# YANGON UNIVERSITY OF ECONOMICS DEPARTMENT OF MANAGEMENT STUDIES MBA PROGRAMME

# EFFECT OF PROJECT MANAGEMENT, EXTERNAL ENVIRONMENT AND HUMAN FACTORS ON SUCCESS OF PROJECTS IN SAN SAPAL PWINT CO., LTD

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**Academic Year (2016~2019)** 

Supervised by: Submitted by:

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This thesis is submitted to the Board of Examiners in partial fulfillment of the requirements for the degree of Master of Business Administration (MBA)

**Supervised By:** Submitted By:

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# **ACCEPTANCE**

This is to certify that this thesis entitled "Effect of Project Management, External Environment and Human Factors on Success of Projects In San Sapal Pwint Co., Ltd " has been accepted by the Examination Board for awarding Master of Business Administration (MBA) degree.

	<b>Board of Examiners</b>	
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(Supervisor)		(Examiner)
(Examiner)		(Examiner)

# DECEMBER, 2019

# CHAPTER 1 INTRODUCTION

This chapter is composed of rationale of the study, objectives of the study, scope and method of the study and organization of the paper. The thesis title is "Effect of Project Management, External Environment and Human Factors on Success of Projects in San Sapal Pwint Co., Ltd".

The Chartered Institute of Building (1996) has defined project management as the overall planning, co-ordination and control of a project from inception to completion aimed at meeting a client's requirements in order to produce a functional and financially viable project that will be completed on time within authorised cost and to the required quality standard.

Project management is a form of procurement designed to act as an integrating function, to pull together combinations of resources into temporary organisations to achieve a required purpose. The main advantage of the project management system is that it offers integration by including a professional site management service in addition to architects, cost consultants, structural, mechanical/electrical engineering consultants, site managers, planners, and buyers.

Project is a single use plan to achieve a certain objective of introducing something unique or a change and ensure that progress is maintained in line with the objective, generally in terms of time, cost, and various technical and quality performance parameters. The purpose of project management is to foresee or predict as many dangers and problems as possible; and to plan, organise and control activities so that the project is completed as successfully as possible in spite of all the risks. Effective objectives in project management are specific. A specific objective increases the chances of leading to a specific outcome.

The end result of a project is fited the purpose for better performaaance and quality. In more recent years the concept of total quality management has come to the fore, with the responsibility for quality shared by all staff from top management downwards. The project must be completed without exceeding the authorised expenditure. Financial sources are not always inexhaustible and a project might be abandoned altogether if funds run out before completion. All significant stages of the project must take place no later than their specified dates, to result in total completion on or before the planned finish date.

Today's competitive and dynamic global economy in every organization have developed a completely new ways of doing business that is turning to project management to consistently deliver business results. Projects are completed by terms of people who are specially chosen for their skills, knowledge and potential to contribute to the final result. The main purpose of this study is to get maximum return by using the maximum resosurces, to reduce the risk of failure and to increase the chance of success of San SaplPwint Co., ltd.

# 1.1 Rationale of the Study

SSP Company has been implementing construction projects (building and renovation projects) for private banks' branches. Since private banks are focusing on market coverage, and opening new branches in various places throughout the country, the business opportunity is higher for construction businesses, particularly SSP company. However, at rhe other hand, the competition is fierce in construction industry due to rising number of new construction companies and price fluctuation of raw materials.

Moreover, clients' bargaining power is getting higher, and the coordination and cooperation of clients are crucial to project success. Some construction firms are struggling to adapt to changing external forces (economic, socio-cultural, and political changes) and also to get appropriate support from client side. Some construction firms are trying to manage their projects by doing project management actions effectively.

However, in this era of challenging and competition, construction firms must have both project management effectiveness and ability to cooperate with clients and to respond to changing external environment.

# 1.2. Objectives of the Study

There are three main objectives:

- To examine the effect of project management actions on project success.
- To explore the influence of external environment on project success.
- To analyze the effect of human factors on project success.

# 1.3 Scope and Method of the Study

The descriptive research method is used in this study. This study focuses only on factors influencing project success in San Sapal Pwint Co., Ltd. Both primary data and secondary data are collected. The primary data are collected from managing director,

project director, head office staff, engineers of SSP who are supervising and managing projects' work packages such as information technology (IT), electrical work, civil work, design work as well as all other construction work and contractors with personal interviews. Simple random sampling method is applied to select 30 persons from total 70 persons who are such kind of persons as mentioned. In personal interviews, structured questionnaires are used. The secondary data are collected from recorded data, documented policies, research papers, websites and SSP company documented and record datas.

# 1.4 Organization of the Study

The paper includes five chapters. Chapter one is about the introduction of this paper. It includes rationale of the study, objective of the study, scope and method of the study and organization of the study. Chapter two presents an overview of relevant literature including the theoretical background. Chapter three presents the project management of SSP Co., Ltd. Chapter four includes analysis on factors (project management, external environment, and human resource factors) affecting on success of projects in SSP Co., Ltd. Chapter five presents the finding and discussion, suggestion and recommendation, needs for further research study.

# **CHAPTER 2**

#### THEORETICAL BACKGROUND

In this chapter, factors considered in the study, project management actions, external environment and human factors definitions are included.

# 2.1 Project Management

Project management is "the function of planning, costing, controlling and evaluating a project, so that it is completed on time, to specification and to budget" (Radcliffe, 1984), The project management is the planning, co-ordination and control of a project from conception to completion on behalf of a client requiring the identification of the client's objectives in terms of utility, function, quality time and cost, and the establishment of relationships between resources, integrating, monitoring and controlling the contributors to the project and their output, and evaluating and selecting alternatives in pursuits of the client's satisfaction with the project outcome" (Walker, A, 1996)

Project management is the discipline of using established principles, procedures, and policies to manage a project from conception through completion. Project management oversees the planning, organizing and implementing of a project. Another way of illustrating the unique nature of project work is in terms of the project life cycle. The project life circle is the series of phases that a project passes through from its initiation to its closure. Project effort starts slowly, builds to a peak, and then declines to delivery of the project to the client.

Project management has become an organization-wide core competency; nearly every manager, regardless of discipline is involved in managing one or more projects. Project management has developed to the point where it is a professional discipline having its own body of knowledge and skills. Today it is nearly impossible to imagine anyone at any level in the organization who would not benefit from some degree of experise in the process of managing projects. Project management provides people with a powerful set of tools that improves their ability to plan, implement, and manage activities to accomplish specific objectives. Project management brings a unique focus shaped by the goals, resources and schedule of each project. The main objective of project management is to meet specified performance within cost and time schedule (Meredith& Mantel, Jr. 2003).

# 2.2 General Factors Affecting Project Success

A number of variables influencing the success of project implementation were identified following review of these articles. The term CSF's in the context of the management of projects was first used by Rockart in 1982 and is defined as those factors predicting success on projects (Sanvido et al.1992). A careful study of previous literature suggests that CSF's can be grouped under five main categories. These include human-related factors, project-related factors, project procedures, project management actions, and external environment.

# (a) Project-Related Factors

Chan, Scott and Chan (2004) presented the project-related factors which are affecting project success. The attributes used to measure this factor are type of project, nature of project, number of floors of the project, complexity of project, and size of project.

#### (b) Procurement- Related Factors

A number of researchers identified the importance of procurement factors (Pocock et al.1997a, 1997b; Walker 1999; Kumaraswamy and Chan 1999; Walker and Vines 2000. Dissanayaka and Kumaraswamy (1999) defined the scope of procurement as the framework within which construction is brought about, acquired or obtained. Therefore, two attributes are procurement method (selection of the organization for the design and construction of the project) and tendering method (procedures adapted for the selection of the project team and its particular the main contracton).

#### (c) Project Management Actions

Project management action is a key for project success (Hubbard 1990). Jaselskis and Ashley (1991) suggested that by using the management tools, the project managers would be able to plan and execute their construction projects to maximize the project's chances of success. Then, the variables in project management include adequate communication, control mechanisms, feedback capabilities, troubleshooting, coordination effectiveness, decision making effectiveness, monitoring, project organization structure, plan and schedule followed, and related previous management experience (Belout 1998; Chua et al, 1999; Walker and Vines 2000).

A number of attributes will affect this factor, including the communication system, control mechanism, feedback capabilities, planning effort, organization structure, safety and quality assurance program, control of subcontractors works, and finally the overall managerial actions.

#### (d) External Factors

Various researchers support "environment" as a factor of affecting the project success (Akinsola et al, 1997; Kaming et al, 1997; Songer and Molenaar 1997; Chua et al, 1999; Walker and Vines 2000). Akinsola et al,(1997) further described "environment" as all external influences on the construction process, including social, political, and technical systems.

The attributes used to measure this factor are economic environment, social environment, political environment, physical environment, industrial relation environment, and level of technology advanced.

# (e) Project Participants- Related Factors

Chua et al, (1999) defined project participants as the key players, including project manager, client, contractor, consultants, subcontractor, supplier and manufacturers. Walker (1995) considered influence of client and client's representative as a significant factor on construction time performace. The client-related factors concerned with client characteristics, client type and experience, knowledge of construction project organization, project financing, client confidence in the construction team, owner's risk aversion, client project management (Chan and Kumaraswamy1997;SongernndMolenaaar 1997; Dissanayaka and Kumaraswamy 1999).

Designers play a vital role as their work involves from inception to completion on a project. Chan and Kumaraswamy (1997) considered that design team-related factors consist of design team experience, project design complexity and mistakes/ delays in producing design documents.

The main contractor and subcontractors start their main duties when the project reaches the construction stage. The variables include contractor experience, site management, supervision and involvement of subcontracting, contractor's cash flow, effectiveness of cost control system, and speed of information flow (Chan and Kumaraswamy 1997; Dissanayaka and Kumaraswamy 1999).

The project manager is another key stakeholder in a consruciton project and his competence is a critical factor of affecting project planning, scheduling, and communication (Belassi and Tukel 1996). Variables under this factor consist of the skills and characteristics of project managers, their commitment, competence, experience and authority (Chua et al, 1999).

A construction project requires team spirit, therefore team building is important among different parties. Team effort by all parties to a contract-owner, architect,

construction manager, contractor, and subcontractors- is a crucial ingredient for the successful completion of a project (Hasan 1995).

The attributes of this factor can be mainly divided into two categories: one is related to client, another is the project team. For the first group, it includes client's experience of ability, nature of client, size of client organization, client's emphasis on cost, time and quality and client constribution to the project. For the second group, it includes project team leader's experience and skills, project team leader's committent on time, cost and quality, project team leader's involvement, project team leader's adaptability and working relationship, and the last one is support of the project team leader's parent companies.

# 2.3 Specific Factors Affecting Project Success

In this study, only three factors are considered as influencing factors on project success. Chan and Scott (2004) presented some specific factors which are influencing and also important for project success. These factors can be grouped into three: project management actions, external environment and human-related factors.

# 2.3.1 Project Management Actions

As the project management actions, planning, communication systems and control mechanism are considered.

# (a) Planning

The advantages of project planning are reducing risk, clarifying objectives, setting standards for performance, setting up structure for implementation, and setting up a control system. The components of a project plan are objectives, methodology, scheduling budget, organizational structure, procedures for control, procedures for communication, and performance standards. Thinking, planning and information collection must finally reach a point of no return and must be followed by action. Knowledge and information do not lead automatically to action. Planning process consists of these activities performed to set up the total scope of the effort, define and refine the objectives and develop the course of action required to meet defined objectives. The planning process develops the project management plan and the project documents that will be used in carrying out the project.

In the planning stage, every scope of work must be clearly described what to be performed including specifications, every project task is identified and group them as key stages of the project, order key stages in a logical order taking into account any dependencies. Assign duration to each stage. Break down key stages into several levels of detail. Develop an operational plan for each key stage allowing for contingencies. Prepare

budget carefully based on accurate scope of work statement, complete standards and specifications, work schedules with correct time estimates, and considering inflation. Determine project milestones (start, end, and duration of each stage) and represent them on a Gantt chart. The project planning should include the five major tasks such as assigning project manager, organizing project team, developing work breakdown structure (WBS), specifying the time and budget, and project scheduling.

# (b) Communication Systems

During construction stage, the architects, project directors, project managers and client's representative always communicate regular meetings by the contractors and necessary members of the consultant team. Meetings are an important part of the successful management of construction projects. Regular meetings can help facilitate better communication and a shared sense of purpose making it more likely that the project is completed successfully. Project failures are often attributed to inadequate management, with a key factor being a lack of proper communication. Proper meetings are used as a means of reporting progress, enabling discussion of any problems or issues, and allowing the proposal of solutions. They provide a good opportunity for two-way discussions of any issues that have arisen or that are anticipated. Holding meetings on site enables to see progress rather than relying on a report for another party and to look at problem areas, discuss quality issues, assess mock-ups and so on.

Progress meetings are a specific sort of project meeting during which the contract administrator receives progress reports from the contractor and consultant team, cost reports from the cost consultant and other more specific information such as sub contractor reports, progress photos and so on. Meeting minutes should be prepared, with a requirement that any disagreement with the items recorded in the minutes is raised within a pre-defined period. Progress meetings may also result in the preparation of a construction progress report for the client.

A monthly meeting where all parties to the contract: contractor, employer, consultants are to attend to discuss, review, decide on all matters pertaining to the contract works. A monthly meeting should be scheduled from the day the construction works starts, with the 1<sup>st</sup> meeting being the kick-off meeting/ site handover when the contract is officially handed over from the owner of the project to the contractor. This is an important meeting as all rules, regulations, basic contractual matters are clearly laid out and formulated for the whole works. The contractor will have to submit his organization structure, clarifications of main issues, while the employer will lay out his obligations and highlight specific

requirements in the contract. The consultant for the project will be the person to coordinate the relationships between the employer and the contractor, and he will lay down the specific requirement for compliance by both parties.

Site technical meetings should be held on a weekly basis and more regular if there are crucial issues to be discussed. It should be a purely technical work meeting., where site problems are solved immediately. It should not be formal and minutes need not be prepared, however, attendance record should be forwarded to managers, and any issues cannot be solved should be broght to attention of managers.

Similar meetings may be held on management contract projects between the management contractor and the works contractors. Other meetings held on site might include safety briefings and toolbox talks which are held to ensure that workers properly consider health and safety issues on site. Clearly obvious is that every meeting should have an objective and that all the attendees should know what that objective is before they attend. So it is essential to clarify the purpose of the meeting for each and every meeting to ensure there genuinely is a purpose. The key to successful project meeting is that participant must know why they personally need to be there, why the meeting is being held and what is going to be discussed.

# (c) Control Mechanisms

Methods of managing variables in a desirable way. For example, a production manager at manufacturing business might install a variety of control mechanisms to help monitor the workers and adjust the flow of materials and other production inputs to maximize overall production efficiency in generating the desired amount of outputs. Control mechanisms play an important role in any business organization, without which the roles of managers get constrained. Control is required for achieving the goals in a predefined manner because it provides the instruments which influence the performance and decision making process of an organization. Control is in fact concerned with the regulations applied to the activities within an organization to attain expected results in establishing policies, plans and practices.

There are three major objectives for having a control mechanism in an international firm. They are- to get data and clues for the top management for monitoring, evaluating and adjusting decisions and operational objectives. Control mechanisms help to get clues based on which common objectives can be sent to get optimum coordination among units. Control mechanisms evaluate the performance metrics of managers at each level.

There are various modes of control. The most influential ones are the following-

#### (i) Personal Controls

Personal controls are achieved via personal crect supervision of contact with the subordinates. It is the most widely used type of control mechanism in small firms for providing direct supervision of operational and employee management. Personal control used to construct relationship processes between managers at different levels of employees in multinational companies. CEO of international firms may use a set of personal control policies to influence the behavior of the subordinates.

#### (ii) Bureaucratic Controls

These are associated with the interent bureaucracy in an international firm. This control mechanism is composed of some system of rules and procedure to direct and influence the actions of sub-units.

The most common example of bureaucratic control is found in case of capital spending rules that require top management's approval when it exceeds a certain limit.

# (iii) Output Controls

Output Controls are used to set goals for the subsidiaries to achieve the targeted outputs in various departments. Output control is an important part of international business because a company's efficiency in relative to bureaucratic control.

The major criteria for judging output controls include productivity, profitability, growth, market share, and quality of products.

#### (iv) Cultural Controls

Corporate culture is a key for derving maximum output and profitability and hence cultural control is a very important attribute to measure the overall efficiency of a firm. It takes form when employees of the firm try to adopt the norms and values preached by thw firm. Employees usually tend to control their own behavior following the cultural control norms of the firm. Hence, it reduces the dependence on direct supervision when applied well.

# 2.3.2 External Environment

In this study, external environment factors of economics, social, political and legal are considered.

# (a) Economics Factors and Project Management

Economics of project management plays a way vital role in the successful implementation of the proposal. Good management consists primarily of making wise decisions; wise decisions in turn involve making a choice between alternatives.

Engineeering considerations determine the possibility of a project being carried out and point out the alternative ways in which the project could be handled. Economic considerations also largely determine a project's desirability and dictate how it should be carried out. A feasibility study determines either the which or the whether of the proposed project which way to do it or whether do it at all.

A similar sequence of ten clearly defined steps is involved in carrying out the economic analysis of a project:

- Understand the problem
- Define the energy integrated system
- Collect the data
- Interpret the data
- Devise the alternatives
- Evaluate the alternatives
- Identify the best alternatives
- Suggest the best alternative to the director of the project and get the feedback information
- Monitor the results
- Determine that the energy integrated system could be disseminated, including where and under what conditions.

# (b) Social Factors and Project Management

When working with internal and external customers on a project, it is essential to pay close attention to relationships, context, history, and the corporate culture. Corporate culture refers to the beliefs, attitudes, and values that the organization's members share and the behaviors consistent with corporate culture. Corporate culture sets one organization apart from another, and dictates how members of the organization will see interact and sometimes judge. Often, projects too have a specific culture, work norms, and social convention.

Some aspects of corporate culture are easily observed; others are more difficult to discern. In one company, individuals work separately in closed offices; in another, teams may work in a shared environment. The more subtle components of corporate culture, such as the values and overarching business philosophy, may not be readily apparent, but they are reflected in member behaviors, symbols and conversation used.

Conflict away project team members is also one of the cultural factors affecting project success. If a team wants to overcome (or harness) conflict for effectiveness and productivity, the question is how to navigate and resolve the conflicts. Conflict that springs from diversity can actually assist the team in completing complex problem solving. However, if not navigated successfully, it can create relationship strain and derail achievement due to increased difficulties in communication and coordination.

As the global marketplace continues its rapid expansion, researchers are increasingly turning attention to the issue of conflict management. Differing social and cultural values don't necessarily increase the number of conflicts a team will experience, but can have an impact on how conflicts are managed and resolved. Cultural awareness is needed for understanding and appreciating other's values and behavioral norms. Without that, foregin assignments will become an overwhelming challenge. Self-awareness and skill development can aid in resolving the problematic conflict arirsing from cultural differences to help a team maintain good relation and remain productive.

# (c) Political and Legal Factors and Project Management

The type of working relationships and personl dynamics that develop between the members of a project team and others involved in a project such as stakeholers and senior executives, can determine how smoothly a project progresses and ultimately how successful it is. In a group with good working relationships problems can be dealt with easily and conflicts handled maturely without causing the project to flounder. Meetings can consist of jostling for power or simply trying to justify position and when that happens progress on the project will suffer.

Office politics can be difficult to define but all are usually recognizing the symptoms and they almost always involve a struggle for power whether that entails simply trying to keep the job or to be promoted; and they are difficult to avoid even if not personally involved.

Sometimes the politics are not internal but involve the client trying to avoid power to get more out of the project than the original contract included; maybe more functionally for the same cost or the agreed functionally for a lower cost? These sorts of problems can be bad for the reputation of a company if a major client starts to publicly criticize the project deliverables and question the success of the final outcome.

In the case of project politics can learn from politicians themselves and use these three key techniques;

#### (i) Look at Both Sides of the Conflict

There are always two sides to every conflict so try and understand both perspectives without losing sight of the fact that the ultimate goal is a successful project. Be a good arbiter and if understand the underlying reasons for the conflict are on step closer to resolving it. Plays for power can often come from underlying job insecurity, for example something which might be in a position to improve or at the very least help broker a compromise.

# (ii) Avoid Complicating the Situation

Don't listen to long explanations of why someone is behaving in a certain way or why tasks have not been completed instead try to cut through all the political baggage and simplify the problem. If necessary, employ new ground rules for everyone to follow or halt the project temporarily while the problem is resolved.

# (iii) Remind Everyone of the Benefits for Them Personally

People can often lose sight of the benefits of a project to them personally once they are embroiled in the day to day tasks so remind everyone why the project is being done and what will get out of it. Of course, job satisfaction is important but if the project politics have got so bad that have become a problem than the potential benefits need to be something more tangible such as the company maintaining their reputation so they stay in business everyone keeps their job. That's a useful focus for anyone.

# 2.3.3 Human Related Factrs and Project Management

As the human related factors, the two common factors are considered in this study. These factors are project manager related factors and client related factors.

# (a) Role of the Project Manager

A project manager is a person who has the overall responsibility for the successful initiation, planning design, execution, monitoring, controlling, and closure many different industries that produce products and services use this job title.

The project manager must have a combination of skills including an ability to ask penetrating questions, detect unstated assumptions and resolve conflicts as well as more general management skills.

Key among the project manage's duties is the recognition that risk directly impacts the likehood of success and that the risk must be both formally and informally measure throughour the lifetime of a project. Risk arise from uncertainly and the successful project manager is the one who focuses on this primary concern, Most of the issues that impact a project result in one way or another from risk, A great project manager can lessen risk significantly often by adhering to a policy of open communication, every significant participant has an opportunity to express opinions and concerns.

A project manager is a person who is responsible for making decisions, both large and small. The project manager should make sure they control risk and minimize uncertainly. Every decision the project manager makes must directly benefit heir project.

#### (b) Role of The Client

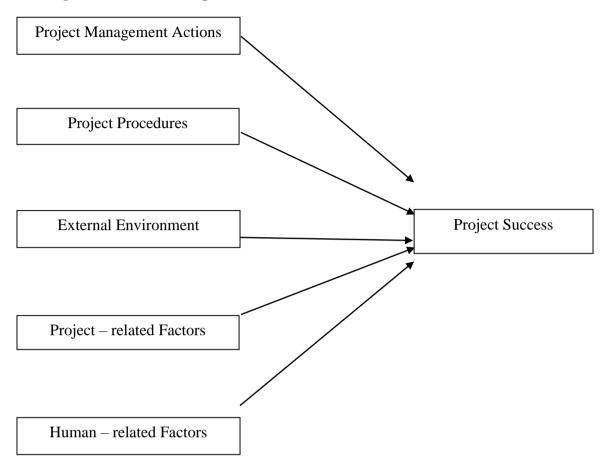
A client's role during project development and implementation is crucial to the success of the project. Project managers, however, often lack support from the client organization's top management. It is very difficult to hold a client accountable for their role in a project. All are wanted to make the clients deliriously happy and meet their expectations. Sometimes this desire can stifle ability to hole client's accountable to the responsibilities and they signed up for when they signed the contract. Of course, all are want to walk away from a project where the client sings our praises. This puts the client in a powerful position when negotiating issues, that arise during a project. At least when they are working with a firm that really cares abut the relationship and outcomes.

Roles and responsibilities are different for every project. It's attempts to decline these clearly and definitely at the start of the project. Review the with the client at the start. Given some recent hiccups, even this communication may need to be reiterated throughout the course of the project.

# 2.4 Previous Study

This study largely based on the conceptual model developed by Chan and Scott (2004). They presented that the factors influencing project success in their article "Factors Affecting the Success of a Construction Project". Their conceptual model is shown in Figure (2.1).

Figure (2.1) Conceptual Framework of Chan and Scott



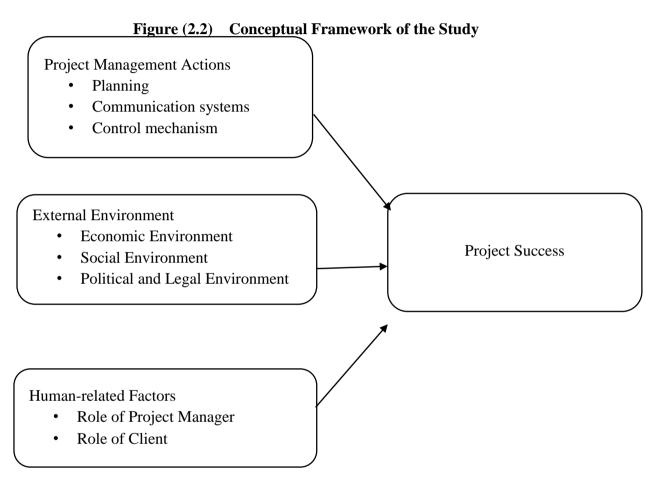
Source: Chan and Scott (2004)

The aim of this paper is to develop a conceptual framework on critical success factors (CSFs). Seven major journals in the construction field are chosen to review the previous works on project success. Five major groups of independent variables, namely project-related factors, project procedures, project management actions, human-related factors, and external environment are identified as crucial to project success.

# 2.5 Conceptual Framework of the Study

The conceptual framework of this study is shown in Figure (2.2). Although Chan and Scott presented that the five factors are influencing project success. In this study, only three factors are considered. These three factors are project management actions,

external environment and human-related factors. Project-related factors are neglected because this study focuses only on one campany. Thus, the scopes and natures of projects conducted by this company will not be different between each other.



Source: Adopted form Chan and Scott (2004)

According to conceptual framework of the study Figure (2.1), this study examines the effect of project management, external environment and human factors on success of projects in San Sapal Pwint Co., Ltd. Project management actions are categorized into three subtypes: planning, communication and control mechanism. External environment is measured into three environments: economics, social, political and legal. Human factors can be influenced by role of project managers and role of client.

# **CHAPTER 3**

# PROJECT MANAGEMENT ACTIONS OF SSP

This chapter introduces the profile of San Sapal Pwint Co.,Ltd (SSP). Then, its project management actions are presented.

#### 3.1 Profile of SSP

The name San Sapal Pwint Co.,Ltd means "Jasmine Flower" and its easy usage is "SSP". The professional works of SSP are structural estimation, construction, renovation and decoration. SSP company serves one stop construction services for residential and commercial projects such as homes, hotels, offices, showrooms, retail outlets, restaurants etc.

Table (3.1) Projects Undertaken by SSP

Sr.No	Projects	Completion
		Date
1	North Oakalapa Branch (Thiriyadanar Whole Sale	27.8.2013
	Compound ) of CB Bank	
2	Tamwe ( Banyardala Branch ) of CB Bank	6.2.2014
3	Kyauktadar Branch ( Maharbandula Street ) of CB Bank	5.6.2014
4	North Oakalapa Branch ( Kaymarthi ) of CB Bank	2.9.2014
5	Shwegonedine Branch of CB Bank	2.9.2014
6	Pabadan Branch ( Konezaydan Street ) of CB Bank	17.2.2015
7	Dagon Branch ( Shwedagon Pagoda Street) of CB Bank	16.7.2015
8	Patanaw Branch of CB Bank	2.4.2016
9	Hlaing Tharyar Branch 2 of CB Bank	2.8.2016
10	Meikhtila Branch ( Min Yat ) of CB Bank	24.4.2017
11	Pyay Lann 9 Mile Branch ( Mayankone ) of CB Bank	24.8.2017
12	Thonegwa Branch of CB Bank	27.1.2019

Source: San Sapal Pwint Co.,Ltd (2019)

SSP also provides structural design, aluminum and glass installation, composite, modern furniture, sign works (including LED), roller shutter installation, ceiling work and all others decorated work as well as civil works. SSP company has skillful person like project director, professional consultants, project managers project supervisors, quality controller, site engineers, quantity surveyors, structural designers and office team. SSP

company started walk in this field since 2013. During this period, SSP worked many projects which are successfully completed to satisfaction of clients. SSP company working together of directors who can do good management, project managers who have good technical knowledge, staffs who have good experiences in construction work. Implementations are consistently supervised to adhere to the requisites of customers along with strict consideration to their budget and schedule.

Projects undertaken by SSP company are demolition works, new building construction works, micro-pilling works, structure steel works, RC works, structural estimation work, mechanical and electrical works, building inspection works, interior decoration works, general site leveling and surveying works. The projects completed are shown in Table (3.1).

SSP company is now implementing the Eain Mae CB Bank project in Ayarwaddy Division. The major activities of this project are construction work, mechanical work, electrical work, interior and exterior decoration work as well as overall construction services.

# 3.2 Organization Structure

The organization structure is depicted as Figure (3.1).

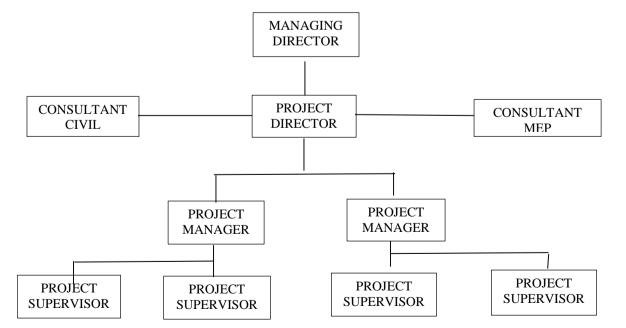


Figure (3.1) Organization Chart of SSP

Source: San Sapal Pwint Co.,Ltd (2019)

The managing director is at the top of the organization structure, she oversee the direction, transactions, and performance of the whole company. Under the control of managing director, consultant (civil), consultant (mechanical and electrical work), and project director are taking their respective responsibilities. Under the supervision of project director, there are two project managers. The span of control of each project manager is two (two project supervisors).

# 3.3 Project Management Actions of SSP

As project management actions, in this study, planning, communication systems and control mechanisms and are concerned.

#### 3.3.1 Responsibilities of Project Managers at SSP

A project manager is a person who has the overall responsibility for the successful initiation, planning design, execution, monitoring, controlling, and closure of responsible projects. The activities the project managers have to do for the completion of projects at SSP are planning and defining scope, activity planning and sequencing, resource planning, developing schedules, time estimating, cost estimating, developing a budget, documentation, creating charts and graphs, risk analysis, managing risk and issues, monitoring and reporting progress, team leadership, negotiating with vendors, controlling quality and making reports.

# 3.3.2 Skills of Project Managers at SSP

The major skills the project managers must have to take responsibilities for projects are shown in Table (3.2). The skills of project managers are describe -

- Leadership Skill
- Time Management Skill
- Math and Budgeting Skill
- Analytical Skill

Table (3.2) Skills of Project Managers at SSP

Sr. No.	Skills	Description	
1	Leadership Skill	To keep employees motivated, to resolve	
		conflicts and to make decisions for team	
		members.	
2	Time Management Skill	To work with employees, customers and	
		management, and often to complete multiple	
		tasks at once	
3	Math and Budgeting	To keep and maintain a budget in almost every	
	Skill	field. Project manager need to be confident in	
		using math skills to make sure where the	
		company's money is going.	
4	Analytical Skill	To solve problems that come up during a typical	
		work day.	
		To analyze data and make decisions that affect the	
		project on a regular basis.	

Source: San Sapal Pwint Co.,Ltd (2019)

# 3.3.3 Project Management Actions of SSP

In SSP, project management actions can be seen from project management perspective because it has the actions for planning, also has the actions for communication systems for project implementation, and actions for controlling the project.

# (a) Planning at SSP

The planning activities normally started after signing the contract with client for a project. The first activity of planning stage is site surveying which is responsible for project manager and site-engineer. They need to discuss and negotiate with respective government authorities for some cases if it is necessary. After they check the conditions of the site, and it is needed to change or remove infrastructure e.g., electrical cables, they go and meet with responsible authorities for some negotiations.

The second activity at the planning stage is time and budget estimations. The quantity surveyor takes this responsibility. She estimates the quantities of each major resource to complete a project. Then she estimates the cost for each resource and also for each task. The quantity surveyor also set the schedule time to complete the whole project and also the time to complete each task.

The third activity at the planning stage is that the project manager gives instructions to team members about the tasks or work packages they have to take responsibilities. Project manager's instruction includes the tasks, budget and time schedule for each task or each work package. The final activity at the planning stage is organizing the required resources such as machineries and vehicles, and some major raw materials.

# (b) Communication at SSP

Two types of project meetings are conducted at SSP for effective communication. These are handover meeting and progress meeting. Handover meetings are conducted to formally start the project, project phase or sub-contract. The purpose of meeting is to set the scene for the project and establish how it will be managed. The handover meetings at SSP can be seen in Table (3.3).

Table (3.3) Handover Meetings at SSP

Sr. No	Venue	Time	Discussion Points	When
1	SSP Office	2hrs	Specifications as per drawing	Before formal start the project (To start the project)
2	SSP Office	2hrs	Schedules (Time, Budget, Responsible persons, Tasks)	After agreement with client

Source: San Sapal Pwint Co.,Ltd (2019)

The progress meeting generally held monthly to monitor progress and guide the project to completion. The purpose of this meeting is to provide interaction and innovation to help solve problems. The progress meetings at SSP nature can be seen in Table (3.4).

Table (3.4) Progress Meetings at SSP

Sr. No	Venue	Time	Attendees	Discussion Points
1	SSP Office	2hrs	MD, Project director, Consultants, Project Managers, Project Supervisors, Project Engineers	Scheduling the project.
2	SSP Office	2hrs	Project director, Consultants Project Managers, Project Supervisors, Project Engineers, Contractors	Discussing, negotiating and assigning jobs according to schedule.

Source: San Sapal Pwint Co.,Ltd (2019)

In this company, the architects, project directors, project managers and client's representative always communicate regular meetings by the contractors and necessary members of the consultant team. Meetings are an important part of the successful management of construction projects. Regular meetings can help facilitate better communication and a shared sense of purpose making it more likely that the project is completed successfully. Project failures are often attributed to inadequate management, with a key factor being a lack of proper communication. Proper meetings are used as a means of reporting progress, enabling discussion of any problems or issues, and allowing the proposal of solutions. They provide a good opportunity for two-way discussions of any issues that have arisen or that are anticipated. Holding meetings on site enables to see progress rather than relying on a report for another party and to look at problem areas, discuss quality issues, assess mock-ups and so on.

Progress meetings are a specific sort of project meeting during which the contract administrator receives progress reports from the contractor and consultant team, cost reports from the cost consultant and other more specific information such as sub contractor reports, progress photos and so on. Meeting minutes should be prepared, with a requirement that any disagreement with the items recorded in the minutes is raised within a pre-defined period. Progress meetings may also result in the preparation of a construction progress report for the client.

A monthly meeting where all parties to the contract: contractor, employer, consultants are to attend to discuss, review, decide on all matters pertaining to the contract Works. A monthly meeting should be scheduled from the day the construction works starts, with the 1<sup>st</sup> meeting being the kick-off meeting/ site handover when the contract is officially handed over from the employee/ owner of the project to the contractor. This is an important meeting as all rules, regulations, basic contractual matters are clearly laid out and formulated for the whole works. The contractor will have to submit his organization structure, clarifications of main issues, while the employer will lay out his obligations and highlight specific requirements in the contract. The consultant for the project will be the person to coordinate the relationships between the employer and the contractor, and he will lay down the specific requirement for compliance by both parties.

Site technical meetings should be held on a weekly basis and more regular if there are crucial issues to be discussed. It should be a purely technical work meeting., where site problems are solved immediately. It should not be formal and minutes need not be prepared, however, attendance record should be forwarded to seminar managers, and any issues cannot be solved should be brought to attention of seminar managers.

Similar meetings may be held on management contract projects between the management contractor and the works contractors. Other meetings held on site might include safety briefings and toolbox talks which are held to ensure that workers properly consider health and safety issues on site. What is clearly obvious is that every meeting should have an objective and that all the attendees should know what that objective is before they attend. Thus, it is essential to clarify the purpose of the meeting for each and every meeting to ensure there genuinely is a purpose. Various meetings are conducted as effective communication system for project success.

#### (c) Control Mechanisms

SSP practices controlling the project with four parts: reporting the progress, checking the progress at site, finding the optimum ways for contingency cases, and lesson learn for better next project. This control mechanism can be seen in Table (3.5).

There are four steps of controlling mechanism; reporting the project progress, monitoring the project progress, contignecy action and lesson learn from finished project. In the reporting the project progress is reported from stie engineers to project mangers. The reporting includes abouts work completion, varied from specification, time delay and budget overrun in condition of projects. In monitoring the project progess is reported from project director or project manager to milestones. The reporting includes abouts work

completion, causes of varied from specifications, causes of the time delay and causes of budget overrun.

**Table (3.5)** Control Mechanism of SSP

Sr. No.	Controlli	ing Steps	About
	Reporting the P	Project Progress	- Work Completion (%)
1	From	To	- Varied from specifications
	Site Engineer	Project manager	- Time delay
			- Budget overrun
	Monitoring the	Project Progress	- Work Completion (%)
	Who	When	- Causes of varied from
2	Project Director	Milestones	specifications
	Project Manager		- Causes of time delay
			- Causes of budget overrun
	Continger	ncy Action	- Varied from specifications
	Who	How	- Weather changes
	- Project Director	- Internal Meeting	- Other risks of delay
3	- Project Manager		- Unexpected issues for cost
			increase
	Lesson Learn from	n Finished Project	- Client Satisfaction
4	From Whom	How	- Client Suggestion
	G11		- Complaints
	Client	Feedback Form	

Source: San Sapal Pwint Co.,Ltd (2019)

And also, in the contingency action is reported from project director or project manger causing of internal meeting. This steps in action of varied from specifications, weather changes, other risks of delay and unexpected issues for cost increase. Morever, in lesson learn from finished project, the reported learn from client of feedback form. The conditions of clients satisfication, client suggestion and complaints of projects by accepting customers.

# **CHAPTER 4**

# ANALYSIS ON FACTORS INFLUENCING PROJECT SUCCESS OF SAN SAPAL PWINT CO., LTD

This chapter consists of six parts concerning with the analysis on factors influencing on project success of San Sapal Pwint Co.,Ltd. To analysis on the relationship between influencing factors on project success and project success of San Sapal Pwint Co.,Ltd, the required data is obtained through survey data. The data are collected by using structured survey and in-depth questionnaires with (30) a project director, project managers, employees and subcontractors of San Sapal Pwint Co.,Ltd. Thus, the first part is presented demographics profile of respondents and then reliability analysis of the variable is also described. The third part is analysis on factors influencing on project success. The fourth part is analysis on the effects of project management action on project success. The sixth part is analysis on the effects of human related factors on project success.

# 4.1 Demographic Profile of Respondents

In this study, demographic profile of respondents is measured with six items: gender, age, education level, position level, income level and years of experience. The study involved 30 respondents from employees and contractors of San Sapal Pwint Company Limited in Yangon. For each question, the most possible answer is provided to respond and they can choice in relevant answer. This can be seen Table (4.1).

According to the Table (4.1), gender of respondents is classified into two groups such as male and female. It was found that, the percentage of the gender of the respondents is found male respondents are 83.33 percent while female respondents are 16.67 percent in the survey. Therefore, male respondents are the major distribution of the sample.

Age of respondents can be divided into four groups; between 21 and 30 years, between 31 and 40 years, between 41 and 50 years and above 51 years. According to Table (4.1), 3 respondents (10.00 %) are between 21 and 30 years, 15 respondents (50.00 %) are between 31 and 40 years, 11 respondents (36.67 %) are between 41 and 50 years and 1 respondents (3.33 %) are above 51 years. It is found that there are more respondents who have between 31 and 40 years old.

**Table (4.1) Demographic Profile of Respondents** 

	No. of Respondents	Percentage (%)
Total	100	100.00
Gender		
Male	25	83.33
Female	5	16.67
Age (Years)	·	
21- 30	3	10.00
31-40	15	50.00
41-50	11	36.67
Above 51	1	3.33
<b>Education Level</b>		
Graduated	23	76.67
Post Graduated	7	23.33
Position of Level		
Project Director	1	3.33
Project Engineer	2	6.67
Manager	4	13.33
Site Engineer	9	30.00
Supervisor	4	13.33
Staffs	5	16.67
Subcontractors	5	16.67
Working Years		
Under 1	3	10.00
1years – 2Years	9	30.00
3 Years - 4 Years	13	43.33
5Years and Above	5	16.67
Income Level		
Under 500,000	6	20.00
500,001 - 800,000	8	26.67
800,001 - 1,100,000	9	30.00
Above 1,100,000	7	23.33

Source: Survey Data (December, 2019)

Education level of respondents is classified into five groups. There are high school level, university studying level, graduate level, post graduated level and other. There are, graduate level and master degree. It was found that 23 respondents are graduated and 7 respondents are post graduated. As percentage, 76.67 percent of respondents are graduated and 23.33

percent of respondents are post guarded. It can be deducted that most of the respondents are graduated level.

Position level of respondents is classified into seven groups. There are Project Director, Project Engineer, Manager, Site Engineer, Supervisor, Staffs and Subcontractors of SSP Company Limited. It was found that, 1 respondent (3.33 %) are Project Director, 2 respondents (6.67 %) are Project Engineer, 4 respondents (13.33 %) are Manager, 9 respondents (30.00 %) are Site Engineer, 4 respondents (13.33 %) are Supervisor, 5 respondents (16.67 %) are Staffs (Assistant) and 6 respondents (16.67%) are subcontractors. It is found that most of the respondents are site engineers.

Working years of respondents is classified into four groups: under 1 year of experiences, between 1 and 2 years of experiences, between 3 and 4 years of experiences and above 5 years of experiences. It was found that experience years of respondents in their job is founded that 3 respondents describing 10.00 percent are under 1 year, 9 respondents describing 30.00 percent are between 1 and 2 years, 13 respondents describing 43.33 percent are between 3 year and 4 years and 5 respondents describing 16.67 percent are 5 years and above. It can be deducted that most of the respondents are 3 years and 4 years in SSP Company Limited.

Income level of respondents is classified into four groups: Under 500,000 Kyats, between 500,001 and 800,000 Kyats, between 800,001 and 1,100,000 Kyats and above 1,100,001 Kyats. It was found that income level of respondents in their job, 6 respondents describing 20.00 percent are under 500,000 Kyats, 8 respondents describing 26.67 percent are between 500,001 and 800,000 Kyats, 9 respondents describing 30.00 percent are between 800,001 and 1,100,000 Kyats and 7 respondents describing 23.33 percent are above 1,100,001. It can be deducted that most of the respondents are between 800,001 and 1,100,000 Kyats.

# 4.2 Reliability Test

To measure the reliability of the instruments, Cronbach's coefficient alpha was calculated. This method has been recognized as an effective and widely-used approach to determine the internal consistency of study instruments. Generally, an alpha value close to 1.0 indicates high internal consistency reliability, an alpha value less than 0.6 is considered to be poor, values of 0.7 are considered acceptable and values above 0.8 are deemed to be

good (Sekaran, 2003). In this study, the alpha value for each of the variable is described in following Table (4.2).

.Table (4.2) Reliability Test

Sr.No	Variables	Items	Cronbach's Alpha
1	Planning	7	0.810
2	Communication	8	0.863
3	Control Mechanism	7	0.883
4	Economics	5	0.793
5	Social	5	0.761
6	Political and Legal	5	0.880
7	Role of Project Manager	5	0.825
8	Role of Client	7	0.702
9	Project Success	6	0.829

Source: Survey Data (December, 2019)

Table 4.2 shows the results of reliability test for all of independent variables – project management action (planning, communication and control mechanism), external environment factors (economics, social and political), human related factors (role of project manager and role of client) and dependent variable (project success) for San Sapal Pwint Co., Ltd. It was observed that all of the alpha values are more than 0.7. Alpha value for control mechanism was 0.883 which was the highest alpha value among factors influencing on project success.

Computed alpha values results showed that Cronbach's alpha was 0.810 for planning, 0.863 for communication, 0.793 for economics, 0.761 for social factors, 0.880 for political and legal factors, 0.825 for role of project manager, 0.702 for role of client and 0.829 for project success factors. These statistics reveal that internal consistency of items to the concept was good.

# 4.3 Analysis of Influencing Factors on Project Success

The objective of the study is to analyze the effects of project management action on project success of San Sapal Pwint Co., Ltd. in Yangon. In this study, project management action (planning, communication and control mechanism), external environment factors (economics, social and political and legal) and human related factors (role of project manager and role of client) are regarded as the independent variables for project success.

The project success variable is regarded as the independent variable. This section is to analyze employees and subcontractors' perception on project success of San Sapal Pwint Co.,Ltd in Yangon. The respondents were asked to indicate the effects of project management action on project success utilizing by San Sapal Pwint Co., Ltd. This study based on 30 employees and subcontractors of San Sapal Pwint Co.,Ltd in Yangon. A 5-point scale was used to measure level of agreed or disagreed where (1) = strongly disagree (2) = disagree (3) = neutral (4) = agree and (5) = strongly agree. The scoring was done using mean values ranging from 1-5; therefore the closer a score is to 5, the more strongly agreed the practice. Employees and subcontractors of San Sapal Pwint Co.,Ltd response towards those project management action on project success will be presented in mean and standard deviation values as follows.

# 4.3.1 Planning Action of SSP

The following Table (4.3) describes employees and subcontractors' perception on planning action on project success with mean and standard deviation values. There are seven factors for planning action.

According to the results Table (4.3), the overall mean value of the employees and subcontractors' perception on planning stages is 3.79. This result presents the agreement level. Among the factors, the item that this company respects the planned budget, time frame and performance criteria on each project have the maximum value is 4.03. This result means that this company well performs and plans their each project by managing and reviewing on budges, project completion time and criteria to get low cost, lead time and customer's satisfaction. But the items that this company planned time for each project has minimum mean value is 3.17. This result indicates that the company is always considers on budget estimations then time for each project to start and complete because this company's project starting time and completion time can be changes depend on external or internal situation.

Table (4.3) Planning

Sr.No	Particular	Mean	SD
1	Defined clearly goals	3.80	0.664
2	Make project team	3.83	0.461
3	Perform and meet objectives	3.93	0.639
4	Respecting criteria	4.03	0.490
5	Planning time	3.17	0.746
6	Provide accurate schedule and plan	3.83	0.461
7	Considering project milestones	3.93	0.639
	Overall Mean	3.79	

Source: Survey Data (December, 2019)

#### 4.3.2 Communication

The following Table (4.4) describes employees and subcontractors' perception on communication with mean and standard deviation values. There are eight factors for communication.

**Table (4.4) Communication** 

Sr.No	Particular	Mean	SD
1	Using different channels	3.93	0.52
2	Project information	3.77	0.77
3	Conducting frequent	3.87	0.68
4	Make responsibility and accountability	3.93	0.58
5	Share information	3.77	0.63
6	Making monthly meeting	3.93	0.52
7	Giving feedback	3.57	0.57
8	Commitments and respond	3.80	0.61
	Overall Mean	3.82	

Source: Survey Data (December, 2019)

According to the results Table (4.4), the overall mean value of the employee and subcontractor perception on communication is 3.82. This result presents the agreement level. Among the factors, the item that company's internal and external stakeholder's communication process can be worked by using different communication channels (email, fax, telephone, weekly meeting and etc.), company conducts project meetings to make sure responsibility and accountability for results and company makes monthly meeting with all

parties has the maximum mean value 3.93. This result means that this company has used appropriate communications system to inform company information and or procedures. In addition, this company selects to assign responsibility for each job with clear job description and empowerment by making weekly project meeting. Furthermore, this company always communicates to all party concern with project completion rate and budget condition by making monthly meeting. But the item that project manager gives feedback to team member after monthly meeting has minimum mean value is 3.57. Therefore, project manager of company weak share information to team member after monthly meeting.

# 4.3.3 Control Mechanism

The following Table (4.5) describes employees and subcontractors' perception on control mechanism with mean and standard deviation values. There are seven factors for control mechanism.

**Table (4.5)** Control Mechanism

Sr.No	Particular	Mean	SD
1	Access the completion	3.77	0.77
2	Access prevent completion	3.77	0.77
3	Giving punishment	3.87	0.68
4	Giving rewards	3.77	0.77
5	Providing rewards for budget	3.17	0.75
6	Giving rewards for requirements	4.03	0.49
7	Finding for working unsafe manner	3.47	0.82
	Overall Mean	3.69	

Source: Survey Data (December, 2019)

According to the results Table (4.4), the overall mean value of the employee and subcontractor perception on control mechanism is 3.69. This result presents the agreement level. Among the factors, the item that This Company gives rewards for meeting client's requirements has the maximum mean value 4.03. This result means that this company always recognize on their employees for meeting client's requirements by providing sufficient financial reward, gifts, trophy and others to attract and motivate on their employees. But the item that this company provides rewards for competition within budget has minimum mean value is 3.17. Therefore, this company is needed to provide appropriate reward to each employee for competition job within budget by their employees.

#### **4.3.4** Economics Factors

The following Table (4.6) describes employees and subcontractors' perception on economics factors with mean and standard deviation values. There are five factors for economics factors.

**Table (4.6) Economic Factors** 

Sr. No	Particular	Mean	SD
1	reduce the risk	3.87	0.63
2	Reduce transaction costs	3.70	0.65
3	Protecting negative effect	3.87	0.63
4	Interest rate	3.60	0.62
5	Payment terms	3.87	0.78
	Overall Mean	3.78	

Source: Survey Data (December, 2019)

According to the results Table (4.6), the overall mean value of the employee and subcontractor perception on economics factors is 3.78. This result presents the agreement level. The maximum mean value is 3.87 among five factors of economics. This result means that this Company helps clients to reduce the risk of inflation; this company protects its clients form the negative effect of currency exchange rate as possible as it can and the client can propose the payment terms up to their ability and convenience. This result means that this company helps customers or clients to reduce the risk of inflation by investing in construction. In addition, this company always considers clients to protects from the negative effect of currency exchange rates and helps customers to own housing and apartment by selling low interests' rate or long-term payment plans. But the item that this company does not transfer the effect of increasing interest rate to clients has the minimum mean value, 3.60. Therefore, company needs to reduce the effect of increasing rate to clines by considering appropriate ways.

#### 4.3.5 Social Factors

The following Table (4.7) describes employees and subcontractors' perception on social factors with mean and standard deviation values. There are five factors for social factors.

**Table (4.7) Social Factors** 

Sr.No	Particular	Mean	SD
1	Providing employment opportunity	3.77	0.77
2	Concerning the effects on environmental	3.87	0.68
3	Health and safety	4.00	0.53
4	Local infrastructure.	3.80	0.66
5	Helping living standard	3.83	0.46
	Overall Mean	3.85	

According to the results Table (4.6), the overall mean value of the employee and subcontractor perception on social factors is 3.85. This result presents the agreement level. Among the factors, the item that this company concerns the health and safety of its employees at construction sites has the maximum mean value 4.00. This result means that this company always emphasis employee's health and safety practices to reduce unnecessary cost and injury/accidence rate in the workplace by providing personal protective equipment, conducting regularly safety inspection and safety training to all employees. But, the item that for providing employment opportunity, company accepts projects, not totally focusing on profit has the minimum mean value, 3.77. Therefore, company needs to create more job opportunity by selecting skillful job candidates if company has accepted new project.

#### **4.3.6** Political and Legal Factors

The following Table (4.8) describes employees and subcontractors' perception on political and legal factors with mean and standard deviation values. There are five factors for political factors.

**Table (4.8) Political and Legal Factors** 

Sr. No	Particular	Mean	SD
1	Considering the importance of obeying	4.00	0.70
2	Constructing building design	4.10	0.55
3	Emphasizing on compliance	4.07	0.69
4	Never accepting break the rules of government.	4.13	0.57
5	Giving holiday and specific working hours	4.10	0.71
	Overall Mean	4.08	

According to the results Table (4.8), the overall mean value of the employee and subcontractor perception on political and legal factors is 4.08. This result presents the agreement level. Among the factors, the item that it is sure that this company never accepts the contracts to build the buildings for which it has to break the rules of government has the maximum mean value 4.13. This result means that this company always obeys and follows YCDC rule and regulation and not for make profit by accepting the contracts to build the buildings for which it has to break the rules of government. But, the item that the company emphasizes on the structural strength of buildings to compliance with the rules of YCDC has the minimum mean value, 3.77. Therefore, company weak emphasizes on the structural strength of buildings to compliance with the rules of YCDC.

#### **4.3.7** Role of Project Manager

The following Table (4.9) describes employees and subcontractors' perception on project manager with mean and standard deviation values. There are seven factors for project manager.

According to the results Table (4.9), the overall mean value of the employee and subcontractor perception on role of project manager is 3.89. This result presents the agreement level. Among the factors, the item that this company's project team leaders commit on their duties and responsibilities to meet cost, time and quality for a project has the maximum mean value 4.03.

Table (4.9) Role of Project Manager

Sr. No	Particular	Mean	SD
1	Technical skills.	3.80	0.66
2	Planning skills	3.83	0.46
3	Good communication skills	4.00	0.53
4	Good judgement	3.80	0.66
5	Motivating team members	3.83	0.46
6	Coordinating with project team members	3.93	0.64
7	Committing on duties and responsibilities	4.03	0.49
	Overall Mean	3.89	

This result means that project team leader of this company have good leadership skills and accountability to perform effectively and efficiently complete on their duty and responsibility by leading on their subordinate. But, the item that this company's project team leaders have enough technical skills has the minimum mean value, 3.80. This result indicates that company is needed to select and recruit skillful team leaders and should provide refresh training or appropriate training to improve technical skill level for their some of project team leaders.

#### 4.3.8 Role of Client

The following Table (4.10) describes employees and subcontractors' perception on role of client with mean and standard deviation values. There are five factors for role of client.

According to the results Table (4.9), the overall mean value of the employee and subcontractor perception on role of client is 3.78. This result presents the agreement level. Among the factors, the item that this company makes relevant negotiations with clients for better completion of projects, this company permits some adjustments in contract if clients show strong reasons/ records to make adjustments and this company values the desires and needs of clients has the maximum mean value 3.78.

Table (4.10) Role of Client

Sr. No	Particular	Mean	SD
1	Making relevant negotiations	3.87	0.63
2	Support architectural design.	3.70	0.65
3	Permitting some adjustments	3.87	0.63
4	Allowing clients to balance project	3.60	0.62
5	Valuing the desires and needs	3.87	0.68
	Overall Mean	3.78	

This result means that these companies always receives and accept customers' suggestion and feedback to provide their needs and wants to attain customers satisfaction and benefit for organization. But the item that this company allows clients to balance project quality with cost has the minimum mean value, 3.60. This result indicates that the company is always considers quality and safety first on their project because constructing and using poor equipment and quality have negative effects on company images. Thus, this company weak provides and allows clients to balance project quality with cost.

#### 4.3.9 Project Success

The following Table (4.11) describes employees and subcontractors' perception on project success with mean and standard deviation values. There are six factors for role of client.

According to the results Table (4.11), the overall mean value of the employee and subcontractor perception on project success is 3.88. This result presents the agreement level because this company retain on their project success at the construction market by providing better quality building and design, suitable cost and reliable quality, right time and right criteria for their customers. Among the factors, the item that this company values the support of client to architectural design has the maximum mean value, 4.10. This result means that this company always services on their customer concern with upgrade architectural design than other companies.

**Table (4.11) Project Success** 

Sr. No	Particular	Mean	SD
1	Completing on time	4.03	0.49
2	Completing on budget	4.10	0.40
3	Completing with identified quality.	3.60	0.68
4	Getting satisfaction of clients	3.77	0.77
5	Getting satisfaction of project team members	3.87	0.68
6	Receiving appreciation by stakeholders	3.93	0.64
	Overall Mean	3.88	

But the item that this company permits some adjustments in contract if clients show strong reasons/records to make adjustments has the minimum mean value, 3.60. Therefore, this company should more adjust in contract to gain customer satisfaction and reliability on their project.

### 4.4 Analysis on the Effect of Project Management Actions on Project Success

The section presents the relationship between project management actions and project success. Multiple regression analysis is conducted to test the proposed objectives of the relationship between project management action (planning action, communication and control mechanism) and project success. The results of multiple regression analysis are shown in Table (4.12).

According to the results shown in Table (4.12), there are project management action factors (planning action, communication and control mechanism) which relates to the project success of SSP Co., Ltd. All the values of significant are less than 0.5. Therefore, the result is significant of communication and control mechanism at 95% confidence interval.

Table (4.12) Project Management Action on Project Success

Independent Variables	Unstanda Coeffic		Standardized Coefficients		a.	VIF.		
	В	Std. Error	Beta	t	Sig.	, 22 ,		
(Constant)	0.283	0.310		0.910	0.371			
Planning Action	0.082	0.126	0.073	0.650	0.522	3.203		
Communication	0.584***	0.141	0.562	4.151	0.000	4.658		
Control Mechanism	0.287**	0.125	0.351	2.296	0.030	0.030		
R	0.947							
R Square	0.898							
Adjusted R Square	0.886							
Durbin wanton	2.069							

According to analysis, the communication factor is positive significant on project success. Because of SSP company using different communication channels (email, fax, telephone, weekly meeting etc), communicating the project information with quality, validity and timelines, conducting frequent face-to-face meetings, conducting project meetings to make sure responsibility and accountability for results, making project meetings to share information accurately and clearly on each working process, making monthly meeting with all parties, giving feedback to team member after monthly meeting, establishing time commitments for team members to respond to each other.

According to analysis, the control mechanism factor is positive significant on project success. In control mechanism, SSP company having target to access the completion of each work package, regularly accessing the present completion of work at milestones, giving punishment for not following the guidelines to their employees, giving rewards for competition in limited time or duration, providing rewards for competition

<sup>\*10%</sup> significant level, \*\* 5% significant level, \*\*\* 1% significant level

within budget, giving rewards for meeting client's requirements, finding for working unsafe manner.

In conclusion, these two factors are significant on project success of SSP Company. The company is needed to estimate calculation on project starting time/ completion time, and budget estimations by considering others factors likes external and internal environment factors because these factors can be effects on project time and budgets.

### 4.5 Analysis on the Effect of External Environment Factors on Project Success

The section presents the relationship between external environment and project success. Multiple regression analysis is conducted to test the proposed objectives of the relationship between external environment (economics, social, and political and legal) and project success. The results of multiple regression analysis are shown in Table (4.13).

Table (4.13) External Environment Factors on Project Success

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF.		
	В	Std. Error	Beta		0	, ,		
(Constant)	0.087	0.516		0.168	0.868			
Economics	0.093	0.110	0.099	0.841	0.408	1.226		
Social	0.683***	0.121	0.674	5.634	0.000	1.257		
Political and Legal	0.200*	0.103	0.232	1.945	0.063	1.22		
R			0.839	l	l			
R Square		0.704						
Adjusted R Square		0.669						
Durbin wanton			1.579					

Source: Survey Data (December, 2019)

According to the results shown in Table (4.13), there are external environment factors (economics, social and political and legal) which relates to the project success of

<sup>\*10%</sup> significant level, \*\* 5% significant level, \*\*\* 1% significant level

SSP Co., Ltd. All the values of significant are less than 0.5. Therefore, the result is significant of social and political and legal variables at 95% confidence interval.

According to analysis of social factors, SSP Company provides employment opportunity, accepts projects not totally focusing on profit, concerns the effect of its construction work on nature environment, concerns the health and safety of its employees at construction sites, supports and improves local infrastructure, helps for promoting higher living standard of society.

In political and legal factors, SSP company considers the importance of obeying the YCDC rules and regulations relating to buildings and structures, constructs according to the building design approved by YCDC, emphasizes on the structural strength of buildings to compliance with the rules of YCDC, never accepts the contracts to build the buildings for which it has to break the rules of government, gives holiday and specific working hours to all employees according to labor law. According to the results, the company accepts projects, not totally focusing on profit therefore the company create more job opportunity.

#### 4.6 Analysis on the Effect of Human Related Factors on Project Success

The section presents the relationship between human related factor and project success. Multiple regression analysis is conducted to test the proposed objectives of the relationship between human related factors (role of project manager and role of client) and project success. The results of multiple regression analysis are shown in Table (4.14). According to the results shown in Table (4.14), there are human related factors (role of project manager and role of client) which relates to the project success of SSP Co., Ltd.

According to analysis, the team leaders have enough technical skills, planning skills, communication skills, good communication skills, gives good judgment for emergency case and conflicts, motivates team members by supporting reward, incentive payment and appropriate recognition for work done timely, coordinates with project team members by receiving feedback giving guideline and suggestion, commits on their duties and responsibilities to meet cost, time and quality for a project.

**Table (4.14) Human Related Factor on Project Success** 

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF		
	В	Std. Error	Beta					
(Constant)	0.013	0.593		0.022	0.983			
Role of Project Manager	0.651***	0.159	0.562	4.092	0.000	1.320		
Role of Client	0.354**	0.145	0.336	2.450	0.021	1.320		
R			0.784		l			
R Square	0.615							
Adjusted R Square	0.586							
Durbin wanton		1.684						

According to analysis, SSP company makes relevant negotiation with clients for better completion of projects, values the support of client to architectural design, permits some adjustments in contract if clients show strong reasons/ records to make adjustments, allows clients to balance project quality with cost, values the desires and needs of clients. This result indicates that the company is always considers quality and safety first on projects. This result indicates that company is needed to select and recruit skillful team leaders and should provide refresh training or appropriate training to improve technical skill level for their some of project team leaders.

In conclusion, the two factors are signiciant human related factor on project success. The role of project manager and role of client are important played in project success. Therefore, company is needed to select and recruit skillful team leaders and should provide refresh training or appropriate training to improve technical skill level for their some of project team leaders.

<sup>\*10%</sup> significant level, \*\* 5% significant level, \*\*\* 1% significant level

#### **CHAPTER 5**

#### CONCLUSION

This chapter describes the conclusion based on the result of the analysis. It provides findings and discussions, suggestions and recommendations for SSP Co., Ltd. to emphasize the importance of factor influencing on project success, and to enhance the project success of the organization. The limitations and needs for further research are also clearly described to fulfill the gap of this study to do further research which can provide the better results to understand the factor influencing on project success.

#### 5.1 Findings and Discussions

The objectives of the study are to explore project management actions of SSP Co., Ltd. and to analyze the effect of factors influencing on project success of SSP Co., Ltd. The influencing factors on project success by SSP Co., Ltd were tested on the response of thirty employees by using structured questionnaires. According to the demographic profile of respondents, male respondents are more than female respondents in gender group. The average age of respondents is between thirty first and fourty years. Most of the respondents are graduated. Most of the respondents are site engineer because main workforce of this organization was site engineers. In year of working experience, the majority of respondents have services year between three years and four years in SSP Co., Ltd.

According to the results of reliability test, all variables are reliable. According to the mean values analysis of project management action factors (planning action, communication and control mechanism), communication variables has the maximum mean value. It can be concluded that SSP Co., Ltd can successfully create communication activities with various communication methods likes fax, email, internet, meeting, giving clear job instruction and other, to inform and share project condition and responsibility which help to improve project completion time, quality, validity and cost at workplace. In addition, project external environment factors (economics, social and political and legal), legal variable has the maximum mean value. It can be concluded that the company have regularly considering and obeying the YCDC Rules and Regulations relating to buildings and structures. Furthermore, mean values analysis of human related factors (role of project manager and role of clients), role of manager has the maximum mean value. It can be concluded that project team leader this company's project team leaders have enough

competency skills to lead and manage their team and whole project by taking responsibility and accountability on their performance results.

In addition, multiple regression analysis was used to test the effect of project management actions and project success of SSP Co., Ltd. The results show that communication and control mechanism have positive significant effects on project success. Thus, these two factors were taken into consideration and essential for the improvement of project success. But planning action has no significant effects on project success.

Furthermore, multiple regression analysis was used to test the effect of external environment factors and project success of SSP Co., Ltd. The results show that social and political and legal variables have positive significant effects on project success. Hence, these two factors were taken into consideration and essential for the improvement of project success. The Although, the results of standardized coefficient (Beta) indicates that economics variables within external environment factors of SSP Co., Ltd have negative relation with project success.

The result of multiple regression analysis, human related factors (role of project manager and role of client) of SSP Co., Ltd have positive significant relationship with project success.

#### 5.2 Suggestions and Recommendations

Base on the findings of the study, some recommendation and suggestion are presented in order to increase the project success of SSP Co., Ltd by utilizing influencing factors on project success.

For project management action and project success, a communication variable is the significant factor that positively related on project success. Communication activity plays a significant role in improving and supporting project success. Therefore, company should more create communicating with their stakeholders before formal start the project (To start the project) and after agreement with client to discussing, negotiating and assigning jobs according to schedule. In addition, control mechanism variable has positive related and significant with project success. Therefore, organization should maintain on its control mechanism factors - by regularly reporting, monitoring on each stages of project condition, prepare contingency plan/ action for emergency condition and continuous learning and lesson from finished project to get more project success. But, this company

should more emphasis on planning action because this factor no significant related with process success. Hence, company should have specific objective, rule and regulation for each project to protect customer's compline after contract. In addition, this company should appoint and select skillful site engineer and team leader for site surveying to inform and give correct and specific data for organization. In addition, this company is need to estimate on time and budget to give information to clients and subcontractors by considering and analysis environmental and other factors. And, the project managers are needed to give clearly job instructions the tasks, budget and time schedule for each task to members.

According to the results of this study, external environment factors - economics has been revealed no significant factor that negatively influence on the project success. Therefore, the firm should help clients to reduce the risk of inflation by inviting or allowing to invests in construction project. In addition, this company is needed to provide and help customers to buy home or apartment by selling installment payment and long term payment system. It can be reduce the effect of increasing interest rate to clients. Political and social factors should maintain current condition because these factors have positive related with project success.

Human related factors (role of project manager and role of client) have been significant factor that positively influence on project success. Therefore, this company should select skillful project manager to to guide and to collaborate with contractors. In addition, project managers are given the resources and authority to match their project responsibility and held accountable by their superiors for the extent to which they achieve targets. Company's project team leaders must be having technical skill to lead team and whole project. The organization should be more emphasized on influencing factors on project success to improve success. The organization can achieve and meet its goal and objective by implementing systematically project success factors Therefore, the project success factors are essential for SSP Co.,Ltd.

#### **5.3** Needs for Further Research

This study mainly emphasizes on the influencing factors on project success of SSP Co., Ltd. The data were collected from employees and subcontractors of SSP Co., Ltd. totally 30 respondents using sampling methods. There are some limitation of time, cost and data in this study. This study only focused on SSP Co., Ltd and limited time. The results

would be varying according to the individuals as well as time. In the further studies, a large sample size and alternative theory or other influencing factors on project success should be applied. In addition, further research should focus on other the influencing factors on project success factors of similar companies and other different companies.

#### **APPENDIX**

#### **Survey Questionnaire**

The following personal information is necessary for validation of the questionnaire. This survey is only used in partial fulfillment of Master of Business Administration, Yangon University of Economics. Please answer all the questions as candidly and completely as possible. Thank you for your time.

#### **General Information**

Please tick  $(\sqrt{\ })$  at the appropriate box/column (or) write in your answers where appropriate

1.	Gender			
		Male		Female
2.	Age			
		Under 20		Between 21and 30
		Between 31 and 40		Between 41 and 50
		More than 51		
3.	Maritalis	3		
		Single		Married
4.	Educati	Other		
		High School passed		College/ university (studying)
		Diploma		Graduate
		Post Graduate		Other
5.	Monthly salar	y (kyats) from this company	is:	
		Less than 100,000		100,001 – 300,000
		300,001-600,000		600,001 – 900,000
		900,001 - 1,200,000		More than 1,200,001

6.	Position:		
		Project Manager	Project Assistant Manager
		Executive	Supervisor
		Assistant	

#### Part A

# **Perception on Project Management Action on Project Success**

Please express your expectation and perception on Project Management Action of "San Sapal Pwint Company Limited" by marking the rank on the following statements.

1: Strongly Disagree 2: Disagree 3: Neutral 4: Agree

**5: Strongly Agree** 

## I. Planning

Sr. No.	Questions for Planning	1	2	3	4	5
1.	Having clearly defined goals and directions					
2.	Making clear to the project team.					
3.	Competing project team members to perform and meet projects' objectives.					
4.	Respecting the planned budget, time frame and performance criteria on each project.					
5.	Planning time for each project.					
6.	Providing accurate schedule and plan for clients.					
7.	Considering methodology and budgets to determine project milestones					

# II. Communication

Sr. No.	Questions for Communication	1	2	3	4	5
1.	Using different communication channels (email, fax, telephone, weekly meeting and etc.) between company's internal and external stakeholders					
2.	Informing with quality, validity and timeliness.					
3.	Conducting frequent face-to-face meetings.					
4.	Conducting project meetings to make sure responsibility and accountability for results.					
5.	Making project meetings to share information accurately and clearly on each working process for their coworkers and subordinate.					
6.	Making monthly meeting with all parties.					
7.	Giving feedback to team member after monthly meeting.					
8.	Establishing time commitments for team members to respond to each other.					

# III. Control Mechanism

Sr. No.	Questions for Control Mechanism	1	2	3	4	5
1.	Having target to access the completion of each work package.					
2.	Accessing the prevent completion of work at milestones regularly					
3.	Giving punishment for not following the guidelines to their employees.					
4.	Giving rewards for competition in limited time or duration.					
5.	Providing rewards for competition within budget.					
6.	Giving rewards for meeting client's requirements.					
7.	Finding for working unsafe manner (e.g not wearing PPE and others) in the work place.					

#### Part B

Please express your expectation and perception on External Environment of "San Sapal Pwint Company Limited" by marking the rank on the following statements.

1: Strongly Disagree

2: Disagree

3: Neutral

4: Agree

**5: Strongly Agree** 

## I. Economics

Sr. No.	Questions for Economics	1	2	3	4	5
1.	Helping clients to reduce the risk of inflation.					
2.	Helping clients to reduce transaction costs.					
3.	Protecting its clients form the negative effect of currency exchange rate as possible as it can.					
4.	Increasing interest rate to clients are not transferred					
5.	Proposing the payment terms up to their ability and convenience by the clients					

# II. Social

Sr. No.	Questions for Social	1	2	3	4	5
1.	Providing employment opportunity, company accept projects, not totally focusing on profit.					
2.	Concerning the effect of its construction work on nature/ environment.					
3.	Concerning the health and safety of its employees at construction sites.					
4.	Supporting and improve local infrastructure.					
5.	Helping for promoting higher living standard of society.					

# III. Political and Legal

Sr. No.	Questions for Political and Legal	1	2	3	4	5
1.	Considering the importance of obeying the YCDC Rules and Regulations relating to buildings and structures.					
2.	Constructing according to the building design approved by YCDC.					
3.	Emphasizing on the structural strength of buildings to compliance with the rules of YCDC.					
4.	Never accepting the contracts to build the buildings for which it has to break the rules of government.					
5.	Giving holiday and specific working hours to all employees according to labor law.					

#### Part C

Please express your expectation and perception on Human-Related Factors of "San Sapal Pwint Company Limited" by marking the rank on the following statements.

1: Strongly Disagree 2: Disagree 3: Neutral 4: Agree

**5:** Strongly Agree

## I. Role of Project Manager

Sr. No.	Questions for Role of Project Manager	1	2	3	4	5
1.	Having enough technical skills.					
2.	Having enough planning skills					
3.	Having good communication skills					
4.	Giving good judgement for emergency case and conflicts in the workplace.					
5.	Motivating team members by supporting reward, incentive payment and appropriate recognition for work done timely.					
6.	Coordinating with project team members by receiving feedback, review and also give guideline and suggestion to perform their jobs effectively.					
7.	Committing on their duties and responsibilities to meet cost, time and quality for a project.					

# II. Role of Client

Sr. No.	Questions for Role of Client	1	2	3	4	5
1.	Making relevant negotiations with clients for better completion of projects.					
2.	Valuing the support of client to architectural design.					
3.	Permitting some adjustments in contract if clients show strong reasons/ records to make adjustments.					
4.	Allowing clients to balance project quality with cost.					
5.	Valuing the desires and needs of clients.					

#### Part D

Please express your expectation and perception on Project Success of "San Sapal Pwint Company Limited" by marking the rank on the following statements.

1: Never 2: Rare 3: Sometimes 4: Often

5: Always

## I. Project Success

Sr. No.	Questions for Project Success	1	2	3	4	5
1	Completing on time					
2	Completing on budget					
3	Completing with identified quality.					
4	Getting satisfaction of clients					
5	Getting satisfaction of project team members					
6	Receiving appreciation by stakeholders (Team and Project manager, contractors and clients).					

## **Appendix** Project Management Action on Project success

# **Model Summary**<sup>b</sup>

					Change Statistics			
Mode 1	R	R Square	Adjusted R Square	Std. Error of the Estimate	•	F Change	df1	
1	.947ª	.898	.886	.15447	.898	76.042	3	

# Model Summary<sup>b</sup>

	Change Statistics							
Model	df2	Sig. F Change						
1	26	.000	2.069					

a. Predictors: (Constant), Control, Planning, Communication

b. Dependent Variable: Project Success

#### **ANOVA**<sup>a</sup>

Mode	1	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.443	3	1.814	76.042	.000 <sup>b</sup>
	Residual	.620	26	.024		
	Total	6.064	29			

a. Dependent Variable: Project Success

b. Predictors: (Constant), Control, Planning, Communication

### Coefficients<sup>a</sup>

				Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.283	.310		.910	.371
	Planning	.082	.126	.073	.650	.522
	Communicatio n	.584	.141	.562	4.151	.000
	Control	.287	.125	.351	2.296	.030

## Coefficientsa

		95.0% Confidence of the Grant B	dence Interval	l Correlations			
Model		Lower Bound	Upper Bound	Zero-order	Partial	Part	
1	(Constant)	355	.920				
	Planning	177	.341	.795	.126	.041	
	Communication	.295	.873	.928	.631	.260	
	Control	.030	.544	.907	.411	.144	

## Coefficients<sup>a</sup>

		Collinearity Statistics		
Model		Tolerance	VIF	
1	(Constant)			
	Planning	.312	3.203	
	Communication	.215	4.658	
	Control	.169	5.929	

a. Dependent Variable: Project Success

# **Appendix** External Environment on Project success

# Model Summary<sup>b</sup>

-				Std. Error	Change Stati	stics	
Mod el	R	R Square	Adjusted R Square	of the Estimate	R Square Change	F Change	df1
1	.839 <sup>a</sup>	.704	.669	.26294	.704	20.569	3

# Model Summary<sup>b</sup>

	Change Statistics					
Model	df2	Sig. F Change				
1	26	.000	1.579			

a. Predictors: (Constant), Legal, Economics, Social

b. Dependent Variable: Project Success

# <mark>ANOVA<sup>a</sup></mark>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.266	3	1.422	20.569	.000 <sup>b</sup>
	Residual	1.798	26	.069		
	Total	6.064	29			

a. Dependent Variable: Project Success

b. Predictors: (Constant), Legal, Economics, Social

#### Coefficients<sup>a</sup>

Model				Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	.087	.516		.168	.868
	Economics	.093	.110	.099	.841	.408
	Social	.683	.121	.674	5.634	.000
	Legal	.200	.103	.232	1.945	.063

# **Appendix** Human Related Factor on Project Success

# Model Summary<sup>b</sup>

					Change Statistics		
Mode 1	R	R Square	Adjusted R Square	Std. Error of the Estimate	-	F Change	df1
1	.784ª	.615	.586	.29415	.615	21.542	2

# Model Summary<sup>b</sup>

	Change Statistics					
Model	df2	Sig. F Change				
1	27	.000	1.684			

a. Predictors: (Constant), Clients, Manager

b. Dependent Variable: Success

## **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.728	2	1.864	21.542	.000 <sup>b</sup>
	Residual	2.336	27	.087		
	Total	6.064	29			

a. Dependent Variable: Success

b. Predictors: (Constant), Clients, Manager

## Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.013	.593		.022	.983
	Manager	.651	.159	.562	4.092	.000
	Clients	.354	.145	.336	2.450	.021

	95.0% Confidence Interval for B		Correlations			Collinear ity Statistics	
M	odel	Lower Bound	Upper Bound	Zero- order	Partial	Part	Toleranc e
1	(Constant)	-1.203	1.229				
	Manager	.324	.977	.727	.619	.489	.757
	Clients	.058	.651	.613	.426	.293	.757

# **Coefficients**<sup>a</sup>

Model		Collinearity Statistics
		VIF
1	(Constant)	
	Manager	1.320
	Clients	1.320

a. Dependent Variable: Success