# KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI, GHANA

Project Managers Competencies Assessment in Hotel Construction Projects: A Survey of Perspectives from Key Stakeholders of Hotel Construction Projects in

Northern Ghana

By

**Opare Ayesu** 

(BSc Construction Technology and Management)

# A THESIS SUBMITTED TO THE DEPARTMENT OF CONSTRUCTION TECHNOLOGY AND MANAGEMENT, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF

MASTER OF SCIENCE

NOVEMBER, 2018

#### DECLARATION

I hereby declare that this submission is my own work towards the MSc Project Management and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgment has been made in the text.

OPARE AYESU (ID: 20542712)

(Student name and ID)

.....

Signature

.....

Date

Certified by: PROF. DIVINE KWAKU AHADZIE) (Supervisor) .... Signature Date Certified by: PROF. BENARD KOFI BAIDEN (Head of Department) .... Signature Date

#### ABSTRACT

Past research into the project manager's competence in construction projects indicate that there is a gap in project manager's competence for hotel constructions in Ghana.

The aim of the study was to assess competencies of project managers in hotel construction through the application of PMI Project Managers competency standard. The objectives of the study among others included the identification of project management practices in hotel construction projects, assess the project managers competencies in terms of knowledge, personal and performances of hotel construction projects, identify key stakeholders' perspective on the required competencies of project managers' in hotel construction and propose framework of key competencies required of project managers in hotel construction based on the perspectives of key stakeholders.

The main tools for the collection of data were questionnaires survey. The target population for the data collection were key stakeholders (project managers, Engineers, Hotel owners building construction organizations and senior consultants of architectural and quantity surveying firms). Statistical package for social scientists (SPSS V 20) and Relative Importance Index (RII) were employed to analyze data obtained.

Among the top ranking project management practices, PM competency assessment and required competency for hotel construction are; project scope management, construction and post construction management, Ghana tourism hotel design requirement, Authority approval, Ghana tourism hotel classification, Hotel Scheme design and effectively resolves issues and solves problems. Proposed recommendations include (1) Construction management techniques for hotel development, and preparation of planning, legal, feasibility (financial and physical) and other necessary documentation are recommended to

enhance competence of PMs in hotel construction (2) PMs should understand the critical success factors for hotel construction and tested in practice (3) PMs should understand Hotel Design and Construction techniques, items involved in designing (for example interior and exterior design), Construction methods and hotel building types (4) PMs should understand the hotel industry, the regulation, the tourism authority and hotel design requirement (5) PMs should understand hotel construction is a complex mix-ups, diverse stakeholders, diverse consultants and specialist are involved and therefore their management is necessary. The research findings provide empirical evidence that can be adopted by hotel developers in their establishment.

# TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT	iii
TABLE OF CONTENTS	V
LIST OF TABLES	ix
LIST OF FIGURES	X
ACKNOWLEDGEMENT	xi
DEDICATION	xii
ABBRIVIATIONS	xiii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study	1
1.2 PROBLEM STATEMENT	4
1.3 RESEARCH QUESTIONS	5
1.4 AIM AND OBJECTIVES	5
1.5 JUSTIFICATION OF THE STUDY	6
1.6 SCOPE OF THE STUDY	6
1.8 METHODOLOGY	7
1.9 CONTENT OF THE STUDY	8
CHAPTER TWO	10
LITERATURE REVIEW	
2.1 Introduction	10
2.2 PROJECT MANAGEMENT PRACTICES IN HOTEL CONSTRUCTION	10
2.2.1 Definition of Project	10
2.2.2 Project Management Defined	10
2.2.3 PROJECT LIFE CYCLE	11
2.2.3.1 Concept phase:	11
2.2.3.2 Development phase	12
2.2.3.3 Implementation phase	12
2.2.3.4 Close-out phase	12
2.2.4 Project Phase	13
2.2.5 The processes of Project Management practice	14

2.2.5.1 Project Management Process Groups	.14
2.2.5.2 Project Management Knowledge Areas	.14
2.3 PROJECT MANAGEMENT METHODOLOGIES	. 15
2.4 HOTEL PROJECT MANAGEMENT	. 15
2.4.1 Strategic Hotel Project Development Management	. 15
2.4.1.1 Hotel Development Audits	.17
2.4.1.2 SWOT Analysis	.17
2.4.2 Project Feasibility	.18
2.4.2.1 Physical Feasibility	.18
2.4.2.2 Financing Hotel Development	. 19
2.4.2.3 Hotel Project Financial Feasibility	20
2.3.3 Hotel Project Risk Management	
2.4.4 Project Team Management	22
2.4.5 Financing Hotel Construction Project	23
2.4.6 Project Health, Safety, Security, and Environmental (HSSE) Management	23
2.4.7 Hotel Construction and Post Construction Management	24
2.5 HOTEL DEVELOPMENT IN GHANA	25
2.4.1 Introduction	25
2.5.2 Tourism Industry in Ghana	26
2.5.3 Hotel Segmentation	26
2.5.3.1 Market segmentation	27
2.5.3.2 Market targeting	27
2.5.3.3 Market positioning	27
2.5.4 Ghana Tourism Hotel Classification	28
2.5.5 Hotel Design Requirement	29
2.5.6 The Components of Hotel Design	. 30
2.5.7 Challenges of Hotel construction Projects	.31
2.6 COMPETENCIES OF PROJECT MANAGER	.31
2.6.1 Project Manager	31
2.6.2 Competencies Defined	32
2.5.3 Project Management Competency	32
2.6.4 Project manager's competencies	33
2.7 THREE DIMENSION COMPETENCIES	35
2.7.1 Knowledge Competencies	35

2.7.2 Personal Competence	37
2.7.3 Performance Competencies	
2.6.4 Project Managers Competencies Required for Hotel Construction/Development	
2.8 COMPETENCE ASSESSMENT	
2.8.1 Reviewing Competency Requirement	
2.8.2 Assessment Criteria	40
2.8.3 Assessment of Knowledge Competencies	41
2.8.4 Assessment of Personal Competence	42
2.8.5 Performance Competencies Assessment	42
2.9 COMPETENCE ASSESSMENT TOOL	43
2.10 PROJECT STAKEHOLDERS IN HOTEL CONSTRUCTION	43
2.10.1 Stakeholders in Hotel construction	43
2.10.2 Categories of stakeholders in Hotel Construction	44
2.10.3 Identification of Key Stakeholders in Hotel Construction	44
2.11 CONCEPTUAL FRAMEWORK	45
2.11.1 Framework for hotel construction	46
2.11.2 Framework for Project Managers Competencies	48
CHAPTER THREE	55
RESEARCH METHODOLOGY	55

3.1 INTRODUCTION	55
3.2 RESEARCH DESIGN	55
3.3 Initial Survey	56
3.4 Design and Development of questionnaire	57
3.5 Pre-testing questionnaire	58
3.6 Population	
3.7 Method of Population sampling	
3.8 Sampling size	
3.9 Analysis of Data	60

CHAPTER FOUR	61
ANALYSIS OF DATA AND RESULT DISCUSSION	61
4.1 INTRODUCTION	61
4.2 DEMOGRAGHY AND GENERAL INFORMATION	61

4.2.1 Professional Background of Respondents	62
4.2.2 Academic Qualification of Respondents	62
4.2.3 Respondents Professional Affiliation	63
4.2.4 Respondent's Years of Experience in Construction industry	64
4.2.5 Respondent's Years of Experience in Hotel Construction	65
4.2.6 Respondents Involvement in Hotel Buildings Projects	66
4.2.7 Type of Clients	67
4.3 RELATIVE IMPORTANCE INDEX	68
4.4 PROJECT MANAGEMENT PRACTICES IN HOTEL CONSTRUCTION	69
4.5 PROJECT MANAGER COMPETENCY ASSESSMENT IN HOTEL CONSTRUCTION	70
4.5.1 Knowledge Competence Assessment	70
4.5.2 Performance Competence	74
4.5.3 Personal Competence	76
4.6 PROJECT MANAGER COMPETENCY REQUIREMENT IN HOTEL CONSTRUCTION	:
PERSPECTIVE OF KEY STAKEHOLDERS	79
4.6.1 Knowledge Competencies Requirement	79
4.6.2 Performance Competence Requirement	82
4.6.3 Personal Competence Requirement	85
CHAPTER FIVE	88
CONCLUSION AND RECOMMENDATIONS	88
5.1 INTRODUCTION	88
5.2 SUMMARY OF FINDINGS	88
5.2.1 Objective One: Identify Project Management practices for hotel construction	88
5.2.2 Objective Two: Assess project managers' competencies in terms of knowledge, performan	nce
and personal for hotel construction	88
5.4 RECOMMENDATION	91
5.5 RECOMMENDATION FOR FUTURE STUDIES	91
5.6 PRACTICAL IMPLICATION	92
REFERENCES	93
APPENDIX	105

# LIST OF TABLES

Table 2.1 Operational measures for questionnaires	. 51
Table 4.1: Professional Background Distribution	. 62
Table 4.2 Academic Qualification Distribution	. 63
Table 4.3 Professional Affiliation Distribution	. 64
Table 4.4 General Job Experience Distribution	. 65
Table 4.5 Client Distribution	. 68
Table 4.6 Project Management Practices	. 70
Table 4.7 Knowledge Competence Assessment	. 72
Table 4.8 Performance Competence Assessment Variable	. 75
Table 4.9 Personal Competence Assessment	. 78
Table 4.10 Knowledge Competence Variables	. 81
Table 4.11 Performance Competence Variables	. 83
Table 4.11 Personal Competence Variables	. 86

# LIST OF FIGURES

Figure 2.1: Accommodation establishment distribution in Ghana, 2010	. 26
Figure 2.2: Framework for Hotel Construction:	. 47
Figure 2.3: Integrated model of competence identifying components of the overall	
construct	. 49
Figure 2.4 Abridge Version of Crawford Integrated Competency Model	. 50
Figure 4.1 Job Experience in Hotel Construction Distribution	. 66
Figure 4.2 Respondents Involvement in Hotel Projects	. 67

#### ACKNOWLEDGEMENT

My first gratitude goes to the Almighty God for not only the opportunity, but also for the guidance and wisdom to go through this program. I owe a great deal of appreciation to my supervisor, Prof. D. K Ahadzie for his precious contribution and guidance throughout the thesis. I also recognize with gratitude, the support of the rest of the staff of the Department of Construction Technology and Management, KNUST Kumasi. I am most grateful to my best friend Osei Yaw Edwin and the rest of Project Management Class for their support.

# DEDICATION

I want to dedicate this thesis to God Almighty and my beloved wife Mrs. Deborah Opare

Yeboah and my daughter Pernille Oparebea Ayesu

# **ABBRIVIATIONS**

PMI	 Project Management Institute
РМВОК	 Project Management Body of Knowledge
PMCDF	 Management Competency Development Framework
IPMA	 -International Project Management Association
PMA	 Project Management Association
AIPM	 Australian Institute of Project Management
РМ	 Project Manager
SWOT	 Strength, Weakness, Opportunity and Threat
MWRWH	 Ministry of Water Resource, Works and Housing

#### **CHAPTER ONE**

## **INTRODUCTION**

#### 1.1 Background of the Study

A construction of hotel projects may be well conceived, resources and finances may be adequately available with specialist and consultants highly experienced, but efforts of all the participants should be skillfully coordinated and managed, if not the project may overrun the budget and fail to meet the schedule as plan, or fall short in functional and technical quality (Udo and Koppensteiner, 2004). CIOB (2014) book standard for project management and development contended the construction projects are intricate, complex activities and resource consuming and are often complex activities. The management of projects in construction field is normally done on an individual project basis, with a project manager being made leader and responsible for all operations on all aspects of the construction field is directed toward pulling together all necessary wide range of elements to complete the project satisfactorily. Hence construction projects require a team of people and hotel construction project is with no exception.

The leadership role of project team by the project manager is critical in order to achieve the project's objectives PMI, (2017). PMI further highlights the leadership of project manager in projects play a critical role and is clearly visible throughout the project. PMI further stated project manager as a leader may become involved in a project from the onset of the project through closing. Furthermore, PMI stated project manager may be involved in concept development, analysis and evaluation activities in some organizations, as prior to project initiation. Project manager may also be called upon in some organizational settings, to assist

or manage in analysis of business, business case development of the project and aspects of program and portfolio management for a project (PMI, 2017). However, PMI alluded the project manager's role may vary from organization to organization and the project management role is ultimately tailored to fit the organization the project is being carry out (PMI, 2017).

West and Plumeri, (2006) defines competency as the skills, knowledge, ability, characteristics and experiences associated with high performance on a job. Liikamaa, (2015) allude that, the concept of competency is not new, but it is useful when researching how different project managers' skills fit the challenges of the everyday work. In-depth research has been conducted on the topic of competencies required for successful project management (Ahadzie et al., 2013; Anantatmula 2010; Stevenson and Starkweather 2010; Thai and Bedingfield 2010; Fisher 2011). Different types of projects require different leadership styles (Anantatmula 2010). The project manager's competencies should be taken into consideration to effectively assign them to projects (Müller and Turner, 2010a). The concept competency-based assessment evolved in Europe after the formation of the European Community in 1967 (www.ahbrsc.com, 2004). According to PMI (2017) the assessment criteria refer to the three competence dimensions and describe observable behavior or results. PMI Again stresses that, important tools to gather evidence for the behavior and results of project management related documents and reviews; key performance indicators and success criteria achievability rates; and any repeatable success measurement. However PMI (2017) opined it is important to define the assessment criteria in a way so that the actual behavior, performance, and results are assessed.

The PMI project manager competency development (PMCD) framework third edition, highlight three main assessment dimensions:

- Knowledge expectation,
- Performance expectation, and
- Personal behavior expectation.

Also, IPMA (2015) has developed a standard for competent project/programme/portfolio management. The Individual Competence Baseline (ICB) describes 29 competence elements, which you have to develop in order to successfully manage projects/programmes/portfolios. These 29 competencies are organized in three competencies areas:

- People: people competencies define personal and interpersonal competence
- Practice: Practice competencies define technical aspect of managing project
- Perspective: Perspective competencies define contextual competence that must be navigated within and across the broader environment.

In addition, IPMA introduces the organizational competence baseline in managing projects which is a holistic approach for organization to strengthen the management of project. Again, IPMA project excellent baseline was designed for assessment of annual IPMA international project excellent award competition since 2002, evaluating projects from different sectors and from different geographical regions, according to standardized methodology and process.

#### **1.2 PROBLEM STATEMENT**

For the past five years, there has been proliferation of hotel construction in Northern part of Ghana, especially Regional capitals. The Hotel business has become lucrative venture for ordinary businessman in the northern part of the country. Reports from Ghana statistical Authority 2017 indicates that Hotel and Restaurants in Ghana contributed 1.4% to the nation's Gross Domestic Product (GDP) for the third quarter of 2017, adding to 5.7 % of GDP in tourism sector. However, investors in the Hotel business are concern with the competence of project management professional in the region. To embark on their vision and translate into the customer satisfaction and to meet standard requirement of Ghana Tourism Authority competent project manager is required.

In developing hotel project, a wide range of professionals and expertise are needed, asserted by (Ranssley and Ingram, 2000) to estimate how the cost might be and to determine how the property might be developed. Ranssley and Ingram further stated construction of hotel project is capital intensive in terms of effort, money and time. Many professionals in the field of construction considers hotels projects to be very complex venture that consumes much resources, capital, energy and time, and involve great risk and uncertainty. Construction of hotel involves high expectations of the parties, challenging and exciting and ever-shifting array of market segment (Ransley and Ingram, 2000). As contended (Ransley and Ingram, 2000) the outcome of the final product of hotel designed should meet owners needs and provide customer satisfaction. However there have been much literature available in relation to the competencies in construction industry (Ahadzie, 2007; Ahadzie et al., 2009; Manaan, 2013). Reviewing the literature, the researcher reveals there was no direct literature of project managers' competencies for hotel construction projects, so the researcher intends to tap the knowledge of key stakeholders in hotel construction field to bridge the gap in the research identified. The researcher intends to assess the required competencies of project managers and its relevance in the hotel construction.

### **1.3 RESEARCH QUESTIONS**

To help achieve the objectives, the following questions were asked;

- What is project management practices used in hotel construction?
- What are the project managers' competencies required in construction of hotel project?
- What are perspectives of key stakeholders, in terms of required competencies of project managers in hotel construction projects?
- How do the competencies in general construction differ from hotel construction in terms of knowledge, personal and performance?
- What are methods used to assess project managers' competencies in construction project?

# **1.4 AIM AND OBJECTIVES**

The aim of this research is to assess project managers' competencies for hotel construction projects in terms of knowledge, personal and performance from perspective of key stakeholders' in hotel construction projects.

The objectives of this research are:

• To identify the project management practices in hotel construction projects.

- To assess the project managers' competencies in terms of knowledge, personal and performances for hotel construction projects.
- To identify key stakeholders' perspectives on the required competencies of project managers' for hotel construction.
- To propose PMs Competencies framework required in hotel construction based on the perspectives of key stakeholders.

#### **1.5 JUSTIFICATION OF THE STUDY**

The outcome of this study will go a long way to enable hotel owners to decide on selection of ideal competent project managers in their endeavors to translate their vision into reality and customer satisfaction. This study will also help human resource managers to use recognized and worldwide accepted competency standard in evaluating the competence of PMs. This will enhance decision making process and selection of future PMs regarding succession planning, performance appraisal, training needs, and promotions of project managers in Hotel Construction.

#### **1.6 SCOPE OF THE STUDY**

The research was to assess PMs Competencies of project managers in hotel construction in the Northern Ghana. The study was limited to key stakeholders in construction industry engaging in Hotel construction projects.

#### **1.7 LIMITATIONS OF THE STUDY**

The major setback that affected the study was Geographical limitation. Most of the sampled construction organizations were in the Capital cities in Northern Region, Upper East Region and Upper West Region. The study should have covered all construction firms but only large construction firms with highest financial classes were covered for the study, small scale construction firms were excluded due to lack of reliable information. The sample used for the study were limited in size because the study consisted of construction professional who have experience in hotel construction working in the three Northern Regions.

#### **1.8 METHODOLOGY**

#### **Stage 1: literature review**

This study was confined to the hotel construction projects where there is a more direct link between the key stakeholders both on the client and contractor side. The initial survey of the literature reveals no specific study of project managers' competencies related to hotel construction. The literature review was concentrated on research which was related to hotel construction in construction industry in general, such as, the earlier research of (Ahadzie 2007; Ahadzie et al, 2009; Ahadzie et al, 2014; Manaan, 2013; Kalinová, 2008; Venter, 2006; Cloete and Venter, 2007 etc.).

#### Stage 2: Pre-test survey

Data collection in the pre-test survey took the form of structured questionnaire. Pre-test study was conducted to test the validity of the questionnaire that would be distribute to the participants.

#### **Stage 3: questionnaire Survey**

The feedback from the pre-test was validated to form the main questionnaire survey for the study. The questions were formed in line with the above stated objectives. In order to obtain a high level of response, a Likert format questions was designed and was limited to key stakeholders in Hotel construction project.

#### **Stage 4: questionnaire analysis**

Questionnaire analysis was organized in two format. First, the demography and personal information was analyzes using descriptive statistics method with SPSS software. The second point data which structured Likert was manually analyzed using relative importance index (RII) to rank variables of the data collected.

#### **Stage 5: writing the research report**

This stage involves writing up the content of the dissertation and was covered the chapters proposed in the following section.

#### **1.9 CONTENT OF THE STUDY**

The study was organized into five chapters. Chapter one offers general introduction which consist of brief introduction, the study background, problem statement, aim and objectives of the study, justification, scope, brief methodology and content of the study.

Chapter two reviews related literature of the study where a historical background of the study, a theoretical framework as well as empirical analyses of the study was espoused while chapter three discusses the methodology used through a research design, population,

sampling and sampling techniques, sources of data, procedures for data collection, and data analysis procedures were explained.

Chapter four offers an analyses and discussion of results whereas the final chapter summarizes, offer recommendations and conclusion for the study.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.1 Introduction**

This chapter explore extensively on the literature review on the study. It begins with a look at the project management practices in hotel construction, the concepts of project management competencies and its application in hotel construction. The study reviewed literature on the project managers' competencies and compare competency development frameworks of project management intuitions and criteria used to assess these competencies.

#### 2.2 PROJECT MANAGEMENT PRACTICES IN HOTEL CONSTRUCTION

#### **2.2.1 Definition of Project**

Project is defined as an endeavor temporary undertaken to create a unique service, product or result and are undertaken to fulfil specific objectives of producing deliverables (PMI, 2017). Project has specific objective to be completed and have defined start and end dates, consume human and nonhuman resources, have funding limits and cut across several function lines (Kerzner, 2013)

#### 2.2.2 Project Management Defined

There are several published definitions of project management from project standard organizations and institutions. CIOB standard for project management and development (2015) defines project management as the "overall planning, coordination and control of a project from inception to completion aimed at meeting a client's requirements in order to produce a functionally viable and sustainable project that will be completed safely, on time,

within authorized cost and to the required quality standards". Project management and many of its practices was originated from construction projects and formed the foundation of the original 1987 document (PMI, 2016).

Kerzner, (2017) contended to managing project successfully is about achieving a continuous stream of project objectives within time, within cost, at the desired performance/technology level, while utilizing the assigned resources effectively and efficiently, and having the results accepted by the customer and/or stakeholders.

#### 2.2.3 PROJECT LIFE CYCLE

Project management institute combine standard glossary compiled by Davidson, 2009 define project life cycle as a collection of generally sequential project phases whose name and number are determined by the control needs of the organization or organizations involved in the project. Kloppenborg, (2015); Milosevic & Srivannaboon, (2006); Schwalbe, (2010) cited in Marnewick, (2017) stated the life cycle of the project is a collection of project phases and defines what performance of work is to done in each phase. The life cycle of the project normally consists of four to six phases, but the application of these phases differs from organization. These phases include;

#### 2.2.3.1 Concept phase:

The concept phase is the first step of project life cycle and it gives a brief description of the project itself (Schwalbe, 2010; Tummala and Burchett, 1999) cited in (Marnewick, 2017). It includes aspects such as the deliverables of the project and the preliminary costs. This phase

focuses on the identification of the operational needs, business drivers, strategic plans, and other factors that define the scope and objectives of the project.

#### 2.2.3.2 Development phase

Besner and Hobbs, (2006) cited in Marnewick, (2017) stated the aim of this specific phase is to elaborate on the deliverables of the concept or initial phase. The project team creates detailed project plans, and more accurate costing and scoping can be done since additional information is available to the project team. This phase provides an in-depth work breakdown structure (WBS), typically up to three levels deep. This allows the project team to make more accurate assumptions about the project.

#### 2.2.3.3 Implementation phase

During this phase, the project team delivers the product, as specified in the previous two phases, and provides performance reports to the stakeholders (Jugdev and Müller, 2005). It is also the phase that normally takes the longest to complete and is the most expensive phase in terms of time and cost (Jugdev and Müller, 2005; PMI, 2013).

#### 2.2.3.4 Close-out phase

Client acceptance plays an important role in the close-out phase (Hyväri, 2006), and all the work is completed during this phase (Schwalbe, 2010). The completed product or service must be related back to the original specification defined in the concept phase. A post-implementation audit is performed to measure the effectiveness of the project against the goals and objectives.

There are generally five distinct and sequential phases that can be distinguished when a hotel is being developed (Baltin, et al., 1999, p. 30 cited in Vender, 2006). These distinct phases are; Development planning, Assembly of the development team, Feasibility analysis, Project implementation and Initial marketing and operations.

Hotel construction passes through the following five key development phases (Inter-Continental Hotels 1996 cited in Cloete and Vender, 2007), these are; concept Design, development design, Contract documentation, period of Construction and Post-construction period.

Wurtzebach et al., (1995, p. 652) cited in Venter (2006) further reveal that estate development process which is similar to hotel development project consists of eight stages, which are typical but not necessarily followed in all cases. The processes are; idea inception, Idea refinement, Feasibility, Contract negotiations, Commitment point, Construction, Initiation of operations and Asset management over time.

The characteristics and requirements for hotel development project have many similarities for that of real estate but differ in many respects (Venter and Cloete, (2007). Therefore project manager should be competent and experience to manage any size of hotel construction process at his disposal.

#### 2.2.4 Project Phase

Hermarij (2016) defined project phase as a discrete time period within a project, separated from other time periods, and having a pre-defined sub-deliverable. Project phase is logical collection that is related to project activities and culminates in the completion of one or more deliverables (PMI, 2017). However, using multiple phases of the project may provide insight

for better managing the project. It also provides an opportunity to assess the project performance and take preventive or corrective actions in subsequent phases (PMI, 2017).

#### 2.2.5 The processes of Project Management practice

PMI (2017), states the project life cycle is managed by executing a series of project management activities known as project management processes. These project management processes are appropriate to projects in all organization and apply global across the (ISO 21500, 2012).

#### 2.2.5.1 Project Management Process Groups

However, PMI (2017); cited in (Kerzner, 2017) identifies five process groups and some of the activities within these groups. These includes; Project initiation groups, Project planning process groups, Project execution process group, Project monitoring and control and Project closure

#### 2.2.5.2 Project Management Knowledge Areas

In addition to Process Groups (PMI PMBOK guide 6<sup>th</sup> edition, 2017) categorized processes by Knowledge Areas. A Knowledge Area is an identified area of project management defined by its knowledge requirements and described in terms of its component processes, practices, inputs, outputs, tools, and techniques.

PMI (2017) further stated although the Knowledge Areas are interrelated, they are defined separately from the project management perspective. The ten Knowledge Areas identified

in PMBOK guide are used in most projects most of the time. The ten Knowledge Areas described in this guide are:

Project Integration Management, Project Scope Management, Project Schedule Management, Project Cost Management, Project Quality Management, Project Resource Management, Project Communications Management, Project Risk Management, Project Procurement Management and project stakeholder management (PMI, 2017)

#### **2.3 PROJECT MANAGEMENT METHODOLOGIES**

Project management is defined as a system of practices, techniques, procedures, and rules used by those who work in a discipline (PMI Publishing Division, 2013).

Kerzner (2017) indicated that as companies approach some degree of maturity in project management, it becomes readily apparent that some sort of standardization approach is necessary for the way that projects are managed. Also The Standish Group, (2010) and Wysocki (2011) contended project methodologies should be developed specially to help address low success rates of using project-related knowledge. However, Kerzner (2017) opined achieving project management excellence, or maturity, it is more likely a repetitive process can be used on each and every project and this repetitive process is referred to as the project management methodology (Kerzner, 2017).

#### 2.4 HOTEL PROJECT MANAGEMENT

#### 2.4.1 Strategic Hotel Project Development Management

As stated earlier, project manager can be employed at the initial stage to take part of strategic management team to help develop business case and project charter. According to Venter

(2006) "established hotel organizations is quite often having an in-house development division, managing future hotel expansion and other development related issues such as franchising, market segmentation, management contracts, market valuations, identifying market expansion, and all strategic issues. For these, project manager, team members or consultants dedicating their daily effort to hotel development project as it is imperative to understand the strategic context of the subject organization"

The strategic management focuses on organizations mission that can best achieved through internal capabilities and its external environment comprehensive and systematic assessment. Pearce and Robinson (1995) "Identify nine critical tasks in the strategy development process:

- Formulate the company's mission, including broad statements about its purpose, philosophy and goals
- Develop a company profile that reflects its internal conditions and capabilities 3. Assess the company's external environment, including both the competitive and general contextual factors
- Analyze the company's options by matching its resources with the external environment
- Identify the most desirable options by evaluating each option in light of the company's mission
- Select a set of long-term objectives and grand strategies that will achieve the most desirable options"
- Develop annual objectives and short-term strategies that are compatible with the selected set of long-term objectives and grand strategies

- Implement the strategic choices by means of budgeted resource allocations in which the matching of tasks, people, structures, technologies, and reward systems are emphasized
- Evaluate the success of the strategic process as input for future decision-making Pearce and Robinson (1995)".

#### 2.4.1.1 Hotel Development Audits

McDonald and Payne (1998) cited in Venter (2006) "stated development audit provides the means for the organization to understand how it relates to the environment in which it operates. It also enables internal strengths and weaknesses to be identified in terms of how they match external opportunities and threats. However, Venter (2006) alluded the development audit should be a systematic, critical and unbiased review and appraisal of the company's development operations. Thus, it provides management with the information to select a position in its particular environment based on known facts. In short, it provides the answer to the question: Where is the company now?"

#### 2.4.1.2 SWOT Analysis

Strength, Weakness, Opportunity and Threat analysis (SWOT) is the analysis and audits of internal strength and weakness as it relates to external threats and opportunities (Venter, 2006). According to McDonald (2000, p. 48) cited in Venter (2006), "SWOT analyses should be conducted for each segment that is considered to be important in the company's future. "These SWOT analyses should, if possible, contain just a few paragraphs of commentary focusing on key factors only. They should highlight internal differential

strengths and weaknesses vis-à-vis competitors and key external opportunities and threats. They should be interesting to read, contain concise statements, include only relevant and important data, and give greater emphasis to creative analysis".

#### 2.4.2 Project Feasibility

Project feasibility involves assessment of business problems or opportunities into details and come out with identified solutions that will likelihood meet customer requirement (Westland, 2006)

Cloete (1995), cited in (Venter, 2006) stated "before property development is undertaken, it is necessary to do an analysis to evaluate the chances of successfully executing the development. This analysis, called the feasibility study or viability analysis, involves the comparison of the cost benefit relationships of alternatives over specific time periods".

There are five reasons for commissioned of feasibility studies. These are; definition of concept, application for planning permission, definition of optimum land use, application for finance and attraction of potential operators (Ransley and Ingram, 2000)

Hotel property development feasibility studies follow the following process (Baltin et al 1999; Rushmore and Baum; 2001; Ransley and Ingram, 2000 and Cloete, 1998). These are; Feasibility Objectives, Statement of Physical Feasibility, Macro Environment Feasibility, Market Feasibility, Physical Feasibility and Financial Feasibility.

#### **2.4.2.1 Physical Feasibility**

Cloete (1998) cited in Venter, (2006) "defines a physical feasibility study as an analysis of the suitability of the site for suggested development. Therefore, it is a match between the

unique requirements of the proposed development and the unique characteristics of the specific site".

The essential factors of site analysis and the content of the study could be linked with physical feasibility study and could be described under three headings, i.e. site characteristics, environmental factors and site location (Cloete, 1998 cited in Venter, 2006). "Physical feasibility (including legal characteristics) is an independent analysis, Wurtzebach and Miles (1995) include site analysis as part of the market study. These different approaches highlight a further important distinction that should be drawn between physical site feasibility and locational feasibility" (Cloete, 1998 and Pyhrr, 1989)

#### **2.4.2.2 Financing Hotel Development**

PMI (2016) define Project Financial Management as instrument that determines how the project will be financed, including the processes to acquire and manage the financial resources for the project.

According to Baltin et al., (1999) cited in (Venter, 2006) "the available financing methods can be grouped into three categories, i.e. short to intermediate term debt instruments, long-term debt instruments and equity structures. When a project is characterized by high risk, when permanent financing does not cover the entire development cost, or when sharing equity is not desirable, developers often use short- to intermediate term financing/debt. The most common short to intermediate term debt instruments are (Baltin et al, 1999: 56 cited in Venter, 2006); Construction Loans, Combined Construction and Term Loans, Term and Bullet Loans, Convertible Mortgages, Land Sale-Leasebacks and Leasehold Loans,

Permanent Loans Mortgages with a Kicker, Wraparound Mortgages, Other Long-Term Debt Instruments"

The three major structures that could be used for equity financing for hotel development project stated (Baltin et al., 1995; cited in Venter, 2000) are "Joint Ventures, Limited Partnerships and All-Equity Financing". As noted by (PMI, 2016), through the construction project's life cycle, the project manager's responsibilities for financial management may be broken down into four broad areas: accounting for financial resources of the project, managing costs and profits, managing cash flows, and making financial decisions or providing the necessary verified information to the project sponsor for making such decisions.

#### 2.4.2.3 Hotel Project Financial Feasibility

The return-risk relationship in the development and construction of new projects are generally considered by feasibility analysis (Venter, 2006).

Financial feasibility follows steps; "Estimate the total capital outlay of the project, Estimate the total net project income, Estimate the profitability of the project and compare to the investor's objectives, do a cash flow projection for the development period, do a risk analysis on the proposed project (Cloete, 1996; cited in Venter, 2006)"

However, Inter-Continental Hotels, (1996), cited in Venter, (2006) stated principal development elements in the hotel project development separates by each of the planning, building, supply and hand-over process in the following: These are;

"Land, Construction, Furniture, Fixtures and Equipment (FF&E), Technical Services and Other Professional Fees, Financing Costs, Organization and Development Costs, Pre-Opening Expenses, Working Capital and Contingency"

Project manager provides technical support and management for feasibility study and schematic design activities for capital projects, including establishment of project scope, schedule, budget and working through all phases of project development project.

#### 2.3.3 Hotel Project Risk Management

Every project whether small or large poses some sort of risk that project teams needs to reduce its impact on the outcome of the project. This could be done through identification, analysis, response planning, implementation and controlling the potential risk throughout the life the project. Ransley and Ingram (2001) make it clear that "construction projects potentially involve a high degree of risk exposure, which is due to the one-off nature of many schemes, their long development programs and the uncertainties that are often associated with on-site construction operations. Risk management techniques should be adopted, which could potentially make a significant contribution to the successful delivery of projects. These techniques enable the project team to reduce the impact of risks, improve the overall management of a project and be more certain of achieving the client's objectives"

According to Ransley and Ingram, (2001, p. 149 cited in Vender, 2006): risk management is a team-based process, utilizing the knowledge and experience of the whole project team to manage the client's exposure to risk.

However, possible risks in Hotel Construction are; Physical risk, technical risk, political risk, Schedule risk, operational performance risk, Economic/financial risk, Environment risk,

21

Marketing risk and legal and contractual risk. Technical risk involves, Demolition, Different site conditions, Design changes, incomplete design scope, Defective design, Errors and Omissions, inadequate specification, Equipment failure, MEP services performance requirement and inefficient use of technology

(www.jetwinghotels.com/jetwinglighthouse)

#### 2.4.4 Project Team Management

The construction project teams require certain types of characteristics such as ability to move from one location to another, adapting to political and different cultures and a sense of mission. Hotel construction requires highly skills professional, consultants, and experiences in different trades, which could be provided by specialists employed by the hotel owners or property developer, hotel group or independent professional consultants (Lawson, 1997). However, Ransley and Ingram (2000. P. 113) cited in Venter (2006) stated "depending on the type of hotel project, location, branding and complexity, most if not all of the following consultants could be appointed; Architect, Interior Designer, Quantity Surveyor or Cost Estimator, Structural Engineer, Mechanical and Electrical Services Engineers, Planning Supervisor, Planning Consultant, Landscape Architect, Historic Building Consultant, Kitchen Planner and Food Services Consultant, Traffic Engineer, Archaeologist, Botanist, Project Manager, Environmental Engineer/Consultant, Acoustic Engineer, Procurement Specialist. Baltin et al., (1999, P. 32) stated other types of consultants which may be required to work with the core team include; Marine Consultant/Engineer, Government Relations Adviser, Marketing Consultant, Management Adviser, Land Planner, Soil Engineer,

Fire/Life-Safety Engineer, Financial Adviser, Public Finance Adviser, Appraiser, Accountant and Tax adviser"

#### 2.4.5 Financing Hotel Construction Project

Financing hotel construction or property development could be achieved through a range of approaches. These are; "Retained profits; the reinvestment of profits derived from trading, Long-term borrowing; raising funds through the capital markets in the form of debentures or from institutional loan providers (either of these methods will increase the levels of annual interest to be paid and as a result will raise the gearing of the business), Issue of more shares for cash; this will require an increase in share dividends to be paid even if the dividend remains at the same rate for all investors and Short-term borrowing; this may be available by delaying payments to creditors or by raising the level of overdrafts. However, long-term investments funded from short-term sources are clearly risky and should be avoided Venter (2006)".

#### 2.4.6 Project Health, Safety, Security, and Environmental (HSSE) Management

PMI (2016) stated requirements of the Health, Safety, Security, and Environmental (HSSE) planning processes and activities are:

- Owner/sponsor-enforced regulations,
- Mandated standards and regulations (local, state, national, or international),
- Both owner/sponsor and internationally accepted standards and regulations, and
- Contractor good practices and working criteria.
PMI (2016) further stated it is common for project sponsors or owners to invoke additional requirements, such as constraints specific to the geographic region and application area where the project is destined (may depend on the scale, scope, and complexity of the project); specific safety and environmental management systems standards, where general measures may be considered insufficient to provide the assurance and control required; and industry-specific codes and standards, which define specific project safety and environmental performance and acceptance criteria.

# 2.4.7 Hotel Construction and Post Construction Management

Keoki et al, (2015) stated managing projects effectively requires considerable amount of general knowledge background about the construction industry. However, CIOB (2014) opined the project manager should have the knowledge, experience, and competence to understand and define the interrelationships among the project management components of the project. PMI (2016) alluded the construction projects often require the integration of engineering disciplines (civil, structural, electrical, mechanical, geotechnical, etc.) as well as interaction with technology and sophisticated equipment that demand unique construction techniques and methods. PMI further stated these integration and interaction of methods contribute to unique subcontracting arrangements, special financing, risk insurance, compressed schedule timelines, sustainable infrastructure, complex logistics, adaptation to changing governmental regulations, and internal/external constraints, all of which have the potential for significant increases to project and capital costs.

(Ransley and Ingram, 2000) cited in Venter, (2006) "stated completing a building is always difficult, particularly so in the case of hospitality projects. In this process several

24

operational/finishing activities have to be coordinated and completed simultaneously with the installations, testing and commissioning of services such as air-conditioning, sound systems, theatrical lighting, computer networks, etc. Ransley and Ingram (2000) further stated before the operator can take occupation of the hotel site/facilities, practical completion must be achieved, as it is an important contractual milestone, which marks the end of the contractor's possession of the site and hands over the responsibility to the client. This handover should only occur if the building is complete for all practical purposes. However, (Ransley and Ingram, 2000), suggested before building can be practically handover, one can arrange for areas to be handed in in phases. They added such can be beneficial to both parties, but they need to be managed carefully".

## 2.5 HOTEL DEVELOPMENT IN GHANA

## 2.4.1 Introduction

Business hotels and resorts compete for today's sophisticated global travelers, and their developers and operators often look to architects and interior designers to create new and interesting "experiences" for the guest (Penner et al, 2012). Tourism report on National 15-Year National Tourism Development Plan (2013 – 2027) reported "growth of star rated hotels in Ghana from 1,345 in 2005 to 1,747 in 2010. The report stated majority or star-rated hotels are in the 1- and 2-star category and quite number of higher rated categories of hotels under construction. In addition, the report emphasized the hotel occupancy rates, especially in star-rated hotels, have been relatively high during the past decade". Ghana Tourism Authority statistics (2010) shows roughly 80 per cent occupancy rates of hotels are on average for 4-star rated hotel, hence the increase in star in hotel across the Country

especially the Northern part of due to Tourist attraction, activities NGO's and the Ghana government flagship programs.

## 2.5.2 Tourism Industry in Ghana

Structure of Ghana Tourism Authority comprises of several "licensed number of tourism establishments or businesses operating as travel agents, hotels, car rentals, tour operators, restaurants, companies and nightclubs within Ghana (Ghana Tourism Development Plan, 2012)". The report shows that, accommodation establishment in the three Northern Regions are 4% in Northern Region 3% in Upper East Region and 1% in Upper West Region.



Figure 2.1: Accommodation establishment distribution in Ghana, 2010

(Source: Ghana Tourism Development Plan, 2012)

# 2.5.3 Hotel Segmentation

Kotler et al., (1999) cited in Venter, (2006) stated segmentation of hotels involves a three-

step process. The processes are:

- Market segmentation,
- market targeting
- market positioning

# 2.5.3.1 Market segmentation

Market segmentation of hotels divides buyers into distinct market groups which might require separate products and/or marketing mixes (Venter, 2006). One way of grouping market is by demographic segmentation and consists of dividing the market into groups based on demographic variables such as, family lifecycle, education, gender, age, income, occupation, race, religion and nationality. Reason why this method is popular is that the consumer's wants and needs and usage rates ranges closely with demographic variables. Another reason is demographic variables which are easier to measure than most other types. Also, variables, for example geodemographic, geographic, psychographic and behaviorist variables, can be used to segment markets (Venter, 2016)

# 2.5.3.2 Market targeting

The next segmentation process is market targeting according to (Venter, 2006) which is the process of evaluating of each segment's attractiveness and selecting one or more of the market segments.

## 2.5.3.3 Market positioning

The third step is market positioning, comprising the development of a competitive position and an appropriate marketing mix for a product. Once a company has chosen its target market segments, it must decide what positions to occupy in those segments. The positioning task consists of three steps; these are, identifying a set of possible competitive advantages on which to build a position, Selecting the right competitive advantages and effective communication, and Delivering the chosen position to a carefully selected target market (Venter, 2006).

According to Baltin & Cole, 1995) cited in Venter (2006) "hotel developers should consider the target market that the hotel expects to serve. The target market will serve as a guide for planning the physical structure and amenities in the hotel, which are derived from guest profiles, the hotel's location, budget and brand status. It is suggested that consultations with experienced designers and architects will yield feasible concepts on how to achieve an overall look that would appeal to the target market while keeping within the development budge".

# 2.5.4 Ghana Tourism Hotel Classification

A new harmonized standard for accommodation and catering establishment, 2005 of Ghana Tourism Authority classified hotels, motel and resort according star rating system to commensurate with internal requirement. It classified hotels, motels and resorts in five classes

- One Star (4<sup>th</sup> Class)
- Two Star (3<sup>rd</sup> Class)
- Three Star (2<sup>nd</sup> Class)
- Four Star (1<sup>st</sup> Class)
- Five Star (Luxury)

According to the Tourism Authority, the hotel establishment shall be assessed for quality of facilities and services. The inspector of the authority will stay overnight and sampling of all facility and services and license the hotel under these classifications. Therefore, the project manager and his team for hotel construction should have extensive knowledge of the Ghana Tourism Authority requirement and the classification standards.

## 2.5.5 Hotel Design Requirement

Echavarren (2001) cited in Venter (2006) stated the shortfall of hotel construction is inadequate project requirements and specifications. The new harmonized standard for accommodation and catering establishment of Ghana Tourism Authority, 2005 specifies the standard requirement for hotel construction in Ghana. It categorized hotel design requirement according to the star rating of the hotel facility. For example, a standard single room size of four star hotels is 16m<sup>2</sup> and double room size is 18m<sup>2</sup>. Also a standard single room size of a five-star hotel 18m<sup>2</sup> and double room 20m<sup>2</sup> (GTA, 2005)

A new or adapted design should establish a hotel that can be operated efficiently by the staff and management, and consideration should be given to practical operational issues such as the flow of people, materials or information. The designer is responsible for the following elements (Ransley & Ingram, 2000, p. 7) "Space planning, Form and color, Finishes and durability, Lighting and audio-visual systems Technology".

However, Ransley and Ingram (2000, p. 3 cited in Venter, 2006) alluded the final hotel product should be designed to satisfy the consumer and to meet the needs of the client.

According to Baltin et al (1999 cited in Venter, 2006), "hotel design requires specialized design expertise and involves an array of design specialists that are seldom found on other

types of commercial property designs. The project team systematically works through a process by which design concepts are transformed into solid reality, sensitive to the many site and market variables involved. This process involves a myriad of market and operational considerations that must be incorporated into a hotel's design".

# 2.5.6 The Components of Hotel Design

The design of hotels incorporates both exterior and interior elements (Ransley and Ingram 2000). The exterior presentation of a property includes signs, entrances, canopies, outdoor activities, terraces, patios, lawns and landscaping. Venter (2006) alluded the exterior presentation gives the hotel property a distinctive presence and offers the customer a first hint of what is on offer inside. Venter further alluded the aim of internal design is to optimally utilize the space available in the building, both for front and back-of-house activities. The internal facilities include accommodation, food and beverage areas, reception areas, leisure amenities, storage and services (for example, heating, air conditioning, gas, water, lighting, power and communications). (Venter, 2006) stated the consideration must be given to the circulation pattern of customers and staff so that minimal disruption/congestion do not occurs. An important requirement when designing hotels is to ensure that the interior design does not present accident or fire hazards that may affect the safety of guests or other occupants. "The design of a hotel property is also a reflection of the operating standards of the unit and includes factors such as;

- Capacity of bedrooms, public areas and food and beverage facilities
- Layouts of table groupings
- Anticipated product and service turnover, flexibility of accommodation and seating

 Method of food and drink service, staffing and support arrangements(Ransley and Ingram, 2000)"

## 2.5.7 Challenges of Hotel construction Projects

Construction of hotel project is often fraught with misunderstanding of definite objectives and processes (Ransley and Ingram, 2000; Baltin *et al.*, 1999). Kanika (2016) alluded hotel developments are different - they are very diverse and quite complicated when compared to any other type of real estate investment and property development. They involve complex and overlapping end-to-end processes, multiple stakeholders, considerable strategic planning and decision making, extensive technical knowhow and specialist experience in project management, operational equipment, technical services, pre-openings, management and operation of hotel (Kanaki, 2016). She further emphasizes few owners have an experience with hotels, thus neglect the need of hiring specialized consultancy services Kanika (2016). Furthermore, she stated few architects have in-depth knowledge in hotel development processes. As a result, there have been substantial overdraws in construction budget at the mercy of project managers, architects, technicians and other planners, who are just as inexperienced with regard to hotel construction.

# 2.6 COMPETENCIES OF PROJECT MANAGER

# 2.6.1 Project Manager

PMI (2017) defines project manager as;

"The person assigned by the performing organization to lead the team that is responsible for achieving the project objectives. Also

31

BS 6079; 2000-2 defines project manager as;

"Individual or body with authority, accountability and responsibility for managing a project to achieve specific objectives"

From the above definitions, it clear that, project manager's role is crucial and challenging than most of the work in any other firms as he/she requires a broad understanding of the various areas that needs strong interpersonal skills to coordinate activities. (Barmayehvar, 2015; Yang et al., 2011). A stable of capable, qualified, professional project managers can manage a full range of projects, from large, complex technology projects to smaller, short-term projects (Crawford, 2010).

# **2.6.2 Competencies Defined**

Griffiths and Washington (2015) defines competency as;

"A specific set of behaviors or performance indicators associated with a facet of exceptional performance in an organizational role". Each competency reflects a unique combination of knowledge, skills, abilities, and other factors that are driven and influenced by multiple traits and motivations, ultimately manifesting themselves in skillful behavior.

Competency is viewed as an individual's underlying characteristic that is causally related to effective performance in a job or situation (Liikamaa, 2015).

## 2.5.3 Project Management Competency

Project management competence is a key to project management success (Anderson, 2011). Mahmood et al., (2006), cited in Gareis and Huemann, (1999) asserted that, project management competency is the capability to manage projects professionally, by applying best practices regarding the design of the project management process, and the application of project management methods.

"Project management professionals working in projects where technical issues are important must have the competency to deal with them. Project management competencies require knowledge and experience in the subject, which enables the project to meet its deadlines and objectives. Project management competencies are achieved by the combination of education and the knowledge acquired during training, the skills developed through experience, and application of such acquired knowledge and experience. (Mahmood et al., 2006)"

According PMI (2017), for project manager to be competent, he/she needs to satisfy the following competency components: "knowledge competence (i.e., what the project manager knows about the application of processes, tools, and techniques for project activities); performance competence (i.e., how the project manager applies knowledge to meet project requirements); and personal competence (i.e., how the project manager behaves when performing activities within a project environment, his or her attitude, and core personality characteristics". Based on this, competent project managers can consistently apply their project management knowledge and personal behaviors to increase the likelihood of delivering projects that meet stakeholders' requirements (ahsan et al., 2013)

## 2.6.4 Project manager's competencies

Crawford (2007) defined project manager competence;

"As a combination of knowledge (qualification), skills (ability to do a task), and core personality characteristics (motives, traits and self-concepts) that lead to superior results" Crawford further stated that, project success and competence of project management

33

personnel are closely interrelated, and the competence of the project manager is in itself a factor in the successful delivery of projects.

Mahmood et al., (2006) asserted project Managers must be able to recognize the issue and be confident that appropriate action has been taken to deal with them as technical issues can cause a project to fail.

Recent PMI studies applied the Project Manager Competency Development (PMCD) Framework indicates skills set needed by project managers through the use of The PMI Talent Triangle (PMI, 2017, p. 56). The talent triangle focuses on three key skill sets:

**Technical project management** "The knowledge, skills, and behaviors related to specific domains of project, program, and portfolio management. The technical aspects of performing one's role"

**Leadership** "The knowledge, skills, and behaviors needed to guide, motivate, and direct a team, to help an organization achieve its business goals".

**Strategic and business management** "The knowledge of and expertise in the industry and organization that enhanced performance and better delivers business outcomes".

According to (Murch, 2001) cited in (Bauer, 2014), project managers should possess sufficient technical knowledge and skill to perform their jobs. Lewis (1998) cited in (Bauer, 2014) emphasize technical skills enhance the ability of the project manager to lead and manage, through an understanding of the complex issues that develop during a project life cycle. However, research conducted by (Monson, 2000) cited in (Bauer, 2014), stated "... technical expertise does not correlate directly to successful project management".

According to (Barber, 2005) cited in (Barmayehvar, 2013), project manager should possess business management skills, be a psychologist, an accountant, and a technician. The personality based competencies deal with the core personality characteristics ensuring that the individual can do a particular job. In his view only two of these elements are present in project management standards namely output based competencies and input based competencies. This further re-emphasis the stands (Angbanbio, 2014).

## **2.7 THREE DIMENSION COMPETENCIES**

The following section examines the three dimensions of project manager competencies in detail. These are knowledge competence, personal competence and performance competence.

## 2.7.1 Knowledge Competencies

The core knowledge the organization needs is derived from the vision, the strategy, and the critical factors of success (Sihvo et al., 2014) allude the. The importance of Knowledge competence cannot be overemphasized as it reflects the project manager's knowledge or body of information (the processes, tools, and techniques for project activities) required to perform the tasks required for the project (Ahsan et al., 2013). Knowledge competence can be demonstrated under Project Management Professional (PMP) ® credential framework, by passing an appropriately credentialed assessment, such as the PMP® examination, or any equivalent project management accreditation PMI (2017). It further stated these knowledge competences are detailed in the examination content outlines, for example, the Project Management Professional (PMP) ® Examination Content Outline and PMBOK guide.

The PMI PMCD framework for knowledge competence is designed to be applied generically, regardless of the nature, type, size, or complexity of the projects being managed

(PMI, 2007) cited in Ahsan et al., (2013). In some industries there may be technical skills that are particularly relevant to that industry or covered by specific domain, regulatory, or legal requirements (PMI, 2007) cited in (Ahsan et al., 2013). For example, to run a construction project, an organization may require its project managers to have more knowledge of safety standard. Because of these complexities, PMI does suggest developing industry-specific or organization specific competencies. Professional competency in project management is attained by the combination of knowledge acquired during training, and skills developed through experience and the application of the acquired knowledge (Edum-Fotwe and McCaffer, 2000). "Knowledge aspects of competencies are the factual or procedural information necessary for successfully performing a task. With regard to the knowledge component of project manager competencies, there is less research in terms of effectiveness criteria. Studies have prescribed the knowledge competencies as required, such as quality control (Dainty et al., 2004; Geoghegan and Dulewicz, 2008; Gillard and Price, 2005; Hao and Swierczek, 2010; Mei et al. 2005; Stevenson and Starkweather, 2010); however, in a recent study by Zwikael (2009), of 783 project managers from different countries and industries, it was found that the Knowledge Areas from the PMBOK® Guide (PMI, 2007) with the greatest impact on project success were Project Time Management, Project Risk Management, Project Scope Management, and Project Human Resource Management". These results were found to be sensitive to industry requirements; thus, a general consensus in the literature is that knowledge underlies many of the competencies required in successful project management and the requirements may be different for different industries.

## 2.7.2 Personal Competence

Personal competences are those behaviors, attitudes, cultural influences, and core personality characteristics that contribute to a person's ability to manage portfolios, programs, and projects (PMI, 2017). Personal competence is identified as the dimension of competence that has potential to differentiate between threshold and superior performance (Crawford, 2005). Improvements of project manager's personal competence enhance his ability to use effectively knowledge and performance competence on projects. PMI Project Managers Competency Development (PMCD) framework grouped personal competence into six units; Communicating, Leading, Managing, Cognitive ability, Effectiveness and Professionalism.

# **2.7.3 Performance Competencies**

PMI Combine Standard Glossary 4<sup>th</sup> Edition Compiled by Davidson, (2009) defines Performance competence as;

"What the project manager is able to do or accomplish by applying project management knowledge. This competency dimension looks at the demonstrable performance of the individual in carrying out project management tasks, and focuses on the project outcomes grouped in five units: initiating, planning, executing, monitoring and controlling, and closing a project"

The performance competence of project manager can be demonstrated by assessing projectrelated actions and outcomes (Ahsan et al., 2013). A et al., (2013) further stated project managers must apply their knowledge to meet project outcomes. There has been imperative growing links to performance of project managers with the performance of the organization within project-based sectors. Gillard and Price, (2005; Mei et al., 2005 cited in Ahsan et al., 2013). There have been extensive studies in the link between performance competency and project success (Ahasan et al., 2013). The identification of project management competence with that of performance of a project and organizational outcomes demonstrates the importance of identifying effective project manager competencies (Ahsan et al., 2013).

## 2.6.4 Project Managers Competencies Required for Hotel Construction/Development

"All project managers have skills, but not necessarily the right skill set for the projects at hand. For complex projects with a multitude of stakeholders, all from different countries with different cultures, finding the perfect project manager may be an impossible task (Kerzna, 2010)"

Hotel construction is regarded as a complex construction project due to fragmentation of many parts and being difficult to understand or a complex mixed-use building type which present significant challenges in both design and construction (Baltin et al, 1999). "Construction projects are constantly increasing in technological complexity and the relationship and the contractual grouping of those who are involved are also complex and contractually varied. There are innumerable processes that make up the construction project. It is always the owner's desire that his/her project should be unique. Furthermore, it is the owner's goal and objective that the facility is completed on time and within agreed upon budget. Systems engineering approach to construction projects help understand the entire process of project management and to manage and control its activities at different levels of various phases to ensure timely completion of the project with economical use of resources to make the construction project most qualitative, competitive, and economical (Ransley & Ingram, 2000: 161)". Few good project managers or project management companies know

how to manage process. An average five hotel property requires about 27 different consultants and cost about four times as much as an office block and will take 3 times as long to build. Also, in many emerging countries approvals and permissions can hinder the process (Kanaki, 2016).

## **2.8 COMPETENCE ASSESSMENT**

In this section, the researcher addressed the assessment of competency of the project managers using the assessment criteria. The purpose of the assessment is to identify areas of strengths and weaknesses of project manager to determine how further development could improve competence and results.

# 2.8.1 Reviewing Competency Requirement

To review competency requirement of a project manager, the right competency required and role that requires knowledge and experience of best practices in project management need to be determine. Also, if your organization has a good knowledge base, it is possible to create your own competency requirements for each role (PMI, 2017). In addition, to ensure meaningful and effective results of the competency assessment, organizational, cultural, and personal requirements should be identified and combined with the requirements of performance, personal, and knowledge competences. This will establish the goals, scope, development plan, and criteria as well as an assessment baseline for each individual or group (PMI, 2017).

PMI further stated that, the identified requirements may influence one or all of the following competence dimensions:

- Knowledge expectations,
- Performance expectations, and
- Personal behavior expectations.

# 2.8.2 Assessment Criteria

PMI (2017) proposed Assessment criteria for project managers, it stated once the requirements are identified, assessment criteria for each target group are defined to create a competency assessment baseline. It further stated the assessment criteria refer to the three competence dimensions and describe observable behavior or results. Assessment criteria specify what must be done by the organization to achieve competence in each Performance Criterion. This is designed to ensure that the organization is able to self-assess and provide evidence for final assessment, which is not deficient. It also has the purpose of indicating gaps in the organization's coverage of the requirements set out in the Standards (Stevenson, 2000). However, the important tools to gather evidence for the behavior and results of a project manager are interviews; surveys; deliverables; other project management related documents and reviews; key performance indicators and success criteria achievability rates; and any repeatable success measurement.

According to (PMI, 2017) it is important to define the assessment criteria in a way so that the actual behavior, performance, and results are assessed. Simply checking the existence of formalized documents will not assess performance. The same is true for expected behaviors of project managers, who should be assessed for their intentions and effect and not only for superficial actions. The three assessment dimensions are:

- Knowledge expectation,
- Performance expectation, and
- Personal behavior expectation (PMI, 2017)

# 2.8.3 Assessment of Knowledge Competencies

Assessing project managers' knowledge competencies involves a number of ways (West and Plumeri 2006; Bigelow and West, 2003), but one which is internationally accepted "standard for knowledge in the project management field is the Project Management Institute's A Guide of Project Management Body of Knowledge (PMBOK<sup>®</sup> Guide). West and Plumeri (2006) contended the advantage of using this PMBOK standard is that it has created a uniform language of project management that can be used across all industries. For construction industry, PMI has created generally accepted principles for construction projects that are not common to all general project types. The language and concepts help build a consistency of communication that allows for the use of tools and techniques across projects within an organization". Knowledge assessment should address both the five process areas of the PMBOK<sup>®</sup> Guide as well as the ten knowledge areas. Furthermore,

The second area of knowledge competency assessment is the behaviors exhibited in the workplace. This approach requires the use of a multi-rater tool that allows the acquisition of feedback on the project managers' behavior from a variety of sources, typically a peer, subordinate, supervisor, or even a client. This type of assessment focus on the desired behaviors that effective project manager's exhibit in the execution of their jobs (West and Plumeri, 2006).

## 2.8.4 Assessment of Personal Competence

The purpose of a self-assessment would be to establish where the individual stands against the competence baseline of the PMCD Framework. "A project manager may wish to assess their competence as a personal exercise or prior to an assessment by a third party. The individual may apply the process less formally and the collection of evidence may be done over an extended period (PMI, 2017)"

The project manager will compare their performance against the individual performance criteria. The assessment may lead to a request for assistance to address a development need or an organizational assessment

# 2.8.5 Performance Competencies Assessment

PMI (2017) stated that, "assessing performance competence of a project manager will have required senior professional to act as assessors, they will decide how they are to assess the project manager's performance, against the criteria prescribed in the PMCD Framework. The project manager will gather evidence to be used in the assessment against the PMCD Framework performance criteria. The purpose is to meet or exceed the baseline competence defined by the PMCD Framework".

The assessment levels project managers themselves can be defined simply. Levels of performance could, for example, be expressed as: Below Expectation, Meets Expectation, and Exceeds Expectation

Upon completing the assessment, a plan can be created to guide the individual and organization toward their desired goals. Organizations may want to strive to address the key

42

areas that will provide them with maximum improvement benefits, rather than attempting to focus on all of the possible issues at once (PMI, 2017)

# 2.9 COMPETENCE ASSESSMENT TOOL

Popular assessment tool used in measuring project managers' competence is 360-degree feedback evaluation (Sanghi, 2007; Bigelow and West, 2003; Cartwright and Yinger (2007). "It is assessment tool that needs to be completed by the individual, as well as several independent assessors; for example, a supervisor, peer, subordinate, and a client. Individuals rate themselves on their competency in several key performance indicators. The independent assessors then rate the individuals on those same criteria. To see how the candidate's behavior competency measures up, his or her profile scores are compared to the feedback provided by the assessors (Sanghi, 2007; Bigelow and West, 2003; Cartwright and Yinger, (2007)."

# 2.10 PROJECT STAKEHOLDERS IN HOTEL CONSTRUCTION

## 2.10.1 Stakeholders in Hotel construction

There are many stakeholders in construction undertakings, just as there are stakeholders in other endeavor (Chinyio and Olomolaiye, 2010). "Stakeholders checklist in construction projects is often large and would include the following; owners and users of facilities, project managers, facilities managers, designers, shareholders, legal authorities, employees, subcontractors, suppliers, process and service providers, competitors, banks, insurance companies, media, community representatives, neighbors, general public, government

establishments, visitors, customers, regional development agencies, the natural environment, the press, pressure groups, civic institutions, etc. (Newcombe, 2003; Smith and Love, 2004)"

# 2.10.2 Categories of stakeholders in Hotel Construction

Stakeholders in construction project are divided and categorized according to their location once they identify (Calvert, 1995; Winch and Bonke, 2002; Chinyio and Olomolaiye, 2010; Fummey, 2016). construction project stakeholders for these reasons can be divided into internal or external to the project team or project scope (Sutterfield *et al.*, 2006) or inside and outside stakeholders (Newcombe, 2003), and direct and indirect stakeholders (Smith and Love, 2004).

## 2.10.3 Identification of Key Stakeholders in Hotel Construction

PMI Construction Extension Guide 3<sup>rd</sup> (2016) states that, both contractor the project owner usually executes construction projects with the assistance of an architectural or engineering designer as an intermediary. They provide resources to form the project team and other stakeholders to the project, as described in the following:

"The owner typically mobilizes the following stakeholders: Financing institutions, Professional designers and technical consultants, architects, and engineers, Construction manager agency, Inspection third parties, Licensors of proprietary technology and process engineers, Lawyers and external legal advisors, Insurance companies and Administrative and regulatory organizations. Also, the contractor typically mobilizes the following stakeholders: Subcontractors, Lawyers and external legal advisors, Insurance companies, and Equipment and material suppliers" PMI, (2016)". Other stakeholders may be involved in the project due to their own interests, such as local communities and labor unions. Their influence on the project outcomes will vary according to local legislation, culture, and customs, which affect the application of stakeholder management processes throughout construction projects.

However, Ransley and Ingram, (2000, p. 113) listed key stakeholders/ consultants in hotel construction/ development "depending on the type of hotel project, location, branding and complexity, most if not all of the following can be appointed; Architect, Interior Designer, Quantity Surveyor or Cost Estimator, Structural Engineer, Mechanical and Electrical Services Engineers, Planning Supervisor, Planning Consultant, Landscape Architect, Historic Building Consultant, Kitchen Planner and Food Services Consultant, Traffic Engineer, Archaeologist, Botanist, Project Manager, Environmental Engineer/Consultant, Acoustic Engineer and Procurement Specialist

Baltin et al (1999: 32), defined other types of stakeholders' consultants which may be required to work with the core team include:

Marine Consultant/Engineer, Government Relations Adviser, Marketing Consultant, Management Adviser, Land Planner, Soil Engineer, Fire/Life-Safety Engineer, Financial Adviser, Public Finance Adviser, Appraiser, Accountant and Tax adviser"

#### 2.11 CONCEPTUAL FRAMEWORK

In reference from the literature review of the concept and challenges of hotel construction, project manager's standards for competency and a framework that defines project manager's competencies in relation to the PMI Knowledge, Performance and Personal Competence (three dimension of project manager's competencies) a framework of the hotel development by (Venter, 2006 )and Integrated project managers competence by Crawford (2005) are being compared to come out with a framework for project managers required competencies for hotel construction.

# 2.11.1 Framework for hotel construction

Venter and Cloete (2007) in their study proposed a framework for hotel construction and they develop and validated with the view that developments of hotel should subscribe to a mix of critical success factors, which should be incorporated during the development process. Venter and Cloete (2007) identified the following critical success factors for hotel developments projects: these are;

"Operational strategic direction and market understanding, Operational management and staff skills, training and experience, Branding and marketing, Operational and construction standards education, implementation and consistency of standards, Site location, National and local government regulations taxes, duties, policies, legislation, town planning and building regulations, Feasibility – financial, market, physical, macro-environment, Accessibility – for guests, staff and suppliers, Development of strategic and project objectives, Design efficiency – meeting budget, operational efficiency and guest satisfaction, Development team – team leader, executive management, key operational staff, consultants, and advisors, and Contractor – cost, time, quality, experience, resources, capability and attitude".



**Figure 2.2: Framework for Hotel Construction:** 

Source: Venter and Cloete (2007)

# 2.11.2 Framework for Project Managers Competencies

Integrated model for project managers' competence for identifying senior management perception of project management competence proposed by Crawford (2005) in exploring the relationship between assessment of project management competence and perceptions of performance in the workplace, defined five competency distinct characteristics of PMs. Crawford (2005) "highlights two of these distinct competence characteristics, namely, knowledge and skills are considered to be surface competencies and the most readily developed and assessed through training and experience. Also, Crawford further stated the remaining three competencies are core personality characteristics, motives, traits and selfconcept, are considered difficult to assess and develop". In this, Crawford (2005) developed framework to reconcile the "attribute based and performance based approaches to competence described above and provide a basis for identifying and measuring aspects of competence against standards". Ahadzie et al., (2009) stated significant benefits of framework of PMs competence is that, it reflects both the elements of outcomes and performance behaviors in predicting the performance of PMs at the concept, design, tender, procurement, construction and operational phases of the project lifecycle





## construct

# (Source: Crawford, 2005)

However, this study was undertaken to focus on competencies of project managers' using PMI approach of three dimension competencies of project managers hence adoption of Crawford integrated competence model. The researcher was of the view that this model has characteristic elements of three-dimension project manager competencies which can be apply in hotel construction and therefore compared to the framework for hotel developer proposed by Venter and Cloete (2007). The researcher was of the view that combing these two model will help produce proposed abridge version of required competency framework for project managers in hotel construction projects.



# Figure 2.4 Abridge Version of Crawford Integrated Competency Model

(Source: Crawford, 2005)

# Table 2.1 Operational measures for questionnaires

Dependent	Independent Variable		
Variable			
Project	Project management Practices in Hotel construction		
Managers	Project Management Practices		
Competencies	Strategic Hotel Development		
	Hotel Market Analyses		
	Hotel Development Feasibility		
	Hotel Financial Feasibility Analysis		
	Project Scope Management		
	Risk Management		
	Project Financing		
	Project Documentation Management		
	<ul> <li>Project Resource and Team Management</li> </ul>		
	Construction and Post Construction Management		
	Cost Management		
	Communication Management		
	Stakeholder Management		
	• Health and Safety and environmental		
	(HSSE)management		
	PROJECT MANAGER COMPETENCIES OF PROJECT MANAGER		
	KNOWLEDGE COMPETENCIES		
	Communication knowledge		
	• Report writing.		
	General and business Correspondence		
	Public speaking		
	Presentation skills		
	IT Knowledge		
	Internet Systems		
	Project information system		
	• Operating systems.		
	MS Project, Primavera		
	• Information systems and IT tools.		
	AutoCAD and Other Autodesk packages		
	Hotel Financing knowledge		
	Financial Feasibility		
	Financial Reporting systems		
	Project finance arrangement for Hotels		
	• Investment appraisal.		
	Establishing cash flow		
	• Establishing budgets.		
	Legal Knowledge		
	General legal Require background		
	Drafting contracts.		
	Permit Acquisition process for hotel Construction		

Health and safety. Security and Environmental (HSSE) issues
Prenaration of claims and ligation
Social Impact Issues
Tourism Industry Knowledge
Ghana Tourism Authority
Contrist Attraction
Tourism industry and Hotal Davalonment
International Tourism
International Fourism     Chang Tagging Hatel Changing and the second seco
Ghana Tourism Hotel Classification
• Hotel Development
Hotel Design Knowledge
• Hotel Design Types
Ghana Tourism Hotel Design Requirement
Site and Master planning
Public Areas Space Design
Guest Room and Suit Design
Administration and back of the House design
Conference Design
Kitchen Design
Landscape Design
Electrical Engineering Systems Design
Mechanical Engineering System Design
• Fire Safety Design
• Swimming Pool Design
Restaurant Design
• IT and Internet System Design
Telephone System Design
Hotel Construction Knowledge
Hotel Construction Techniques
Construction Materials
Flectrical System in construction
Mechanical Systems Construction
Interior Design
• Interior Design
PERFORMANCE COMPETENCE IN HOTEL CONSTRUCTION
Strategic Hotel Development
Hotel Development Planning
Organization Mission
Corporate Objectives
• Development Audit
• Strength, Weakness, Opportunity and Threat (SWOT) Analysis
Development Objectives / Strategy
Hotel Market Analyses
Micro Hotel Market Analyses
Macro Hotel Market Analysis
Hotel branding

Hotel Segmentation
Hotel product Packaging
Hotel Development Feasibility
Feasibility Analyses Process
Macro Hotel Market Analyses
Physical Feasibility (Site Analysis)
Financial Feasibility Analysis
Cost Benefit Analysis
Valuation and Replacement Cost
Total Project Income
Cash Flow Projections
Profitability Analysis
Risk Management
Business Risk
Financial Risk
Development Risks
Risk Management in Practice
Project Financing
Hotel Property Financing
Hotel Investment
Project Documentation
Schematic Design
Design Development
Authority Approval
Contract Documentation
Bills of Quantities
Tender Process
Project Team Management
Consultant Selection
Selection of Require Consultant
Construction and Post Construction Management
Contractual and Commercial Management
Project Programming
Construction Management
Hand over to Operators
Practical Completion
Construction Contract Finalization
Project Cost Management
• Cost Estimation
• Budgeting
Cost Control
Project Communication Management
Communication Planning     Design Decommentation Assessment
Floject Documentation Assessment     Stakeholder Communication
Gammunication Monitoring
Communication wionitoring     Project Stakeholder Management
Stakeholder Identification
- Stakenoluer luentineation

Stakeholder Analysis		
Stakeholder Register		
PERSONAL COMPETENCIE		
Communication		
<ul> <li>Actively listens, understands, and responds to stakeholders</li> </ul>		
Maintains lines of communication		
Ensures quality of information		
Tailors communication to audience		
Leadership		
• Creates a team environment that promotes high performance		
Builds and maintains effective relationships		
<ul> <li>Motivates and mentors project team members</li> </ul>		
<ul> <li>Takes accountability for delivering the project</li> </ul>		
<ul> <li>Uses influencing skills when required</li> </ul>		
Management		
• Plans and manages for project success in an organized manner		
Cultural and Political Awareness		
<ul> <li>Plans and manages for project success in an organized manner</li> </ul>		
Cultural and Political Awareness		
• Builds and maintains the project team		
• Resolves conflict involving project team or stakeholders		
Cognitive Ability		
• Takes a holistic view of project		
• Effectively resolves issues and solves problems		
• Uses appropriate project management tools and techniques		
• Seeks opportunities to improve project outcome		
Effectiveness		
Resolves project problems		
• Maintains project stakeholder involvement, motivation, and support		
Changes at the required pace to meet project needs		
• Uses assertiveness when necessary		
Professionalism		
• Demonstrates commitment to the project,		
Operates with integrity		
Handles personal and team adversity in a suitable manner		
Manages a diverse workforce		
Development in the days of a many institution of instances with the institution		

Resolves individual and organizational issues with objectivity
(Source: PMCD Framework, 2017; PMI, 2017; PMI, 2016 and Venter, 2006)

## **CHAPTER THREE**

# **RESEARCH METHODOLOGY**

# **3.1 INTRODUCTION**

This chapter discusses the research methodology adopted for the study. It follows the extensive literature review conducted in chapter two. It comprises different parts, each part focusing on a distinct methods concern. It discusses the theoretical framework of the study follows by the research approach, design, and strategy used to guide this study. The overall purpose of this chapter is to provide a robust rationale for the selection of the appropriate methodology based on the aim, objectives, and limitations of the study.

## **3.2 RESEARCH DESIGN**

"Researchers cannot assume that people think in certain ways without asking them what they think. The design of the research normally specifies which of the various types of research approach will be adopted and how the researcher plans to implement scientific controls to enhance the interpretability of the results (Al-Moghany, 2006; Polit and Hungler, 1999)" Panneerselvam, (2004, p. 12 cited in Laphi, 2013) stated in her study that, "research design provides a complete guideline for data collection; the following include the essence of a research design, Selection of research approach, Design of sampling plan, Design of experiment; and, Design of questionnaire". However, in this study, the researcher used structured questionnaire in the gathering of data. Interviews were conducted to test the credibility, reliability, experiences and perception of respondent's knowledge in hotel construction. The researcher used quantitative research design method in the survey.

# **3.3 Initial Survey**

The initial survey was conducted in the form of personal observation and interviews of key professionals including owners/developers, architects, engineers, construction managers, project managers, and quantity surveyors of hotel construction site who gave their views regarding the competencies of project managers'. To augment and enrich the content of the outcome of this observation and interviews, a detail literature search was carried out by the researcher on the competencies and assessment of project managers. The outcome of this interview and literature search formed the basis of the next round of questionnaire administering.

Construction Professionals	Comments			
Architects	Architects were concerned on the design of the			
	internal and the External part of the hotel. For			
	internal design, they suggested guest rooms, back of			
	the house, corridor reception is very important. In			
	internal design, they suggested landscaping is very			
	important.			
Construction Managers	They were concern on the Management of various			
	stakeholders, subcontractors, site management and			
	the construction of the building itself.			
Project Managers	The project Managers were concerned on the			
	investment of the facility, the project management			
	practices and the risk involved in hotel construction			

Table 3.1	Responses	from	Initial	survey
-----------	-----------	------	---------	--------

Quantity Surveyors	The quantity surveyor were concerned on the cost,
	materials management and cash flow of the project

# Source: (Field Survey 2018)

# **3.4 Design and Development of questionnaire**

The questions were designed to aid solicit information towards addressing the objectives of the study. The questions designed comprise mostly the closed-ended type of questions to enable quick response and also easier to code and statistically analyzed. The questionnaire was designed in four sections namely Section A, Section B, Section C and Section D with a preamble to explain the major purpose of the study to the prospective respondents. Section A solicit information about the demography or personal information of respondents which was added to ascertain the reliability and credibility of the responses that would be received from the participants. Descriptive statistics was used in the analysis of this part. Section B was designed to solicit information mainly on the current project management practices in hotel construction. The subsequent section C inquired information on how the respondent would be assessed their project managers' competencies in terms of knowledge, personal and performance in construction of their hotel. Last Section D solicit information from the respondents on the required competencies of project managers. The following sub section looks at the questionnaire into much detail however a definition of a "variable" should be pursued as a prelude to proper comprehension of the dependent and independent variables found in the questionnaires development discussions

## 3.5 Pre-testing questionnaire

According to Gillham (2000), Nkado (1999), Leedy (2005), Bryman and Bell (2003) cited in Crafford (2007) recommended pretesting of questionnaire as the surest protection against errors in questionnaires. A convenience sample of 15 construction professional including 5 architects, 6 quantity surveyors and 4 project managers in the Bolgatanga was asked to test the questionnaire. Questions were asked about the questionnaire in order to get feedback. The feedback led to the following amendments to the draft questionnaire; rearrangement of the demographic background, renaming some competencies and adding sub-competence under some unit competence in knowledge, performance and personal competencies respectively.

All participants which took part of pre-testing said the questions were easy to understand and could be completed in a few minutes.

#### **3.6 Population**

The population targeted for this research was subcontractors in mechanical engineering, electrical engineering and IT systems companies respectively who are experts in hotel construction, building contractors operating within the three Northern Regions (Northern Region, Upper East Region and Upper West Region) with the Ministry of Water Resource, Works and Housing (MWRWH). The rest are Project managers of D1 and D2 building construction organizations who are registered with (MWRWH), directors of works of quantity surveying and architectural firms registered with the Architects Registration Council of Ghana (ARCG), Ghana Institution of Surveyors (GhIS) and hotel supervisors

from Ghana Tourism Authority in the three northern regions (Northern Region, Upper East Region and Upper West Region) were involved in the study

# 3.7 Method of Population sampling

The researcher adopted purposive sampling method in selecting the subcontractors of electrical and mechanical firms, construction professionals and hotel experts describe above. The purposive sampling technique presupposes that the target population has basic and concrete idea about the issue under consideration. Therefore, due consideration was given in the selection of the sample population of key stakeholders who possess high degree of knowledge in hotel construction. In purposive sampling (occasionally referred to as judgment samples), researcher selects units subjectively in an attempt to obtain a sample that appears to be representative of the entire population.

## 3.8 Sampling size

Based on the earlier interviews conducted at the initial survey, 70 key stakeholders (project managers, architects, site engineers and quantity surveyors) participated and were interested in the study. Due to time constraints, sample of 50 questionnaires were distributed, 20 in Bolgatanga, 20 in Tamale and 10 in Wa as shown on **table 3.2**. It was distributed among key stakeholders discussed above. The distribution of the questionnaire was determined based on the accessibility, reliability and credibility of the key stakeholders due to the quality of responses required. In all, 45 questionnaires were retrieved for the analysis.
Respondents	Questionnaire	Questionnaire	<b>Response Rate</b>
	Distributed	Retrieved	
Tamale	20	17	34%
Bolgatanga	20	18	36%
Wa	10	10	20%
Total	50	45	90%

## Table 3.2: Questionnaire Distribution and Response Rate

Source: Field Survey, (2018)

## 3.9 Analysis of Data

SPSS (Statistical Package for Social Sciences) was in descriptive statistics because it was user friendly. Also, the five point Likert scale question type was manually analyzed using Relative Importance Index (RII). After analysis, the data was presented on graphs and tables for easy reading, identification and comparison where necessary.

#### **CHAPTER FOUR**

## ANALYSIS OF DATA AND RESULT DISCUSSION

## **4.1 INTRODUCTION**

In this chapter, the researcher presented the summary of data analyzed. The results were presented based on the objectives of the study, which aimed at identifying the project management practices in hotel construction projects, assessing the project managers' competencies in terms of knowledge, personal and performances of hotel construction projects, identifying key stakeholders' perspective on the required competencies of project managers in hotel construction and to propose framework of key required project managers competencies in hotel construction based on the stakeholders perspectives. The software adopted for data analysis was SPSS (20.0) and findings were presented in form of histogram, bar chart, frequency tables and percentages for easy reading. The five point Likert scale questions was manually calculated using Relative Importance index (RII). A total of 45 questionnaires were duly filled and returned out of the 50 distributed. This represents response rate of 90 % which falls within accepted limits.

#### **4.2 DEMOGRAGHY AND GENERAL INFORMATION**

This section analyses the respondents' background information, verifies and understands the credibility of targeted respondents. The background information includes respondents' professional background, academic qualification, years of experience in general building and hotel construction, number of hotels building constructed and the types of clients involved in hotel construction.

## **4.2.1 Professional Background of Respondents**

Table 4.1 below shows that 11.1 %, 5 out 45 are Architects, 13.3 %, 6 out of 45 of the respondents are building contractors, 20.0 %, 9 out of 45 of the respondents are Project Managers, 15.6 % (7 out of 45) of the respondents are also quantity surveyors, and 15.6%, 7 out of 45 of the respondents are site Supervisors, 8.9 %, 4 out 45 of respondents are Electrical Engineers, 4.4 %, 2 out 45 respondents are Mechanical Engineers and 11.1 %, 5 out 45 other Professionals. It can be seen that significant experienced experts occupy the various levels in the hotel construction. The result shows that project managers play very important roles in hotel construction in the three Northern Regions in Ghana.

Professional Background	Frequency	Percentage (%)	Cumulative (%)
Architect	5	11.1	11.1
Building contractor	6	13.3	24.4
Project Manager	9	20.0	44.4
Quantity surveyor	7	15.6	60.0
Site supervisor	7	15.6	75.6
Electrical Engineer	4	8.9	84.4
Mechanical Engineer	2	4.4	88.9
Others	5	11.1	100.0
Total	45	100.0	100.0

 Table 4.1: Professional Background Distribution

Source: field survey, 2018.

## **4.2.2 Academic Qualification of Respondents**

From Tables 4.2 below, 22.2 %, 10 of 45 of the respondents holds HND, 48.9 %, 22 out of 45 of the respondent's holds Bachelor's degree. Furthermore, 24.4 % 11 out of 45 of the respondents holds Master's degree but no one holds Doctorate degree. Finally, respondents

with other qualifications are made up of 4.4%, 2 out of 45 of the respondents. The educational level of the respondents is important since it has an influence on the way to manage construction activities

Education Qualification	Frequency	Percentage (%)	Cumulative (%)
HND	10	22.2	22.2
Bachelor's Degree	22	48.9	71.1
Master's Degree	11	24.4	95.6
Doctorate Degree	-	-	-
Others	2	4.4	100.0
Total	45	100.0	100.0

 Table 4.2 Academic Qualification Distribution

Source: field survey, 2018.

## **4.2.3 Respondents Professional Affiliation**

Table 4.3 below shows professional affiliations of respondents. In this, 4.4 %, 2 out of 45 of the respondents are affiliated to Ghana Institute of Surveyor, 8.9 %, 4 out of 45 of the respondents are affiliated to Ghana Institute of Engineers and 11.1 %, 5 out of 45 are affiliated to Institution of Incorporated Engineers. Furthermore, 4.4 % 2 out of 45 of the respondents are affiliated to Project Management Professional, 11.1 % 5 out of 45 are affiliated to Ghana Institution of Architects but no one is affiliated to Chartered Institute of Builders. Finally, respondents with other affiliations are made up of 60.0 %, 27 out of 45 of the respondents. The result shows that respondent with other affiliation play very important roles in hotel construction in the three Northern Regions in Ghana. The professional

affiliation of the respondents is important since it has an influence on the competencies of hotel construction activities.

Professional Affiliation	Frequency	Percentage	Cumulative (%)
		(%)	
Ghana Institute of Surveyor	2	4.4	4.4
Ghana Institute of Engineers	4	8.9	13.3
Institution of Incorporated	5	11.1	24.4
Engineers	2	4.4	28.9
Project Management Professional	5	11.1	40.0
Ghana Institution of Architects	-	-	-
Chartered Institute of Builders	27	60.0	100.0
Others			
Total	45	100.0	100.0

**Table 4.3 Professional Affiliation Distribution** 

Source: field survey, 2018.

## 4.2.4 Respondent's Years of Experience in Construction industry

Table 4.3 below shows the respondents job experience in years in the construction industry, 6.7 % 3 out of 45 of the respondents have less than five years of experience, 11.1 %, 5 out of 45 of the respondents have experience between six (6) and ten (10) years. Also 24.4 %, 11 out of 45 of the respondents from the total sample have years of experience between eleven (11) and fifteen (15) years, 26.7 %, 12 out of 45 of the respondents have between sixteen (16) and twenty (20) years of experience. The rest 31.1 %, 14 out of 45 of the respondents have more than twenty years of experience. This profile signifies the high levels of experience on which the results of this survey was based.

Job Experience in Construction	Frequency	Percentage	Cumulative
		(%)	(%)
0-5 years	3	6.7	6.7
6-10 years	5	11.1	17.8
11-15 years	11	24.4	42.2
16-10 years	12	26.7	68.9
Above 20 years	14	31.1	100.0
Total	45	100.0	100.0

**Table 4.4 General Job Experience Distribution** 

Source: field survey, 2018.

### 4.2.5 Respondent's Years of Experience in Hotel Construction

Figure 4.3 below shows the respondents job experience in years in hotel construction industry, 6.7 %, 3 out of 45 of the respondents have less than five years of experience, 17.8%,8 out of 45 of the respondents have experience between six (6) and ten (10) years in hotel construction. Also 31.1 %, 14 out of 45 of the respondents from the total sample have years of experience between eleven (11) and (15) years, 26.7 %, 12 out of 45 of the respondents have between sixteen (16) and twenty (20) years of experience. The rest 17.8 %, 8 out of 45 of the respondents have more than twenty years of experience. This profile signifies the high levels of experience on which the results of this survey were based. It gives a good indication that the respondents had at least a minimal level of experience competence in managing construction activities. Moreover, the variety of experiences between each group enriched the research with different knowledge and information.



Figure 4.1 Job Experience in Hotel Construction Distribution

Source: field survey, 2018.

## 4.2.6 Respondents Involvement in Hotel Buildings Projects

In the figure below shows the survey of number of hotel buildings respondents involved in construction, 6.7 % 3 out of 45 involved in construction of only one building, 31.1 % 14 out of 45) involved in construction of 2 - 3 hotel buildings, 31.1% 14 out 45 involved in construction of 4 -5 buildings and 13.3 % 6 out 45 in involved in more than 5 hotel buildings. This is good indication that the respondents have experience in hotel construction



**Figure 4.2 Respondents Involvement in Hotel Projects** 

Source: field survey, 2018.

## 4.2.7 Type of Clients

Table 4.5 below shows types of clients in hotel construction in the three northern regions, 11.1 %, 5 out of 45 of the respondents works for public organization, 28.9%, 13 out of 45 of the respondents works for private and individual organizations, 46.7 %, 21 out of 45 of the respondents works for both private and public figures and other 13.3 % 6, out of 45 works with institution like NGO 's and international institutions. The result implies that public and private figures are the most dominated influential factor in the hotel project environment in the three northern regions.

## **Table 4.5 Client Distribution**

Type of Client	Frequency	Percentage (%)	Cumulative Percent (%)
Public Organization	5	11.1	11.1
Private individuals and	13	28.9	40.0
organizations			
Both public and private figures	21	46.7	86.7
Others	6	13.3	100.0
Total	45	100.0	100.0

Source: field survey, 2018

## **4.3 RELATIVE IMPORTANCE INDEX**

The Relative Importance Index (RII) was used to rank factors for the analysis. Retrieved questionnaires were analyzed using the Relative Importance Index (RII) to rank the critical competency variables for hotel construction projects in Ghana. The relative importance index (RII) was calculated manually using the following formula;

Relative Importance Index (RII) = 
$$\frac{5n5+4n4+3n3+2n2+1n1}{5N}$$
,  $(0 \le \text{RII} \le 1)$ 

Where N= Total number of respondents, 5 is the highest weighted score (5, 4, 3, 2, 1) on the Likert scale of importance (whereas n1= not very important, n2= not important, n3= average, n4= important and n5= very important). The relative importance index for all the competency factors and groups was calculated using the equation above. The indexes were ranked for knowledge competencies, performance competencies and personal competencies. The group index is the average of relative importance index of the competencies factors in each group.

## 4.4 PROJECT MANAGEMENT PRACTICES IN HOTEL CONSTRUCTION

The table 4.6 below shows fourteen (14) project management practices identified that can influence the critical success of hotel construction project. Among these are project scope management which was ranked first (1<sup>st</sup>) with (RII=0.924). This was followed by construction and post construction management which was ranked (2<sup>nd</sup>) with (RII=0.920), communication management ranked (3<sup>rd</sup>) with (RII=0.853), Strategic hotel development was ranked (4<sup>th</sup>) with (RII=0.840), hotel market analysis was ranked (5<sup>th</sup>) with (RII=0.827), hotel financial feasibility analysis was ranked (6<sup>th</sup>) with (RII=0.818), project documentation management was ranked (7<sup>th</sup>) with (RII=0.813), project cost management was ranked (8<sup>th</sup>) with (RII=0.796), project stakeholder manage was ranked (9<sup>th</sup>) with (RII=0.787) and hotel development feasibility was ranked (10<sup>th</sup>) with (RII=0.782). Project Resource and Team Management, Health and Safety and environmental (HSSE) management, Project Financing were ranked 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> with (RII=0.769), (RII=0.764) and (RII=0.756) respectively. Finally, project risk management was (14<sup>th</sup>) with (RII=0.751). All these factors show importance of identification of project management practices in hotel construction.

Project Management	TOTAL	ΣW	MEAN=( $\Sigma$ W/N)	RII	RANK
Practices	(N)				
Strategic Hotel Development	45	189	4.200	0.840	4 <sup>th</sup>
Hotel Market Analyses	45	186	4.133	0.827	5 <sup>th</sup>
Hotel Development Feasibility	45	176	3.911	0.782	10 <sup>th</sup>
Hotel Financial Feasibility	45	184	4.089	0.818	6 <sup>th</sup>
Analysis					
Project Scope Management	45	208	4.622	0.924	1 <sup>st</sup>
Risk Management	45	169	3.756	0.751	14 <sup>th</sup>
Project Financing	45	170	3.778	0.756	13 <sup>th</sup>
Project Documentation	45	18	4.067	0.813	7 <sup>th</sup>
Management		3			
Project Resource and Team	45	173	3.844	0.769	11 <sup>th</sup>
Management					
Construction And Post	45	207	4.600	0.920	$2^{nd}$
Construction Management					
Cost Management	45	179	3.978	0.796	8 <sup>th</sup>
Communication Management	45	192	4.267	0.853	3 <sup>rd</sup>
Stakeholder Management	45	17	3.933	0.787	9 <sup>th</sup>
		7			
Health and Safety and	45	172	3.822	0.764	12 <sup>th</sup>
environmental					
(HSSE)management					

## Table 4.6 Project Management Practices

Source: field survey, 2018

## 4.5 PROJECT MANAGER COMPETENCY ASSESSMENT IN HOTEL

## CONSTRUCTION

## 4.5.1 Knowledge Competence Assessment

Table 4.7 below shows statistics of competency assessment levels for knowledge competencies of project managers in hotel construction. There a total 7 constituent variables which is listed in the table and 49 sub-constituents have been analyzed using relative

importance index (RII). Generally, all key stake holders agreed that the top ten most important competence factors each under knowledge competence are:

Ghana tourism hotel design requirement (RII=0.933), Restaurant design (RII=0.862), Telecommunication system design (RII=0.849), Social impact issues (RII=0.836), Construction materials (RII=0.818), Administration and back of the house design (RII=0.813), guest room and suit design (RII=0.813), Mechanical engineering system design (RII=0.809), Kitchen design (RII=0.804) and Permit acquisition process for hotel construction (RII=0.800).

Based on the constituent of knowledge competence variables, the respondents generally agreed that the top three groups of competence are:

- Hotel design knowledge(**RII=0.785**)
- Hotel construction(**RII=0.765**)
- Legal knowledge(**RII=0.752**)

# Table 4.7 Knowledge Competence Assessment

KNOWLEDGE	TOTAL	ΣW	MEAN=(	RII	RANK	GROUP
COMPETENCE	(N)		<b>ΣW/N)</b>		1	RANK
Communication knowledge				0.717	3 <sup>rd</sup>	6 <sup>th</sup>
Report writing.	45	157	3.489	0.698	4 <sup>th</sup>	
General and business Correspondence	45	144	3.200	0.640	5 <sup>th</sup>	
Public speaking	45	165	3.667	0.733	2 <sup>nd</sup>	
Presentation skills	45	179	3.978	0.796	1 <sup>st</sup>	
IT Knowledge				0.705		7 <sup>th</sup>
Internet Systems	45	165	3.667	0.733	2 <sup>nd</sup>	
Project information system	45	150	3.333	0.667	5 <sup>th</sup>	
Operating systems.	45	146	3.244	0.649	6 <sup>th</sup>	
MS Project, Primavera	45	161	3.578	0.716	3 <sup>rd</sup>	
Information systems and IT tools.	45	161	3.578	0.716	3 <sup>rd</sup>	
AutoCAD and Other Autodesk packages	45	169	3.756	0.751	1 <sup>st</sup>	
Hotel Financing knowledge				0.742		4 <sup>th</sup>
Financial Feasibility	45	176	3.911	0.782	1 <sup>st</sup>	
Financial Reporting systems	45	174	3.867	0.773	2 <sup>nd</sup>	
Project finance arrangement For Hotels	45	164	3.644	0.729	4 <sup>th</sup>	
Investment appraisal.	45	153	3.400	0.680	6 <sup>th</sup>	
Establishing Cash flow	45	171	3.800	0.760	3 <sup>rd</sup>	
Establishing budgets.	45	164	3.644	0.729	5 <sup>th</sup>	
Legal Knowledge				0.752		3 <sup>rd</sup>
General legal Require background	45	166	3.689	0.738	4 <sup>th</sup>	
Drafting contracts.	45	162	3.600	0.720	3 <sup>rd</sup>	
Permit Acquisition process for hotel Construction	45	180	4.000	0.800	$2^{nd}$	
Health and safety, Security and Environmental (HSSE) issues	45	158	3.511	0.702	6 <sup>th</sup>	
Preparation of claims and ligation		161	0.358	0.716	4 <sup>th</sup>	
Social Impact Issues	45	188	4.178	0.836	1 <sup>st</sup>	
Tourism Industry Knowledge				0.730		5 <sup>th</sup>

Ghana Tourism Authority	45	169	3.756	0.751	2 <sup>nd</sup>	
Tourism Attraction	45	157	3.489	0.698	5 <sup>th</sup>	
Tourism industry and Hotel	45	168	3.733	0.747	3 <sup>rd</sup>	
Development						
International Tourism	45	150	3.333	0.667	6 <sup>th</sup>	
Ghana Tourism Hotel	45	178	3.956	0.791	1 <sup>st</sup>	
Classification						
Hotel Development	45	163	3.622	0.724	4 <sup>th</sup>	
Hotel Design Knowledge				0.785		1 <sup>st</sup>
Hotel Design Types	45	174	3.867	0.773	9 <sup>th</sup>	
Ghana Tourism Hotel Design	45	210	4.667	0.933	1 <sup>st</sup>	
Requirement						
Site and Master planning	45	165	3.667	0.733	12 <sup>th</sup>	
Public Areas Space Design	45	178	3.956	0.791	7 <sup>th</sup>	
Guest Room and Suit Design	45	183	4.067	0.813	4 <sup>th</sup>	
Administration and back of the	45	183	4.067	0.813	4 <sup>th</sup>	
House design						
Conference Design	45	175	3.889	0.778	8 <sup>th</sup>	
Kitchen Design	45	181	4.022	0.804	7 <sup>th</sup>	
Landscape Design	45	147	3.267	0.653	14 <sup>th</sup>	
Electrical Engineering Systems	45	173	3.844	0.769	10 <sup>th</sup>	
Design						
Mechanical Engineering	45	182	4.044	0.809	6 <sup>th</sup>	
system Design						
Fire Safety Design	45	152	3.378	0.676	13 <sup>th</sup>	
Swimming Pool Design	45	170	3.778	0.756	$10^{\text{th}}$	
Restaurant Design	45	194	4.311	0.862	$2^{nd}$	
IT and Internet System Design	45	168	3.733	0.747	11 <sup>th</sup>	
Telecommunication System	45	191	4.244	0.849	3 <sup>rd</sup>	
Design						
Hotel Construction				0.765		2 <sup>nd</sup>
Knowledge						
Hotel Construction Techniques	45	173	3.844	0.769	2 <sup>nd</sup>	
Construction Materials	45	184	4.089	0.818	1st	
Electrical System in	45	167	3.711	0.742	4 <sup>th</sup>	
construction						
Mechanical Systems	45	164	3.644	0.729	5 <sup>th</sup>	
Construction						
Interior Design	45	173	3.844	0.769	2 <sup>nd</sup>	

Source: field survey, 2018

## **4.5.2 Performance Competence**

Table 4.8 below shows results of competency assessment levels for performance of project managers in hotel construction. In this, a total of 11 constituent variables which is listed in the table and 50 sub-constituents have been analyzed using relative importance index (RII). In this, all key stake holders agreed that the top ten most important competence factors for assessing project managers each under performance competence are:

Authority approval (RII=0.884), Hotel property financing (RII=0.884), Contract documentation (RII=0.867), Cost control (RII=0.844), Construction management (RII=0.822), Tendering process (RII=0.817), Material selection and management (RII=0.813), Consultant selection and management (RII=0.813), Micro hotel market analyses (RII=0.804) and Budgeting (RII=0.804). Also, all key stakeholders agreed that, the top three constituents of performance competence variables, for assessing project management are;

- *Project financing(RII=0.802)*
- *Project Documentation(RII=0.800)*
- *Project cost Management(RII=0.795)*

# Table 4.8 Performance Competence Assessment Variable

PERFORMANCE	TOTAL(N)	ΣW	MEAN=( $\Sigma$ W/N)	RII	RANK	GROUP
COMPETENCE						RANK
Strategic Hotel Development	45			0.733		6 <sup>th</sup>
Hotel Development Planning	45	166	3.689	0.738	3 <sup>rd</sup>	
Organization Mission	45	172	3.822	0.764	1 <sup>st</sup>	
Corporate Objectives	45	159	3.533	0.707	5 <sup>th</sup>	
Development Audit	45	158	3.511	0.702	6 <sup>th</sup>	
Strength, Weakness,		166	3.689	0.738	3 <sup>rd</sup>	
Opportunity and Threat	45					
(SWOT) Analysis						
Development Objectives /	45	169	3.756	0.751	$2^{nd}$	
Strategy						
Hotel Market Analyses				0.733		6 <sup>th</sup>
Micro Hotel Market Analyses	45	181	4.022	0.804	1 <sup>st</sup>	
Macro Hotel Market Analysis	45	173	3.844	0.769	2 <sup>nd</sup>	
Hotel branding	45	154	3.422	0.684	$4^{\text{th}}$	
Hotel Segmentation	45	163	3.622	0.724	3 <sup>rd</sup>	
Hotel product Packaging	45	154	3.422	0.684	4 <sup>th</sup>	
Hotel Development Feasibility				0.716		10 <sup>th</sup>
Feasibility Analyses Process	45	161	3.578	0.716	3 <sup>rd</sup>	
Physical Feasibility(Site	45	168	3.733	0.747	2 <sup>nd</sup>	
Analysis)						
Financial Feasibility Analysis	45	174	3.867	0.773	1 <sup>st</sup>	
Cost Benefit Analysis	45	157	3.489	0.698	4 <sup>th</sup>	
Valuation and Replacement Cost	45	154	3.422	0.684	7 <sup>th</sup>	
Cash Flow Projections	45	157	3.489	0.698	4 <sup>th</sup>	
Profitability Analysis	45	156	3.467	0.693	6 <sup>th</sup>	
Risk Management				0.724		8 <sup>th</sup>
Business Risk	45	170	3.778	0.756	1 <sup>st</sup>	
Financial Risk	45	157	3.489	0.698	3 <sup>rd</sup>	
Development Risks	45	171	3.800	0.760	2 <sup>nd</sup>	
Risk Management in Practice	45	153	3.400	0.680	4 <sup>th</sup>	
Project Financing				0.802		1 <sup>st</sup>
Hotel Property Financing	45	199	4.422	0.884	1 <sup>st</sup>	
Hotel Investment	45	162	3.600	0.720	$2^{nd}$	_
Project Documentation				0.800		2 <sup>nd</sup>
Schematic Design	45	167	3.711	0.742	5 <sup>th</sup>	
Design Development	45	155	3.444	0.689	6 <sup>th</sup>	
Authority Approval	45	199	4.422	0.884	1 <sup>st</sup>	
Contract Documentation	45	195	4.333	0.867	2 <sup>nd</sup>	
Bills of Quantities	45	180	4.000	0.800	4 <sup>th</sup>	
Tender Process	45	184	4.089	0.817	3 <sup>rd</sup>	

Project Team Management				0.779		4 <sup>th</sup>
Consultant Selection and	45	183	4.067	0.813	1 <sup>st</sup>	
Management						
Contractor Selection and	45	180	4.000	0.800	3 <sup>rd</sup>	
Management						
Plant Selection and	45	155	3.444	0.689	4 <sup>th</sup>	
Management						
Material Selection and	45	183	4.067	0.813	1 <sup>st</sup>	
management						
<b>Construction And Post</b>						
Construction				0.740	26 <sup>th</sup>	5 <sup>th</sup>
Management						
Contractual and Commercial	45	173	3.844	0.769	19 <sup>th</sup>	
Management						
Project Programming	45	169	3.756	0.751	$2^{nd}$	
Construction Management	45	185	4.111	0.822	1 <sup>st</sup>	
Hand over to Operators	45	159	3.533	0.707	3 <sup>rd</sup>	
Practical Completion	45	156	3.467	0.693	4 <sup>th</sup>	
Construction Contract	45	157	3.489	0.698	5 <sup>th</sup>	
Finalization						
Project Cost Management				0.795		3 <sup>rd</sup>
Cost Estimation	45	166	3.689	0.738	3 <sup>rd</sup>	
Budgeting	45	181	4.022	0.804	$2^{nd}$	
Cost Control	45	190	4.222	0.844	$1^{st}$	
Project Communication				0.701		11 <sup>th</sup>
Management						
Communication Planning	45	147	3.267	0.653	4 <sup>th</sup>	
Project Documentation	45	158	5.511	0.702	3 <sup>rd</sup>	
Assessment						
Stakeholder Communication	45	165	3.667	0.733	1 <sup>st</sup>	
Communication Monitoring	45	161	3.578	0.716	$2^{nd}$	
Project Stakeholder				0.729		9 <sup>th</sup>
Management						
Stakeholder Identification	45	169	3.756	0.751	2 <sup>nd</sup>	
Stakeholder Analysis	45	148	3.289	0.658	3 <sup>rd</sup>	
Stakeholder Register	45	175	3.889	0.778	1 <sup>st</sup>	

Source: field survey, 2018

## **4.5.3 Personal Competence**

Table 4.9 depicts competence assessment level of project manager in hotel construction. As shown on the table, there are 6 constituents and 26 sub constituent statistic results of competency assessment levels for personal competencies of project managers in hotel

construction. All key stake holders agreed that the top ten most important competence factors for assessing project managers each under personal competence are; Resolves individual and organizational issues with objectivity (RII=0.836), Motivates and mentors project team members (RII=0.831), Uses assertiveness when necessary(RII=0.827), Ensures quality of information (RII=0.827), Takes accountability for delivering the project(RII=0.822), Changes at the required pace to meet project needs (RII=0.818), Resolves conflict involving project team or stakeholders (RII=0.818), Creates environment that promotes high team performance (RII=0.809) and Tailors communication to audience, and Takes a holistic view of project (RII=0.809)

Also, based on the different groups of competence factors, the respondents generally agreed that the top three groups of competence are:

- *Communication (RII=0.800)*
- Effectiveness (RII=0.797)
- *Leadership* (*RII*=0.796)

# Table 4.9 Personal Competence Assessment

PERSONAL	TOTAL(N)	ΣW	MEAN=( $\Sigma W/N$ )	RII	Rank	GROUP
COMPETENCE						RANK
Communication				0.800		1 <sup>st</sup>
Actively listens,	45	173	3.844	0.769	4 <sup>th</sup>	
understands, and responds to						
stakeholders						
Maintains lines of	45	179	3.978	0,796	3 <sup>rd</sup>	
communication						
Ensures quality of	45	186	4.133	0.827	$1^{st}$	
information						
Tailors communication to	45	182	4.044	0.809	$2^{nd}$	
audience						
Leadership				0.796		3 <sup>rd</sup>
Creates a team environment	45	182	4.044	0.809	3 <sup>rd</sup>	
that promotes high						
performance						
Builds and maintains	45	163	3.622	0.724	5 <sup>th</sup>	
effective relationships						
Motivates and mentors	45	187	4.156	0.831	1 <sup>st</sup>	
project team members						
Takes accountability for	45	185	4.111	0.822	$2^{nd}$	
delivering the project						
Uses influencing skills when	45	179	3.978	0.796	4 <sup>th</sup>	
required						
Management	45			0.770		4 <sup>th</sup>
Builds and maintains the	45	178	3.956	0.791	$2^{nd}$	
project team						
Plans and manages for	45	173	3.844	0.769	3 <sup>rd</sup>	
project success in an						
organized manner					1	
Cultural and Political	45	168	3.733	0.746	$4^{\text{th}}$	
Awareness						
Resolves conflict involving	45	184	4.089	0.818	$1^{st}$	
project team or stakeholders						
Cognitive Ability				0.754		6 <sup>th</sup>
Takes a holistic view of	45	180	4.000	0.800	$1^{st}$	
project					1	
Effectively resolves issues	45	172	3.822	0.764	3 <sup>rd</sup>	
and solves problems					1	
Uses appropriate project	45	178	3.956	0.791	$2^{nd}$	
management tools and						
techniques					th	
Seeks opportunities to	45	149	3.311	0.662	4 <sup>th</sup>	
improve project outcome						

Effectiveness				0.797		2 <sup>nd</sup>
Resolves project problems	45	171	3.800	0.760	4 <sup>th</sup>	
Maintains project		176	3.911	0.782	3 <sup>rd</sup>	
stakeholder involvement,						
motivation, and support						
Changes at the required pace	45	184	4.089	0.818	$2^{nd}$	
to meet project needs						
Uses assertiveness when	45	186	4.133	0.827	1 <sup>st</sup>	
necessary						
Professionalism				0.757		5 <sup>th</sup>
Demonstrates commitment	45	171	3.800	0.760	2 <sup>nd</sup>	
to the project						
Operates with integrity	45	161	3.578	0.716	5 <sup>th</sup>	
Handles personal and team	45	163	3.622	0.724	4 <sup>th</sup>	
adversity in a suitable						
manner						
Manages a diverse	45	168	3.733	0.747	3 <sup>rd</sup>	
workforce						
Resolves individual and	45	188	4.178	0.836	$1^{st}$	
organizational issues with						
objectivity						

Source: field survey, 2018

## 4.6 PROJECT MANAGER COMPETENCY REQUIREMENT IN HOTEL

## **CONSTRUCTION: PERSPECTIVE OF KEY STAKEHOLDERS**

## **4.6.1 Knowledge Competencies Requirement**

The table 4.10 below shows ranking of knowledge competency requirement variables of project managers in hotel construction. This was based on the 7 constituents and 49 subconstituents of knowledge competence variables. The top ten ranked knowledge competence requirement based on the key stake holders perspective are; Ghana tourism hotel classification (*RII=0.866*), International tourism and hotel requirement (*RII=0.862*), Mechanical systems in construction (*RII=0.862*), Construction materials (*RII=0.858*), Permit acquisition process for hotel construction (*RII=0.857*), Ghana tourism hotel design requirement (RII=0.853), Fire safety design (RII=0.853), Tourism attraction (RII=0.849), Establishing budget (RII=0.849) and Telecommunication system design (RII=0.844). The three most ranked knowledge competence requirement variables based on the

perspectives of key stake holders in hotel construction are;

- *Hotel construction knowledge (RII=0.833)*
- Tourism Industry Knowledge (RII=0.828)
- Legal Knowledge (RII=(0.818)

# Table 4.10 Knowledge Competence Variables

KNOWLEDGE COMPETENCE	TOTAL	ΣW	MEAN=	RII	RANK	GROUP
REQUIREMENT	(N)		(ΣW/N)			RANK
Communication knowledge				0.791		6 <sup>th</sup>
Report writing.	45	176	3.911	0.782	3 <sup>rd</sup>	
General and business	45	178	3.956	0.791	$2^{nd}$	
Correspondence						
Public speaking	45	173	3.844	0.769	4 <sup>th</sup>	
Presentation skills	45	185	4.111	0.822	1 <sup>st</sup>	-
IT Knowledge				0.767	.1	7 <sup>th</sup>
Internet Systems	45	165	3.667	0.733	5 <sup>th</sup>	
Project information system	45	176	3.911	0.782	3 <sup>rd</sup>	
Operating systems.	45	180	4.000	0.800	$2^{nd}$	
MS Project, Primavera	45	161	3.578	0.716	6 <sup>th</sup>	
Information systems and IT tools.	45	181	4.022	0.804	1 <sup>st</sup>	
AutoCAD and Other Autodesk	45	172	3.822	0.764	4 <sup>th</sup>	
packages						
Hotel Financing knowledge				0.796		5 <sup>th</sup>
Financial Feasibility	45	174	3.867	0.773	5 <sup>th</sup>	
Financial Reporting systems	45	183	4.067	0.813	3 <sup>rd</sup>	
Project finance arrangement For	45	177	3.933	0.787	4 <sup>th</sup>	
Hotels						
Investment appraisal.	45	185	4.111	0.822	2 <sup>nd</sup>	
Establishing cash flow	45	165	3.667	0.733	6 <sup>th</sup>	
Establishing budgets.	45	191	4.244	0.849	1 <sup>st</sup>	
Legal Knowledge				0.818		3 <sup>rd</sup>
General legal Require background	45	180	4.000	0.800	5 <sup>th</sup>	
Drafting contracts.	45	186	4.133	0.827	3 <sup>rd</sup>	
Permit Acquisition process for hotel	45	193	4.289	0.857	$1^{st}$	
Construction						
Health and safety, Security and	45	189	4.200	0.840	$2^{nd}$	
Environmental (HSSE) issues						
Preparation of claims and ligation	45	175	3.889	0.778	6 <sup>th</sup>	
Social Impact Issues	45	181	4.022	0.804	4 <sup>th</sup>	
Tourism Industry Knowledge				0.828		2 <sup>nd</sup>
Ghana Tourism Authority	45	183	4.067	0.813	6 <sup>th</sup>	
Tourism Attraction	45	191	4.244	0.849	3 <sup>rd</sup>	
Tourism industry and Hotel	45	189	4.200	0.840	4 <sup>th</sup>	
Development						
International Tourism	45	194	4.311	0.862	2 <sup>nd</sup>	
Ghana Tourism Hotel Classification	45	195	4.333	0.866	1 <sup>st</sup>	
Hotel Development	45	174	3.866	0.773		
Hotel Design Knowledge				0.818		3 <sup>rd</sup>

Hotel Design Types	45	189	4.200	0.840	4 <sup>th</sup>	
Ghana Tourism Hotel Design	45	192	4.267	0.853	7th	
Requirement						
Site and Master planning	45	167	3.711	0.742	14 <sup>th</sup>	
Public Areas Space Design	45	187	4.156	0.831	7 <sup>th</sup>	
Guest Room and Suit Design	45	180	4.000	0.800	10 <sup>th</sup>	
Administration and back of the	45	180	4.000	0.800	10 <sup>th</sup>	
House design						
Conference Design	45	189	4.200	0.840	4 <sup>th</sup>	
Kitchen Design	45	187	4.156	0.831	8 <sup>th</sup>	
Landscape Design	45	170	3.778	0.756	41 <sup>st</sup>	
Electrical Engineering Systems	45	189	4.200	0.840	4 <sup>th</sup>	
Design						
Mechanical Engineering system	45	180	4.000	0.800	10 <sup>th</sup>	
Design						
Fire Safety Design	45	192	4.267	0.853	$2^{nd}$	
Swimming Pool Design	45	178	3.956	0.791	13 <sup>th</sup>	
Restaurant Design	45	189	4.200	0.840	4 <sup>th</sup>	
IT and Internet System Design	45	185	4.111	0.822	9 <sup>th</sup>	
Telecommunication System Design	45	190	4.222	0.844	3 <sup>rd</sup>	
Hotel Construction Knowledge	45			0.833		1 <sup>st</sup>
Hotel Construction Techniques	45	178	3.956	0.791	5 <sup>th</sup>	
Construction Materials	45	193	4.289	0.858	$2^{nd}$	
Electrical System in construction	45	184	4.089	0.818	4 <sup>th</sup>	
Mechanical Systems Construction	45	194	4.311	0.862	1 <sup>st</sup>	
Interior Design	45	188	4.178	0.836	3 <sup>rd</sup>	

Source: field survey, 2018

## **4.6.2 Performance Competence Requirement**

The table 4.11 below displays ranking of performance competency requirement variables of project managers in hotel construction. This was based on the identified 11 constituents and 50 sub-constituents of performance competence variables. Generally, the top ten most ranked performance competency requirement variables based on the key stake holders perspective are; Schematic design (*RII=0.876*), Organization mission (*RII=0.858*), Cost benefit analysis (*RII=0.856*), Plant selection and management (*RII=0.849*), Cash flow projection (*RII=0.844*) Design development(*RII=0.840*), Consultant selection and

management (*RII*=0.836), Hotel investment (*RII*=0.822), Hotel development planning (*RII*=0.818) and Cost control(*RII*=0.818)

The three top ranked performance competence variables;

- Project Resource and Team Management (RII=821)
- *Project Documentation(RII=0.796)*
- *Hotel Development Feasibility*(*RII*=794)

Tabl	le 4.	11	Perf	ormance	Com	ipete	ence V	Var	ial	bl	es
------	-------	----	------	---------	-----	-------	--------	-----	-----	----	----

PERFORMANCE	TOTAL(N)	ΣW	MEAN=	RII	RANK	GROUP
REQUIREMENT			$(\Sigma W/N)$			KANK
Strategic Hotel Development				0.774		8 <sup>th</sup>
Hotel Development Planning	45	184	4.089	0.818	2 <sup>nd</sup>	
Organization Mission	45	193	4.289	0.858	1 <sup>st</sup>	
Corporate Objectives	45	163	3.622	0.724	6 <sup>th</sup>	
Development Audit	45	164	3.644	0.729	5 <sup>th</sup>	
Strength, Weakness, Opportunity	45	173	3.844	0.769	3 <sup>rd</sup>	
and Threat (SWOT) Analysis						
Development Objectives / Strategy	45	169	3.756	0.751	4 <sup>th</sup>	
Hotel Market Analyses				0.781		5 <sup>th</sup>
Micro Hotel Market Analyses	45	177	3.933	0.787	$2^{nd}$	
Macro Hotel Market Analysis	45	169	3.756	0.751	4 <sup>th</sup>	
Hotel branding	45	173	3.844	0.769	3 <sup>rd</sup>	
Hotel Segmentation	45	177	3.933	0.787	2 <sup>nd</sup>	
Hotel product Packaging		182	4.044	0.809	$1^{st}$	
Hotel Development Feasibility				0.794		3 <sup>rd</sup>
Feasibility Analyses Process	45	165	3.667	0.733	7 <sup>th</sup>	
Physical Feasibility(Site Analysis)	45	180	4.000	0.800	3 <sup>rd</sup>	
Financial Feasibility Analysis	45	167	3.711	0.742	6 <sup>th</sup>	
Cost Benefit Analysis	45	188	4.178	0.856	1 <sup>st</sup>	
Valuation and Replacement Cost	45	179	3.978	0.796	4 <sup>th</sup>	
Cash Flow Projections	45	190	4.222	0.844	2 <sup>nd</sup>	
Profitability Analysis	45	177	3.933	0.787	5 <sup>th</sup>	
Risk Management				0.778		6 <sup>th</sup>
Business Risk	45	178	3.956	0.791	1 <sup>st</sup>	
Financial Risk	45	175	3.889	0.778	3 <sup>rd</sup>	
Development Risks	45	169	3.756	0.751	4 <sup>th</sup>	

Risk Management in Practice	45	178	3.956	0.791	1 <sup>st</sup>	
Project Financing				0.785		4 <sup>th</sup>
Hotel Property Financing	45	168	3.733	0.747	7 <sup>th</sup>	
Hotel Investment	45	185	4.111	0.822	1 <sup>st</sup>	
Project Documentation				0.796		2 <sup>nd</sup>
Schematic Design	45	197	4.378	0.876	1 <sup>st</sup>	
Design Development	45	189	4.200	0.840	2 <sup>nd</sup>	
Authority Approval	45	171	3.800	0.760	5 <sup>th</sup>	
Contract Documentation	45	166	3.689	0.738	6 <sup>th</sup>	
Bills of Quantities	45	178	3.956	0.791	3 <sup>rd</sup>	
Tender Process	45	174	3.867	0.773	4 <sup>th</sup>	
Project Resource and Team				0.821		1 <sup>st</sup>
Management						
Consultant Selection and	45	188	4.178	0.836	2 <sup>nd</sup>	
Management						
Contractor Selection and	45	182	4.044	0.809	3 <sup>rd</sup>	
Management						
Plant Selection and Management	45	191	4.244	0.849	1 <sup>st</sup>	
Material Selection and	45	178	3.956	0.791	4 <sup>th</sup>	
Management						
Construction And Post				0.775		7 <sup>th</sup>
Construction Management						
Contractual and Commercial	45	175	3.889	0.778	3 <sup>rd</sup>	
Management						
Project Programming	45	171	3.800	0.760	4 <sup>th</sup>	
Construction Management	45	170	3.778	0.756	6 <sup>th</sup>	
Hand over to Operators	45	171	3.800	0.760	4 <sup>th</sup>	
Practical Completion	45	181	4.022	0.804	1 <sup>st</sup>	
Construction Contract Finalization	45	173	3.844	0.789	2 <sup>nd</sup>	
Project Cost Management						
Cost Estimation	45	177	3.933	0.787	2 <sup>nd</sup>	
Budgeting	45	165	3.667	0.733	3 <sup>rd</sup>	
Cost Control	45	184	4.089	0.818	1 <sup>st</sup>	
Project Communication				0.761		9 <sup>th</sup>
Management						
Communication Planning	45	163	3.622	0.724	3 <sup>rd</sup>	
Stakeholder Communication	45	167	3.711	0.742	2 <sup>nd</sup>	
Communication Monitoring	45	168	3.733	0.747	1 <sup>st</sup>	
Project Stakeholder Management				0.732		10 <sup>th</sup>
Stakeholder Identification	45	162	3.600	0.720	$2^{n\alpha}$	
Stakeholder Identification Stakeholder Analysis	45 45	162 170	3.600 3.778	0.720 0.756	2 <sup>nd</sup> 1 <sup>st</sup>	

Source: field survey, 2018

## **4.6.3 Personal Competence Requirement**

Table 4.11 depicts personal competency requirement variables of project managers in hotel construction. It was based on the 6 constituents and 26 sub-constituents of personal competence variables. The top ten ranked personal competence requirement variables was based on the agreement level of key stakeholder's general perspective. These are;

Effectively resolves issues and solves problems (RII=0.871), Plans and manages for project success in an organized manner (RII=0.853), Takes a holistic view of project (RII=0.849) Builds and maintains the project team (RII=0.844) Creates a team environment that promotes high performance (RII=0.831) Cultural and political *awareness* (RII=0.831) Ensures quality of information(RII=0.831) Resolves conflict involving project team or stakeholders (RII=0.827) Operates with integrity (RII=0.827) and Builds and maintains effective relationships(RII=0.826)

The top three constituent personal competence variables based on the respondents generally perspectives are:

- *Management (RII=0.839)*
- *Cognitive Ability (RII=0.825)*
- Effectiveness (RII=0.805)

# Table 4.11 Personal Competence Variables

PERSONAL COMPETENCE	TOTAL(N)	ΣW	MEAN=	RII	RANK	GROUP
REQUIREMENT			(ΣW/N)			RANKING
Communication				0.805		3 <sup>rd</sup>
Actively listens, understands,		172	3.822	0.764	4 <sup>th</sup>	
and responds to stakeholders	45					
Maintains lines of	45	183	4.067	0.813	2 <sup>nd</sup>	
communication						
Ensures quality of information	45	187	4.156	0.831	$1^{st}$	
Tailors communication to	45	183	4.067	0.813	$2^{nd}$	
audience						
Leadership				0.797		5 <sup>th</sup>
Creates a team environment that		187	4.156	0.831	$1^{st}$	
promotes high performance	45					
Builds and maintains effective	45	186	4.133	0.826	$2^{nd}$	
relationships						
Motivates and mentors project						
team	45	180	4.000	0.800	3 <sup>rd</sup>	
Members					.1	
Takes accountability for	45	167	3.711	0.742	$5^{\text{th}}$	
delivering the project					. th	
Uses influencing skills when	45	177	3.933	0.787	$4^{\text{tn}}$	
required						
Management				0.839	and	1 <sup>st</sup>
Builds and maintains the project	45	190	4.222	0.844	2"	
team		100		0.070	4 St	
Plans and manages for project	45	192	4.267	0.853	15	
success in an organized manner		105	4.4.5.4	0.001	ord	
Cultural and Political	45	187	4.156	0.831	314	
Awareness	45	100	4 1 2 2	0.007	₄th	
Resolves conflict involving	45	186	4.133	0.827	4 <sup>44</sup>	
Cognitive A hility				0.925		and
Cognilive Ability	15	101	4.044	0.840	and	2
Takes a holistic view of project	45	191	4.244	0.849	2	
solves problems	45	190	4.330	0.871	1	
Lisse appropriate project		10/	4 080	0.010	2rd	
management tools and	45	104	4.069	0.010	5	
techniques	45					
Seeks opportunities to improve	45	171	3 800	0.760	1 <sup>th</sup>	
project outcome		1/1	5.000	0.700	<b>-</b>	
Effectiveness				0.805		3 <sup>rd</sup>
Resolves project problems	15	176	3 011	0.782	3rd	
Resolves project problems	+5	1/0	3.711	0.762	5	

Maintains project stakeholder	45	180	4.000	0.800	4 <sup>th</sup>	
involvement, motivation, and						
support						
Changes at the required pace to	45	184	4.089	0.818	1 <sup>st</sup>	
meet	45					
project needs						
Uses assertiveness when	45	184	4.089	0.818	1 <sup>st</sup>	
necessary						
Professionalism				0.797		5 <sup>th</sup>
Demonstrates commitment to	45	171	3.800	0.760	5 <sup>th</sup>	
the project,						
Operates with integrity	45	186	4.133	0.827	1 <sup>st</sup>	
Handles personal and team		182	4.044	0.809	3 <sup>rd</sup>	
adversity in a suitable manner	45					
Manages a diverse workforce	45	173	3.844	0.769	4 <sup>th</sup>	
Resolves individual and	45	184	4.089	0.818	2 <sup>nd</sup>	
organizational issues with						
objectivity						

Source: field survey, 2018

## **CHAPTER FIVE**

## **CONCLUSION AND RECOMMENDATIONS**

## **5.1 INTRODUCTION**

In this chapter, the researcher gives the summary of major findings, conclusions and recommendations of what was meant to assess the level of competencies of project managers in hotel construction industry in Northern Ghana. In the end, the researcher gives suggestions and recommendation for further research for the areas concern as far as project manager's competencies is concerned.

### **5.2 SUMMARY OF FINDINGS**

### 5.2.1 Objective One: Identify Project Management practices for hotel construction

The objective one of the study have been sufficiently addressed by the review of relevant literature pertaining to the objective of the study and the pursuance of succeeding chapter three and four. This objective reveals that, project managers of hotel construction are conversant with all the 14 identified project management practices in Northern Ghana with five most significant practices as 'Project Scope Management', 'Construction and Post Construction Management', 'Communication Management' 'Strategic Hotel Development' and 'Hotel Market Analyses'.

# **5.2.2** Objective Two: Assess project managers' competencies in terms of knowledge, performance and personal for hotel construction

The generally accepted standard for project managers' competence, PMI project management competency development (PMCD) framework based on knowledge,

performance and personal competence and framework for hotel development by (Venter and Cloete, 2007) had extensively reviewed and the operational variables had sufficiently addressed the objective (See Chapter two, three and four). The study reveals that, all the 7 constituent variables and 49 sub-constituent variables identified for assessing PMs competencies are practically possible as the findings of the study suggested and are significant for project manager's competence for hotel construction projects. The most significant sub-constituent variable for assessing knowledge, performance, and personal competencies are, 'Ghana tourism hotel design requirement', 'Restaurant design' 'Authority approval Hotel' 'hotel property financing', 'Contract documentation', 'Project Cost control', 'Resolves individual and organizational issues with objectivity', and 'Motivates and mentors project team members'.

# **5.2.3** Objective Three: To identify key stakeholders' perspectives on the required competencies of project managers for hotel construction

The required competencies of project managers for hotel construction had been addressed by study. It was based on review of relevant literature, PMI competency standard and the pursuance of chapter three and four. All the constituents' variables for knowledge, performance and personal competencies are significant requirement for hotel construction as reveal by the study. However, the five most significant variables are 'tourism industry knowledge', 'legal knowledge', 'project resource and team management', 'project documentation' and 'hotel development feasibility', 'resolve issues and solves problems with project teams', 'takes holistic view of the project', and 'plans and manages for project success'.

# **5.2.4** Objective Four: To proposed PMs Competencies framework required for hotel construction based the perspectives of key stakeholders

Competency-based conceptual framework is gaining prominence in recent times (Brophy and Kiely, 2002) cited in (Angbanbio 2014). This study has developed framework for hotel construction, it was based on the (Crawford, 2005) integrated model of competence and (Venter and Cloete, 2007) framework for hotel development. (See section 2.11.1 and 2.11.2)

### **5.3 CONCLUSION**

The study has shown that the project managers are conversant with all the identified project management practices in the three northern regions of Ghana. However, for project managers' competencies assessment, the study identifies that, all the variables are significant predictors for PMs Competencies.

The key stakeholder's perspectives for required competencies for hotel construction were identified as the study has shown all the variables are significant predictors for competencies requirement PMs for hotel construction.

Finally, the study has provided competencies framework for hotel construction consisting of a list of all competencies (knowledge, performance and personal competencies) which will be beneficial at the project level (Hotel construction/development), therefore the recruitment of effective project managers for hotel construction by organizations should consider require competencies.

## **5.4 RECOMMENDATION**

The following recommendations have been made to PMs Competencies in hotel construction in Ghana.

- Construction management techniques for hotel development, and preparation of planning, legal, feasibility (financial and physical) and other necessary documentation are recommended to enhance competence of PMs in hotel construction.
- 2. The PMs should understand the critical *success factors* for hotel construction and be tested in practice.
- 3. PMs should understand Hotel Design and Construction techniques, items involved in designing (for example interior and exterior design), Construction methods and hotel building types
- 4. PMs should understand the hotel industry, the regulation, and the tourism authority and hotel design requirement.
- PMs should understand hotel construction is a complex mix-up, diverse stakeholders, diverse consultants and specialist are involved and therefore their management is necessary.

## **5.5 RECOMMENDATION FOR FUTURE STUDIES**

- 1. The researcher suggests further research should be extended to cover cities where there is a reliable data on the perceptions of PMs by stakeholders in hotel construction and tourism industry.
- 2. PMs Competencies for Manager Stakeholders in Five Star Hotel Project.

 PMs Competence for Managing Green, Sustainability and Resource Efficiency in Hotel Projects

## **5.6 PRACTICAL IMPLICATION**

The results will enable hotel organization, owners to improve construction quality and efficiency of their hotel buildings through the implementation of the measures suggested for improving PMs Competencies.

#### REFERENCES

- Ahadzie, D. K. (2007) "A model for predicting the performance of project managers in mass house building projects in Ghana", PhD thesis, University of Wolverhampton, Wolverhampton.
- Ahadzie, D. K. Proverbs, D.G. Olomolaiye P.O. and Ankrah (2009) "Competencies required by project managers for housing construction in Ghana: Implications for CPD agenda", Engineering, Construction and Architectural Management, 16(4), pp. 353– 375
- Ahadzie, D. K., Proverbs, D. G. and Sarkodie-Poku, I. (2014) "Competencies required of project managers at the design phase of mass house building projects", International Journal of Project Management, 32(6), pp. 958–969.
- Ahadzie, D. K., Proverbs, D. G., & Olomolaiye, P. (2005) "Project Managers' Performance Measures: A Fresh Perspective", 21st Annual ARCOM Conference, 1(September), pp. 3–12.
- Ahadzie, D.K., Proverbs, D.G. and Olomolaiye, P (2008). "Model for Predicting the performance of project managers in mass house building projects", Journal of Construction Engineering and Management, American Society of Civil Engineers. 134: (8): 618–629
- Ahsan, K., Ho, M., Khan, S. (2013) "Recruiting Project Managers": A Comparative Analysis of Competencies and Recruitment Signals from Job Advertisements.
- Aitken, A. and Crawford, L. (2008) "Senior management perceptions of effective project manager behavior: An exploration of a core set of behaviors for superior project managers", Project Management Institute, p. 8.

- Alderman, N., & Ivory, C. (2011). Translation and convergence in projects: An organizational perspective on project success. *Project Management Journal*, 42(5), 17–30.
- Al-zwainy, F. M. S. and Mohammed, I. A. (2016) "Investigation and assessment of the Project Management Methodology in Iraqi Construction Sector", 11(4), pp. 2494– 2507.
- Anderson, D. R., Sweeney, D. J., and Williams, T. A. (2001) Quantitative methods for business 8th Ed. Canada: South-Western College Publishing.
- Andrew R.J. Dainty, Mei-I Cheng and David R. Moore (2004) A competency-based performance model for construction project managers, Construction Management and Economics, 22:8, 877-886, DOI: 10.1080/0144619042000202726
- Angbanbio, R. (2014) "A model for predicting the performance of project managers at the Conceptual phase of mass housing building projects (MHBPS) in Ghana"
- Antoniadis, D. N., Edum-Fotwe, F. T. and Thorpe, A. (2006) 'Project reporting and complexity', *Proceedings of 22nd Annual Conference ARCOM*, (September), pp. 123–133.
- Atencio, M. (2013) "A Critical Success Factors Framework That Includes Leadership Competencies for Successful Delivery of Projects", PhD Thesis, University of Salford, Manchester.
- Baltin, B. and Cole, J. (1995). "Renovating to a target market." Lodging Hospitality, 51(8): 3.
- Baltin, B. et al (1999). Hotel Development. Washington: The Urban Land Institute. BBC
- Barzelis, A., Mejer, O. and Karvelien, R. (2002) "The Challenges of Assessment of Project Managers" Competences Aidanas Barzelis, Oksana Mejer', Pp. 5–12.

- Besner, C., & Hobbs, B. (2006). The Perceived Value and Potential Contribution of Project Management Practices to Project Success. Project Management Journal, 37(3) and 12.
- Bigelow, D. & West, J. L. (2003). Putting the right project manager on the right job—what competency assessment is all about! Paper presented at PMI® Global Congress 2003-North America, Baltimore, MD. Newtown Square, PA: Project Management Institute.
- Bourne, L. (2005) "The Accidental Project Manager", JAFA Conference, Auckland, New Zealand, (august), pp. 28–33.
- Boyatzis, R. E., Stubbs, E. C. and Taylor, S. N. (2002) "Learning Cognitive and Emotional Intelligence Competencies Through Graduate Management Education." Academy of Management Learning & Education, 1(2), pp. 150–162.
- Brill, J. M., Bishop, M. J. and Walker, A. E. (2006) "The competencies and characteristic required of an effective project manager: a web-based delphi study", *Educational Technology, Research and Development*, 54(2), pp. 115–140.
- Bucero, A. (2015) The Influential Project Manager: Winning Over Team Members and Stakeholders.
- Boyatzis, R. and Boyatzis, R. E. (2008) 'Competencies in the 21st century', Journal of Management Development, 27(1), pp. 5–12.
- Brophy, M. and Kiely, T. (2002). "Competencies: a new sector". Journal of European Industrial Training, 26: 2/3/4, 165-176.
- Carbone, T. A. and Gholston, S. (2004) "Project manager skill development: A survey of programs and practitioners", *EMJ Engineering Management Journal*, 16(3), pp. 10–16.
- Cardy, L. R. and Selvarajan, T. T. (2006) Competencies: alternative frameworks for competitive advantage. Business Horizons, 49(2006), pp. 235-245.
- Chinyio, E and Olomolaiye, p. (2010) Construction Stakeholder Management: Blackwell Publishing, Wiley & Sons ltd.
- Chinyio, E. and Akintoye, A. (2008) Practical approaches for engaging stakeholders: Findings from the UK. *Construction Management and Economics*, **26**(6):591–599.
- CIOB (2014) Code of Practice for Project Management.
- Clarkson, M.B.E. (1995) A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, **20**(1):92–117.
- Cleland, D.I. (2002) *Project Management: Strategic Design and Implementation* (4th edn). London: McGraw-Hill.
- Cloete, C.E. (1998). Property Development, (Vol. 1). Sandton: South African National Property Education Committee.
- CPWR (2008) "The construction chart book: The U.S. construction industry and its workers". Available at: <u>www.cpwr.com</u>.
- Crawford, L. (2005) "Senior management perceptions of project management competence", International Journal of Project Management, 23(1), pp. 7–16
- Crawford, L., Hassner Nahmias, A. and Lynn Crawford, P. (2010) "Competencies for managing change Competencies for Managing Change Competencies for Managing Change", *International journal of project management International Journal of Project Management, 28(4), pp. 405–412*
- Danborg, T., Grisales, R. and Lopez, N. (2011) "The Link between Project Management Leadership and Project Success". Available at: http://www.diva

portal.se/smash/get/diva2:831794

- Dimitris Antoniadis, Francis Edum-Fotwe, Antony Thorpe, & R. M. (2008) "Exploring complexity in construction projects", *Project Management ADvances, Training & Certification in the Mediterranean*, (May), pp. 1–6.
- Dobgegah, R., Owusu-Manu, D.-G., and Omoteso, K. (2011) "A Principal Component Analysis of Project Management Construction Industry Competencies for the Ghanaian", Australasian Journal of Construction Economics and Building, 11, pp. 26–40 /FULLTEXT01.pdf.
- Dziekoński, K. (2017) "Project Managers' Competencies Model for Construction Industry in Poland", *Procedia Engineering*, 182, pp. 174–181.
- Eberle, A., Meyer, H. and Rosen, D. (2011) "A Comparison of PMI and IPMA Approaches", pp. 31–34. Management, P.
- Echavarren, E. (2001). "Real Estate Project Review." Corporate Finance Quarterly Report Enero 2001. [Web page].
- Ennis, O. (2016) "Capital Projects Competency Framework for Csd Project Managers", (February). Advances in Program Management Series.
- Garavan, T. N., O'Brien, F. and O'Hanlon, D. (2006) "Career advancement of hotel managers since graduation: A comparative study", *Personnel Review*, 35(3), pp. 252–280.
- Geoghegan, L., & Dulewicz, V. (2008). Do project managers' leadership competencies contribute to project success? *Project Management Journal*, 39(4), 58–67.
- Gillard, S. (2009) "Soft Skills and Technical Expertise of Effective Project Managers", Informing Science and Information Technology Volume, 6, pp. 723–729.

Hamidaddin, a M., Shafiei, M. and Wira, M. (2006) "What Competencies Do project

Managers Need?",*Lcci* - 2006, pp. 1–9. Available at: http://eprints.usm.my/2827/3/indexcodes.txt.

- Hamilton, A. et al. (2017) "Construction Process and Project Management", Journal of Civil Engineering, p. 12.
- Hao, C.T., & Swierczek, F. W. (2010). Critical success factors in project management: Implication from Vietnam. Asia Pacific Business Review, 16(4),567–589.
- Harnett, L. J. and Burke, C. (2013) "Is Project Management a Required Competency for the Hotel Industry?" (August).
- Heinonen, E. (2012) "Competence assessment toolbox for event industry professionals", (December).
- Henderson, F., Anderson, N. and Rick, S. (1995) "Future competency profiling: Validating and redesigning the ICL graduate assessment center", *Personnel Review*, 24(3), pp. 19–31.
- Heywood L, Gonczi A, Hager P. A guide to development of competency standards for professions. Canberra: Australian Government Publishing Service; 1992
- Hoegl, M. *et al.* (2016) "Project Stakeholder Management", *Project management Journal*, 47(1).
- International Project Management Association (2016) ICB IPMA Competence Baseline, Version 4.0, International Project Management Association.
- IPMA (2016) Organizational Competence Baseline for Developing Competence in Managing by Projects.
- Jha, S., Group, F. and Group, F. (2010) The Project Manager's Communication Toolkit.
- Kalinova, G. (2008) "Project manager and his knowledge, skills, and attitude perspectives", *Slovak Journal of civil engineering*, (1), pp. 29–36. Available at:

gabriela.kalinova@stuba.sk.

- Kanaki, M. (2016) "Error! Error! Challenges in Hotel Development Process"! Published on June 8, 2016
- Khan, J.A. 2008. Research methodology. New Delhi: APH Publishing.
- Kloppenborg, T. J (2014) Contemporary Project Management: Organize/Plan/ Perform.
- Kloppenborg, T. J. (2015). Contemporary Project Management (3ed.). Stamford, CT, USA: Cengage Learning
- Kolk, A. and Pinkse, J. (2006) Stakeholder mismanagement and corporate social responsibility crises. *European Management Journal*, 24(1):59–72.
- Laphi, L. (2013) "An evaluation of critical core competencies required for effective project leadership in construction".
- Laufer, A. et al. (2017) Becoming a project leader: Blending planning, agility, resilience, and collaboration to deliver successful projects, becoming a Project Leader: Blending Planning, Agility, Resilience, and Collaboration to Deliver Successful Projects.
- Lester, E. I. A. (2017) Project Management, Planning and Control, Project Management, Planning and Control. doi: 10.1016/B978-0-08-098324-0.00025-1.
- Liikamaa, K. (2015) "Developing a Project Manager's Competencies: A Collective View of the Most Important Competencies", *Procedia Manufacturing*. Elsevier B.V., 3(Ahfe), pp. 681–687.
- Liu, J. Y.-C., Chen, H. H.-G., Jiang, J. J., & Klein, G. (2010). Task completion competency and project management performance: The influence of control and user contribution. *International Journal of Project Management*, 28(3), 220–227.

Locatelli, G. (2015) 'Cost - time project performance in megaprojects in general and nuclear

in particular'.

- Maylor, H., & Blackmon, K. L. (2005). Researching business and manage- ment. Basingstoke, England: Palgrave Macmillan
- Mei, I. C., Dainty, A. R. J., & Moore, D. R. (2005). What makes a good project manager? *Human Resource Management Journal*, 15(1), 25–37.
- Meredith, J. R., & Mantel, S. J. (2006). *Project management: A managerial approach:* Hoboken, NJ: John Wiley.
- Milosevic, D. Z., & Srivannaboon, S. (2006). A Theoretical Framework for Aligning Project Management with Business Strategy. Project Management Journal, 37(3), 13.
- Ministry of Tourism (2012) "National Tourism Development Plan (2013 2027)", p. 340. Available at: <u>http://www.ghana.travel/wp-content/uploads/2016/11/Ghana-Tourism-DevelopmentPlan</u> pdf%0Ahttp://ghana.travel/info/downloads/gtdp.pdf.
- Miranda, T. and Ghimire, B. (2007) "Autumn Semester 2007 Desired Competences for Project Managers", p. 83. Available at: <u>http://www.diva-portal.org/smash/get/diva2:141277/FULLTEXT01.pdf</u>
- Montabon, F., Sroufe, R., & Narasimhan, R. (2006). An examination of corporate reporting, environmental management practices and firm performance. *Journal of Operations Management*, 25, 998–1014.
- Müller, R. and Turner, R. (2010) "Leadership competency profiles of successful project managers", *International Journal of Project Management*, 28(5), pp. 437–448.
- Müller, R., & Turner, J. R. (2007). Matching the project manager's leadership style to project type. *International Journal of Project Management*, 25(1), 21–32.

- Müller, R., Geraldi, J., & Turner, J. R. (2012). Relationships between leadership and success in different types of project complexities. *IEEE Transactions on Engineering Management*, 59(1), 77–90.
- Narh, N. (2013) "Competencies of an Effective Project Manager", International Journal of Emerging Knowledge, 1(6), pp. 90–95. Available at: <u>http://www.bloomfieldeducation.com/resources/PDF 7.pdf</u>.
- Nketia, S., (2016) "Stakeholders' Perception of Construction Project Success at Asutifi North District Assembly".
- Noum, S. G. (2007) "Dissertation Research and Writing for Construction Students", (2<sup>nd</sup> Ed.) Published by Elsevier Ltd.
- Omidvar, G, Jaryani, F, Bin Abdul, Z., Somaye, S., Zafarghandi, F. and Nasab. S.S (2011) Proposed Framework for Project Managers' Competencies and Role of E-Portfolio to Meet These Competencies. *International Journal of e-Education, e-Business, e-Management and e-Learning, Vol. 1, No. 4, October 2011*
- Osman, B. Y. and Manaan, A. (2013) "Competency-Based Evaluation of Project Managers" Performance in Mass House Building Projects in Ghana – The Fuzzy Set Theory Approach
- Pajunen, K., (2006). Living in agreement with a contract: the management of moral and viable firm-stakeholder relationships. Journal of Business Ethics 68 (3): 243–258.
- Panneerselvam, R. 2004. Research methodology. Eastern company Edition. New Delhi: Prentice-Hall Powers
- Papke-Shields, K. E., Beise, C., & Quan, J. (2010). Do project managers practice what they preach, and does it matter to project success? *International Journal of Project Management*, 28(7), 650–662.

Patricio, S. R. and Langdon, N. (2013) "May 2013", 1631(May), pp. 4000-4003. "How the

new Competence Framework from The Association for Project Management (APM) can deliver value to your organization", pp. 1–7.

- Penner, R., Adams, L., Rutes, W. (2012). Hotel Design, Planning and Development. London: Routledge.
- PMI (2016) Construction Extension to the PMBOK Guide, Project Management Institute. Project Management Institute, Inc. doi: 10.1002/pmj.
- Powell, R. A. and Buede, D. M. (2009) *The Project Manager's Guide to Making Successful Decisions*.1–76.
- Project Management Institute Inc (2017) "A guide to the project management body of knowledge (PMBOK®) guide"
- Project Management Institute Inc (2017) Project manager competency development (PMCD) framework.
- Ransley, J. and Ingram, I. (2000). Developing Hospitality Properties and Facilities. Oxford: Butterworth-Heinemann Publishers
- Rutherford, D. G. and O'Fallon, M. J. (2007) '*HOTEL MANAGEMENT*' Published by John Wiley & Sons, Inc., Hoboken, New Jersey Published simultaneously in Canada
- Saunders, M., Lewis P. and Thornhill, A. (2003). Research Methods for Business Students ': Fourth Edition, Prentice Hall.
- Schwalbe, K. (2010). An Introduction to Project Management. Minneapolis, MN, USA: Kathy Schwalbe, LLC.
- Sekaran, U. 2003. Research Methods for Business: a skill building approach. 4th ed. New York: John Wiley and Sons.
- Serpell, A. and Ferrada, X. (2007) "A competency-based model for construction supervisors in developing countries", *Personnel Review*, 36(4), pp. 585–602.

- Sherman, R. (2002) "Management Competencies Assessment Instrument". Us, H. A. (2017) 'About Us', pp. 1–3.
- Sihvo, P., Puhakka, A. and Puhakka, K. V. (2014) Guide of competence and knowledge management competence and knowledge management.
- Singh, Y.K. and Nath, R. 2007. Research Methodology. New Delhi: APH Publishing Corporation.
- Sjekavica, M., Sjekavica, M. and Sjekavica, M. (2017) "Development of a project management performance enhancement model by analyzing risks, changes, and constraints", 69, pp. 105–120.
- Spencer, L. M. J., & Spencer, S. M. (1993). Competence at work: Models for superior performance (1<sup>st</sup> Ed.). New York: John Wiley & Sons, Inc.
- Spolander, G. and Martin, L. 2012. Successful Project management in Social Work and Social Care: Managing Resources, Assessing Risks and Measuring Outcomes. London: Jessica Kingsley Publishers
- Square, N. (2001) Project Manager Competency Development Framework Exposure Draft, Management.
- Stevens, R.E., Wrenn, B., Sherwood, P.K, and Ruddic, M.E. 2006. The Marketing Research Guide. New York: The Haworth Press
- Sullivan, L. E. 2009. The Sage Glossary of the Social and Behavioural Sciences. California: Sage Publications Inc.
- Tang, H. W. V. (2014) "Constructing a competence model for international professionals in the MICE industry: An analytic hierarchy process approach", *Journal of Hospitality*, *Leisure, Sport and Tourism Education*. Elsevier, 15(1), pp. 34–49.
- Toor, S., R. and Ogunlana, S. O. (2009) "Construction professionals' perception of critical

success factors for large-scale construction projects", *Construction Innovation*, 9(2), pp. 149–167.

- Venter, I. (2006) "Hotel Property Development: A Framework for Successful Developments",
- Venter, I. and Cloete, C.E. (2007) "Hotel property development and hotel business development", 10(2), pp. 223–237.
- Welman, C., Kruger, F. & Mitchell, Kumar, R. 2005. Research methodology 3rd edition. Cape Town: Oxford University Press
- West, J. L. & Plumeri, M. (2006). Competency assessment: a process for identifying, developing, and assigning high performing project managers. Paper presented at PMI® Global Congress 2006—North America, Seattle, WA. Newtown Square, PA: Project Management Institute.
- Wurtzebach, C.H. Miles, M.E. and Cannon, S.E. (1995). Modern Real Estate (5th Edition). New York: Wiley & Sons Publishers.
- Yang, L.-R., Huang, C.-F., & Wu, K.-S. (2011). The association among project manager's leadership style, teamwork and project success. *International Journal of Project Management*, 29(3), 258–267.
- Yimam, A. (2011) "Project Management Maturity in the Construction Industry of Developing Countries (The Case of Ethiopian Contractors)", p. 277.
- Zoiopoulos, I. I., Morris, P. W. G. and Smyth, H. J. (2008) "Identifying organizational competencies in project oriented companies: an evolutionary approach", 24th Annual ARCOM Conference, 1(September), pp. 547–555.
- Zwikael, O. (2009). The relative importance of the *PMBOK*® *Guide's* nine Knowledge Areas during project planning. *Project Management Journal*, 40(4), 94–103.

## APPENDIX QUESTIONNAIRE

# KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI COLLEGE OF ART AND BUILT ENVIRONMENT DEPARTMENT OF BUILDING TECHNOLOGY

# QUESTIONNAIRE FOR KEY STAKEHOLDERS IN HOTEL CONSTRUCTION

#### **Introduction**

The name of the researcher is OPARE AYESU, Master of Science (MSc) student in Project Management at the Department of Building Technology. He is conducting a research on a TOPIC: *Project Managers Competencies Assessment in Hotel Construction Projects: A Survey of Perspectives from Key Stakeholders of Hotel Construction Projects in Northern Ghana*. Information provided will be strictly confidential and only used for academic purpose. Please thick where appropriate and give addition information where required or necessary.

THANK YOU.

## **SECTION A: DEMOGRAPHY**

### Please select the appropriate option by ticking the bracket $[\sqrt{}]$ below

 What is your profession? Architect [] Building Contractor [] Project manager [] Quantity Surveyor [] Site supervisor [] Electrical Engineer [] Mechanical Engineer [].

Other, please specify.....

- What is your level of education? HND [] Bachelor's Degree [] Master's Degree [] Doctorate degree [].Other, please specify.....
- 3. What is your professional affiliation? Ghana Institute of Surveyor [ ] Ghana Institute of Engineers [ ] Institution of Incorporated Engineers [ ] Project Management Professional [ ] Ghana Institution of Architects [ ] Chartered Institute of Builders
  - [ ].Others, please specify.....
- 4. What is your level of experience in general construction?
  0-5 years [ ] 6-10 years [ ] 11-15 years [ ] 16-20 years [ ]. Above 20 years [ ]
- 5. What is your level of experience in hotel construction?

0-5 years [ ] 6-10 years [ ] 11-15 years [ ] 16-20 years [ ] Above years 20 [ ]

- 6. Number of hotels projects you involved in construction 1 hotel project []
  2-3 hotel project [] 4-5 hotel projects [] more than 5 hotel projects []
- Who are your major clients? Public organizations [ ]
   Private individuals and organizations [ ]. Both public and private figures [ ].
   Others, please specify......

### **SECTION B**

#### **Project Management practices**

Identify the level of importance from the scale (1-5) the following project management practices in the construction of your hotel. 1=Not very Important, 2=Not Important, 3 = Average, 4= Important and 5= Very Important.

Not very Important	Not Important	Average	Important	Very Important
1	2	3	4	5

Project Management practices in Hotel Construction			Level of Importance				
Please thick $[]$ the appropriate boxes	1	2	3	4	5		
1= Not Very Important, 2= Not Important, 3 = Average, 4=							
Important, 5= Very Important							
1. Strategic Hotel Development							
2. Hotel Market Analyses							
3. Hotel Development Feasibility							
4. Hotel Financial Feasibility Analysis							
5. Project Scope Management							
6. Project Risk Management							
7. Project Financing							
8. Project Documentation Management							
9. Project Resource and Team Management							
10. Construction And Post Construction Management							
11. Project Cost Management							
12. Project Communication Management							
13. Project Stakeholder Management							
14. Health and Safety and environmental (HSSE)management							

#### **SECTION C**

## **Project Manager Competency Assessment**

Below are lists of project managers' competencies in relation to knowledge, performance and personal competencies in hotel construction. How would you assess competencies provided by your project manager in relation to these competencies? Rank on a scale of 1-5. 1=Not Competent, 2=Somewhat Competent 3=Uncertain, 4=Competent, 5=Very Competent

Not Competent	Somewhat competent	Uncertain	Competent	Very Competent
1	2	3	4	5

PROJECT MANAGER COMPETENCY ASSESSMENT					
Please thick $[]$ the appropriate boxes					
1= Not Competent, 2= Somewhat competent, 3= Uncertain, 4= Compe	etent a	and 5	= ver	У	
Competent					
Knowledge competencies	Lev	el of	Com	petenc	e
Unit of Competence	1	2	3	4	5
Communication knowledge	-				•
1. Report writing.					
2. General and business Correspondence					
3. Public speaking					
4. Presentation skills					
IT Knowledge					
1. Internet Systems			_		_
2. Project information system					
3. Operating systems.					
4. MS Project, Primavera					
5. Information systems and IT tools.					
AutoCAD and Other Autodesk packages					
Hotel Financing knowledge					
1. Financial Feasibility					
2. Financial Reporting systems.					
3. Project finance arrangement For Hotels					
4. Investment appraisal.					
5. Establishing cash flow					
6. Establishing budgets.					
Legal Knowledge		_	_		_
1. General legal Require background					
2. Drafting contracts.					
3. Permit Acquisition process for hotel Construction					
4. Health and safety, Security and Environmental (HSSE) issues					
5. Preparation of claims and ligation					
6. Social Impact Issues					
Tourism Industry Knowledge					

1. Ghana Tourism Authority					
2. Tourism Attraction					
3. Tourism industry and Hotel Development					
4. International Tourism					
5. Ghana Tourism Hotel Classification					
6. Hotel Development					
Hotel Design Knowledge					
1. Hotel Design Types					
2. Ghana Tourism Hotel Design Requirement					
3. Site and Master planning					
4. Public Areas Space Design					
5. Guest Room and Suit Design					
6. Administration and back of the House design					
7. Conference Design					
8. Kitchen Design					
9. Landscape Design					
10. Electrical Engineering Systems Design					
11. Mechanical Engineering system Design					
12. Fire Safety Design					
13. Swimming Pool Design					
14. Restaurant Design					
15. IT and Internet System Design					
16. Telecommunication System Design					
Hotel Construction Knowledge					
1. Hotel Construction Techniques					
2. Construction Materials					
3. Electrical System in construction					
4. Mechanical Systems Construction					
5. Interior Design					
PERFORMANCE COMPETENCE IN HOTEL CONSTRUCT	ION				
Unit of Competence	Lev	el of	Com	petenc	e
	1	2	3	4	5
Strategic Hotel Development					
1. Hotel Development Planning					
2. Organization Mission					
3. Corporate Objectives					
4. Development Audit (Situational and future trend analysis)					
5. Strength, Weakness, Opportunity and Threat Analysis					
6. Development Objectives / Strategy					
Hotel Market Analyses		1			
1. Micro Hotel Market Analyses (Location Area market		1	İ		
demand analysis)					
2. Macro Hotel Market Analysis (Nationwide hotel market					
demand analysis)					

3. Hotel branding			
4. Hotel Segmentation			
5. Hotel product Packaging			
Hotel Development Feasibility			
1. Feasibility Analyses Process			
2. Physical Feasibility(Site Analysis)			
3. Financial Feasibility Analysis			
4. Cost Benefit Analysis			
5. Valuation and Replacement Cost			
6. Cash Flow Projections			
7. Profitability Analysis/Return on Investment			
Project Risk Management			
1. Business Risk			
2. Financial Risk			
3. Development Risks			
4. Risk Management in Practice			
Project Financing			
1. Hotel Property Financing			
2. Hotel Investment			
Project Documentation			
1. Schematic Design			
2. Design Development			
3. Authority Approval			
4. Contract Documentation			
5. Bills of Quantities			
6. Tender Process			
Project Team and Resource Management			
1. Consultant Selection and management			
2. Contractor selection and management			
3. Plant Selection and Management			
4. Material Selection and management			
Construction And Post Construction Management			
1. Contractual and Commercial Management			
2. Project Programming			
3. Construction Management			
4. Practical Completion			
5. Hand over to Operators			
6. Construction Contract Finalization			
Project Cost Management			
1. Cost Estimation			
2. Budgeting			
3. Cost Control			

Projec	ct Communication Management			
1.	Communication Planning			
2.	Project Documentation Assessment			
3.	Stakeholder Communication			
4.	Communication Monitoring			
Projec	ct Stakeholder Management			
1.	Stakeholder Identification			
2.	Stakeholder Analysis			
3.	Stakeholder Register			
PERS	ONAL COMPETENCIE			
Unit of	f Comnetence		 	
Comm	unication			
1	Actively listens understands and responds to stakeholders			
2.	Maintains lines of communication	 		
3.	Ensures quality of information			
4.	Tailors communication to audience			
Leader	rship			
1.	Creates a team environment that promotes high performance			
2.	Builds and maintains effective relationships			
3.	Motivates and mentors project team members			
4.	Takes accountability for delivering the project			
5.	Uses influencing skills when required			
Manag	gement			
1.	Builds and maintains the project team			
2.	Plans and manages for project success in an organized manner			
3.	Cultural and Political Awareness			
4.	Resolves conflict involving project team or stakeholders			
Cognit	ive Ability			
1.	Takes a holistic view of project			
2.	Effectively resolves issues and solves problems			
3.	Uses appropriate project management tools and techniques			
4.	Seeks opportunities to improve project outcome			
Effecti	veness			
1.	Resolves project problems			
2.	Maintains project stakeholder involvement, motivation, and support			
3.	Changes at the required pace to meet project needs	 		
4.	Uses assertiveness when necessary	 		
Profes	sionalism			
1.	Demonstrates commitment to the project,			
2.	Operates with integrity	 		
3.	Handles personal and team adversity in a suitable manner	 		
4.	Manages a diverse workforce	 		
5.	Resolves individual and organizational issues with objectivity			

## **SECTION D**

How would you rank the level of importance from the scale (1-5) the following required competencies of project managers in terms of Knowledge, performance and personal competencies in construction of your hotel? 1=Not very Important, 2=Not Important, 3 = Average, 4= Important and 5= Very Important.

Not very Important	Not Important	Average	Important	Very Important
1	2	3	4	5

PROJECT MANAGER COMPETENCIES REQUIRED IN HOTEL CONSTRUCTION.					
Please thick $[]$ the appropriate boxes					
1= Not Very Important, 2= Not Important, 3 = Average, 4= Important, 5=	= Ver	y Im	porta	ant	
Knowledge competencies	Level of Importan			nce	
Unit of Competence	1	2	3	4	5
Communication knowledge	1			I	1
1. Report writing.					
2. General and business Correspondence					
3. Public speaking					
5.Presentation skills					
IT Knowledge					
1. Internet Systems					
2. Project information system					
3. Operating systems.					
4. MS Project, Primavera					
5. Information systems and IT tools.					
6. AutoCAD and Other Autodesk packages					
Hotel Financing knowledge					
1. Financial Feasibility					
2. Financial Reporting systems.					
3. Project finance arrangement For Hotels					
4. Investment appraisal.					
5. Establishing cash flow					
6. Establishing budgets.					
Legal Knowledge					
1. General legal Require background					
2. Drafting contracts.					
3. Permit Acquisition process for hotel Construction					
4. Health and safety, Security and Environmental (HSSE) issues					
5. Preparation of claims and ligation					
6. Social Impact Issues					
Tourism Industry Knowledge					
1. Ghana Tourism Authority					
2. Tourism Attraction					
3. Tourism industry and Hotel Development					

4. International Tourism			
5. Ghana Tourism Hotel Classification			
6. Hotel Development			
Hotel Design Knowledge			
1. Hotel Design Types			
2. Ghana Tourism Hotel Design Requirement			
3. Site and Master planning			
4. Public Areas Space Design			
5. Guest Room and Suit Design			
6. Administration and back of the House design			
7. Conference Design			
8. Kitchen Design			
9. Landscape Design			
10. Electrical Engineering Systems Design			
11. Mechanical Engineering system Design			
12. Fire Safety Design			
13. Swimming Pool Design			
14. Restaurant Coffee Shop Bar Design			
15. IT and Internet System Design			
16. Telecommunication System Design			
Hotel Construction Knowledge			
1. Hotel Construction Techniques			
2. Construction Materials			
3. Electrical System in construction			
4. Mechanical Systems Construction			
5. Interior Design			

PERFORMANCE COMPETENCIES IN HOTEL CONSTRUCTION						
Unit of Competence	1	2	3	4	5	
Strategic Hotel Development						
1. Hotel Development Planning						
2. Organization Mission						
3. Corporate Objectives						
4. Development Audit (Situational and future trend Analysis)						
5. Strength, Weakness, Opportunity and Threat Analysis(SWOT)						
6. Development Objectives / Strategy						
Hotel Market Analyses						
1. Micro Hotel Market Analyses (Nationwide market demand						
analysis)						
2. Macro Hotel Market Analysis(Location or Area market demand						
analysis)						
3. Hotel Branding						
4. Hotel Product Packaging						

5. Hotel Segmentation			
Hotel Development Feasibility			
1. Feasibility Analyses Process			
2. Physical Feasibility (Site Analysis)			
3. Financial Feasibility Analysis			
4. Cost Benefit Analysis			
5. Valuation and Replacement Cost			
6. Cash Flow Projections			
7. Profitability Analysis/ Return on Investment			
Project Risk Management			
1. Business Risk			
2. Financial Risk			
3. Development Risks			
4. Risk Management in Practice			
Project Financing			
1. Hotel Property Financing			
2. Hotel Investment			
Project Documentation			
1. Schematic Design			
2. Design Development			
3. Authority Approval			
4. Contract Documentation			
5. Bills of Quantities			
6. Tender Process			
Project Team Management and Resource Management			
1. Consultant Selection and Management			
2. Contractor Selection and Management			
3. Plant Selection and Management			
4. Material Selection and Management			
Construction And Post Construction Management			
1. Contractual and Commercial Management			
2. Project Programming			
3. Construction Management			
4. Hand over to Operators			
5. Practical Completion			
6. Construction Contract Finalization			
Project Cost Management			
1. Cost Estimation			
2. Budgeting			
3. Cost Control			
Project Communication Management			
1. Communication Planning			

2.	Stakeholder Communication					
3.	Communication Monitoring					
Project Stakeholder Management						
1.	Stakeholder Identification					
2.	Stakeholder Analysis					
3.	Stakeholder Register					
PERSONAL COMETENCIES						
Unit of Competence						
Comn	nunication					
1.	Actively listens, understands, and responds to stakeholders					
2.	Maintains lines of communication					
3.	Ensures quality of information					
4.	Tailors communication to audience					
Leadership						
1.	Creates a team environment that promotes high performance					
2.	Builds and maintains effective relationships					
3.	Motivates and mentors project team members					
4.	Takes accountability for delivering the project					
5.	Uses influencing skills when required					
Management						
1.	Builds and maintains the project team					
2.	Plans and manages for project success in an organized manner					
3.	Cultural and Political Awareness					
4.	Resolves conflict involving project team or stakeholders					
Cognitive Ability						
1.	Takes a holistic view of project					
2.	Effectively resolves issues and solves problems					
3.	Uses appropriate project management tools and techniques					
4.	Seeks opportunities to improve project outcome					
Effectiveness						
1.	Resolves project problems					
2.	Maintains project stakeholder involvement, motivation, and					
	support					
3.	Changes at the required pace to meet project needs					
4.	Uses assertiveness when necessary					
Professionalism						
1.	Demonstrates commitment to the project,					
2.	Operates with integrity					
3.	Handles personal and team adversity in a suitable manner					
4.	Manages a diverse workforce					
5.	Resolves individual and organizational issues with objectivity					