion of the respondents constitute most critical factor from experience.

### **3. Key Findings and Analysis**

#### **3.1 Background/Demographics of Respondents**

The questionnaire successfully returned for the primary data had all key stakeholders participating. Project managers (25%) were the highest participants followed by Architects (17%), Engineers (8%), Quantity Surveyors (10%), Contractors (7%), Sponsors (7%), Client (13%), Government Representatives (8%) and End-users (5%). In addition, research participants had gained good experience with Architects recording over 20 years, followed by Project Managers

(15years) and Contractors (5 years) as the lowest. This compares with Yang, (2010) similar studies and showed a good reflection of stakeholder involvement in project management process hence the results can be generally accepted.

**1) Table of demographics fo respondents**

<b>Background/Demographics of respondents</b>	<b>Average Years of Experience in Industry (above - yrs)</b>		<b>No. of respondents</b>
<b>1. Project Managers</b>	15	15	
<b>2. Architects (without formal project management certification)</b>	20	10	
<b>3. Engineers</b>	10		5
<b>4. Quantity Surveyors</b>	10	6	
<b>5. Contractors</b>	5	4	
<b>6. Sponsors</b>	10	4	
<b>7. Client/Project owners</b>	20	8	
<b>8. Government Representatives</b>	15	5	
<b>9. End users</b>	10	3	

**3.2 CSFs categorization or grouping**

In response to the questions on CSFs categorization/groups, respondents were of the opinion that the categorized groups were essential for effective SM process. In addition, participants indicated a high acceptance as indicated by the RII values. Stakeholder identification (0.85), stakeholder engagement was equally ranked as the highest. This agrees with literature by several scholars emphasizing the need for stakeholder identification and engagement (Bourne, 2005; Jepsen and Eskerod, 2013). Stakeholder classification and prioritization (0.82), Implementation, monitoring and evaluation (0.80), Pre-stakeholder identification (0.79), Pre-conditions (0.76) and Continuous support (0.55) followed in the order of decreasing RII. The least RII of 0.55 which is above 0.50 is an indication that all the groups are essential. This again agrees with stakeholder groups evolved by scholars having developed SM framework or process (Yang, 2010; Aapaoja and Haapasalo, 2014). Stakeholder management should be a process involving systematic identification of all stakeholders, activities, analyzing, and engagement and offering the necessary support and not just an event for successful project delivery (Lock, 2007; Jepsen and Eskerod, 2013)

**Table of CSFs Groups/categorization showing RII and Rank (R)**

<b>CSFs groups/categorization</b>	<b>RII</b>	<b>RANK</b>
<b>1. Stakeholder identification</b>	0.850	1.00
<b>2. Stakeholder Engagement</b>	0.848	2.00
<b>3. Stakeholder Assessment (classification and prioritization)</b>	0.820	3.00
<b>4. Implementation, monitoring and evaluation</b>	0.811	4.00
<b>5. Pre-Stakeholder identification</b>	0.792	5.00
<b>5. Pre-conditions( External factors)</b>	0.762	6.00
<b>7. Continuous support</b>	0.554	7.00

### 3.3 Evaluation of CSFs by respondents

Respondents were to evaluate by rating their degree of agreement for each of the identified CSFs according to a five-point Likert scale (1 = Strongly Disagree and 5 = Strongly Agree) by bearing in mind projects that they been involved. The following ratings were obtained from the RII analysis:

2) Table of CSFs Groups/categorization showing RII and Rank (R)

CSF no	CSFs group/category	Critical Success Factors CSFs	RII	RANK
1	<b>Pre-conditions (External factors)</b>	Managing stakeholders by considering first pre-conditions of political and cultural environment (in addition to economic, legal, social, and ethical issues already identified)	0.849	2.00
2		<b>Pre-stakeholder identification</b>	Good feasibility studies (Selecting the right project/ Clear project brief, design development/ procurement approach).	0.792
3	Detailed project planning.		0.668	21.00
4	Strong commitment by both parties after education to embrace SM		0.790	14.00
5	Competitive/ Transparent/ Procurement approaches		0.811	6.00
6	Good leadership and entrepreneurship skills		0.791	13.00
7	Clear goals and objectives		0.781	15.00
8	Top management support		0.790	14.00
9	Public/community support		0.513	27.00
10	<b>Stakeholder identification</b>		Early and proper identification of all stakeholders	0.850
11		Formulating appropriate strategies for the management of stakeholders	0.762	18.00
12		Predicting stakeholder reactions to implementation of the strategies	0.760	20.00
13		Project manager's competence (experience, technical ability, leadership style)	0.817	4.00
14		Project team related factors	0.761	19.00
15	<b>Stakeholder assessment (classification and prioritization)</b>	Exploring stakeholder needs to projects	0.807	7.00
16		Assessing attributes (power, urgency, and proximity) of stakeholders	0.793	11.00
17		Understanding area of stakeholder interest	0.781	15.00
18		Predicting stakeholder reactions to implementation of the strategies	0.519	25.00
19		Accurately predicting the influence of stakeholders	0.516	26.00
20		Assessing stakeholder behavior	0.668	21.00
21	<b>Stakeholder engagement</b>	Communication (with and engaging stakeholders properly and frequently; Open and constant communication)	0.820	3.00
22		Keeping and promoting a good relationship and trust	0.805	8.00
23		Information and communication approach/ dissemination	0.801	10.00
24		Analyzing conflicts and coalitions among stakeholders	0.791	13.00
25		Engaging stakeholders by considering critical success and barrier factors	0.805	8.00
26		Clarity of roles and responsibilities among members	0.781	15.00

27	<b>Implementation, monitoring and evaluation</b>	Implementing fully stakeholder management process and strategies	0.803	9.00
28		Identify and analyze changes in stakeholder influence	0.666	22.00
29		Identify and analyze changes in stakeholder interest	0.601	24.00
30		Consistent monitoring and feedback	0.765	17.00
31		Evaluate attainment of objectives stakeholder needs and satisfaction	0.793	11.00
32		Consider documentation and implementation of feedbacks	0.781	15.00
33	<b>Continuous support</b>	Realize stakeholder changes, communicate and engage with frequently, adapt new strategy where necessary	0.663	23.00
34		Continue top management support, increase PM and stakeholders knowledge in SM,	0.775	16.00
35		Formal SM process (Establish an approach profile and SM process conducive for procurement approach and project type)	0.812	5.00

### 3.4 Pre-conditions (External factors)

Political and the cultural environment were the additional pre-conditions to ethical, social, legal and economical identified by Yang, (2011). Political and cultural environment plays a significant role in stakeholder interest, influence and behavior in developing countries especially when mega projects and integrated procurement approach are involved (Neringa et al, 2013; Osei-Kyei and Chan, 2013; Aapaaja and Haapasalo, 2014; Mok et al, 2015). A project without political support will experience a major critical barrier (Eyiah-Botwe, 2015) which will inadvertently affect the stakeholder management process as stakeholders are likely to be antagonistic to the project outcome (Newcombe, 2003).

### 3.5 Pre-stakeholder identification

All the eight factors were confirmed and rated as impacting on the effective SM process and its successful implementation. Competitive, transparent procurement approach was highest ranked in this group with RII of 0.811 however ranked 6<sup>th</sup> overall as per table. This is understood as the procurement approach determines the stakeholder process and stakeholders involved (Rwelamila, 2010). Good feasibility studies, top management support, clear goals and objectives are necessary since that will determine stakeholder attitude and decision to embrace stakeholder management (Jepsen and Eskerod, 2013). Public support was the least ranked with RII of 0.513. This again confirms the assertion by scholars that project managers and team are interested in satisfying the client and not the public, end users hence the little involvement of the public at the early stages of the project (Newcombe, 2003).

CSFs	Critical Success Factors CSFs	RII	Rank
2	group/category		
	Good feasibility studies (Selecting the right project/ Clear project brief, design development/ procurement approach).	0.792	12.00
3	Detailed project planning.	0.668	21.00

4	<b>Pre-stakeholder identification</b>	Strong commitment by both parties after education to embrace SM	0.790	14.00
5		Competitive/ Transparent/ Procurement approaches	0.811	6.00
6		Good leadership and entrepreneurship skills	0.791	13.00
7		Clear goals and objectives	0.781	15.00
8		Top management support	0.790	14.00
9		Public/community support	0.513	27.00

### 3.6 Stakeholder identification

The highest rated CSF finding belonging to the Stakeholder identification group is early and proper identification of stakeholders with RII of 0.850 and overall ranked first. This agrees with literature as stakeholder identification has been suggested as part of the SM process by many scholars. The addition is the need for early and proper identification of all stakeholders. Project manager's competence was second ranked with RII of 0.817 and overall ranked fourth. These two factors are critical to successful SM implementation and project delivery in developing countries since the SM concept is yet to be fully embraced (Eyah-Botwe, 2015). The least factor is predicting stakeholder reactions to implementation of the strategies as per table

	CSFs group/category	Critical Success Factors CSFs	RII	Rank
10	<b>Stakeholder identification</b>	Early and proper identification of all stakeholders	0.850	1.00
11		Formulating appropriate strategies for the management of stakeholders	0.762	18.00
12		Predicting stakeholder reactions to implementation of the strategies	0.760	20.00
13		Project manager's competence (experience, technical ability, leadership style)	0.817	4.00
14		Project team related factors	0.761	19.00

### 3.7 Stakeholder assessment (classification and prioritization)

The most rated CSF finding relating to Stakeholder assessment is Understanding area of stakeholder interest with RII of 0.807 (ranked 7<sup>th</sup> overall) and Assessing attributes (power, urgency, and proximity) of stakeholders (RII, 0.793 and ranked 11<sup>th</sup> overall). The other factors though confirmed were lowly ranked as per table...

	CSFs group/category	Critical Success Factors CSFs	RII	Rank
15	<b>Stakeholder assessment (classification and prioritization)</b>	Exploring stakeholder needs to projects	0.781	15.00
16		Assessing attributes (power, urgency, and proximity) of stakeholders	0.793	11.00
17		Understanding area of stakeholder interest	0.807	7.00
18		Predicting stakeholder reactions to implementation of the strategies	0.519	25.00
19		Accurately predicting the influence of stakeholders	0.516	26.00
20		Assessing stakeholder behavior	0.668	21.00

### 3.8 Stakeholder Engagement

The CSF evaluation by respondents for stakeholder engagement on the average were very high with Communication (RII-0.820 and ranked 3<sup>rd</sup> overall), Keeping and promoting good relationship and trust, engaging stakeholders by considering critical success factors (RII-0.805 and ranked 8<sup>th</sup> overall). Stakeholder engagement has been identified by all scholars as critical and confirmed by respondents (Yang, 2009). Though Clarity of roles and responsibility

21	<b>Stakeholder engagement</b>	Communication (with and engaging stakeholders properly and frequently; Open and constant communication)	0.820	3.00
22		Keeping and promoting a good relationship and trust	0.805	8.00
23		Information and communication approach/ dissemination	0.801	10.00
24		Analyzing conflicts and coalitions among stakeholders	0.791	13.00
25		Engaging stakeholders by considering critical success and barrier factors	0.805	8.00
26		Clarity of roles and responsibilities among members	0.781	15.00

The last two groups of CSFs were not much different as all factors were confirmed by respondents as critical factors for SM process. Implementing fully stakeholder management process and strategies (RII of 0.803 and ranked 9<sup>th</sup>) and Formal SM process (RII-0.812, ranked 5<sup>th</sup> overall) were the highest ranked in their groups. All CSFs were though confirmed the low evaluation of some factors reflects the challenges in project management in developing countries such as identifying and analyzing stakeholders. In addition, realizing stakeholder changes was low rated an indication of the challenges associated with stakeholder analysis by research participants.

	CSFs group/category	Critical Success Factors CSFs	RII	Rank
27	<b>Implementation, monitoring and evaluation</b>	Implementing fully stakeholder management process and strategies	0.803	9.00
28		Identify and analyze changes in stakeholder influence	0.666	22.00
29		Identify and analyze changes in stakeholder interest	0.601	24.00
30		Consistent monitoring and feedback	0.765	17.00
31		Evaluate attainment of objectives stakeholder needs and satisfaction	0.793	11.00
32		Consider documentation and implementation of feedbacks	0.781	15.00
33	<b>Continuous support</b>	Realize stakeholder changes, communicate and engage with frequently, adapt new strategy where necessary	0.663	23.00
34		Continue top management support, increase PM and stakeholders knowledge in SM,	0.775	16.00
35		Formal SM process (Establish an approach profile and SM process conducive for procurement approach and project type)	0.812	5.00

### 5.0 Conclusion

This study set out to identify and evaluate critical success factors CSFs for effective stakeholder management SM in developing countries. Three research objectives were formulated as: to identify CSFs for an effective stakeholder management process, (2) categorize the factors identified and (3) evaluate the identified CSFs. Thirty- Five (35) critical success factors were identified through literature review. The findings and analysis agreed with the literature that the factors are critical but of different impact. This is confirmed by the RII of 0.513 for Public/community support ranked 27<sup>th</sup> and lowest however above RII-0.500 value. This study confirmed the need to have political and cultural environment as addition to other identified by earlier researchers.

Secondly, this research set out to categorise the CSFs into groups for the SM process for the purpose of developing a sustainable stakeholder management frame work. The five groups are: Pre-conditions (External factors), Pre-stakeholder identification, Stakeholder identification, Stakeholder assessment (classification and prioritization), Stakeholder engagement, Implementation, monitoring and evaluation and Continuous support. The findings indicate that the groups were confirmed by respondents as useful for SM process. The need for pre- stakeholder identification as part of the process before stakeholder identification was confirmed.

Thirdly, the study evaluated the level of impact of each of the critical factors and identified the first five ranked factors as follows: early stakeholders' identification (RII of 0.850) ; managing culture and political environment (RII of 0.849) ; communication (RII of 0.820); project managers' competence (RII of 0.817); formal stakeholder management process (RII of 0.812 ) were highly ranked in the descending order of first to fifth. The findings and the rankings also indicated that perception of CFS are not very much different from other studies, however the perception differ in which CSFs have the highest impact on successful and effective SM process in developing Ghana.

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