

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF MANAGEMENT STUDIES
MBA PROGRAMME**

**TEAM EFFECTIVENESS AND PROJECT PERFORMANCE
OF MAX MYANMAR CONSTRUCTION CO., LTD**

**CHUE MIN
EMBA II - 32
16th BATCH**

DECEMBER, 2019

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF MANAGEMENT STUDIES
MBA PROGRAMME**

**TEAM EFFECTIVENESS AND PROJECT PERFORMANCE
OF MAX MYANMAR CONSTRUCTION CO., LTD**

ACADEMIC YEAR (2017 – 2019)

Supervised By:

Dr. Yin Min Htwe
Associate Professor
Department of Management Studies
Yangon University of Economics

Submitted By:

Chue Min
EMBA II - 32
EMBA 16th Batch
2017 - 2019

December, 2019

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF MANAGEMENT STUDIES
MBA PROGRAMME**

**TEAM EFFECTIVENESS AND PROJECT PERFORMANCE
OF MAX MYANMAR CONSTRUCTION CO., LTD**

“This Thesis submitted as a partial fulfillment of the requirements for the Master of
Business Administration (MBA)”

Supervised By:

Dr. Yin Min Htwe
Associate Professor
Department of Management Studies
Yangon University of Economics

Submitted By:

Chue Min
EMBA II - 32
EMBA 16th Batch
2017 - 2019

December, 2019

ACCEPTANCE

This is to certify that the thesis entitled “**Team Effectiveness and Project Performance of Max Myanmar Construction Co., Ltd**” has been accepted by the Examination Board for awarding Master of Business Administration (MBA) degree.

Board of Examiners

(Chairman)

Dr. Tin Win

Rector

(Supervisor)

(Examiner)

(Examiner)

(Examiner)

December, 2019

ABSTRACT

This study intends to examine the factors influencing team effectiveness and to analyze the influence of team effectiveness on project performance. In this study, 120 employees from Max Myanmar Construction Co. Ltd are selected by using simple random sampling method. Team effectiveness is measured with three dimensions of team results, team survival and individual satisfaction. According to the findings, team results is influenced by team leadership, team role and responsibility, team communication. Team communication influences on both team survival and individual satisfaction of team effectiveness. Project performance is influenced by all factors for team effectiveness. Therefore, company should focus on building project leadership skill, identifying clear role and effective communication for improvement of team effectiveness and project performance.

ACKNOWLEDGEMENTS

First of all, I would like to express my deepest gratitude to Professor Dr. Tin Win, Rector, Yangon University of Economics, for allowing me to undertake this study as a partial fulfillment towards the Master Degree of Business Administration.

My deepest thanks to Professor Dr. Nu Nu Lwin, Head of Department, Department of Management Studies for her extensive and constructive suggestions, her supporting excellence lecturers and comments to complete this thesis. Moreover, as my supervisor, I am heartily grateful to her guidance, advice, encouragement in preparing to complete this study successfully.

Moreover, I would like to extend my great respect and heartfelt gratitude to my supervisor Dr. Yin Min Htwe, Department of Management Studies, Yangon University of Economics for allowing me to undertake this interesting research topic under her supervision. Without her kind support, encouragement, valuable advices and guidance, it will not be possible to complete this thesis.

I would like to say that my sincere thanks to all the teachers, and visiting lecturers who have made their grateful efforts in rendering knowledge sharing of MBA Programmed during these two years.

I would like to express my heartfelt indebtedness to all of the professors, associate professors and lecturers who provided supervision and fortitude to help me achieve the goals set out for this study. In addition, I would like to extend my appreciation to the faculty and all the staffs in the Department of Management Studies.

My sincere appreciation goes to Max Myanmar Construction Co., Ltd for their willingness to participate and effective cooperation make me accomplish this study successfully.

Finally, I would like to express my gratitude to my parents, my wife, my friends, my classmates and also myself for the continuous support and patience throughout the course of my study.

Chue Min

EMBA II- 32 (16th Batch)

TABLE OF CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vi
CHAPTER 1 INTRODUCTION	1
1.1 Rationale of the Study	2
1.2 Objectives of the Study	2
1.3 Scope and Method of the Study	2
1.4 Organization of the Study	3
CHAPTER 2 THEORETICAL BACKGROUND	4
2.1 Team Effectiveness	4
2.2 Model of Team Effectiveness	6
2.3 Factors Influencing Team Effectiveness	7
2.4 Construction Project Team	12
2.5 Project Performance	14
2.6 Previous Studies	14
2.7 Conceptual Framework of the Study	15
CHAPTER 3 TEAM EFFECTIVENESS AND PROJECT PERFORMANCE OF MAX MYANMAR CONSTRUCTION CO., LTD	17
3.1 Profile of Max Myanmar Construction Co., Ltd.	17
3.2 Research Design	19
3.3 Demographic Profile of Respondents	20
3.4 Reliability Analysis	21
3.5 Team Characteristics	22

3.6	Team Effectiveness	26
3.7	Project Performance	29
CHAPTER 4	ANALYSIS ON INFLUENCE OF TEAM EFFECTIVENESS	31
	ON PROJECT PERFORMANCE IN MAX MYANMAR	
	CONSTRUCTION CO., LTD	
4.1	Analysis on Factors Influencing Team Effectiveness	31
4.2	Influence of Team Effectiveness on Project Performance	36
CHAPTER 5	CONCLUSION	38
5.1	Findings and Discussions	38
5.2	Suggestions and Recommendations	39
5.3	Needs for Further Research	40
	REFERENCES	
	APPENDICES	

LIST OF TABLES

Table No.	Title	Page
3.1	Demographic Profile of Respondents	20
3.2	Reliability Analysis	21
3.3	Team Leadership	22
3.4	Team Relationship	23
3.5	Team Trust and Value	24
3.6	Team Goals and Objectives	24
3.7	Team Role and Responsibility	25
3.8	Team Communication	26
3.9	Team Results	27
3.10	Team Survival	28
3.11	Individual Satisfaction	28
3.12	Project Performance	29
4.1	Factors Influencing on Team Result	32
4.2	Factors Influencing on Team Survival	34
4.3	Factors Influencing on Individual Satisfaction	35
4.4	Influencing Team Effectiveness	37

LIST OF FIGURES

Figure No.	Title	Page
2.1	Construction Project Team and its Basics Functions	13
2.2	Conceptual Framework	16
3.1	Organization Chart for functional department	18
3.2	Organization Chart for construction project team	19

CHAPTER 1

INTRODUCTION

An evolution of teamwork and its concept started over the world, where most organization approach to design and co-operate team effectiveness both internal and external of organization. The process of working together as a team is essential to achieve, company's vision and mission. Today, effective team can provide many advantages in organization and higher overall organizational performance. Individual commitment to a group effort that create a team work in every organization. It also involved social and culture factors on group performance. At present, more organizations are interested in teamwork to meet global competitions and customer satisfactions. Teamwork is not applied only to construction industry, but also management, problem solving and other related works. Since conflict within teams can occur in every saturation, effective team should to establish ethical culture and better relationship among working people on every level of organization.

The nature of construction industry is fragmented. Generally, construction industry in Myanmar works as separate activities into a single unit for almost new project with different trades and functions team. Therefore, process integration in team effectiveness are one of the most important Factors to meet project requirements and customer satisfaction minimum risks. However, bringing people all together into one place does not mean effective team, which does not occur automatically. It may be challenge by several issue such as lack of knowledge, misunderstanding, mature respect and habit.

Therefore, it is essential to build up the effective teams for construction project to identify and solve the solution to integrate and work together effectively. In construction industry, the factors that impact on team effectiveness such as team leadership, team relationship, trust and value, team goal and objective team role and responsibility and team communication are the most affecting Factors to the team for team effectiveness. Each factor support and link each other to create effective project performance.

1.1 Rationale of the Study

The propose of this study is to determine the role of team effectiveness in project team and project performance. And it can benefit of competitive advantages and higher organization performance which valued added function for the organization. To ensure construction team to complete their project successfully. It is necessary for construction companies to implement within organization. Team alone are not sufficient to perform time, cost, quality measure.

Cohen and Bailey (1997) indicated that it is often impossible for researches and managers to compare team in different functional areas, department and supporting function. Therefore, team leaders are required to determine the best ways and to ensure all team member efforts are whether alight with strategies plan, vision and mission. Therefore, team leaders have to reflect on how well they are working together time to time.

In most cases, an organization most valuable asset is its people. The same is true for project team. Team effectiveness and project performance depend on the people of organization. The reality of many organization is that under value, under train and under utilized. It helps in understanding, people involvement, satisfaction and the work culture.

1.2 Objectives of the Study

Two main objectives of this study are as followed,

1. To analyze the influencing factors on team effectiveness in Max Myanmar Construction Co., Ltd.
2. To examine the influence of team effectiveness on project performance of Max Myanmar Construction Co., Ltd.

1.3 Scope and Method of the Study

This study intends to analyze influence of team effectiveness on project performance. This study is descriptive research. The respondents of 120 are selected from out of 500 employees of Max Myanmar Construction Co. Ltd by using simple random sampling method. For secondary data, document of previous actual projects data, research paper, text book, website and other related information are used. Collected data are analyzed by descriptive method and multiple regression analysis. This study would not include people those who are not related to construction industry.

1.4 Organization of the Study

There are five chapters in this study. Chapter one is the introduction part which included rationale of study, objective of the study, scope and method of the study and organization of the study. Chapter two presents theoretical background of team effectiveness and project performance. In Chapter three, profile and Factors influencing team effectiveness of Max Myanmar Construction Co., Ltd projects in Myanmar. Chapter four, the analysis of influencing Factors on team effectiveness in Max Myanmar Construction Co., Ltd in Myanmar. Chapter five is the conclusion that presents finding, suggestions, recommendations and limitations and need for further study.

CHAPTER 2

THEORETICAL BACKGROUND

The concept of team and teamwork has currently become a concern for management in all type of industries, including construction. Through history, people work together and collaborate to achieve goal.

2.1 Team Effectiveness

A team is a unit of two or more people who interact and coordinate their work to accomplish a common goal for which they are committed and hold themselves mutually accountable. A group of people with a full set of complementary skills required to complete a task, job or project is defined as a team. Hackman (1987, 1990) defined team mean two or more people who works together to achieve the specified shared goals.

According to Katzenbach and Smith (2003, pp.), a team can be defined as role of team in organizations is by increasing effectiveness, competitiveness, and productivity, team have become an essential element of successful business or association. A group become an essential element of successful business or association. A group become a team when each member is use enough of himself and his contribution to the skills of others.

The company have to conduct team effectiveness in project performance practices to complete their project on time with specifications identified by their clients and to avoid unnecessary cases. Once the concept of team and teamwork are recognized, it is important for the team to know how to work together. An effective team requires continuous monitoring of team condition to ensure team member can adjust their task with respect to one another.

According to Stott and Walker (1995), studying team effectiveness is an unclear and fuzzy task, depending of the applied criteria, different types of teams may be considered effectiveness or non-effective. The management and organizational literature is filled with attempts to define team effectiveness and to list the most significant criteria team can be considered effective when “the productive outputs of the work meet or exceed the performance standards of the people who receive or review the output.”

It is imperative to define team effectiveness beforehand to enhance the understanding of the concept. Various researches have defined team effectiveness. Some prominent definitions are: Cohen et al. (1996) define team effectiveness in terms of both high performance and employee quality of work life. This idea draws from socio-technical theory, which states both social and technical systems must be maximized or optimally effective team.

Tanenbaum et al. (1996) define effectiveness as a combination of performance in terms of outputs, sustainable growth and regenerate itself. Mohrman et al. (1995) define team effectiveness based on three aspects. First team performance is the extent to which the group's productive output meets the approval of its customers. Second, interdependent functioning is the extent to which team is inter-reliant on one another. Third, team satisfactions is the extent to which the team is satisfied with team membership.

According to Henderson and Walkinshaw (2002), team performance can view as the execution of an action, something accomplishment of a desired result, especially as view after the fact. An effectiveness team is believed to produce high end project outcomes that exceed standards and, therefore, enhance overall productivity.

Cohen et al. (1996) define team effectiveness in terms of both employee quality of work life and high performance. This idea draws from socio-technical theory, which states both social and technical systems must be maximized for effective teams.

Effective organizations are essential for the growth and prosperity of any society. Modern civilization is based on a complex network of organizations. In turn, an organization consists of several clusters of teams. In recent years, the utilization of teams at the workplace has increased dramatically (Guzzo and Dickson 1996). As a result, concern for enhancing team effectiveness is increasing (Hackman 2002). Indeed, teams are the building blocks of any organization.

2.2 Models of Team Effectiveness

Team effectiveness have studied in team effectiveness models. Team effectiveness models included in this section looked specifically on teams, in general, as there is not much literature on the team effectiveness model in construction teams. Several 23 studies identified sets of variables or constructs used to determine team effectiveness (Guzzo 1986; Hackman 1987; Bettenhausen 1991; Campion et al. 1993; Guzzo and Dickson 1996; Cohen and Bailey 1997; Milosevic and Tugrul 1997; Werner

and Lester 2001; Therefore, it is relevant for this study to examine various team effectiveness models to determine team effectiveness Factors that can be used to develop assessment tools for this study. Normative models of team effectiveness (Hackman 1987) emerged in the late 1980s and emphasized points of leverage that practitioners and researchers could employ to influence team effectiveness. According to (Salas et al. 2009), input-process-output (IPO) theory was developed in the early model of team effectiveness. IPO theory predicts input Factors, such as team and individual characteristics, function through mediators or moderators to influence outputs, such as performance and team satisfaction. (Salas et al. 2009).

2.2.1 Normative Model developed by Hackman

Hackman's (1990) theoretical classification of team effectiveness. The model identifies potentially manipulability aspects of the group and Its context that are particularly in promoting team effectiveness, and organizes factors to make them useful in diagnosing the strengths and weakness of task-performing teams. The three Hackman team effectiveness factors are labelled team results, team survivability and individual satisfaction.

(a) Team Result

The team results, defined as the performance standard of the people who review the team's. Group interaction outcome classified as performance outcome (e.g. speed, quality and cost) and other outcome such as attitude change, positive thinking, social contribution and culture.

(b) Team Survival

The teams (need for) survivability: Defined as a team's willingness to work together in the future. Team adapt the changes in different environment for team survival. Team perform well in solving problem, coordination and challenges in organizational culture.

(c) Individual Satisfaction

The team member's individual satisfaction defined as satisfaction of team member's personal needs. the team or individual should on balance, satisfy rather than frustrate the personal needs of group members

In sum, a team is considered effective when it benefit's its organization, its members, and its own survival.

2.2.2 Input Process Output Model Developed by Driskell

In the model of input process output framework. On the input factors side, there are three levels of factors such as individual level factors, group level factors, and environmental level factors. The input factors undertake the group interaction process, where Hill (1982) indicated group interaction may produce performance as the outcome beyond that expected on the basis group input factors when the team benefit from on the opportunity for resources and rework, and outperforms. The team effectiveness model established by Driskell et al. (1987), takes into consideration how the environment impact on team processes and performance. It concludes that effectiveness developed from interactions within the team.

2.3 Factors Influencing Team Effectiveness

According to Salas et at (2005) the big six team effectiveness factors are components of project team performance. These are;

1. Team leadership
2. Team relationship
3. Team trust and value
4. Team goal and objective
5. Team role and responsibility
6. Team communication

2.3.1 Team Leadership

Team leadership is the most important factors in project management. And Leadership can be defined a process of social interaction where leaders attempt to influence the behaviors and performance of their team. Leader can move the team to desire outcome or team effectiveness. It is well known concept over the world when

one leader can't achieve everything. Individual work group include different of role, skills, scope and background.

It is the responsibility of the team's leader to guide the team to achieve specific project goals. An effective team leader should confirm team members clearly understand project objectives and share his/her commitment to accomplishing them. The leader must support each individual performance to be the best team performance results.

According to Salas et al. (2005), To maintain and create the team shared mental models, which enables team member to know their roles, and how to perform team task. Team leadership also represents a third characteristic of effective team performance. Most team contain certain individuals who are primarily responsible for defining team goal and for developing and structuring the team to accomplish this mission.

These roles exist even in self manage teams (Nygren & Levine. 1996), although the conduct varies considerably from similar roles in more traditional teams. the conduct of leadership roles in such team varies considerably from similar roles in more traditional teams. However, the achievement of the leader in defining team directions and organizing the team to maximize progress such directions contributes meaningfully to team effectiveness. Indeed, we would argue that effectiveness leadership processes represent perhaps the most critical factors in the success of organizational teams.

2.3.2 Team Relationship

Team relationship means that the relationship among team member which are also require to get team effectiveness and project performance. it can reduce the conflict management and create team unity, teamwork and project performance.

A well understanding between team members is reached through the development of relationships and learning about each team member culture and what he/she can bring to the table. This leads to trust and trust become a successful relationship and project. It is crucial for a team to respect and trust one another's respective role in the construction process and understand the risks inherent with these roles to ensure the project's success.

Consequences from recent research Walker (1994) discovered that type of contract does not directly affect speed of construction and that several client related factors, particularly how well clients or their representatives deal with the project team. These results deliver an interesting insight into the nature of the client/project team relationship.

2.3.3 Trust and Value

Trust is psychological impact that effect on relationship among team member. Team value will help to shape the overall culture and ethical value among team. it can generate psychological treatment and respect each other to be better team performance.

In recent year, the impact of trust is very common in not only in construction but also in business environment. Trust is used as one of the most effective Factors in relationship to built up the effective team. Lewicki and Bunker note that trust is a critical success element to most business, professional, and employment relationships.

Everyone on the team trusts each other that they will be professional, do them best, and look out for each other's' interests and value added for physically and mentally.

Research conducted by Sihna and Sihna (1995) indicated how leader in organization have successfully created a synergetic work and team culture in their organization. They achieved it through the introduction of a "master work value "and there after social values typical of the society. Traditional view of work was either performed in family or framework. According to research findings, people become more involved in jobs and less dependent on the leader because the value everyone

striving toward and the values which employees normally practice at home they could practice at work.

2.3.4 Team Goal and Objective

Goal as a step of milestones. Every team working on the project has a specific goal or contribution to the group project. Team goal and objective enables a team to clarify what could be the meaningful results for them.

The team should define and agree collectively upon common team and project goals that provide purpose, focus, and direction. It is important that goals should be specific plan and achievable procedures.

In workplace, a team goal normally refers to the level of task results that team members have to realize (Weldon & Weingart, 1993). Setting a goal at the team level means that team members must reach it cooperatively. Thus, team goals are related to the performance of the team.

As most construction project teams comprise participants from different organizations that come together to form temporary organizations aimed at achieving the common objective of delivering a project, the process of integrating pre-existing company based individual workgroups is critical if the various teams in a construction project are to work together effectively.

Any strategy or system that brings together the various project parties, drawing upon the collective strength of all the teams, has the potential to contribute to the success of the product that the team delivers

2.3.5 Team Role and Responsibility

The degree and type of interdependence in work group from several sources including the differentiation of roles, the distribution of skills and resources, and the manner in which goals are defined and achieved. Helping each other can carry fair share of work, helping team members on performing task, understanding the rights and responsibility as a team.

Each team member should appreciate his/her individual or organization's duties, rights, and responsibilities prior to starting the project. This avoids upcoming problems, when everyone on the team clearly understands what is essential of him/her. In addition, it is necessary for team members to know their legal responsibilities, not only for their protection, but to shun worthless miscommunications and expenditure

Belbin (1993) had explained about two types of roles which are specifically functional role and team role (Rajendran, 2005). 'Functional role' refers to the job demands that a person has been engaged to meet by supplying the requisite technical skills and operational knowledge, whereas 'team role' refers to interrelate and contribute with others at work in certain characteristic ways (Belbin, 1993). Belbin (1993) further emphasized that the team role describes how the individual fits into the team, not what particular function he or she performs.

According to Benders and Van Hootegem (1999), the concept of team responsibility is rather vaguely elaborated. Sometimes, team responsibility is conceptualized as being the autonomy of the team as a whole, whereas at other times the concept strictly refers to the responsibility of individual team members.

2.3.6 Team Communication

Sharing information between individuals or groups to reach mature respect and common understanding. It important that the information or work instruction need to understood. and communicate in meetings.

Communication skills are vital to recognize and respond to others. It also requires to align and emphasize the values of the project team. Sharing information should support a team to the successful delivery of its projects

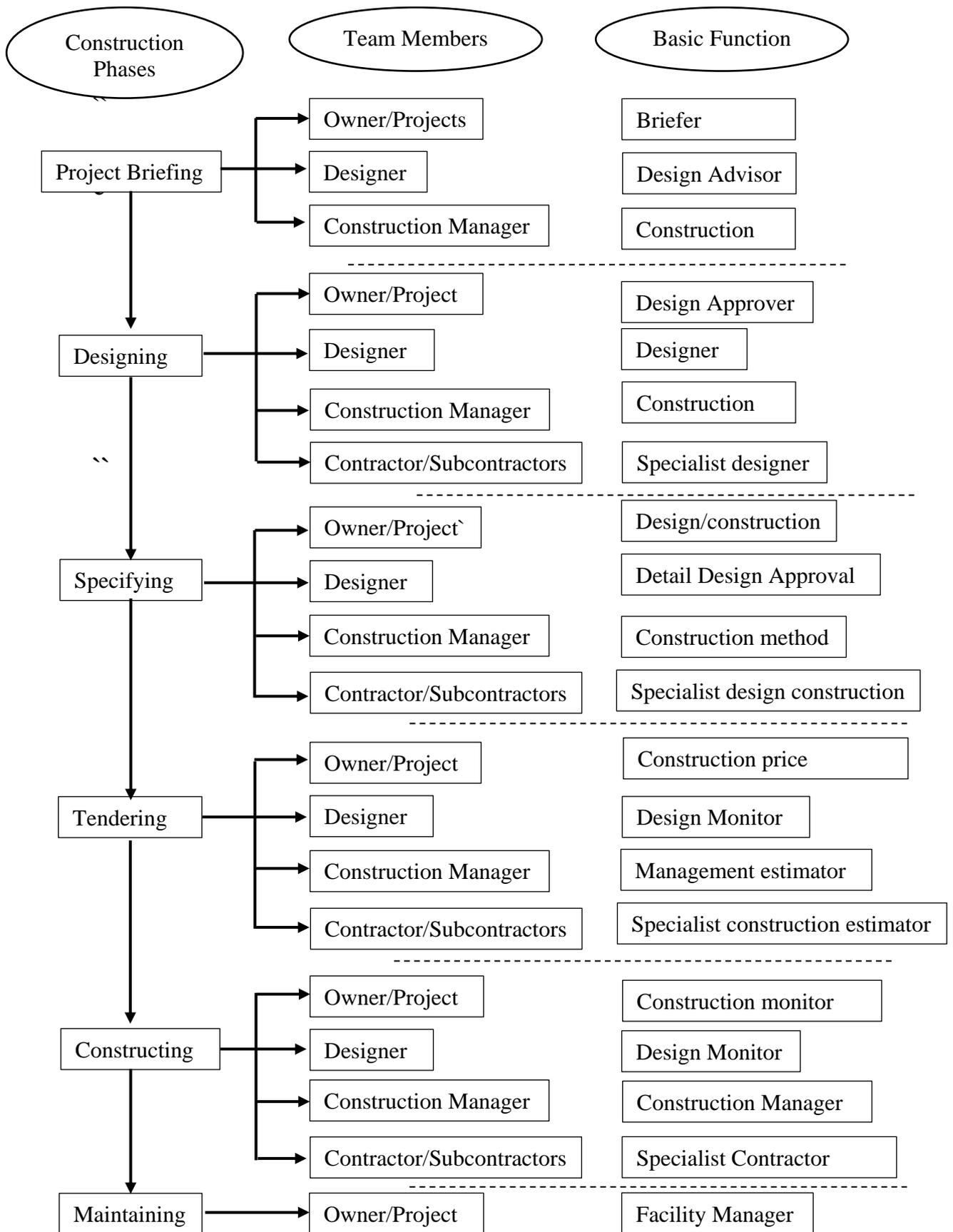
Although today managers undertake various tasks and activities, it has been documented that they spend most of their time in communication (Baguley, 1994: 3; Huczynski and Buchanan, 2001: 178). In our society, communication activities can comprise engaging in conversations, listening to colleagues, networking, collecting information by telephone or computer. Hence, communication skill is not only for workplace but also for personal development in work place.

2.4 Construction Project Team

A project team comprises of team members, who are flexible in the way they perform their tasks and are easy to adapt to their work environment and new situations. Projects are often associated with constraints, such as time and cost control. It is essential for a team to completely understand the whole project arrangement and how serious it is to develop an effective team. In construction project, team members are selected based on the abilities of each team member, namely particular discipline skill, expertise, and experience, they have to offer to perform the technical contribution in an efficient and profitable way. In addition, some are selected according to the project's requirements, such as social, political, and economic requirements. Team members are alike they share the common general experience of project activity, technology and methodology.

According to Cornick and Mather (1999), Construction project are also very different, as each and every one possesses: Unique and often complex project culture characteristics to make them behave in a particular way as a group, which can apply equally to the firms of designers and constructors as to the owner and project requirement. They have a discipline which has traditionally set them in particular roles and relationships, including owners, through traditional contractual arrangements.

Figure (2.1) Construction Project Team and Its Basics Functions



Source: Cornick and Mather 1999

2.5 Project Performance

A typical project undergoes three stages—preconstruction, construction and post construction stages. In these stages, there are numerous actions performed to achieve the output and objectives stated by the owner. Therefore, it is crucial for the project team, at some extent, to measure its performance on the activities or sub-processes performed throughout the project. Project performance can be measured as a process of the project (Bai and Yang 2011). For a project effective team, it is important for team members to understand and accept the performance measurement.

Project cost is one of the most common measures used to measure project performance. Teams are always in search of ways to complete the project within the budget specified. A project to complete within the cost is challenging because there are always uncertainties and changes occurring throughout a construction project. According to Bubshait and Almohawis (1994), cost can be defined as the degree to which the general conditions promote the completion of a project within the estimated budget. Cost can be measured cost variation calculated by the variance between the actual cost and the budgeted cost of a project.

Project schedule is also used to measure performance of the project. According to Lim and Mohamed (1999), client view duration of a project as their first criterion for project success. The duration of a construction project can be observed as the timeframe from the start of site work.

2.6 Previous Studies

Previous research has proved that work team characteristics can be related to effectiveness (Campion, Medsker, & Higgs, 1993). This study provides a imitation with professional knowledge worker jobs, different measures of effectiveness, and work units that varied in the degree to which members identified as a team.

The effect of integration on project delivery team effectiveness developed by Bernard K. Baiden, Andrew D.F. Price (2010). This paper explores the effect that integration can have on teamwork effectiveness in construction project and its delivery teams. The findings suggest that the role and value of integration in project teams is uncertain relative to other performance attractive approaches.

Factors contributing towards the effectiveness of construction project teams by Titus Ebenezer Kwofie, Abraham Alhassan, Edward Botchway & Isaac Afranie (2015).

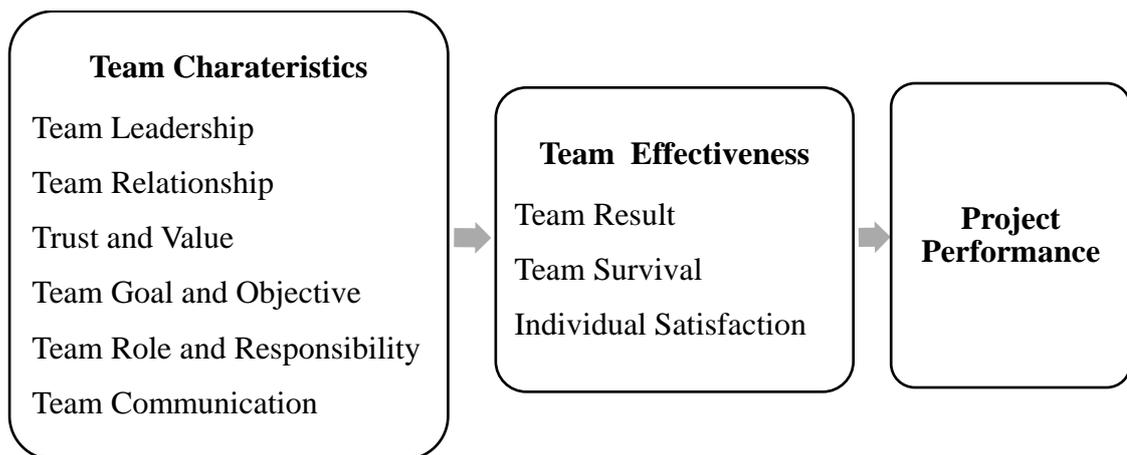
The team approach to project delivery become major client expectations in the construction industry. Hence, appraising the effectiveness of a project team is considered critical for superior team performance in project delivery. The findings are useful for setting a standard framework for evaluating team effectiveness and team building in the construction industry in Ghana and other developing countries.

The previous study is extended by the use of different effectiveness on project performance. Nurhidayah Azmy (2012) reported that the role of the role of team effectiveness in construction Project teams and project Performance. The purpose of the study is to determine the role of team effectiveness and project performance in construction. It studies different factors that associated with team effectiveness and the relationship between the team effectiveness factors and project performance aspects. Quantitative and qualitative research methods are used for this study.

2.7 Conceptual Framework of the Study

By combining the relevant Factors influencing on project performance in team of team effectiveness and factors influencing on team effectiveness, Figure 2.2 states the conceptual framework for this study.

Figure (2.2) Conceptual Framework



Source: Own Compilation (2019)

According to framework, six main independent variable and three dependent variables are involved for team effectiveness measurement for this study. After that, the relationship between and team effectiveness and project performance are measured

with independent variable and dependent variable. The factors influencing on team effectiveness are team leadership, team relationship, trust and value, team goal and objective, team role and responsibility and team communication. And the factors influencing on project performance are team result, team survival and individual satisfaction. Effective team result high performance in every project in team of time, cost and quality. Effective team supports project performance both financial and non-financial value.

CHAPTER 3

TEAM EFFECTIVENESS AND PROJECT PERFORMANCE OF MAX MYANMAR CONSTRUCTION CO., LTD

This chapter is mainly about Max Myanmar Construction Co., Ltd, particularly about the team effectiveness on project performance based on survey data analysis. In this study, data are collected from 120 respondents in various team member by identify with age, gender and team member. This chapter express company profile, organization structure and mean value of respondents answered table.

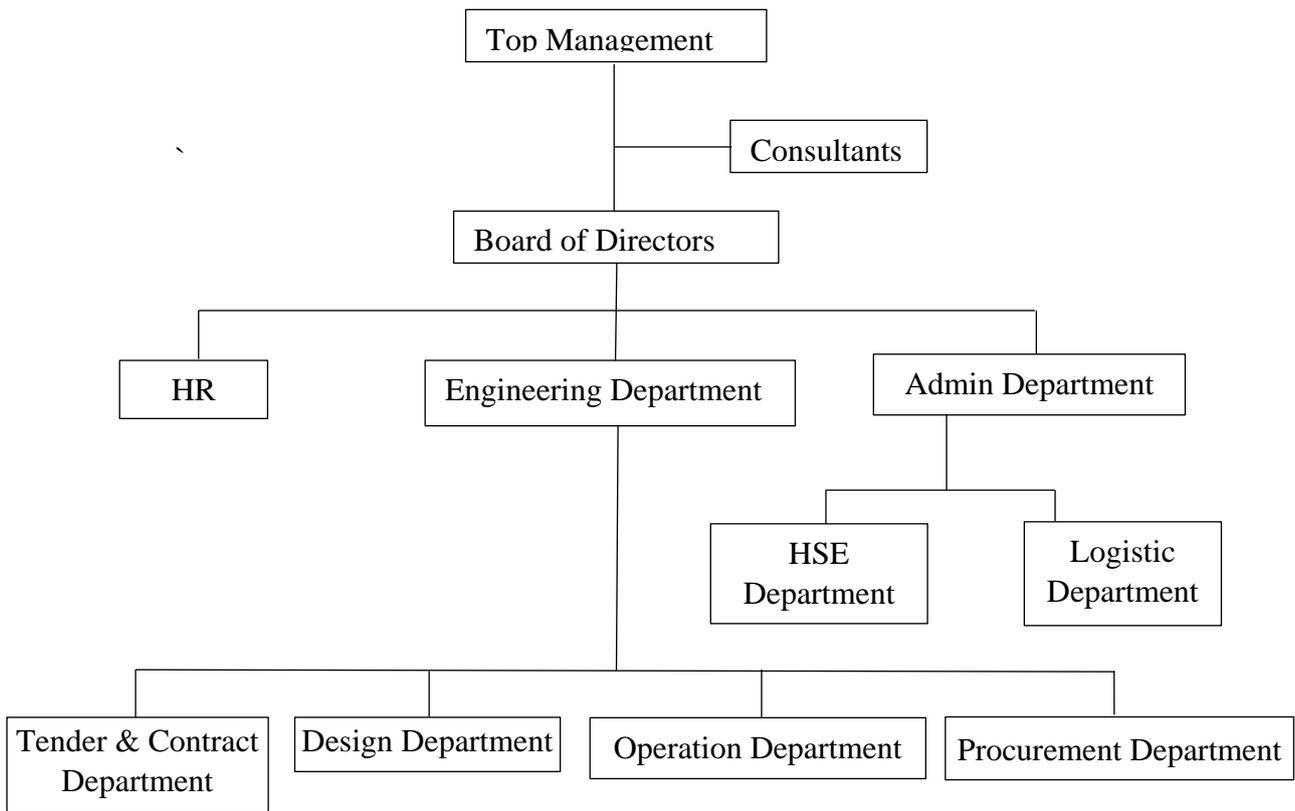
3.1 Profile of Max Myanmar Construction Co., Ltd.

Since Max Myanmar Construction Co., Ltd was established in 1993, Max Myanmar Construction Co., Ltd was incorporated in 1997 and has successfully built and accomplished diversity of construction projects. Construction services includes design, build and management of construction projects provided quality sustainable construction together with good project management both private and public projects. Max Myanmar Construction Co., Ltd completed Port Extension project (Earthworks), Dams and Reservoirs, Residential, Upgrading, Institutional, Commercial, Industrial, Residential Development Projects, High-Rise Building, Infrastructures, Factories, Educational, Social, Health, Recreational, Office Buildings and Hotels. Construction is also acquisitioning a strong position in land redevelopment and infrastructure investment opportunity as a developer. Company mission is to exceed global expectations and be a leader in quality, efficiency, innovation, sustainable development and continued prosperity. Company mission is providing the utmost services for the satisfaction of the client in terms of quality, cost and time. The challenges presented by internationalized, higher requirement and more competitive market that is emerging.

Organization chart in below figure (3.1) show that functional departmental structure of Max Myanmar Construction Co., Ltd in this study. The project team organization is a self-contained unit based on project requirements. Major decision and change management system are decided by top level management such as Board of Director and top management. Manager in functional department are play in operation decision and input/output workflow process. Into functional department, staff are assigned to follow up decision and work flow to align with organization and projects

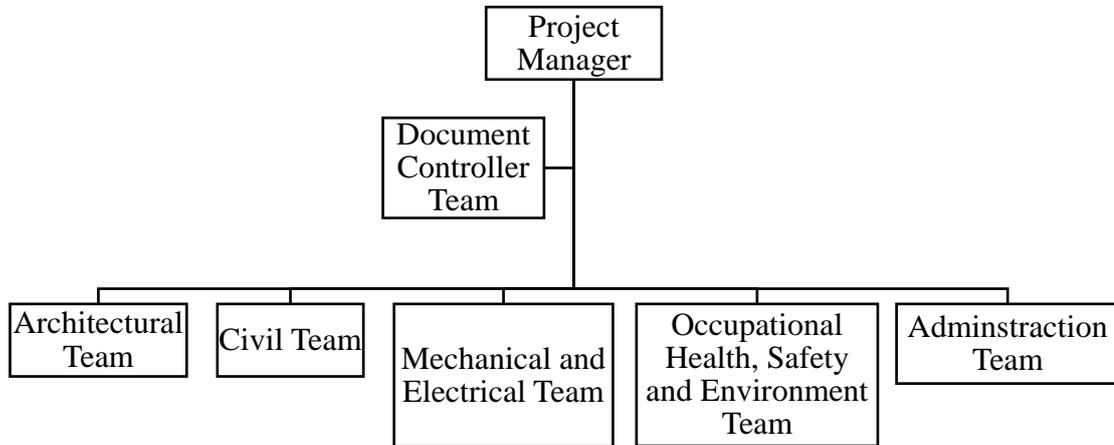
performance. Within organization structure, team member support and communicate each other for assign project. Apart from organization chart for functional department, it also requires that project team for construction project separately. Figure (3.2) show that project team member in Max Myanmar Construction Co., ltd.

Figure (3.1) Organization Chart for Functional Department



Source: Max Myanmar Construction Co., ltd (2019)

Figure (3.2) Organization Chart for Construction Projects Team



Source: Max Myanmar Construction Co., ltd (2019)

3.2 Research Design

This section consists of four part such as sampling, procedure, research instrument (questionnaire), data collection and data analysis of team effectiveness of project performance in Max Myanmar Construction Co., Ltd. To collect primary data team effectiveness in project performance, sampling method and well structure questionably are used. Among the team member in Max Myanmar Construction Co., Ltd, data is mainly classified three level of position such as top-level management, middle management, entry staff and general worker. There are 120 respondents from various position in different assign projects for this study.

Data is collected to 120 respondents of Max Myanmar Construction Co., Ltd in October and November 2019. And explain about the team effectiveness in project performance and level of selection in support factors. Survey form are collected from individual and assign assistance person for data entry for SPSS and respondents demographic.

To examine the factors influencing in team effectiveness in project performance, the following factors such as team leadership, team relationship, trust and value, team goal and objective, team role and responsibility and team communication are applied in data analysis. For the project performance, team effectiveness factors

such as team result, team survival and individual satisfaction are captive factors of project performance in this study.

3.3 Demographic Profile of Respondents

The data obtain from survey are analyze descriptive statistics and performed the responses provided. Factors influencing team effectives on project performance, demographic information are measured with design questioners. Hence, a set of demographic information of respondents has been examined and presented in this study. Total number of 120 respondents are identified with gender, age, current position and team member size for analyzing data. The results are shown in the following table (3.1).

Table (3.1) Demographic Profile of Respondents

Sr No.	Demographic Factors	Number of Respondent	Percentage	
1	Gender	Male	75	62.5
		Female	45	37.5
2	Age	Under 30	46	38.33
		31-40 years	61	50.83
		41-50 years	11	9.2
		Over 50 years	2	1.67
3	Team size	2-4 people	20	16.67
		5-6 people	31	25.83
		7-10	20	16.67
		More than 10	49	40.83
Total		120	100	

Source: Survey data, 2019

According to the analysis of the gender of 120 respondents, most of the respondents are male 62.5 % and the rest respondents are female 37.5 % which mean male are higher respond than male in this study. With regards to the age of 120 respondents, most of respondents exactly 61 respondents in 120 total respondents are age between 31 and 40 years higher rank in this study. In age under 30 years, there is 46 of 120 respondents. Over 50 years, there is 2 respondents in 120 which is the least

among others. For the team size, more than 10 persons group is the highest comparing with less than 10 team size.

3.4 Reliability Analysis

In reliability mentions to the extend to which a measure produces consistent results, if the measurement is frequent a number of times. The analysis of reliability is so-called reliability analysis. Reliability can be surveyed in four way. test-retest: split-half: alternative form and the most popular method. internal consistency (Cronbach's Alpha). In this study, internal consistency (Cronbach's Alpha) is used to show how reliable the questionably is:

Table (3.2) Reliability Analysis

Variables	No of items	Cronbach's Alpha
Team Characteristic		
1. Team Leadership	5	.856
2. Team Relationship	5	.882
3. Trust and Value	5	.566
4. Team goal and Objective	5	.861
5. Team Role and Responsibility	5	.908
6. Team Communication	5	.851
Team Effectiveness		
1. Team Result	5	.906
2. Team Survival	5	.405
3. Individual Satisfaction	5	.877
Project Performance	10	.904

Source: Survey Data (2019)

According to Table (3.2), The Cronbach alpha value for the team relationship, team goal and objective, team role and responsibility and team communication was .882, .861, .908, .851 in influencing factor scale .906 for team result .877 for team satisfaction, .904 for project performance. Most values exceeded the recommended value of .7 (Nunnally, 1978) indicating adequate internal consistency.

3.5 Team Characteristics

In this study, the combination of fifty-nine survey question is used to investigate the factors influencing team effectiveness on project performance in Max Myanmar Construction. The questionnaire is constructed by 6 factors that influence team effectiveness on project performance and each part contains the likert-type questions. In the survey, total of 120 player answered the question each of which have scale of 1 to 5 (1= strongly disagree and 5= strongly agree). Therefore, if the score is greater than 3, it is assumed that respondents are influenced by the factors. The higher score means higher level of influencing to team effectiveness on project performance.

3.5.1 Team Leadership

In this section, it analyzes the team leadership. The statement such as comfortable with the concept of shared leadership, spending time with team member to clarify team's expectation. Exercises good judgement during decision-making process, providing input/thoughts the project and difficulties performing tasks were asked in the questionnaire. Table (3.3) illustrate the mean value of team leadership from survey analysis.

Table (3.3) Team Leadership

No.	Team Leadership	Mean
1	Comfortable with the concept of shared leadership.	3.50
2	Spending time with team members to clarify team's expectations.	3.54
3	Judgment during decision-making process	3.58
4	Providing input/thoughts throughout the project.	3.68
5	Difficulties in performing tasks.	3.84
	Overall Mean	3.63

Source: Survey data, 2019

As illustrated in Table (3.3) the higher mean value is 3.84 is found in the area of difficulties performance tasks. It said that majority of respondents are felt comfortable on difficulty task in team leadership. The lowest mean score 3.50 is found on the area of concept of shared leadership. it indicates that there is something need to comfortable with shard leadership. For overall mean score of 3.62 of total 120

respondents in team leadership, it is concluded that majority of respondents are expect that help in difficulties performance tasks.

3.5.2 Team Relationship

In this section, it analyzes the team relationship. The statement such as effective conflict management, resolved on issues, welfare of teammates, care of teammates care and involvement of all team members were asked in the questionnaire. Table (3.4) illustrate the mean value of team relationship from survey analysis.

Table (3.4) Team Relationship

No.	Team Relationship	Mean
1	Exercised Effective conflict management	3.51
2	Team works on issues arise	3.64
3	Carness about the welfare of my teammates.	3.69
4	Carness about each other.	3.73
5	Involvement of all team members in decision making.	3.67
	Overall Mean	3.65

Source: Survey data, 2019

In category of team relationship, respondents are more agreed on item No 3 and No 5 about care about each other and decision to be made involvement of team member. For a team to be successful and effective, it is essential for a team to have good relationship earth other. Individual respect could be good team especial respondents agree that contribution for the team could be strong team relationship.

3.5.3 Team Trust and Value

In this section, it analyzes the team trust and value. The statement such as treating with respect, trust each other, contribution for the team, supporting each other and important of believing trust were asked in the questionnaire. Table (3.5) illustrate the mean value of team trust and value from survey analysis.

Table (3.5) Team Trust and Value

No.	Team Trust and Value	Mean
1	Treated with respect.	3.67
2	Trust each other.	3.67
3	Rigorization for contribution.	3.92
4	Support each other.	3.75
5	Believing trust.	3.78
	Overall Mean	3.76

Source: Survey data, 2019

In category of trust and value of individual team, respondents satisfy with highest mean score 3.92 recognizing for their contribution team. The second highest mean score is 3.78 is found in item number no's which said that trust is one of key factors of team effectiveness. The lowest mean score 3.67 is found in the area of treated with respect and trust. It indicates that to improve in such area for team effectiveness.

3.5.4 Team Goals and Objectives

In this section, it team goal and objectives, team understanding of team goal and objectives agreement on team goal and objectives, consistent with goal and objective and commitment of goal and objectives were asked in the questionnaire. Table (3.6) illustrate the mean value of team goals and objectives from survey analysis.

Table (3.6) Team Goals and Objectives

No.	Team Goals and Objectives	Mean
1	Understand team's goals and objectives.	3.67
2	Follow up team's goals and objectives.	3.64
3	Agreement on team's goals and objectives.	3.71
4	Consistency of Team goals and objectives	3.78
5	Achievement of team's goals and objectives.	3.71
	Overall Mean	3.70

Source: Survey data, 2019

In category team goals and objective, the highest mean score 3.78 is team in the area of consistence of team goal and objective with individual team. it indicates that respondents believe that consistency with team member are supportive matter for team goal and objective. The area for improvement is the lowest mean score 3.54 which is under sting of team goal and objective in team goals and objectives section. it is concluded that team member to improve team goal and objective but not very clear on strategic goal and objective in more detail.

3.5.5 Team Role and Responsibility

In this section, it analyzes the team role and responsibility. The statement such as willing to take for unassigned tasks, willing to help with unforeseen problem, individual role in relationship to the team, agreement with assigned roles and responsibilities and understand responsibilities were asked in the questionnaire. Table (3.7) illustrate the mean value of team role and responsibility from survey analysis.

Table (3.7) Team Role and Responsibility

No.	Team Role and Responsibility	Mean
1	Willingness to take initiative for unassigned tasks.	3.34
2	Willingness to help with unforeseen problems that need immediate attention.	3.54
3	Individual roles in relations to the team	3.53
4	Agreement with assigned roles and responsibilities.	3.74
5	Understands the responsibilities assigned to them.	3.77
	Overall Mean	3.59

Source: Survey data, 2019

In term of role and responsibility, the highest mean score 3.77 is in the area of team understand the responsibilities assigned to them. It means that they understand the role and responsibility of team member. The least mean value is 3.34 which is imitative for unassigned tasks. it said that team member is not interested in unassigned work to them. it means that they are least contribution in unassigned areas.

3.5.6 Team Communication

In this section, it analyzes the team communication. The statement such as interactive communication, team discussion, communication outside meeting, clear outcome and sharing working experience were asked in the questionnaire. Table (3.8) illustrate the mean value of team communication from survey analysis.

Table (3.8) Team Communication

No.	Team Communication	Mean
1	Interactive communication is present within the team.	3.53
2	Team members participate in team's discussion.	3.72
3	Communications outside meetings are effective.	3.58
4	Team meetings produce clear outcomes.	3.65
5	Sharing know-how from work of experience	3.75
	Overall Mean	3.64

Source: Survey data, 2019

In team communicating table, most of responded answered that know how from work experience with each other is a important supporting factors for team communication to get team effectiveness project performance. it means that team expect that knowledge shared from work experience and contribution impact upon team communication. it is concluded that team concern on knowledge sharing is well know factors for team improvement.

3.6 Team Effectiveness

Nowadays, more and more project teams are formed to achieve organization goal and objective to improve project performance. Organization generally recognized the important and benefit of team effective on project performance. It factors the individual attributes of team members (e.g. skill, experience, and ability) and how these contributions can potentially combine to perform team effectiveness for project performance. In this section, it analyzes on team how the team result, team survival and team satisfaction are responded to team effectiveness on project performance.

3.6.1 Team Results

In this section, it analyzes the team result. The statement such as successful project teams, positive feedback on performance, decision by project team, implementation and client satisfactions were asked in the questionnaire. Table (3.9) illustrate the mean value of team result from survey analysis

Table (3.9) Team Results

No.	Team Result	Mean
1	Successful in its efforts.	3.55
2	Team members feedback on performance.	3.62
3	Satisfy on decision making process.	3.53
4	Implementation the decisions.	3.68
5	Client satisfaction.	3.71
	Overall Mean	3.62

Source: Survey data, 2019

In team results, the highest number mean value is 3.7 compare with other team result factors. It indicates that client satisfaction is more important factors than any other factors in team result table in this study. The lowest number of mean values is 3.52 which indicate the group decision of project team. it means that they are not very satisfy with decision process. it it concluded that there is still improvement in decision making process either as a team or individual.

3.6.2 Team Survival

In this section, it analyzes the team survival. The statement such as problem solving on issues, proud of belong to project team, team culture, cooperation and helping and potential to produce high quality work were asked in the questionnaire. Table (3.10) illustrate the mean value of team survival from survey analysis.

Table (3.10) Team Survival

No.	Team Survival	Mean
1	Solving problems and controversial issues.	3.43
2	Proud to belong to project team.	3.63
3	Developing a team culture.	3.94
4	Cooperation and helping each other in team.	3.79
5	Producing high-quality work as a team.	3.76
	Overall Mean	3.71

Source: Survey data, 2019

In team survival, the highest number mean value is 3.94 compare with factors in team survival. It indicates that respondents expected that culture value perform an effectiveness management. The least low number is 3.43 in Factors of team survival. It means that team they may have some discrepancy and delay in problem solving in most individual team. It is concluded that culture value is the highest number and problem solving is the least number in team survival.

3.6.3 Individual Satisfaction

In this section, it analyzes the individual satisfaction. The statement such as professional competencies, contribution of learning, enjoy working together, satisfaction and continue to work at company were asked in the questionnaire. Table (3.11) illustrate the mean value of individual satisfaction from survey analysis.

Table (3.11) Individual Satisfaction

No.	Individual Satisfaction	Mean
1	Developing professional competencies	3.63
2	Team contributes to my learning.	3.77
3	Enjoying working together with my team colleagues.	3.79
4	Satisfaction by working in this team.	3.78
5	Continue to work	3.81
	Overall Mean	3.76

Source: Survey data, 2019

Finally, the highest mean value 3.81 is in the area of continue to work at this company. It indicates that most of the staff in company still want to work together with

team member in company. It is a good sign for improvement and good relationship with project team. The least significator is that 3.63 mean of professional leave to upgrade on in career development. It indicates that they still hard to decide to improve professional level in competitive working environment. There may be several reasons to group up in professional development. It needs to be discussed in internal career development in team member.

3.7 Project Performance

In this study, in this section, it analyzes the project performance. The statement such as achievement of the project, quality standard, budget, waste control, completion time, report and documentation, urgency, good services communication and risk monitoring company were asked in the questionnaire. Table (3.12) illustrate the mean value of project performance from survey analysis.

Table (3.12) Project Performance

No.	Project Performance	Mean
1	Achievement of the project objectives.	3.60
2	Project completion with the quality standard	3.56
3	Project completion within budget.	3.54
4	Managing waste control.	3.59
5	The project completion on time.	3.58
6	Reports and documentation	3.71
7	Improve the schedule.	3.67
8	Good services of the contractor during process.	3.68
9	Communication with client.	3.68
10	Risk monitoring and control during project execution.	3.76
	Overall Mean	3.64

Source: Survey data, 2019

In project performance section, the highest mean score is 3.76 which mean that majority of respondent take risk factors on project performance. The lowest mean score on project performance is 3.54 regarding about budget control in resource management. it indicates that its budgeting is hard to control in project management because of higher risk in project management which is directly or indirectly related with the project performance. It is concluded that team effectiveness in team member support the project performance but also reduce the risk factors in organization the second highest mean score is 3.71 which mean that majority of respondent know that documentation and reporting process are beneficial factor for project performance. The second lowest mean score on project performance is 3.56 regarding about project completion with standard quality. it indicates that quality control is part of the project performance for controlling and monitoring.

Project performance is measured by major factors that mainly involves in time, quality and cost and scope for controlling. To get better project performance results, team effectiveness on individual process are related to project performance.

CHAPTER 4

ANALYSIS ON INFLUENCE OF TEAM EFFECTIVENESS ON PROJECT PERFORMANCE OF MAX MYANMAR CONSTRUCTION CO., LTD

This chapter consists of three parts concerning with the analysis on factors influencing team effectiveness in project performance. To analyze the Factors influencing team effectiveness, mean value of team factors is used for team effectiveness. For team effectiveness, linear regression model is practiced. The first part is factor influencing team effectiveness. The second part is analysis on influence of team effectiveness on project performance in Max Myanmar Construction Co. Ltd.

4.1 Analysis of Factor Influencing Team Effectiveness

There are three factors for team effectiveness on project performance. These are team result, team survival and individual satisfaction.

4.1.1 Factors Influencing on Team Result

In this section, analyses the influence of team result (team leadership, team relationship, trust and value, team goal and objective, team role and responsibility and team communication) team effectiveness on project performance in Max Myanmar Construction Co., Ltd. The linear regression model is applied. The output from generating linear regression model is shown in Table (4.1)

As shown in Table (4.1), correlation coefficient (R) measures the linear relationship between two variables. The value of R Square is 0.538 that means this specified model could explain 54 percent about the variation of the team result of the organization. The model can explain 51 percent about the variance of the independent variable (team leadership, team relationship, trust and value, team goal and objective, team role and responsibility and team communication) and dependent variable (team result) because adjusted R square is 0.513.

Table (4.1) Factors Inflecting on Team Result

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig	VIF
	B	Std Error	Beta			
(Constant)	.619	.292		2.119	.036	
Team leadership	.207**	.104	.194	1.990	.049	2.316
Team relationship	.014	.106	.014	.132	.895	2.710
Trust and Value	.056	.060	.077	.936	.351	1.666
Team Goal and Objective	-.071	.111	-.065	-.641	.523	2.538
Team Role and Responsibility	.338***	.100	.354	3.383	.001	2.683
Team communication	.285***	.130	.264	2.185	.031	3.578
R			.733			
R Square			.538			
Adjusted R Square			.513			
Durbin Watson			1.748			
F-value			2.927***			

Source: Survey data, 2019

The overall significant of the model, F value, is significant at 1 percent level that indicates the specified model can be said valid.

The significant level of team leadership is at 5 percent confidence level. And The significant level of team role and responsibility and team communication is at 1 percent confidence level. However, other factors such as team relationship, trust and value, team goal and objective are not significant relations on team result. Team leadership variable has the expected positive sign and significant coefficient value at 5 percent level. The positive relation indicates that increase in team leadership lead to enhance in team result in organization. Team role and responsibility and team communication variable has the expected positive sign and significant coefficient value at 1 percent level. The positive relation indicates that to organize in team role and responsibility and manage effective team communication perform team result in organization. The standard coefficient (Beta) indicates that the value has positive relationship with team result. The Dubin Watson value is close to 2 (1.748). Thus, it indicates that there is no sub correction in sample. All VIF are less than 10. Thus, it

shows that there is no multicollinearity problem in this case. This means that there are no correlations among variable.

Therefore, by giving team leadership training, identify clear job descriptions and job scope and effective communication training in this organization support better team result in organization. In Max Myanmar Construction Co., Ltd. Consultants and most senior staffs teach and share their technical knowledge and experience including safety environmental control for technical skills enhancement. Moreover, human resource management also supports personal trainings for personal development and workshop for team work in organization.

4.1.2 Factors Influencing on Team Survival

In this section, analyses the influence of team survival (team leadership, team relationship, trust and value, team goal and objective, team role and responsibility and team communication) team effectiveness on project performance in Max Myanmar Construction Co., Ltd. The linear regression model is applied. The output from generating linear regression model is shown in Table (4.2).

As shown in Table (4.2), Correlation coefficient (R) measures the linear relationship between two variables. The value of R Square is 0.304 that means this specified model could explain 30 percent about the variation of the team result of the organization. The model can explain 27 percent about the variance of the independent variable (team leadership, team relationship, trust and value, team goal and objective, team role and responsibility and team communication) and dependent variable (team result) because adjusted R square is 0.267. The overall significant of the model, F value, is significant at 1 percent level that indicates the specified model can be said valid.

The significant level of team communication is at 1 percent confidence level. However, other factors such as team leadership, team relationship, trust and value, team goal and objective and team role and responsibility are not significant relations on team survival. Team communication has the expected positive sign and significant coefficient value at 1 percent level.

Table (4.2) Factors Influencing on Team Survival

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig	VIF
	B	Std Error	Beta			
(Constant)	1.044	.414		2.524	.013	
Team leadership	.035	.147	.028	.235	.814	2.316
Team Relationship	.102	.149	.088	.685	.495	2.710
Trust and Value	.018	.085	.021	.212	.833	1.666
Team Goal and Objective	.021	.157	.017	.135	.893	2.538
Team Role and Responsibility	.153	.141	.139	1.082	.282	2.683
Team communication	.404***	.184	.325	2.191	.031	3.578
R			.552			
R Square			.304			
Adjusted R Square			.267			
Durbin Watson			1.867			
F-value			8.236***			

Source: Survey data, 2019

The positive relation indicates that increase in team communication lead to enhance in team survival in organization. The standard coefficient (Beta) indicates that the value has positive relationship with team survival. The Dubin Watson value is close to 2 (1.867). Thus, it indicates that there is no sub correction in sample. All VIF are less than 10. Thus, it shows that there is no multicollinearity problem in this case. This means that there are no correlations among variable.

Therefore, by giving effective communication training and communication channel with today modern technology in this organization support better team survival in organization. In Max Myanmar Construction Co., Ltd, staff in organization are more concern about team communication rather than other factors. Most people in Max Myanmar Constructions are positive on team communication and interest team communication with modern technology.

4.1.3 Factors Inflecting on Individual Satisfaction

In this section, analyses the influence of individual satisfaction (team leadership, team relationship, trust and value, team goal and objective, team role and responsibility and team communication) team effectiveness on project performance in Max Myanmar Construction Co., Ltd. The linear regression model is applied. The output from generating linear regression model is shown in Table (4.3).

Table (4.3) Factors Influencing on Individual Satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig	VIF
	B	Std Error	Beta			
(Constant)	.496	.269		1.846	.068	
Team leadership	.136	.096	.131	1.423	.158	2.316
Team Relationship	.074	.097	.075	.760	.449	2.710
Trust and Value	.067	.055	.094	1.203	.232	1.666
Team Goal and Objective	.103	.102	.097	1.012	.314	2.538
Team Role and Responsibility	.115	.092	.124	1.256	.212	2.683
Team communication	.398***	.120	.379	3.319	.001	3.578
R	.767					
R Square	.589					
Adjusted R Square	.567					
Durbin Watson	2.011					
F-value	26.956***					

Source: Survey data, 2019

As shown in Table (4.3), Correlation coefficient (R) measures the linear relationship between two variables. The value of R Square is 0.589 that means this specified model could explain 59 percent about the variation of the team result of the organization. The model can explain 57 percent about the variance of the independent variable (team leadership, team relationship, trust and value, team goal and objective, team role and responsibility and team communication) and dependent variable (team result) because adjusted R square is 0.567. The overall significant of the model, F value, is significant at 1 percent level that indicates the specified model can be said valid.

The significant level of team communication is at 1 percent confidence level. However, other factors such as team leadership, team relationship, trust and value, team goal and

objective and team role and responsibility are not significant relations on individual satisfaction. Team communication has the expected highly positive sign and significant coefficient value at 1 percent level. The positive relation indicates that increase in team communication support to enhance in individual satisfaction in organization. The standard coefficient (Beta) indicates that the value has positive relationship with individual satisfaction. The Durbin Watson value is close to 2 (2.011). Thus, it indicates that there is no sub correction in sample. All VIF are less than 10. Thus, it shows that there is no multicollinearity problem in this case. This means that there are no correlations among variable.

Therefore, team communication is the most important factor for individual satisfaction in Max Myanmar Construction Co., Ltd. Top management focus on development and implementation such kind of team communication that impact on individual satisfaction for project performance and sustainable growth. Without team communication, other factor such as team leadership and team role and responsibility can't not achieve easily to develop and maintain in organization.

4.2 Influence of Team Effectiveness on project performance

In this section, analyses the influence of team effectiveness (team result, team survive and individual satisfaction) on project performance in Max Myanmar Construction Co., Ltd. The linear regression model is applied. The output from generating linear regression model is shown in Table (4.4).

As shown in Table (4.4), Correlation coefficient (R) measures the linear relationship between two variables. The value of R Square is 0.654 that means this specified model could explain 65 percent about the variation of the team result of the organization. The model can explain 65 percent about the variance of the independent variable (team result, team survival and team satisfaction) and dependent variable (team effectiveness) because adjusted R square is 0.645. The overall significant of the model, F value, is significant at 1 percent level that indicates the specified model can be said valid. The significant level of team result, team survival and team satisfaction are at 1 percent confidence level. Team result, team survival and team satisfaction have the expected positive sign and significant coefficient value at 1 percent level. The positive relation indicates that increase in team results, team survival and individual satisfaction impact on team effectiveness on project performance.

Table (4.4) Influencing Team Effectiveness on project performance

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig	VIF
	B	Std Error	Beta			
(Constant)	.732	.199		3.680	.000	
Team Result	.228***	.066	.268	3.471	.001	2.005
Team Survival	.163***	.048	.221	3.369	.001	1.445
Team Satification	.394***	.069	.451	5.739	.000	2.075
R				.809		
R Square				.654		
Adjusted R Square				.645		
Durbin Watson				1.803		
F-value				73.200***		

Source: Survey data, 2019

The standard coefficient (Beta) indicates that the value has positive relationship with team effectiveness on project performance. The Dubin Watson value is close to 2 (1.803). Thus, it indicates that there is no sub correction in sample. All VIF are less than 10. Thus, it shows that there is no multicollinearity problem in this case. This means that there are no correlations among variable.

Therefore, by monitoring and controlling over team result, team survival and individual satisfaction in this organization support better team effectiveness on project performance in organization. In Max Myanmar Construction Co., Ltd, team member in organization are interested in project management, leadership program and team building and communication in workplace. Management and team member maintain current project performance in organization and improve team effectiveness on project performance.

CHAPTER 5

CONCLUSION

In this chapter, it is consisting of three parts. Firstly, finding and discussion which explain about the benefits of this study. Then, suggestion which express about the suggestion of this study. Finally, limitations and need for further research which advice about the requirement to get more deep understanding of this study.

5.1 Findings and Discussions

In this chapter, the findings and discussions of the study are meant for Max Myanmar Construction Co., Ltd development. This study focuses on influencing factor on team effectiveness and project performance in Max Myanmar Construction Co., Ltd. A survey conducted on 120 respondents of team member in Max Myanmar Construction Co.ltd by identifying the compose of gender, age, current position in organization.

After analyzing the surveyed data, based on outcome of mean values, it can assume that employee support team leadership, team relationship, team trust and value and responsibility and team communication. Most of them are believe that team communication is key performance indicator for team effectiveness and project performance. An organization should focus on model of team leadership and team communication that related with project performance. Additionally, the effect of team communication for decision making for leadership and clear on team role and responsibility.

In this study, firstly there are inflecting factors of team leadership, team role and responsibility and team communication on team results. The data suggests that a correlation between independent variables such as team leadership, team role and responsibility and team communication and dependent variable team results. It means that the respondents support leadership of organization and communication with leader. They understand team role and responsibility in organizational improvement. Secondly, there are influencing factors team communication on team survival. Analysis confirm that a correlation between independent variables team communication and dependent variable team survival. It means that the respondents agreed communication is mainly important than another factor for team survival.

It means that member in organization shared knowledge and training program. Thirdly, there are influencing factors team communication on individual satisfaction. A study demonstrates the correlation between independent variables team communication and dependent variable individual satisfaction. It also means that respondents agreed communication is mainly important than other factors for individual satisfaction. It could be today technology and transparency improvement in organization

From its analysis, the study shows that Influencing factors such as team result, team survival and individual project performance of Max Myanmar Construction Ltd. The result indicates that team effectiveness in a organization is important factors for project improvement in organization.

5.2 Suggestions and Recommendations

An effectiveness team can support and contribute an organization achievement and project performance. Most of organization are interested to offer not only to get leadership but also to train leader who can contribute to train individual team. It is hard to survive stand only or individual. Thus, the skills on today workplace need work as a team or family.

In this study, the results show that team communication and role and responsibility are the effectiveness to create team effectiveness in project performance. The analysis results indicate that how the different team member perceive the influence of team effectiveness on project performance. Thus, c

For team leadership, the organization should support training program for leadership and personal development. For team role and responsibility, the organization should clarify team role and responsibility by individual or team for resource management. And the organization should provide clear job scope and job description with updated format.

For team role and responsibility, the organization should inspect and improve on official and non-official. It is recommended that having well defined and realistic goals, roles and responsibilities and team communication are necessary for successful construction projects and project performance. It is suggested that having well defined and goals, roles and responsibilities and appropriate leadership are necessary for success.

5.3 Needs for the Further Research

While this research added to the discussion on team effectiveness on project performance in Max Myanmar construction Co., ltd. This study focuses on views of the team member in Max Myanmar Construction Co., Ltd. Therefore, there are some areas which could be investigated in future studies. Moreover, this research is applied by using self-administered questionnaires and most of the questions are in quantitative nature by using self-rating Likert-scale. Opened ended questions should be included in next research and to explore more courses of team effectiveness in project performance, interview method or focus group discussion method should be added for further research.

This study used the normative model of Hackman and team effectiveness model to investigate the factors that significantly influence project performance. Team result, team survival and individual satisfaction is used to measure influencing factor of the team effectiveness. Other aspect of team effectiveness model technology in modern time and change process in team member should consider to relationship of team effectiveness and project performance in project team and career development for team. Thus, other team effectiveness model which consider the application of technology to be suitable with today modern environment.

REFERENCES

- Azmy, N. (2012). The role of team effectiveness in construction project teams and project performance. *Graduate Theses and Dissertations*. 12265.
- Bai, J. F., Yang, X. Y., & Tao, L. H. (2011, September). Research on construction project process performance measurement. In *2011 IEEE 18th International Conference on Industrial Engineering and Engineering Management* (pp. 1915-1918). IEEE.
- Baiden, B. K., & Price, A. D. (2011). The effect of integration on project delivery team effectiveness. *International Journal of Project Management*, 29(2), 129-136.
- Campion, M. A., Papper, E. M., & Medsker, G. J. (1996). Relations between work team characteristics and effectiveness: A replication and extension. *Personnel psychology*, 49(2), 429-452.
- Dainty, A., Moore, D., & Murray, M. (2007). *Communication in construction: Theory and practice*. Routledge.
- Day, D. V., Gronn, P., & Salas, E. (2006). Leadership in team-based organizations: On the threshold of a new era. *The Leadership Quarterly*, 17(3), 211-216.
- Doorewaard, H., Van Hootegem, G., & Huys, R. (2002). Team responsibility structure and team performance. *Personnel review*, 31(3), 356-370.
- Driskell, J. E., & Salas, E. (1992). Collective behavior and team performance. *Human factors*, 34(3), 277-288.
- Ibrahim, C. K. I., Costello, S. B., & Wilkinson, S. (2011). Key relationship-oriented indicators of team integration in construction projects. *International Journal of Innovation, Management and Technology*, 2(6), 441.
- Kwofie, T. E., Alhassan, A., Botchway, E., & Afranie, I. (2015). Factors contributing towards the effectiveness of construction project teams. *International Journal of Construction Management*, 15(2), 170-178.
- Kwofie, T. E., Alhassan, A., Botchway, E., & Afranie, I. (2015). Factors contributing towards the effectiveness of construction project teams. *International Journal of Construction Management*, 15(2), 170-178.
- Mehta, A., Feild, H., Armenakis, A., & Mehta, N. (2009). Team goal orientation and team performance: The mediating role of team planning. *Journal of Management*, 35(4), 1026-1046.

- Meng, X. (2012). The effect of relationship management on project performance in construction. *International journal of project management*, 30(2), 188-198.
- Nygren, R., & Levine, E. L. (1996). *Leadership of work teams: Factors influencing team outcomes*. Elsevier Science/JAI Press.
- Ortega, A., Sánchez-Manzanares, M., Gil, F., & Rico, R. (2010). Team learning and effectiveness in virtual project teams: The role of beliefs about interpersonal context. *The Spanish Journal of Psychology*, 13(1), 267-276.
- Peterson, M. F., Smith, P. B., Akande, A., Ayestaran, S., Bochner, S., Callan, V., ... & Hofmann, K. (1995). Role conflict, ambiguity, and overload: A 21-nation study. *Academy of Management Journal*, 38(2), 429-452.
- Pinto, J. K., Slevin, D. P., & English, B. (2009). Trust in projects: An empirical assessment of owner/contractor relationships. *International Journal of Project Management*, 27(6), 638-648.
- Schaubroeck, J., Lam, S. S., & Cha, S. E. (2007). Embracing transformational leadership: Team values and the impact of leader behavior on team performance. *Journal of applied psychology*, 92(4), 1020.
- Senaratne, S., & Gunawardane, S. (2015). Application of team role theory to construction design teams. *Architectural Engineering and Design Management*, 11(1), 1-20.
- Senaratne, S., & Hapuarachchi, A. (2009). Construction project teams and their development: case studies in Sri Lanka. *Architectural Engineering and Design Management*, 5(4), 215-224.
- Van Roosmalen, T. M. (2012). *The development of a questionnaire on the subjective experience of teamwork, based on Salas, Sims and Burke's "the big five of teamwork" and Hackman's understanding of team effectiveness*, Master's thesis, The Norwegian University of Science and Technology.
- Walker, D. H. (1995). The influence of client and project team relationships upon construction time performance. *Journal of Construction Procurement*, 1, 4-20.
- Walker, D. H. (1995). The influence of client and project team relationships upon construction time performance. *Journal of Construction Procurement*, 1, 4-20.
- Zenun, M. M. N., Loureiro, G., & Araujo, C. S. (2007). The Effects of Teams' Co-location on Project Performance. In *Complex systems concurrent engineering* (pp. 717-726). Springer, London.

APPENDIX A

Dear Participants,

I am a student of Yangon University of Economics, Department of Management Studies. This questionnaire is designed for the research which is studying on the **“Influence of Team Effectiveness on Project Performance in Max Myanmar Construction Co., Ltd Projects.”** All information you provide will be kept strictly confidential and used only for academic and research purpose. Thank you for your time.

Sincerely,

CHUE MIN

EMBA 16th Batch

For each statement, please indicate by ticking the appropriate rating that describes your opinion from your past experience of working in a team for the above building construction project in which fit the purpose of this questionnaire.

SECTION A: GENERAL INFORMATION

Please choose only one answer for each question listed below.

1. Gender

- Male Female

2. Age (Years)

- Under 30 31-40 years 41-50 years Over 50 years

3. Size of your project team.

- 2-4 people
 5-6 people
 7-10 people
 more than 10

4. What is your current position in the company?

SECTION B: INFLUENCING FACTORS ON TEAM EFFECTIVENESS

Please describe to what extent you agree (√) with each of the following statements regarding the influencing Factors on team effectiveness by using the scales where:

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

No.	Team Leadership	1	2	3	4	5
1	I feel comfortable with the concept of shared leadership.					
2	I spend time with team members to clarify team's expectations.					
3	Team exercises good judgment during decision-making process					
4	Team members provide input/thoughts throughout the project.					
5	I help my team whenever anyone has difficulties performing tasks.					

No.	Team Relationship	1	2	3	4	5
1	Effective conflict management is exercised within the team.					
2	Team works constructively on issues arise until they are resolved.					
3	I care about the welfare of my teammates.					
4	My teammates care about each other's.					
5	Decisions are made with the involvement of all team members.					

No.	Team Trust and Value	1	2	3	4	5
1	As a member of the team, I am treated with respect.					
2	The team members trust each other.					
3	My contributions for the team are recognized.					
4	The team members support each other.					
5	The team believes trust is an important component.					

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

No.	Team Goals and Objectives	1	2	3	4	5
1	I understand team's goals and objectives.					
2	My teammates understand team's goals and objectives.					
3	Team agrees on team's goals and objectives.					
4	Team goals and objectives are consistent with team members.					
5	Team is committed to achieve team's goals and objectives.					

No.	Team Role and Responsibility	1	2	3	4	5
1	Team members are willing to take initiative for unassigned tasks.					
2	Team members are willing to help with unforeseen problems that need immediate attention.					
3	I am clear on my individual roles in relations to the team as a whole.					
4	I agree with assigned roles and responsibilities.					
5	Team understands the responsibilities assigned to them.					

No.	Team Communication	1	2	3	4	5
1	Interactive communication is present within the team.					
2	Team members participate in team's discussion.					
3	Communications outside meetings are effective.					
4	Team meetings produce clear outcomes.					
5	Team members share know-how from work experience with each other					

SECTION C: TEAM EFFECTIVENESS

Please describe to what extent you agree (√) with each of the following statements regarding the team effectiveness by using the scales where:

1 = Strongly Disagree 2= Disagree 3 = Neutral 4= Agree 5 = Strongly Agree

No.	Team Result	1	2	3	4	5
1	My project team is very successful in its efforts.					
2	Team members receive positive feedback on our performance.					
3	Those affected by the decisions of the project team are generally very satisfied with the decisions we make.					
4	Team members implement the decisions made by the project team.					
5	Client satisfy the project team.					

S

No.	Team Survival	1	2	3	4	5
1	It is easy to solve problems and controversial issues in this management team.					
2	I feel proud to belong to this project team.					
3	We have developed a team culture that help us performs as an effectiveness management.					
4	It is clearly expected that we cooperate and help one another in our team.					
5	The project team has the potential to produce high-quality work					

No.	Individual Satisfaction	1	2	3	4	5
1	I develop my professional competencies by participating in this team.					
2	Working in this team contributes to my learning.					
3	I really enjoy working together with my team colleagues.					
4	I get a lot of satisfaction by working in this team.					
5	I will continue to work at this company.					

SECTION D: PROJECT PERFORMANCE

Please describe to what extent you agree (√) with each of the following statements regarding the project performance by using the scales where:

1 = Strongly Disagree 2= Disagree 3 = Neutral 4= Agree 5 = Strongly Agree

No.	Project Performance	1	2	3	4	5
1	Project team successfully achieved the project objectives.					
2	Project completed met the quality standard specified during the earlier phase.					
3	Project was completed within budget.					
4	Project team managed waste control.					
5	The project was completed on time.					
6	Reports and documentation were prepared within the time given.					
7	The team established a sense of urgency and adjustments were promptly made to maintain or improve the schedule.					
8	Good service of the contractor was demonstrated during the project.					
9	Project team communicated with the client in an effective manner.					
10	Project team control risk monitoring and control during project execution.					

Thank you for completing the questionnaire.

APPENDIX B

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.733a	.538	.513	.45919	.538	21.927	6	113	.000	1.748
a. Predictors: (Constant), Mean Team Communication, Mean Trust and Value, Mean Team leadership, Mean Team Goal and Objective, Mean Team Role and Responsibility, Mean Team Relationship										
b. Dependent Variable: Mean_Team Result										

ANOVAa						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.740	6	4.623	21.927	.000 ^b
	Residual	23.826	113	.211		
	Total	51.567	119			
a. Dependent Variable: Mean_Team Result						
b. Predictors: (Constant), Mean_Team Communication, Mean Trust and Value, Mean Team leadership, Mean Team Goal and Objective, Mean Team Role and Responsibility, Mean Team Relationship						

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
	Mean Team leadership	.207	.104	.194	1.990	.049	.001	.413	.432	2.316
	Mean Team Relationship	.014	.106	.014	.132	.895	-.195	.223	.369	2.710
	Mean Trust and Value	.056	.060	.077	.936	.351	-.063	.175	.600	1.666
	Mean Team Goal and Objective	-.071	.111	-.065	-.641	.523	-.291	.149	.394	2.538
	Mean Team Role and Responsibility	.338	.100	.354	3.383	.001	.140	.535	.373	2.683
	Mean_Team Communication	.285	.130	.264	2.185	.031	.027	.542	.280	3.578

a. Dependent Variable: Mean_Team Result

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.552 ^a	.304	.267	.65005		8.236	6	113	.000	1.867

a. Predictors: (Constant), Mean_Team Communication, Mean Trust and Value, Mean Team leadership, Mean Team Goal and Objective, Mean Team Role and Responsibility, Mean Team Relationship

b. Dependent Variable: Mean_Team_Survival

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.882	6	3.480	8.236	.000b
	Residual	47.750	113	.423		
	Total	68.632	119			
a. Dependent Variable: Mean_Team_Survival						
b. Predictors: (Constant), Mean_Team Communication, Mean Trust and Value, Mean Team leadership, Mean Team Goal and Objective, Mean Team Role and Responsibility, Mean Team Relationship						

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	1.044	.414		2.524	.013	.225	1.863		
	Mean Team leadership	.035	.147	.028	.235	.814	-.257	.327	.432	2.316
	Mean Team Relationship	.102	.149	.088	.685	.495	-.194	.398	.369	2.710
	Mean Trust and Value	.018	.085	.021	.212	.833	-.151	.187	.600	1.666
	Mean Team Goal and Objective	.021	.157	.017	.135	.893	-.290	.332	.394	2.538
	Mean Team Role and Responsibility	.153	.141	.139	1.082	.282	-.127	.433	.373	2.683
	Mean_Team Communication	.404	.184	.325	2.191	.031	.039	.769	.280	3.578
a. Dependent Variable: Mean_Team_Survival										

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.767 ^a	.589	.567	.42265	.589	26.956	6	113	.000	2.011
a. Predictors: (Constant), Mean_Team Communication, Mean Trust and Value, Mean Team leadership, Mean Team Goal and Objective, Mean Team Role and Responsibility, Mean Team Relationship										
b. Dependent Variable: Mean_Team_Satisfaction										

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.891	6	4.815	26.956	.000 ^b
	Residual	20.186	113	.179		
	Total	49.077	119			
a. Dependent Variable: Mean_Team_Satisfaction						
b. Predictors: (Constant), Mean_Team Communication, Mean Trust and Value, Mean Team leadership, Mean Team Goal and Objective, Mean Team Role and Responsibility, Mean Team Relationship						

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.496	.269		1.846	.068	-.036	1.029		
	Mean Team leadership	.136	.096	.131	1.423	.158	-.054	.326	.432	2.316
	Mean Team Relationship	.074	.097	.075	.760	.449	-.119	.266	.369	2.710
	Mean Trust and Value	.067	.055	.094	1.203	.232	-.043	.176	.600	1.666
	Mean Team Goal and Objective	.103	.102	.097	1.012	.314	-.099	.305	.394	2.538
	Mean Team Role and Responsibility	.115	.092	.124	1.256	.212	-.067	.297	.373	2.683
	Mean_Team Communication	.398	.120	.379	3.319	.001	.160	.635	.280	3.578
a. Dependent Variable: Mean_Team_Satisfaction										

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.809 ^a	.654	.645	.33370	.654	73.200	3	116	.000	1.803
a. Predictors: (Constant), Mean_Team_Satisfaction, Mean_Team_Survival, Mean_Team Result										
b. Dependent Variable: Mean_Team_Performance										

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.454	3	8.151	73.200	.000 ^b
	Residual	12.917	116	.111		
	Total	37.372	119			
a. Dependent Variable: Mean_Team_Performance						
b. Predictors: (Constant), Mean_Team_Satification, Mean_Team_Survival, Mean_Team Result						

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.732	.199		3.680	.000	.338	1.126		
	Mean_Team Result	.228	.066	.268	3.471	.001	.098	.359	.499	2.005
	Mean_Team_Survival	.163	.048	.221	3.369	.001	.067	.259	.692	1.445
	Mean_Team_Satification	.394	.069	.451	5.739	.000	.258	.530	.482	2.075
a. Dependent Variable: Mean_Team_Performance										