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Impact of Soft Skills on Public Power Utility Projects of Punjab: A View from Private Engineering Sector Companies Of Pakistan

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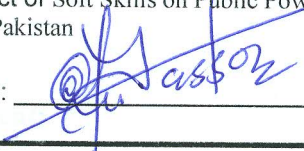
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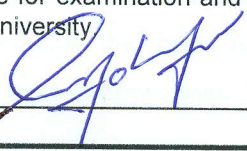
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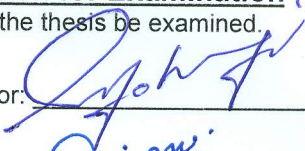
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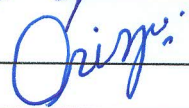
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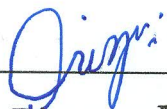
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Abstract

Hard skills such as scheduling, budgeting, and metrics etc. of project management are usually considered for successfully completing the project which are without any shadow of a doubt very important. It has been realized that big quantum of work and studies are in place for organizing and executing the project systematically. A number of hard skills are also in place to measure the progress and objectives of projects. However, the importance of soft skills is generally not considered to achieve project objectives. Public Power utility projects of Punjab are usually consisting of long procedure requiring step by step approval from respective approving authorities. Once the role of hard skills for these projects is completed, in order to attain timely approvals and dealing with the consultant throughout the life time of the project, the use of soft skills come into play. Strong follow ups are required with professional communication, effective decision making and stakeholder engagement management without which it is impossible to get any submitted technical data, drawings and specifications approved. The objective of the study was to determine the impact of soft skills (Stakeholder engagement management, effective decision making and professional communication) on achieving project objectives (In terms of meeting schedule and budget)

Power sector companies of Pakistan were contacted for this study. Through a detailed literature review soft skills were found to be a multidimensional construct. Soft skills were not directly observed, however, it is indirectly measured with the help of Stakeholder engagement management, effective decision making, and professional communication. Twenty one different dimensions have been identified in this study for measuring the impact of soft skills. These findings were aligned with the previous studies where researchers identified the importance of stakeholder engagement management, professional communication and effective decision making during the life of the project and its overall impact on the achievement of project objectives. The study measured impact of soft skills in Pakistani power sector projects and showed that stakeholder engagement management, professional communication and effective decision has significant positive relationship with project objectives achievement.

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Chapter 1

Introduction

Hard skills such as scheduling, budgeting, and metrics etc. of project management are usually considered for successfully completing the project which are without any shadow of a doubt very important. It has been realized that big quantum of work and studies are in place for organizing and executing the project systematically. A number of hard skills are also in place to measure the progress and objectives of projects. However, the importance of soft skills is generally not considered to achieve project objectives.

This study is about the importance of soft skills in project management: stakeholder engagement management, professional communication and effective decision making - 'the soft skills'. Project management requires periodic communication and engagement with stakeholders in order to advice on the project's problem, progress, and personnel matters or delays. Professionally communicating with the stakeholders and critically evaluating there need should be among the major responsibilities of the project manager.

Stakeholder engagement management in project aims to determine those stakeholders who are impact by the outcomes of the project or have influence and either they oppose or support the project. Furthermore, in order to determine success criteria and turning the min to quality goals, it becomes necessary to determine project stakeholders. The analysis of the stakeholders is usually performed whenever there are organizational changes, at the beginning of new projects or where clarification to the consequence of envisaged changes which have occurred. After stakeholder engagement management and analysis, it can be said that professional project communications should be ranked among the major factors which lead to a successful project.

Professional communication is important for the project and the role of project manager in managing the communications throughout the project. Without communications, the stakeholders and project team can be left wondering about what decisions have been made and where things stand. Project communications in respect of team member's and stakeholders awareness of everything regarding what happened in the project can play a major role for the successful completion of the project. The project management industries present and historical paradigm for project success is primarily depends upon the completion of project as per the

schedule and budget. This research, beliefs soft skills of project administration and management that is professional communication, stakeholder engagement management and effective decision making can play a significantly important role which would not just contribute towards the success of the project but can also save a sinking ship and take it to the other side of the river.

In light of the deficiency in literature and research about details regarding soft skills related to project management, the focus of the study is to identify structure and environment of the power industry which throughout the globe is undergoing dramatic change. Project management has become an integral part of the industry without which it has become unadvisable to initiate any project. Project management of any project usually is considered as physical work in various form related to scheduling, budgeting etc. which is the foundation of everything related to the project but if this hard work is coupled with some additional soft skills then the glory related to achieving the objectives of the project successfully can increase significantly.

The public power utilities of Pakistan working with international organizations are now also enjoying the flavor of project management. Power industry functions almost in the same way throughout the globe. The problems which are being faced by the project managers in Pakistan are quite similar to any other project manager working in any part of the world depending upon the environmental conditions.

The requirement for project of engineering, procurement and construction are very much similar. The nature of this job and culture around the globe for this industry brings common problems for everyone when it comes to consultants and approving authorities of country.

The approving authorities of Pakistan consists of National Transmission and Dispatch Company (NTDC) which deals with 220 kV grid and 500 kV grid whereas the Distribution Company's (08 no's) of Pakistan are dealing with 132 kV grid stations. Power utility sector of Punjab consists of the following Distribution Company's (DISCOs):

1. Lahore Electric Supply Company (LESCO)
2. Multan Electric Supply Company (MEPCO)
3. Faisalabad Electric Supply Company (FESCO)
4. Gujranwala Electric Supply Company (GEPCO)

The power utility sector projects of Punjab are mainly turnkey project with usually consists of design, supply, manufacturing, erection, testing and commissioning. These design and related technical data of the equipment which is being supplied are approved by the competent authorities who include National Transmission and Dispatch Company (NTDC) & Distribution Company's (DISCOs) depending upon the project under consideration.

These projects usually comprise engagement of the following parties.

1. Sponsor
2. Client
3. Consultant
4. Related DISCO
5. NTDC
6. EPC (Engineering, Procurement & Construction) Contractor
7. Sub-Contractor

The project manager not just have to keep the project within budget , schedule and prescribed quality but also manage the professional communication with them and making effective decisions while healthily managing stake holders engagement as the stakeholder are highly authorized and their timely satisfaction is crucial for the project.

1.1 Background:

The power utility sector project of Punjab are usually of 1 year duration for 132 kV grid station however the duration for 220 kV and 500 kV grid station may vary from 2 to 5 years. These projects consists of the following steps required for technical data approval of the equipment which is to be procured and installed for any subject grid station by the competent authority (NTDC) and respective Disco.

1. Supplier will submit data to the EPC contractor
2. EPC contractor will submit data to the concerned Consultant for the project
3. The consultant will mark his observation to the submitted data send it back to the EPC contractor to incorporate the comments. If there are no comment the consultant will send the data to the client

4. The client will then submit the data to NTDC
5. NTDC will mark it observation as per their specs and return to the client
6. The client will send data back to EPC contractor
7. The EPC Contractor will send the data back to supplier for manufacturing after incorporating the comments marked by NTDC to the submitted data

1.1. Problem Statement

These projects of 1 year require at least 08 months of approval& ordering and 04 months for execution. Many ongoing projects have been withheld for past 2 to 3 years due to various reasons which may include the following but not limited to:

1. Consultant does not approve the data submitted by the EPC Contractor and an exchange of hundreds of letters is done resulting in nothing but only delay in scheduling.
2. Due to miscommunication with the supplier the manufacturing gets delayed.
3. NTDC do not entertain technical data or specifications submitted to them for approval and comments.
4. Respective DISCO has not provided with the required information to proceed with orientation of feeding line.
5. Litigation.
6. Right of way (ROW). etc.

The above mentioned problems have large impact on the project schedule which subsequently lead to an increased budget. The project manager can save the project from unnecessary delays by regular follow up and timely use of appropriate set of soft skills.

1.2. Objectives of the Study

The objective of this study is to analyze the impact that soft skills have on public power utility projects of Punjab. To attain the said purpose, following are the key point's i.e.

1. To examine the role of stakeholder engagement management in achieving project objectives (in terms of meeting schedule and budget)
2. To examine the role of effective decision making in achieving project objectives (in terms of meeting schedule and budget)

3. To examine the role of professional communication in achieving project objectives (in terms of meeting schedule and budget)

1.3. Research Questions

The research question for this research are as follows

1. What is the impact of stakeholder engagement management on project objectives achievement (In terms of meeting schedule and budget)
2. What is the impact of effective decision making on project objectives achievement (In terms of meeting schedule and budget)
3. What is the impact of professional communication on project objectives achievement (In terms of meeting schedule and budget)

Research Questions	Objectives	Method	Data Collection
What is the impact of stakeholder engagement management on project objectives achievement (In terms of meeting schedule and budget)	To examine the role of stakeholder engagement management in achieving project objectives (in terms of meeting schedule and budget)	Survey	Questionnaire
What is the impact of effective decision making on project objectives achievement (In terms of meeting schedule and budget)	To examine the role of effective decision making in achieving project objectives (in terms of meeting schedule and budget)	Survey	Questionnaire
What is the impact of professional communication on project objectives achievement (In terms of meeting schedule and budget)	To examine the role of professional communication in achieving project objectives (in terms of meeting schedule and budget)	Survey	Questionnaire

Table 1: Research Questions

1.4. Significance of Study

This study can provide students studying project management and professionals to attain better understanding regarding the importance of soft skills in project management. The outcomes obtained from this study can be provided to different forums including project management conferences and project management bodies who can pass it on to the practitioner of project management across the globe which can especially benefit the power industry.

Most of the researchers have provided either a comparison with hard skills of soft skills or dealt with only a few limited numbers of soft skills such as leadership and motivation etc. The impact of professional communication, effective decision making and stakeholder engagement management on project objectives is rarely discussed.

No major studies on this topic were found from Pakistan. There is a need for more studies in order to generalize the findings of soft skills research across varying socio-economic contexts, and also to develop insights into professional communication, effective decision making and stakeholder engagement management and project objectives model.

1.5. Limitations of the Study

Results of this study are mainly limited to cohort of private engineering sector company employees in Pakistan. The size of the sample is small, which is a very key limitation of the study. This research has not covered all aspects related to soft skills of project management since it is such a vast domain. There was no authentic source confirming the total number of companies. The research has been undertaken based on the projects undertaken by companies. However, there can be other companies which have not been working in Pakistan on different projects. This research does not cater the projects undertaken by those organizations. Increased sample frame could provide more validated results for this study topic. This research used single respondent for a project for data collection. It would be more interesting to have multiple respondents from a project assessing independently for the impact of soft skills on these power project.

However, considering the project management is a vast field situated in many different professions, it can be said that the finding of this study are definitely be valuable within the broad field of project management.

Chapter 2

The next chapter provides with the details regarding the literature which has been reviewed in light of the project management and soft skills.

Chapter 2

Literature Review:

The objective of this literature review is to examine that if the idea may be worth seeking or not. Step one of the study consists of indicating the area of the constructs. (Pinder, Wilkinson along with Demack, 2003). This consists of setting out precisely what is bundled along with omitted from the concept underneath this study. Therefore this stakeholder study begins with the ability along with challenge begins with the study of the literature

This can be supported by Ritchie (2007) who within thirty five projects, identified that with stakeholder and communications management with much better client satisfaction, reduces the soft events, and also elevated the actual achievements on the Project.

According to project Management Institute (2004) “project management is the area of planning, as well as coping with sources to bring successful finish the distinct project goals as well as its objectives”. Moreover, PMI declares that project managing makes use of skills, techniques, tool to meet specifications. It usually includes coping with not just time period, charge, as well as range, but identifying this project stakeholders as well as their stakeholder specifications.

Ireland (2006) even so offers a different view along with suggestion that “the challenge in project management would be to gain all of the ambitions even though in addition providing the stakeholder with what required specification which cannot be measured.

Dvir (2007) even are very prescriptive about classification regarding project management, declare that “management of project could be the most important action required to steer a project into an effective end”.

The more common check out along with paradigm proposed by Ireland (2006) along with Shenhar (2007) and a lot of other research workers in neuro-scientific project management is going to be discovered afterwards in stakeholder article.

2.1. Defining project management

As indicated by the Project Management Institute "project management is control of arranging, sorting out, and overseeing assets to achieve the effective consummation of stakeholder requirements". PMI (2004) likewise express; project management is the utilization of abilities, apparatuses, and systems to meet the project prerequisites. It commonly includes scope cost and time as well as distinguishing the stakeholders of the project and their needs. Ireland (2006) offers a different view and recommends "project management is to accomplish every one of the objectives whilst additionally conveying the project on budget and on time". However administrative exercises expected to take the project to an effective end". Phillips (2003) noticed that project management is to keep up and coordinate the requirements of all anticipated stakeholders. Schwalbe on the other hand offers a contrasting perspective of project management from such that project management provides inside it three wide regions: the nine knowledge areas (developed in the upcoming section), the stakeholders and the deliverables of the project. In dealing with these three regions, Schwalbe (2003) proposes this ought to convey a successful project. Besides, Verzuh (2006) further places three key variables as follows.

- The agreement of the stakeholders
- Effective and professional communication and
- Support of the management.

2.2. The Historical Background of the Project Management

Management of projects are being done since early civilization. Dvir and Shenhar (2008) said that "following the start of civilization, individuals are included in project". For instance, probably the most well-known project ever, include: Manhattan Project, the Apollo Project, Sydney Opera House and Great Wall of China.

Until 1900 projects were for the most part overseen by designers, among these included: Christopher Wren (1758-1836) and Isambard Brunel (1805–1858). It's been subsequent to the 1940s that organizations began applying tools and techniques to all projects (verzuh, 2004; and Schwalbe, 2001).

Project management created from various fields of engineering, construction, defense and

designing. It has perceived that two forefather of project management are Lewis and Henry Gantt are broadly known for his utilization of Gantt diagram. Likewise, making of four management capacities, which can frame the premise collection of information connected within program management and project management (Schwalbe, 2003).

The 1960s denotes start of modern era Project Management period. Project Management was perceived as stakeholder control emerging from the management area. Moreover, Verzuh (2004) includes that a lot of cutting edge Project Management was characterized and created in 1960s in driving cold war and then later in the space projects.

The Project Management Institute was shaped to provide guidance for industry in project management. The Managers PMI Board of approval improved what has turned into PMBOK, which includes measures and rules which are generally utilized.

The 1970s portrayed the progressive advancement in data management area with presentation of the (PC) and related communications organizing offices (Azzopardi, 2008). This improvement brought about ease multi project that had more effectiveness in overseeing and monitoring complex project plans. With minimal effort project management programming turned out to be generally accessible and made project management strategies more easily available (Azzopardi, 2008).

As of now with fast mechanical headway, flourishing IT commercial enterprises, and globalization, project management arrangements are popular over the world as a key power to finish projects inside not just a characterized degree, time, and cost limitations, additionally the acknowledgment that project stakeholders have essential influence in effective project of the project (Bista, 2009).

2.3. Project Management: The Traditional View

Baker (2006) says that project management worldview an effective project under the appearance of “on budget, on time and stakeholders and a predetermined scope. Such components are likewise alluded to the triangle of project management, where every side speaks to limitation. Any one side of the triangle can't be altered without influencing any other. Essentially, Verzuh (2006) sets that achievement of project is characterized as “on budget and

on time, to concerning usefulness and execution. Besides, Verzuh (2006) express key segments that the manager of project must figure out how to guarantee a fruitful end of the project. Hartley (2004) composes "cost, time and assets are project limitations which structure the finish of an effective project". Dinsmore (1998) places and strengthens this perspective, taking note of that "generally extend management review focused on the best way to manage the specifics of the project, for example, time, expense and stakeholders". At long last, Dvir and Shenhar (2008) state that the average conventional project management at the project as a grouping of exercises that must be finished by plan to accomplish a predefined and achievable result.

The previously stated writers and researchers believe that normal importance is centered cost and time. Time relates to the measure duration needed to finish any milestone. Project quality ordinarily alludes guidelines or details project deliverables should fulfills. Scope alludes to what should be done to create the final result for which the project was undertaken.

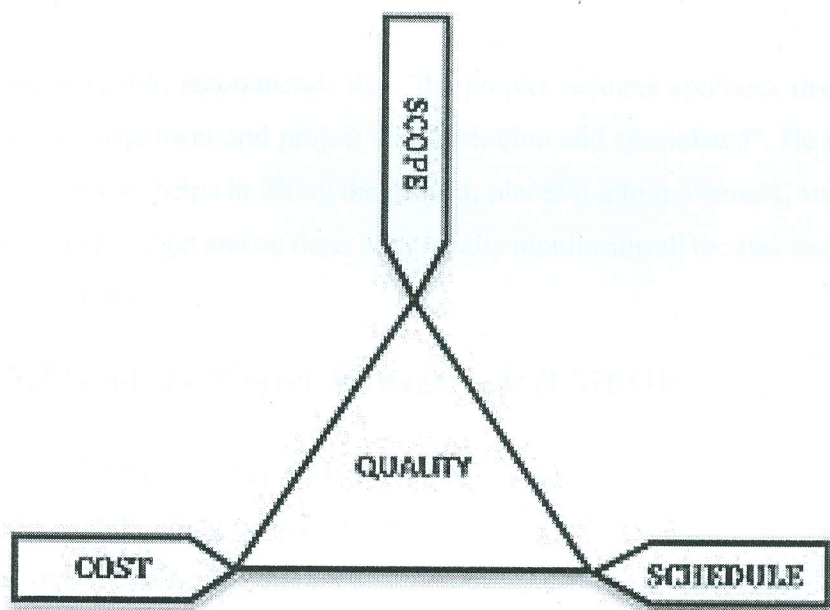


Figure 1: Tripe Constraint

2.4. The Project Manager

Project manager is an expert in the field of management of the project. Verrzuh (2006) states project manager is a pioneer dealing with the project management device set, additionally driving and dealing with all the stakeholders"

Managers are found in the development, building, PC, information transfers, and protection parts. In any case project management have been created in more non-conventional areas, for example, law offices, instruction, review firms, generation, outline and management, and retail commercial enterprises. Dinsmore (2007) bolster their perspective that cutting edge project management is presently extensively connected in the more non-customary regions, for example, showcasing, human asset management, and hierarchical change.

Numerous authors in territory of project administration and management inquired and recognize the key obligations of the project managers as being:

- Attainable and clear objectives of the project
- dealing with project requirements
- Manage time, quality, cost, and scope the four main components of a project

Moreover, Verzuh (2005) recommends that "the project requires aptitudes inside three wide ranges: business management and project administration and specialized". He moreover says that the project manager helps in lifting the project, places it into movement, and conveys to a fruitful conclusion on budget and on time, additionally monitoring all the stakeholders and what does achievement mean.

2.5. PMI Guide to Project Management (PMBOK)

The PMI was established in 1970, primarily reason was numerous project were going on related to development and building which required better management". PMI aims that basic standards may be collected and combined so that everyone one in the world should be aware of it and may be considered as one of the best practices. Further they believed it to be a profession. PMI board affirmed and supported their principle center as being:

- Certification(Professional) and education
- The structure and content in the body of knowledge
- The major characteristics related to this profession

Finally, in 1987 PMBOK (first edition) was out in the market

2.6. Background and Overview of PMBOK

PMBOK is the total learning about project management for the specialists and instructors who apply and propel it. PMBOK incorporates demonstrated customary practices that broadly connected, and imaginative practices that are developing, including distribution.

PMBOK third version is issued in 2004, which was modified from its past release of 2002. The past two versions were portrayals of new and improved disciplines (zones) as indicated by PMI reference to learning ranges depended on the discernment this gave superior comprehension and portrayal of viewpoints and requirements dealing with the procedures these nine areas have inside them.

Main role of the PMBOK is to distinguish subset of learning that is by and large perceived as great practice. As indicated by PMI, implies the learning and practices portrayed are of pertinent to projects, and a wide agreement of their worth, convenience useful application in business. PMI portrays great project management as a general understanding that the right use of aptitudes, apparatuses, and procedures can improve the odds of project accomplishment of an extensive variety of various commercial enterprises and project sorts. PMI call attention to best practice doesn't imply the information depicted ought to dependably be connected consistently, however actually with the stakeholders are in charge of figuring out for any project. Henceforth, PMBOK advances wording for applying, composing, depicting management. PMI battle is a fundamental component, similar to the case for project management.

The PMBOK (2004) states 44 processes, which divided into the nine areas described below

Disciplines

Project Management Discipline's
Scope
Integration
Time
Cost
Quality
Communications
Human Resource
Risk
Procurement

2.7. Managing of Project Communications

Investigating the requirements of communications during the project are considered to be among the major need of the stakeholders of the project. They recommend characterizing and consolidating the organization of data the stakeholders may require. PMI recommend the aim guarantee that the stakeholders are furnished with project data prerequisites when required by them, instead of being overwhelmed by staggering data. Subsequently, the manager of the particular project ought to consider for potential correspondence and techniques required by the stakeholder.

The PMBOK depicts the utilization and report of the data requirements for a management of the project whilst additionally consideration of needs of the stakeholders'. Besides, PMI takes note of that an interchanges arrangement accommodates a commonplace arrangement of apparatuses and procedures to decide project communications requirements

PMI (2004) takes note of quick innovation, which can be extremely helpful for supporting exchange of data. Nonetheless, they takes note of the project manager needs to consider various variables that encroach upon and manage the communications innovation that could be utilized

as a part of a project.

Storm (2004) contends components of PMBOK (2004) connect to instructive abilities in the project management field. Mersino in 2007 battles that project manager is regularly the focal point of all anticipates communications for the project and having incredible data will be an element of the connections for stakeholder management.

2.7.1. Professional Communication

Professional communication is a very vast term which also relates to technical communication and contains a lot of things encompassing a wider variety of skills ranging from making strategies to the use of lasted technology depending upon the objective required to be achieved & also effectively communicating in the business world which may also include

- Body language
- Speaking
- Listening
- Review
- Responding

These are carried out in your workplace or beyond your work place either done electronically or with someone in person.

As identified by Project management institute PMI the biggest reason of success in project is communication. High performance and teamwork can be achieved with openness in communication which also helps to improve mutual trust between the team members.

Professional communication can help and provide insight to areas such as

- Resolution to Conflict
- Procurement Negotiation
- Making Decisions

2.8. Project Stakeholders

PMI portrays project stakeholder as an individual that are effectively included in the project, or whose interest might be influenced the project. It express that they apply impact on outcomes and targets. Henceforth, in the former talk on project manager should recognize the project stakeholders and their needs.

PMI contend that stakeholders have differing obligation and power when partaking in a project and by and large do fluctuate, through the lifecycle of the project. Their obligations can go from intermittent commitment to sponsorship which would likewise incorporate budget. Consequently, the project should guarantee all stakeholders are distinguished and no one is overlooked.

The PMBOK proposes to distinguish all stakeholders, yet all the more essentially to then figure out whom are the key stakeholders. As PMI characterizes for the project stakeholder to "applying impact on outcomes and destinations". Further they says about stakeholder's individuals might profit an effective project result, and negative stakeholders would create problem for the project. PMI (2005) unmistakably contend that there can be stakeholder's who would want the project to not complete its milestones on time and would do everything to put front every weakness of the project.

PMI (2004) joins the information range of interchanges management to project stakeholders, by belligerence alludes to dealing with the requirements of communications.

The project management institute (PMI) defined stakeholder as "A stakeholder is an individual, group, or organization who may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project" (PMI 2013).

Two main methods to manage the relationships with different stakeholders have been explained by (Freeman and McVea 2011) – buffering and bridging. *Buffering* means to establish obstacles between an organization and its stakeholders, in an effort to bind the effect and influence of stakeholders (Harrison and St. John 1996). In compare *bridging* look for shaping a partnership with a stakeholder by creating common ground and action (Elias et al. 2004). Hillman and Keim (2001) claim that the second tactic to the management of stakeholder can help forming the competitive advantage and provide additional resources to the firm.

2.9. Stakeholder Engagement Management

As per the definition of Project management Body of Knowledge (PMBOK) identifying groups, people or organization which could impact the project are included in project stakeholder management. It also includes to analyze stakeholder engagement and to create appropriate strategize for effectively engaging stakeholder in project execution and decisions. It also focuses on communicating continuously with the stakeholder to determine their needs and expectation, dealing with issues when they arise, conflict management and fostering stakeholder engagement appropriately.

Actively engaging stakeholders increase the likelihood of higher success rate. The manager of the project should negotiate continuously and implement desires of the stakeholder to attain strict compliance of the project expectation and goals. According to Cleland (1995), successful implementation of projects is reliant on fulfilling the anticipations of different groups of stakeholders including clients, project managers, designers, subcontractors, suppliers, funding bodies, users, owners, employees and local communities (Newcombe 2003).

2.10. Stakeholder power- influence grid

This power influence grid is useful to in every respect when stakeholders of the project are concerned. It categorizes the stakeholder s of the project in four different ways depending upon their power and interest. The stakeholder with high power and interest are to be managed closely and the one with low interest and low power are to be kept informed.

The premise of the examination is as per the following:

- High power, Low interest
- High power, High interest
- Low power, High interest

- Low power, Low interest

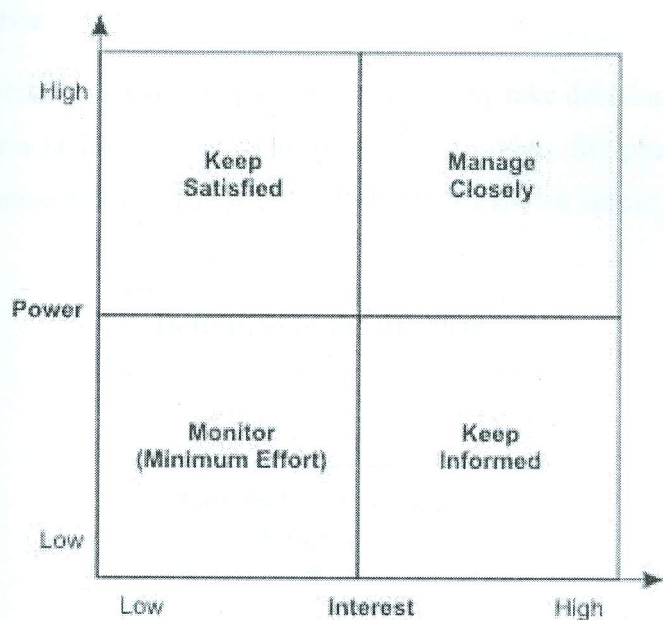


Figure 2: Power Influence Grid

2.11. Effective Decision Making

Choosing between two or more courses of action effectively and efficiently keeping in view the objectives& constraints of the project and then commit to the decision taken & ensuring that the merit of the decision are meet.

The broad process of solving problems, making decisions involves choosing option among all the possible options to the problem. The decision can be intuitive or reasoned process which depends from scenario to scenario.

As defined by Project management Body of Knowledge (PMBOK) the decision styles are as follows:

- Consensus,
- Consultation,
- Command
- Coin flips.

The factors which affect the decision style as defined by Project management Body of Knowledge (PMBOK) can be

- Time constraints
- Trust

- Quality
- Acceptance

For effective decision making the project manager may take decision individually depending upon the scenario or involve the team to take their option. Six-phase model as defined by Project management Body of Knowledge (PMBOK) is shown below:

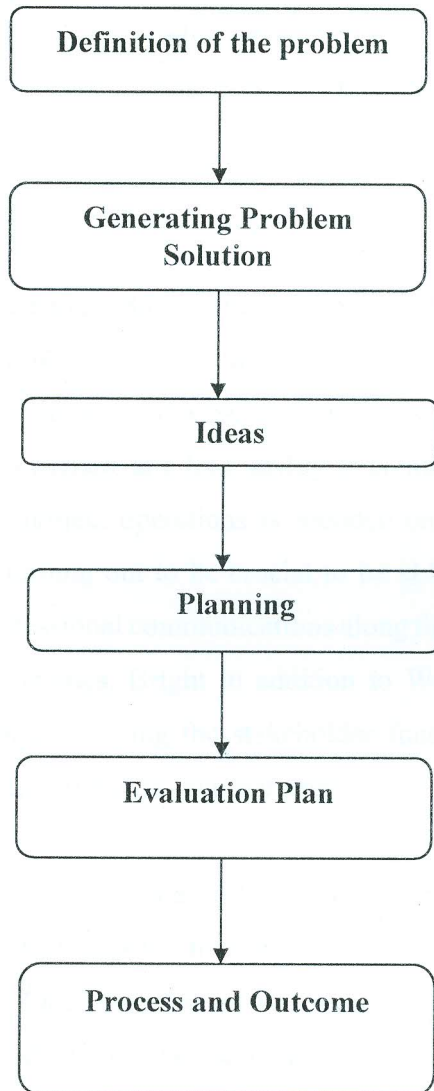


Figure 3: Decision Process Flow

2.12. Industrial literature regarding soft skills:

Literature on project management shows as cited by Muller and Turner, 2005⁶ recognized a set regularly extend achievement elements of five achievement variables which are as follows.

Success Factor	Description
Senior management support	power to implement, resources and authority
Client consultation	Consultation of all stakeholders and Communication with them
Project personnel	Project Personnel Management
Client acceptance	Acceptance and agreement by the customer of the deliverable.
Communication	The number of communication channels that should be maintained.

Table 2: Project Success Factor

Elmes in addition to Wileman (1988) mentioned that the project manager ought to make a deal regarding operation attempts inside a project, in addition to successfully control the project stakeholders. Pinto in addition to Kharbanda (1995) discovered a few soft skills a project manager to possess. For instance, and like, ability to communicate and discussions ability. In addition they stress that project operations is founded on persons operations which in turn brings about soft skills turning out to be crucial to be able to project operations success. In addition they advised professional communications along the different stakeholder is necessary to know for effective outcomes. Bright in addition to Wad of cash (2002) recognized this stakeholder look at through positing the stakeholder functions of the project are generally without a doubt “challenges to the project manager”

In 2004, Maximum Wideman wrote the cardstock talking about project and also reported which “simply becoming on budget and on time does not suggest how project will be successful” Furthermore, Wideman (2002) reported for success of project relies on the men and women involved and also the direction they handle about the project.

Project management achievements in line with the Standish group (2010) will be supplied by means of experienced project manager, who is able to stabilize our wants regarding stakeholders with the projects outcomes with an effectively identified and also reported communication method. Hence, the actual Standish group (2010) shows that any kind of project management governance and also assist constructions really should locate the best top priority.

Woodward (2005) reported quite a few project management case scientific tests. 1 especially report Firefox Residence. This kind of project seemed to be recognized like a “spectacular failure”, underneath the classic check out regarding project achievements: on time and also in budget.

The Standish Group additionally figured out that projects success or failure is a direct result of individuals. In stakeholder fall flat because the absence of project management experience, stakeholders backing and associations. They recommend that very much characterized parts and obligations are imperative to expand the shot for project achievement they call this joint effort management of projects. The Standish Group fights dealing with the cozy associations and powerful correspondence is the most critical part. Coordinated management can moderate project hazard by sharing learning, stakeholder management, data management and viable communications.

Verzuh (2006) says project correspondence among the key elements of project. In stakeholder, viable project data dispersal and circulation include way to measure effectiveness. Veerzuh (2004) expressed great viable correspondence joins obligations and is likewise establishment. Essentially professional correspondence is an essential for a fruitful project. Pastry specialist (2006) likewise composes sort of records, combined will change for the duration of the life of the project. Besides, Baker (2006) takes note of an inclination for the strategy and the kind of archives they get. At last, the achievement relies on upon viable record dispersion that contacts the right individuals in an easy to use design (Baker, 2006). Bournne (2004) has reported that standard achievement variables of a project (time and cost) and noticed that gain from past activities with different apparatuses and procedures for arranging. For example, connections and the instruments to deal with the connections. Bourne (2007) contended achievement or disappointment can be connected to aptitudes of the project manager, for example, noticing abilities are procured, learning and utilization of strategies, for example, viable data stream and record management. Today's project manager as indicated by Bourne (2004) must have the capacity to adjust the stakeholder desires that encompass the project. The project manager sees every one of the elements that add accomplishment by guaranteeing contribution, dealing with the data stream and comprehend the stakeholder's desires.

Project management from Walker and Bourne (2005) proposes that the PMBOK (2005) has a tendency fundamentally worried abilities (the art), aptitudes of honing project management

experts with information territories, for example, project human asset correspondence management (the crucial relationship-centered ranges) consigned optional parts. Thus, Bourne (2007) fights that abilities are fundamental for accomplishing project outcomes that completely desires all through the project lifecycle. Relationship abilities as per Bourne (2009) help the viable use of hard aptitudes; it is individuals, utilizing information, imagination (and frequently innovation) that acknowledge projects, not strategies or equipment. Develop project management achievement and abilities.

A model that connections of project achievement and the soft abilities in light of "the achievement. They note corporates client centers fabricating and looking after connections, cooperation, and interchanges. In a study directed by Gillrard (2005) who observed that individual's abilities were evaluated higher than specialized skills which may include project communications, collaboration and inspiration. It's been accounted for considerable project review that the way to project achievement connections created all through the project.

Further confirm at PMI gathering in 2007, where a paper conveyed proposed that successful correspondence is a key part of procedure building and improvement of connections which prompt stakeholder management. Then again, Carbone and Gholston (2005) really interface the soft abilities manage projects instruction and preparing on the specialized (hard) aptitudes of 'on budget and on time '. Carbone (2004) propose this is because of the specialized aptitudes being simpler to convey in a preparation. They note "specific center set on the soft abilities on part of the person who is managing the project".

At last, ahead of schedule in project management review distinguished 'the general population they recommended that instructors ought to build their endeavors in the unequivocal (hard/specialized) aptitudes, as well as the unsaid (intellectual, reasonable, and soft) abilities. This perspective upholds the fact the project manager needs to be simply specialized, yet ought to envelop the capacity to oversee groups. Bourne (2005) likewise bolster this thought by recommending that aptitudes really supplement the viability of the project hard abilities since project outcomes are accomplished by individuals.

Pearce (2007) noticed that effective project manager's figure out how to manage individuals, which they called "relationship building abilities" which is referred to as soft skills. Exploration found that because of the wrong management of the general population measurements as

opposed to in light of specialized troubles. They discovered that project management instruction to center not on simply the specialized management expertise. The perspective that the soft skills that a project manager ought to have into seven zones: correspondence, authoritative, group building, initiative, adapting, and mechanical. They recommend that powerful project management lays on the human, theoretical, and specialized abilities. Nonetheless another perspective of the project manager's soft abilities, where they distinguished an arrangement of basic achievement elements consider hierarchical and stakeholder points of view. They expressed that lately CSF systems created to guarantee that project achievement is stakeholder reliant and must include collaboration between the project manager and stakeholders who are of the key importance.

An overall exhortation association, composed on the difficulties and encounters of overseeing extensive projects. One of the difficulties, proposing that one part of activities that is regularly ignored is social and geological prerequisites. Gumna (2008) proposes "project manager capacity to build up the privilege shared soul and project environment"

Soft skills additionally alluded to as 'smaller scale social' abilities, are all around perceived as being basic to fruitful project management. Outside of the project management field additionally distinguished that numerous studies have demonstrated that soft abilities can make up for absence of more conventional subjective knowledge, and that they are frequently the separating component are sufficient result recommend that just by really the customer's requirement.

Achievement require skills, you need to acquire the blessing yet there is no chance to get of knowing without a doubt in the event that it will be conceded. This implies as project manager you should convey the arranged goal. Be that as it may, accomplishment all alone does not mean achievement. Achievement is the point at which your accomplishment is recognized it to be a win.

The soft abilities and their importance to the project manager, requires taking note of examination and recommended that two wide ideal models exist in project management review proposed are made up by procedure, frameworks, parts and obligations, danger and quality management, and advantages acknowledgment. Whilst the other, incorporate management, political components, assignment, correspondence, trust. They propose that "nobody point of

view is proper to all circumstances, however the project manager needs to adjust their way to deal with them which includes the utilization and use of both soft and hard skills.

2.13. Summary

The review of literature gave a history and foundation regarding management of project, whilst additionally talking about the customary perspective related to project about on budget and time. Further, it exhibited insights about study of project management as a field. The review presented a very important aspect regarding the project management which a very key segment PMBOK (Project management body of knowledge)

It distinguished, archived and reported the large perspectives of project management field that constitutes an effective project. It was brought to knowledge that stakeholders are of key importance for the project. Furthermore it provides with the information that the project manager has to maintain professional communication with all the stakeholders of the project throughout the lifecycle of the project.

Another important part of the literature review elaborated that to keep all the stakeholders informed at all time and involve them in important decisions regarding the project should be a regular practice. The project manager should convey all the relevant information primarily to concerned stakeholder and secondarily to all those who have a high interest in it and have high power. Many other scholars such as Bourne 2003; Verzuh, 2005; Hartley 2003; Dinsmore 2006; Soderlund, 2002; Beard 2005 ; Gillard 2009; Durrell 2006 ; Pearce 2006; Muller 2005; Schwalbe 2002; Ludin 1997; Dinsmore, 2006; Baroudi, 2006 ;Baccarini 2004 majorly highlighted the that stakeholders are of significant importance and they soft skills play an important role in managing these stakeholders and their expectations. Furthermore they noticed that communication plays a very vital role in managing the expectation and fulfilling their requirements.

Stakeholder mapping, the Power-Influence grid project manager has keep himself aware of the fact that which stakeholders has an high power and high interest it Is very important to keep him satisfied whereas the stakeholder with high power and low interest should be monitored and the stakeholder with low power and low interest should be kept informed at all times and lastly the stakeholder with low power and high interest should also be kept informed at all times.

Many other reviews showed that the major focus is usually done for the hard skill with majorly relates

to the concept of on budget and on time but it also revealed that if these hard skill coupled with soft skill of effective decision making then it can become a recipe for a successful project.

The main reason for this review was to identify that project management has been done since ages and because of which great wonders have been Created and witnessed by the world and extensive work has been done on the literature regarding project management which resulted in the creation of PMBOK. Further it highlighted the importance of the soft skill (stakeholder engagement management, professional communication and effective decision making) of project management which may turn into a primary importance when undertaken a project.

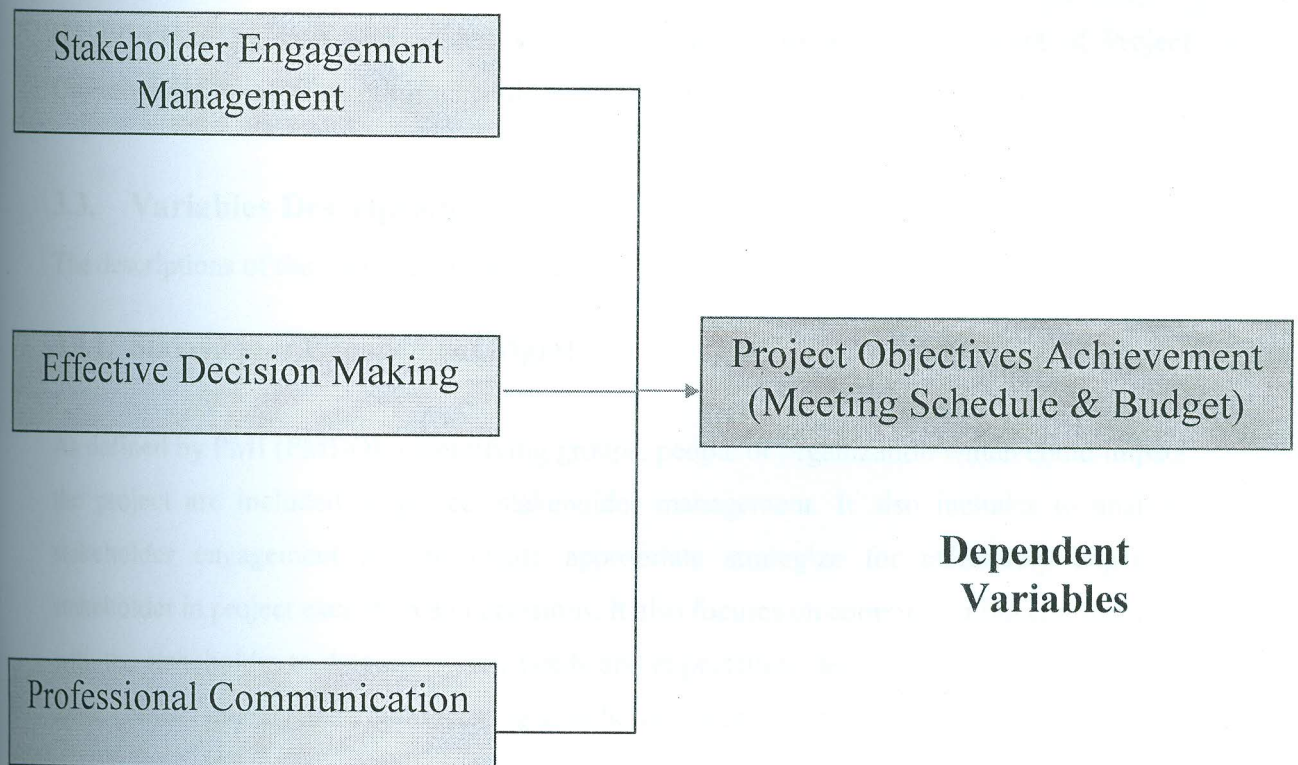
The next chapter contains the details regarding the theoretical framework and how it has been designed.

Chapter 3

Theoretical Framework

3.1. Conceptual Model

Following conceptual model has been tested in this study. The model has integrated and comprehensive view of soft skills and its relation with achieving project objectives.



Independent Variables

Figure 4: Conceptual Model

The major purpose of this research is identify the impact of soft skills on project objectives achievement (In terms of meeting schedule and budget). The conceptual model consists of dependent variable i.e. project objectives achievement (In terms of meeting schedule and budget) and soft skills as independent variables which includes stakeholder engagement management, effective decision making and professional communication.

3.2. Research Hypothesis

After detailed literature review, the following hypotheses have been formulated on the anticipated relationship among the variables in the study.

H1: Stakeholders Engagement Management has significant relationship with achievement of Project Objectives (in terms of meeting schedule and budget).

H2: Professional Communication has significant relationship with achievement of Project Objectives (in terms of meeting schedule and budget).

H3: Effective Decision Making has significant relationship with achievement of Project Objectives (in terms of meeting schedule and budget).

3.3. Variables Description:

The descriptions of the variables identified for this study are given below:

3.3.1. Stakeholder Engagement Mgmt

As defined by PMI (PMBOK) identifying groups, people or organization which could impact the project are included in project stakeholder management. It also includes to analyze stakeholder engagement and to create appropriate strategize for effectively engaging stakeholder in project execution and decisions. It also focuses on communicating continuously with the stakeholder to determine their needs and expectation, dealing with issues when they arise, conflict management and fostering stakeholder engagement appropriately.

Actively engaging stakeholders increase the likelihood of higher success rate for the project. The manager of the project should negotiate continuously and implement desires of the stakeholder to attain strict compliance of the project expectation and goals

3.3.2. Effective Decision Making

Choosing between two or more courses of action effectively and efficiently keeping in view the objectives& constraints of the project and then commit to the decision taken & ensuring that the merit of the decision are meet.

The broad process of solving problems, making decisions involves choosing option among all the possible options to the problem. The decision can be intuitive or reasoned process which depends from scenario to scenario.

As defined by Project management Body of Knowledge (PMBOK) the decision styles are as follows:

- Consensus,
- Consultation,
- Command
- Coin flips.

The factors which affect the decision style as defined by Project management Body of Knowledge (PMBOK) can be

- Time constraints
- Trust
- Quality
- Acceptance

For effective decision making the project manager may take decision individually depending upon the scenario or involve the team to take their option.

Six-phase model as defined by Project management Body of Knowledge (PMBOK) is shown below:

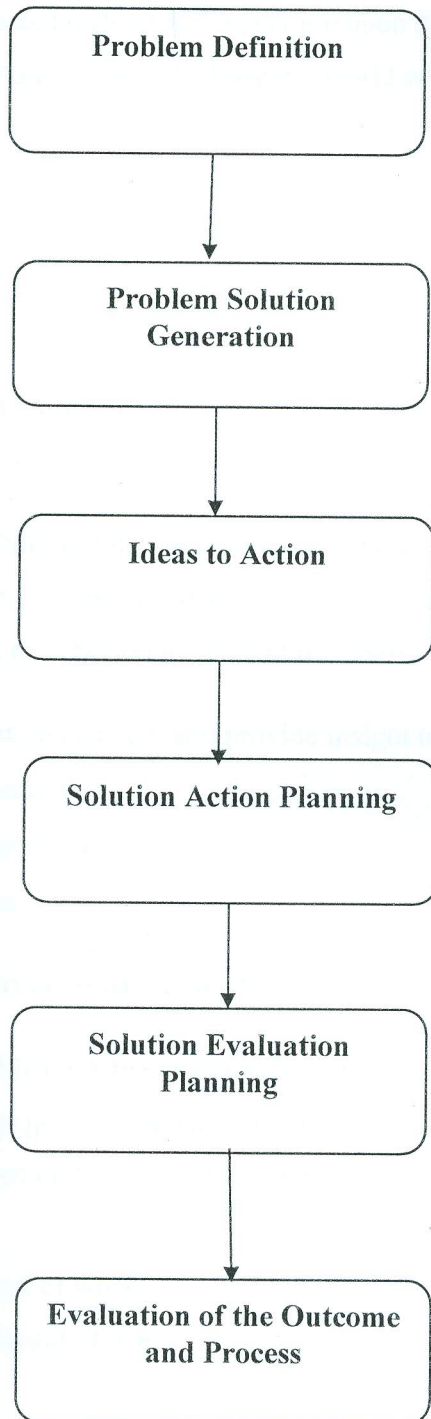


Figure 5: Six Phase Model

3.3.3. Professional Communication

Professional communication is a very vast term which also relates to technical communication and contains a lot of things encompassing a wider variety of skills ranging from making strategies to the use of latest technology depending upon the objective required to be achieved & also effectively communicating in the business world which may also include

- Body language
- Speaking
- Listening
- Writing
- Responding

These are carried out in workplace or beyond work place either done electronically or with someone in person.

As identified by PMI (PMBOK) that biggest reason for success and failure is communication. High performance and teamwork can be achieved with openness in communication which also helps to improve mutual trust between the team members.

Professional communication can help and provide insight to areas such as

- Resolution to Conflict
- Procurement Negotiation
- Making Decisions

3.3.4. Project Objectives Achievement:

As defined by PMI (PMBOK) the undertaking of a project may include achievement of objectives related to the project in various forms such as completion within a certain time period and budget. The objectives of the project may include but are not limited to:

- Fulfilling the Scope of work
- Maintaining the Quality Levels
- Meeting Budget
- Meeting Schedule

Measuring the impact of soft skills on achieving project objectives (meeting project schedule and budget) will be considered for this study.

3.4 Chapter Summary

In this Chapter a detailed theoretical framework has been discussed. Considering the rationale for this study, the chapter listed problem statement followed by theoretical background. Hypotheses have been established for this research followed by explanation of research model. In the end, the chapter provided list of variables used for this research study. In the next chapter research methodology has been explained in detail.

Chapter 4

Research Methodology

4.1. Chapter Introduction

This chapter provides details about various aspects of research methodology. It provides detail about research design, sample design and analysis design. It explains how the instrument was used for data collection in this research study. In the end detail about data collection tool i.e. research questionnaire has been provided.

4.2. Target Population

The targeted population for this study is the power engineering sector companies of Pakistan which are as follows but not limited to:

1. Siemens Pakistan Pvt. (Ltd)
2. Pak Electron Limited (PEL)
3. Schneider
4. General Electric (G.E)
5. Alstom
6. DESCON
7. ASEA Brown Boveri (ABB) Pvt. Ltd
8. Netracon
9. ITW Pvt Ltd.
10. M.E Consultants
11. Barqaab Consultancy
12. Enmass Consultancy
13. LESCO
14. MEPCO
15. GEPCO
16. FESCO

4.3. Place of the Study

As all the targeted population is in Lahore hence study will be conducted in Lahore, Pakistan. Private Engineering Sector Companies based at Lahore will be contacted for this study.

4.4. Research Design

The study describes the impact of soft skills on public power utility project of Punjab. It tries to explain how they are linked to the project objectives achievement. So the research design is explanatory in nature. A brief overview of the research design is given in the follow:

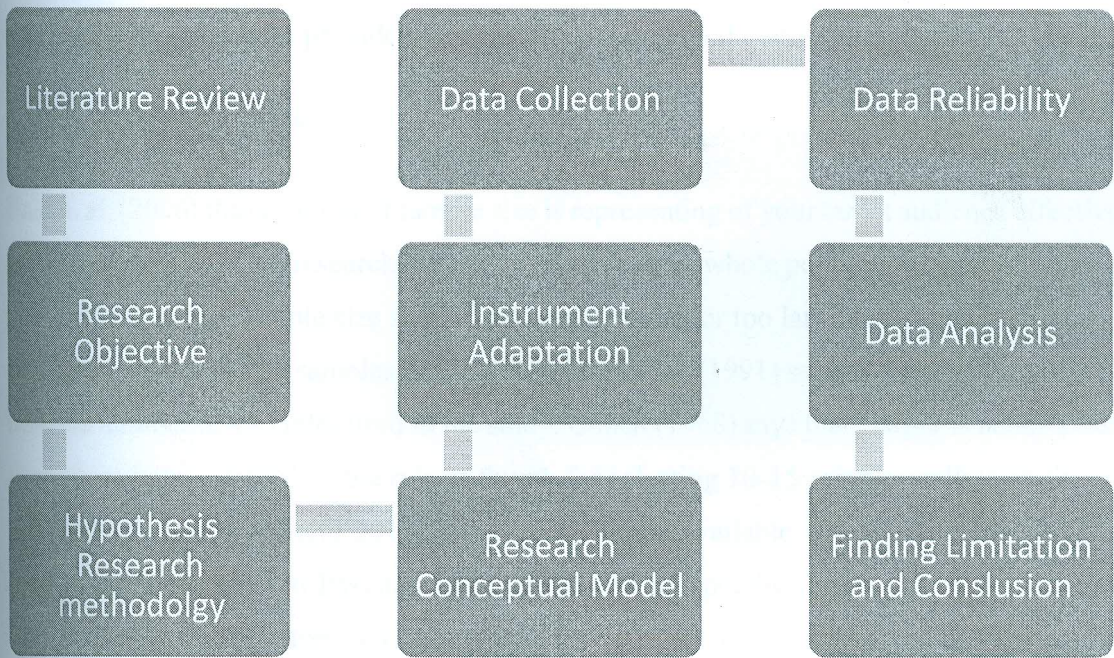


Figure 6: Research Design Overview

4.5. Sample Design

There is no source giving details of all public power utility projects with private engineering companies based at Lahore. Given the number of variables involved and the statistical analysis planned, the researcher has set a target of contacting professional engineers in different engineering sector companies. They would be requested to provide data for maximum number

of public power utility projects covering different types of projects and members in different roles. The objective is to cover different types of companies, projects and respondents.

The researcher sent an email to approximately 40 companies of Pakistan and requested them to participate in this study. The Public Utility companies were requested to provide filled questionnaire by one member from each of the recently completed projects. They were also requested to collect data from maximum number of projects and different members in different roles but at the same time ensuring the condition that only one respondent should be asked from a project. The main reason was to cover maximum types of projects and respondents without collecting multiple responses from the same project. Most of the project team members' were hesitant to discuss about their ongoing projects. The researcher has to explain and give them the confidence that this information will strictly be used for academic purpose only. Only 32 companies provided feedback on the provided questionnaire.

4.6. Sample Size

Hair et. al. (2006) the selection of sample size is representing of your target audience effectively as it is impossible for the researcher to get the sample from whole population. Some researchers give preference that sample size should not be very small or too large and should be within an ideal range of 100 to 200 samples for data analysis. Green (1991) sample size can be calculated from the number of variables used in the study. Cohen (1968) says that "larger is better". Some researchers have established the rule of thumb for selecting 10-15 samples collection for each independent variables (Field 2012). There is no source available which could list all private engineering companies in Pakistan and there is also no specific formula to calculate sample size. Therefore, sample size of 172 is selected. However, it was made sure that the research questionnaire was filled by professionals.

4.7. Sampling Technique

Non probability convenience sampling technique can be adopted in accordance with time and scope constraint and in the view of previous research practices (Sekaran U., 2003). Therefore, convenient sampling technique is used in this study since data of different power sector projects was to be collected from different power sector companies in Lahore.

4.8. Design Analysis

IBM Statistical Package for the Social Sciences (SPSS) Statistics version 2.0. is used for data editing, coding and basic analysis. Regression analysis is done to test the significance and relationship. Reliability of collected data is checked by using Cronbach’s alpha.

4.9. Data Collection Tool

A survey method is used for data collection. The said questionnaire was made available electronically and physically to the respondents. Necessary instructions were mentioned on the questionnaire for the respondents.

The research questionnaire was comprised of five parts.

- 1. Part A had 09 questions related to demographics.
- 2. Part B had 06 questions regarding stakeholder engagement management
- 3. Part C had 05 questions regarding effective decision making
- 4. Part D had 05 questions regarding professional communication
- 5. Part E had 03 questions regarding project objectives achievement

Five point likert scales was used in this study as per the following detail:

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

Figure 7: Five Point Likert Scale

4.9.1. Instrument

The objective was to have a research questionnaire which could be used for measuring constructs of stakeholder engagement management, effective decision making, professional communication and project outcome (meeting project budget and schedule).

4.9.2. Instrument Review & Validation Process

Following figure shows a step by step evolution process for research instrument’s review and validation. The details are described in next sections of this chapter and in chapter 5.

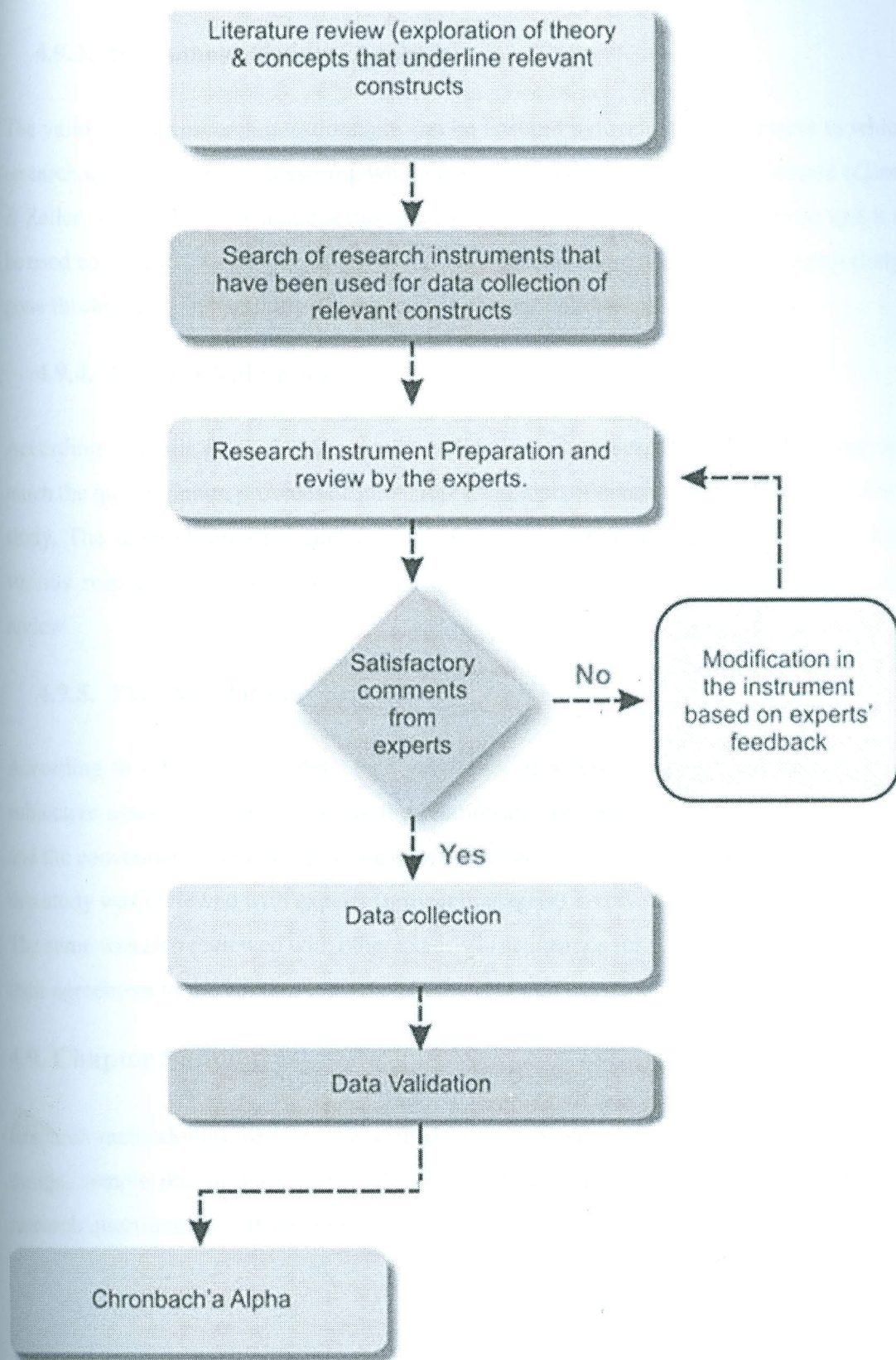


Figure 8: Validation Process

4.9.3. Instrument Validity Analysis

The validity of a research questionnaire can be ensured by evaluating the extent to which the research questionnaire is measuring what the questionnaire is expected to measure (Carmines & Zeller, 1990). The research questionnaire should be checked for its validity so that it could be used confidently for proper data analysis. The questionnaire used in this research study also gone through two step validity process called content validity and face validity.

4.9.4. Content Validation

According to (Hair et al., 1998), content validation of a research questionnaire means how much the questionnaire provides accurate representation of conceptual model being used in the study. The research questionnaire is valid if the items in the questionnaire which represent various respective constructs have been authenticated / evaluated by a detailed literature review.

4.9.5. Face Validation

According to (Hair et al., 1998), face validation of a research questionnaire is basically a subjective assessment that measures the relationship between the items in the questionnaire and the conceptual design by applying experts' judgement. The research questionnaire used in this study was reviewed with experts (project managers) involved in power projects in Lahore. The same was also reviewed with other experts in academics for guidance. The experts showed their agreement to the content presented in the research questionnaire in the current study.

4.9. Chapter Summary

Research methodology has been described in this chapter. It provided detail about research design, sample design and analysis design. In the end detail about data collection tool i.e. research questionnaire has been provided.

Chapter 5

Data Analysis

5.1. Chapter Introduction

Research methodology has been described in previous chapter. In this chapter, data collection and its reliability has been described. Starting with sample profile detail, analysis on reliability of the collected data has been provided.

This chapter also provides descriptive statistics for the main constructs of this research study i.e. stakeholder engagement management, effective decision making, professional communication and project objectives achievement in terms of meeting budget and schedule. Data tables displayed in this chapter have been generated using SPSS.

Data Analysis has also been performed in this chapter using statistical tools SPSS. In addition, the detail and results of correlation carried out for this research are available in appendix III. Further, based on the analysis, the researcher has provided results of the hypotheses.

5.2. Sample Profile

Sample design has already been explained in previous chapter. The researcher received 180 feedbacks from 24 different power sector companies of Pakistan. After initial data analysis, eight feedbacks were rejected based on inappropriate inputs. Finally 172 responses were accepted for detailed analysis representing 172 different projects from 24 different companies of Pakistan. Following table summarizes the detail of the sample profile.

Sr. No	Description	Count	%age
1	Number of companies contacted for the study	40	100
2	Number of companies provided feedback.	24	60
3	Response rate.	60%	70
4	Total responses received (projects data).	180	110
5	Total responses discarded.	8	10
6	Finalized number of responses (projects data).	172	100

Table 3:Sample Profile Detail

Initial analysis of the received responses revealed that these samples possessed diversification with respect to different roles involved in a power sector project e.g. project manager, member of design team, project lead etc. There is also diversification in received feedbacks with respect to other factors as well. Detail is being listed in graphical and tabular format as follows.

5.2.1. Respondent Roles

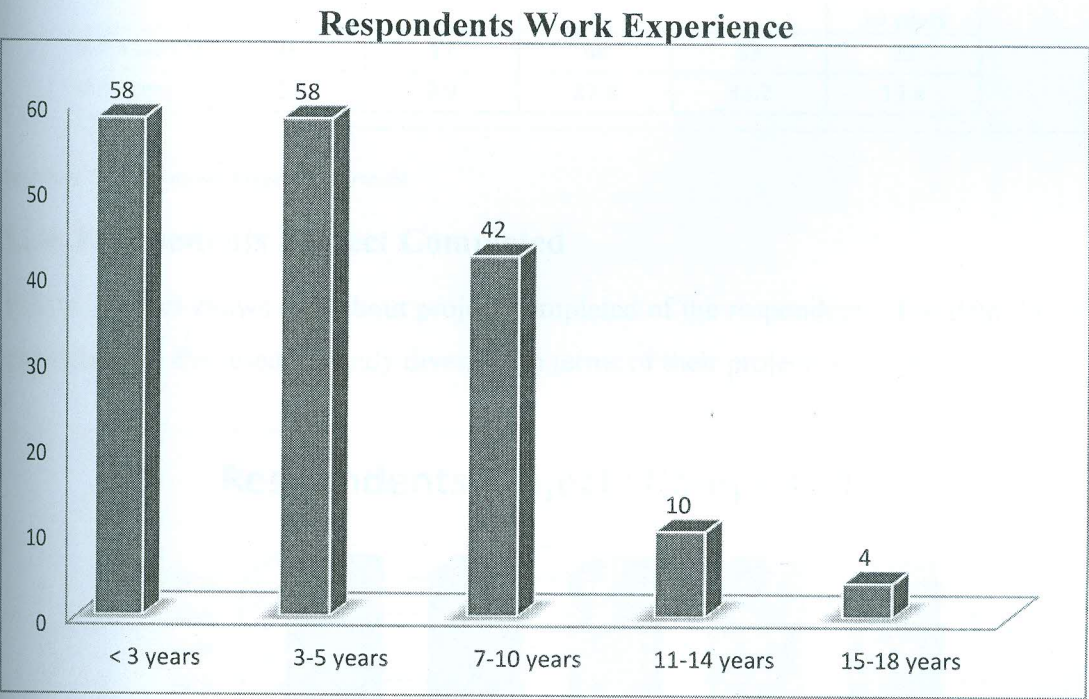
Following table shows different roles of the respondents who provided their feedback in the research study. Majority of the respondents were project managers (26.2%) and were responsible for the project for which they have provided their opinion in this study. Project engineers and supervisors have also form a comprehensive number who have provided their feedback for a power sector project.

Sr. No.	Project Role	Response Rate	%age
1	Supervisor	33	19.2
2	Project Manager	45	26.2
3	Project Engineer	23	13.4
4	Management	36	20.9
5	Senior Management	12	7.0
6	Other	23	13.4
Total		172	100

Table 4: Respondent Roles in Projects

5.2.2. Respondents Work Experience

Following chart shows data about work experience of the respondents. The data shows that respondents in the research study diversify in terms of their work experience.



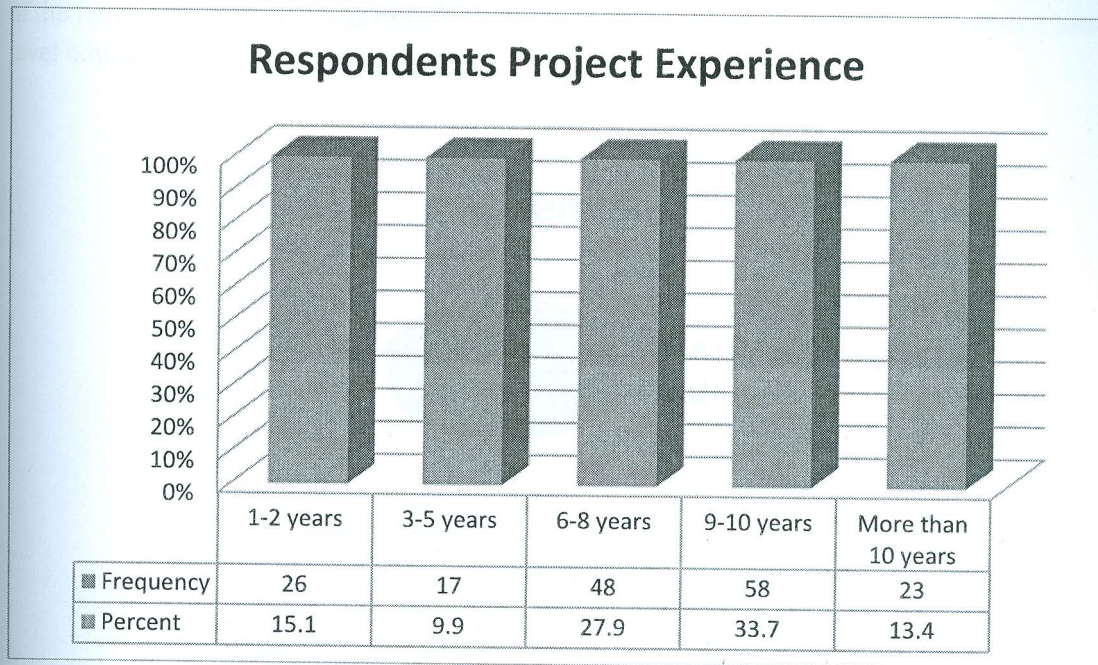
Bar Chart 1: Respondents Work Experience

Respondent	< 3 years	3-5 years	7-10 years	11-14 years	15-18 years
	58	58	42	10	4

Table 5: Respondents Work Experience Profile

5.2.3. Respondents Project Experience

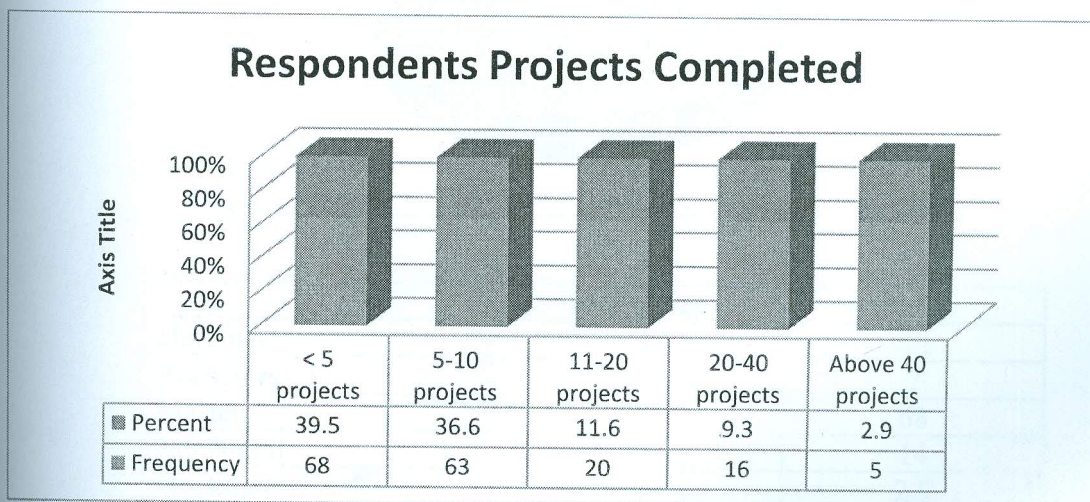
Following chart shows data about project experience of the respondents. The data shows that respondents in the research study diversify in terms of their project experience.



Bar Chart 2: Respondents Project Experience

5.2.4. Respondents Project Completed

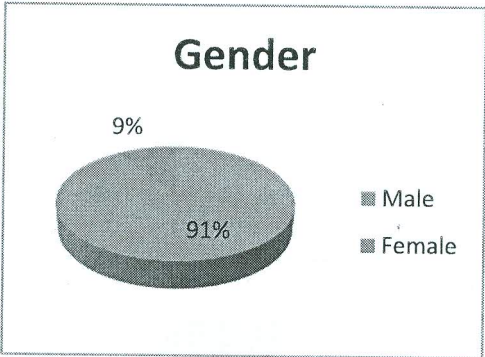
Following chart shows data about project completed of the respondents. The data shows that respondents in the research study diversify in terms of their projects completed.



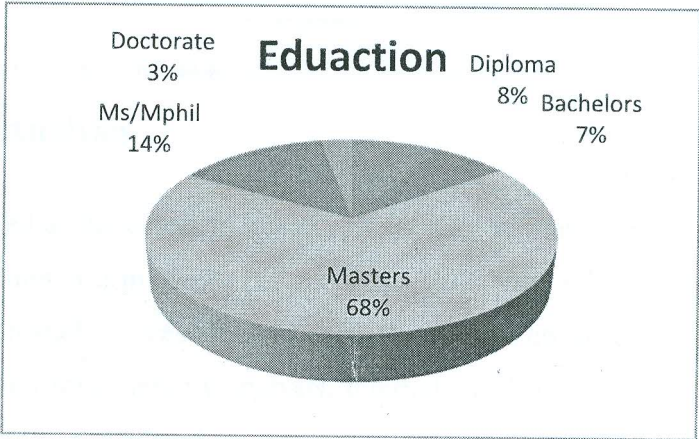
Bar Chart 3: Respondents Project Completed

5.2.5. Other Demographics of Respondents

Other information with respect to respondents’ age groups, gender and qualification detail is as follows. Out of 172 respondents, most of the respondents were males (91%). The percentage of the female respondents was only 9%. Also most of the respondents have minimum masters’ level education.



	Frequency	Percent
Male	156	90.7%
Female	16	9.3%

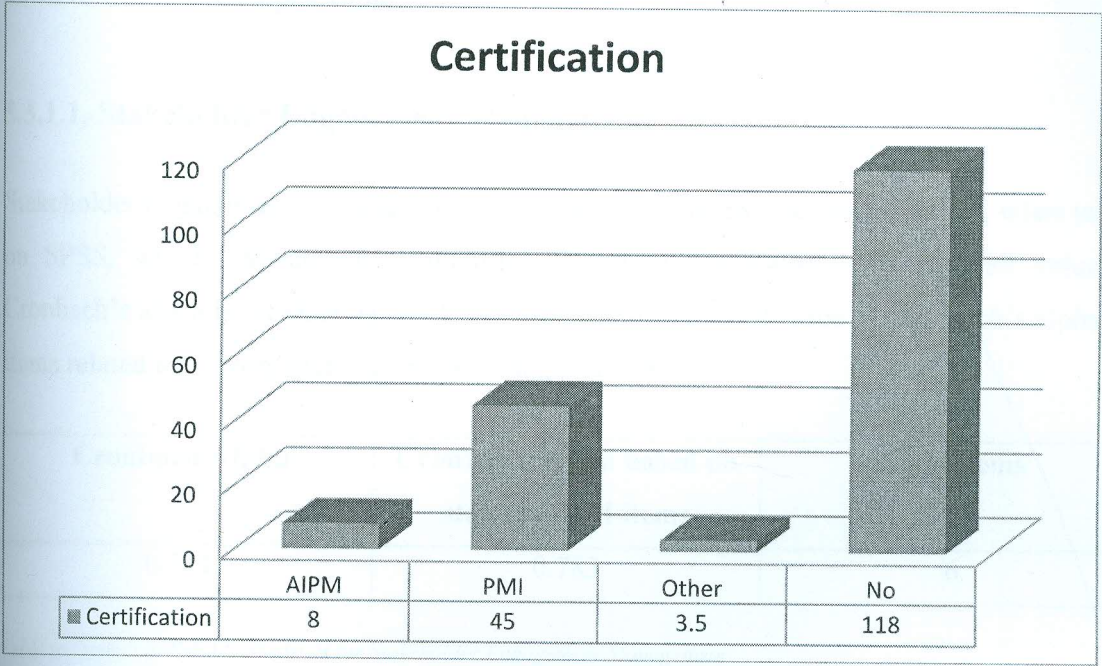


	Frequency	%age
Diploma	14	8.1
Bachelors	12	7
Masters	117	68
MS/Mphil	24	14
Doctorate	5	2.9

Pie Chart 1: Other Demographics of the respondent

5.2.6. Project Management Certification:

Following chart shows the numbers of respondents having projects management certification e.g. PMI or AIPM etc.



Bar Chart 4 : Project Management Certification

5.3. Reliability Analysis

Reliability is defined as the extent to which a measuring instrument produces same results if applied multiple times (Carmines & Zeller, 1990). Reliability of the research questionnaire used in this research study was established using the internal consistency method which is the most popular method for reliability analysis. Internal consistency method requires only one administration and is considered as the most generic form of the estimation process (Sureshchander, Rajendran, & Anantharaman, 2001).

The estimation of internal consistency is executed with the help of a reliability coefficient which is named as Cronbach’s alpha and is denoted by symbol (α) as the name shows alpha (Cronbach, 1951)

Recommended alpha value which is considered as the criteria for strong internal consistency

of the scales that have been used in the research questionnaire is equal to or greater than 0.70 (Nunnally, 1978).

5.3.1. Cronbach’s Alpha

The reliability of the research questionnaire has been evaluated by computing Cronbach’s alpha (α) value for all items. Following sections describe the results of reliability analysis in terms of Cronbach’s alpha value.

5.3.1.1. Stakeholder Engagement Management

Stakeholder engagement management has Cronbach’s alpha value more than 0.7, when tested on SPSS, which validates the reliability of the questionnaire items. Overall value of Cronbach’s alpha is satisfactory. Following table shows overall value of Cronbach’s alpha for items related to Stakeholder engagement management.

Cronbach Alpha	Cronbach Alpha based on standardized items	No of items
0.781	0.783	6

Table 6: Overall Reliability Statistics for Stakeholder Engagement Management

(Source: Generated by the author using IBM SPSS based on data collected)

Following table shows item wise statistics for items of the questionnaire related to stakeholder engagement management.

Stakeholder Engagement Management

	Mean	Std. Deviation	N
Your organization focuses on communicating continuously with the stakeholder to determine their needs and expectation.	2.73	.495	172
Your organization focuses on dealing with issues when they arise.	2.13	.491	172
Your manager of the project negotiates continuously and implements desires of the stakeholders.	1.73	.711	172
Your organization focuses on conflict management and fostering stakeholder engagement appropriately.	2.38	.779	172
The stakeholders in your organization regularly require communication	2.36	.890	172
During project execution in your organization credibility is used to influence people over whom you have little or no formal authority.	2.17	.839	172

Table 7: Item wise Statistics related to Stakeholder Engagement Management

(Source: Generated by the author using IBM SPSS based on data collected)

5.3.1.2. Effective Decision Making

Effective decision making has Cronbach’s alpha value more than 0.7 when tested on SPSS, which validates the reliability of the questionnaire items. Overall value of Cronbach’s alpha is satisfactory. Following table shows overall value of Cronbach’s alpha for items related to Effective decision making.

Cronbach Alpha	Cronbach Alpha based on standardized items	No of items
0.841	0.852	5

Table 8: Overall Reliability Statistics for Effective Decision Making

(Source: Generated by the author using IBM SPSS based on data collected)

Following table shows item wise statistics for items of the questionnaire related to effective decision making.

Effective Decision making

	Mean	Std. Deviation	N
At every turn in every project phase, project team needs to make timely and effective decisions.	2.88	.864	172
Conflicts often arise between project team members and require decision making skill sets to prevent the project from delay.	3.79	.788	172
Project management experience and knowledge assist in taking effective decisions during the project.	3.54	.847	172
Effective decision making skills are about creating the kind of project environment where team members can find personal meaning and value.	3.75	.714	172
For effective decision making the project manager should involve the team to take their opinions.	3.13	.727	172

Table 9: Item wise Statistics related to Effective Decision Making

(Source: Generated by the author using IBM SPSS based on data collected)

5.3.1.3. Professional Communication

Items related to professional communication have Cronbach’s alpha value more than 0.7, when tested on SPSS, which authenticates the reliability of the questionnaire items. Overall value of Cronbach’s alpha is satisfactory. Following table shows overall value of Cronbach’s alpha for items related to professional communication.

Cronbach Alpha	Cronbach Alpha based on standardized items	No of items
0.826	0.828	5

Table 10: Overall Reliability Statistics for Professional Communication

(Source: Generated by the author using IBM SPSS based on data collected)

Following table shows item wise statistics for items of the questionnaire related to professional communication.

Professional Communication

	Mean	Std. Deviation	N
With professional communication skills you can unite the employees around a common goal and generate greater productivity.	4.08	.606	172
The communication depends upon the requirement specified by the stakeholders of the project	4.46	.870	172
The project stakeholders determine the frequency of communication during life of the project.	3.93	.806	172
Professional communication strategy assists in managing relations with the stakeholder which ultimately results in smooth execution of the project.	3.87	.772	172
Openness in communication helps the team members to improve mutual trust between them.	3.95	.769	172

Table 11: Item wise Statistics related to Professional Communication

(Source: Generated by the author using IBM SPSS based on data collected)

5.3.1.4. Project Objectives Achievement

Items related to project objectives achievement have Cronbach’s alpha value more than 0.7, when tested on SPSS, which authenticates the reliability of the questionnaire items. Overall value of Cronbach’s alpha is satisfactory. Following table shows overall value of

Cronbach’s alpha for items related to project objectives achievement.

Cronbach Alpha	Cronbach Alpha based on standardized items	No of items
0.788	0.791	7

Table 12: Overall Reliability Statistics for Project Objectives achievement

(Source: Generated by the author using IBM SPSS based on data collected)

Following table shows item wise statistics for items of the questionnaire related to project outcome measurement related items.

Project Objectives Achievement

	Mean	Std. Deviation	N
By timely communication with senior management and stakeholders of the project, organization can more effectively achieve their project objectives.	3.97	.565	172
Effective decision making play a vital role in meeting project budget and schedule.	2.37	.807	172
By managing the internal and external stakeholders in every phase of a project, project Schedule and budget can be meeting.	2.28	.734	172
By approximately what percentage (%), if any, did actual costs for the project exceeded originally budgeted costs	3.74	.900	172
By approximately what percentage (%), if any, did actual completion time for the project exceeded originally budgeted completion time	3.68	.788	172
What was the estimated duration of the project (in calendar months)	3.72	.932	172
In how many calendar months was the project actually completed	3.71	.921	172

Table 13: Item wise Statistics related to Project Objectives Achievement

(Source: Generated by the author using IBM SPSS based on data collected)

5.4. Descriptive Statistics

5.4.1. Stakeholder Engagement Management

Descriptive statistics and frequencies for stakeholder engagement management are given below.

5.4.1.1 Descriptive Statistics

Following table provides a summarized view of stakeholder engagement management variable which has been calculated on the basis of six different dimensions used to calculate it. Detailed information of those dimensions in terms of descriptive statistics is also given.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Your organization focuses on communicating continuously with the stakeholder to determine their needs and expectation.	172	1.00	5.00	2.13	.715	.511
Your organization focuses on dealing with issues when they arise.	172	1.00	5.00	2.17	.900	.810
Your manager of the project negotiates continuously and implements desires of the stakeholders.	172	1.00	5.00	2.38	.992	.983
Your organization focuses on conflict management and fostering stakeholder engagement appropriately.	172	1.00	5.00	1.62	.950	.903
The stakeholders in your organization regularly require communication	172	1.00	5.00	2.36	.890	.791
During project execution in your organization credibility is used to influence people over whom you have little or no formal authority.	172	1.00	5.00	2.17	.839	.703
Valid N (listwise)	172					

Table 14: Descriptive Statistics for Stakeholder Engagement Management

(Source: Generated by the author using IBM SPSS based on data collected)

5.4.1.2 **Frequencies**

Descriptive statistics has been performed in terms of frequencies for all dimensions. Summary measures can be generated in this test for all variables pertaining to the dimensions in different forms, for example, frequency tables or charts.

There are five data columns in the provided data tables. First column displays scale information on the basis of which information was collected. It also provides brief information about number of respondents who provided information on a given scale for the variable. It also provides relevant percentages of the responses by the respondents. Heading of following tables is name of the relevant dimension variable. Cumulative percentages are also given in the end of each data table. Following information has been assessed in SPSS regarding frequencies of the dimensions.

The information has also been analyzed on the basis of charts generated using SPSS. Histogram charts have been generated to analyze trend of the feedback by the respondents. The histogram demonstrates the estimation of a given variable on x-axis and its frequencies on y-axis. It also demonstrates the mean of given values, standard deviation and total responses which helps in analyzing the input. The trend has been depicted using normal curve in histograms.

5.4.1.2.1. Your organization focuses on communicating continuously with the stakeholder to determine their needs and expectation.

The result in following table shows that most of the respondents (36.6%) have agreed in their response on this dimension which states that organizations focuses on communicating with the stakeholders to determine their needs and expectations.

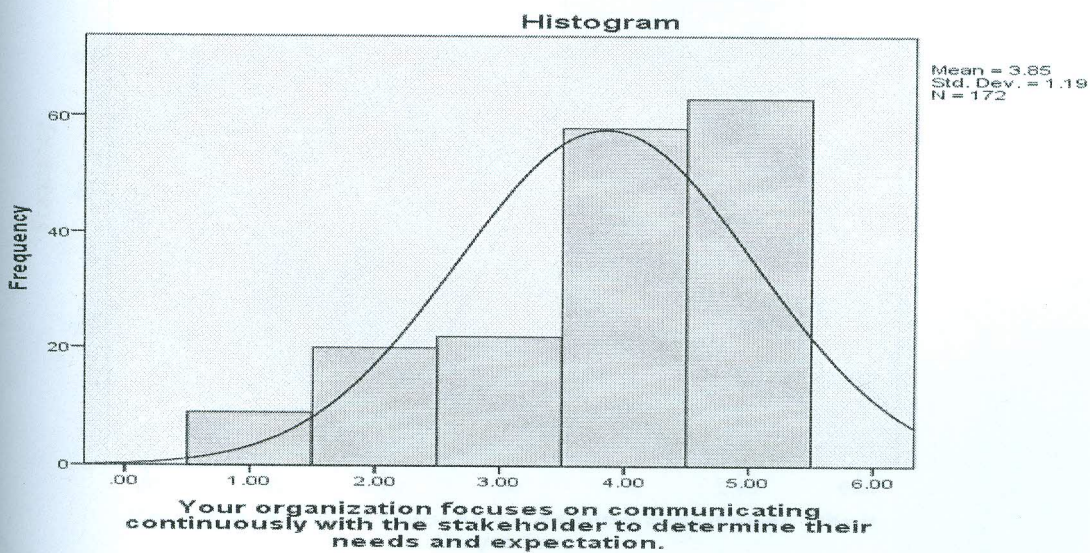
Your organization focuses on communicating continuously with the stakeholder to determine their needs and expectation.

	Frequenc y	Percent	Valid Percent	Cumulative Percent
strongly disagree	9	5.2	5.2	5.2
disagree	20	11.6	11.6	16.9
neutral	22	12.8	12.8	29.7
agree	58	33.7	33.7	63.4
strongly agree	63	36.6	36.6	100.0
Total	172	100.0	100.0	

Table 15: Frequency Table for Your organization focuses on communicating continuously with the stakeholder to determine their needs and expectation

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total 172 responses.



5.4.1.2.2. Your organization focuses on dealing with issues when they arise.

The result in following table shows that most of the respondents (43%) have strongly agreed in their response on this dimension which states that organization focuses on dealing with issues when they arise

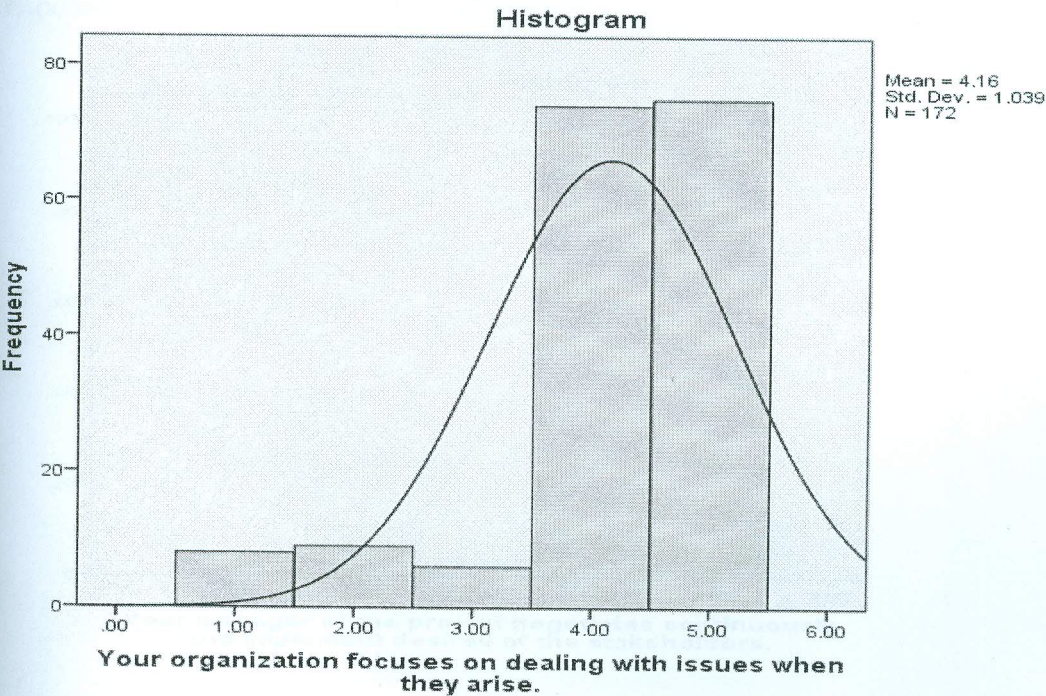
Your organization focuses on dealing with issues when they arise.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	8	4.7	4.7	4.7
disagree	9	5.2	5.2	9.9
neutral	6	3.5	3.5	13.4
agree	74	43.0	43.0	56.4
strongly agree	75	43.6	43.6	100.0
Total	172	100.0	100.0	

Table 16: Frequency table for your organization focuses on dealing with issues when they arise

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total 172 responses.



Histogram 1: Your organization focuses on dealing with issues when they arise

5.4.1.2.3. Your manager of the project negotiates continuously and implements desires of the stakeholders.

The result in following table shows that most of the respondents (48.3%) have strongly agreed in their responses on this dimension which states that manager of the project negotiates continuously and implements desires of the stakeholders.

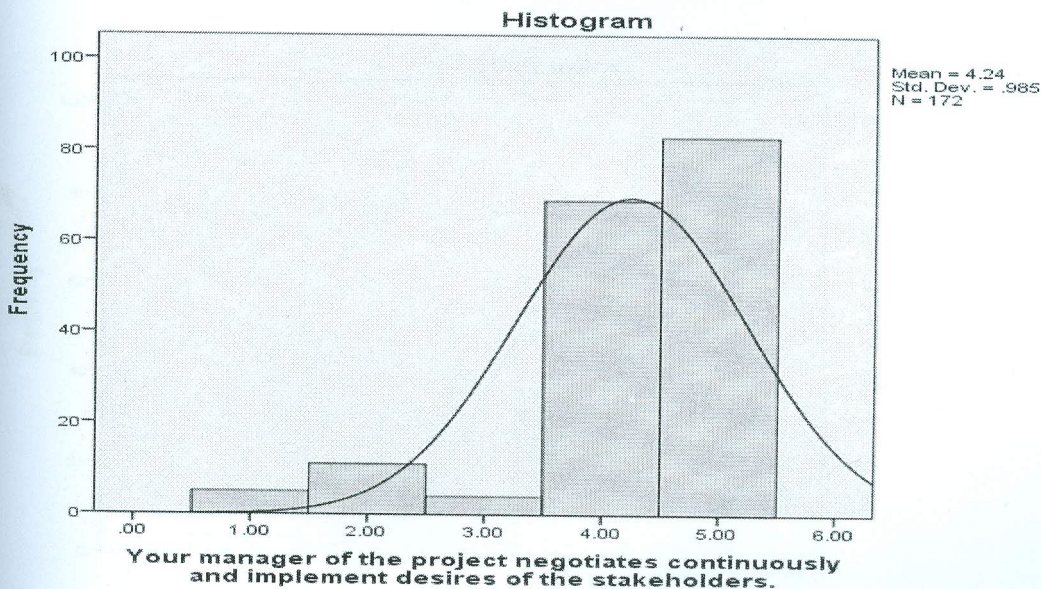
Your manager of the project negotiates continuously and implements desires of the stakeholders.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	5	2.9	2.9	2.9
disagree	11	6.4	6.4	9.3
neutral	4	2.3	2.3	11.6
agree	69	40.1	40.1	51.7
strongly agree	83	48.3	48.3	100.0
Total	172	100.0	100.0	

Table 17: Frequency Table for Your manager of the project negotiates continuously and implements desires of the stakeholders.

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total 172 responses.



Histogram 2: Your manager of the project negotiates continuously and implements desires of the stakeholders

5.4.1.2.4. Your organization focuses on conflict management and fostering stakeholder engagement appropriately.

The result in following table shows that most of the respondents (54%) have strongly agreed in their responses on this dimension which states that organization focuses on conflict management and fostering stakeholder engagement appropriately.

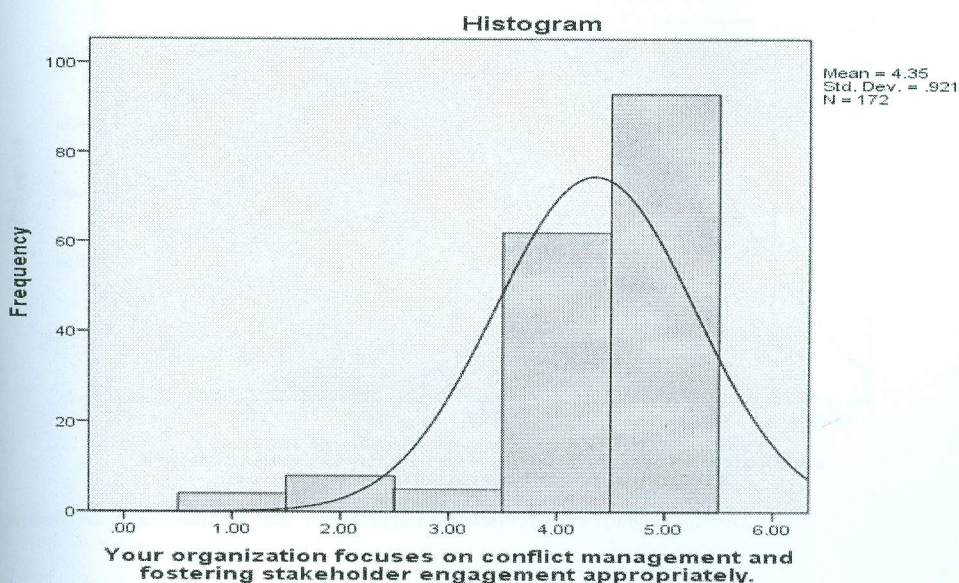
Your organization focuses on conflict management and fostering stakeholder engagement appropriately.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	4	2.3	2.3	2.3
disagree	8	4.7	4.7	7.0
neutral	5	2.9	2.9	9.9
agree	62	36.0	36.0	45.9
strongly agree	93	54.1	54.1	100.0
Total	172	100.0	100.0	

Table 18: Frequency Table for Your organization focuses on conflict management and fostering stakeholder engagement appropriately

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 3: Your organization focuses on conflict management and fostering stakeholder engagement appropriately

5.4.1.2.5. The stakeholders in your organization *regularly require communication.*

The result in following table shows that most of the respondents (64%) have strongly agreed in their responses on this dimension which states that the stakeholders in your organization regularly require communication.

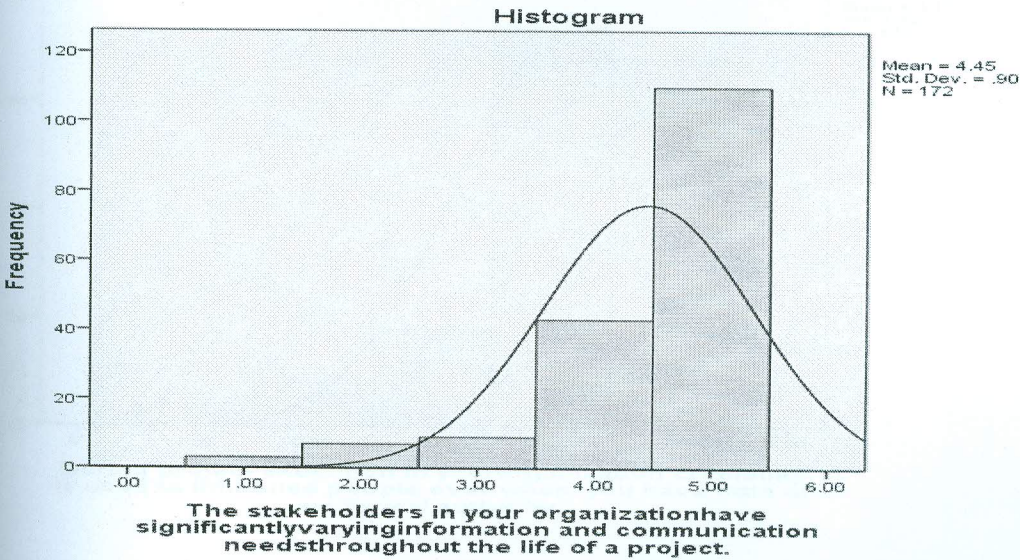
The stakeholders in your organization regularly require communication.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	3	1.7	1.7	1.7
disagree	7	4.1	4.1	5.8
neutral	9	5.2	5.2	11.0
agree	43	25.0	25.0	36.0
strongly agree	110	64.0	64.0	100.0
Total	172	100.0	100.0	

Table 19: Frequency Table for The stakeholders in your organization have regularly require communication

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 4: The stakeholders in your organization regularly require communication.

5.4.1.2.6 During project execution in your organization credibility is used to influence people over whom you have little or no formal authority.

The result in following table shows that most of the respondents (39.5%) have strongly agreed in their responses on this soft dimension which states that during project execution in your organization credibility is used to influence people over whom you have little or no formal authority

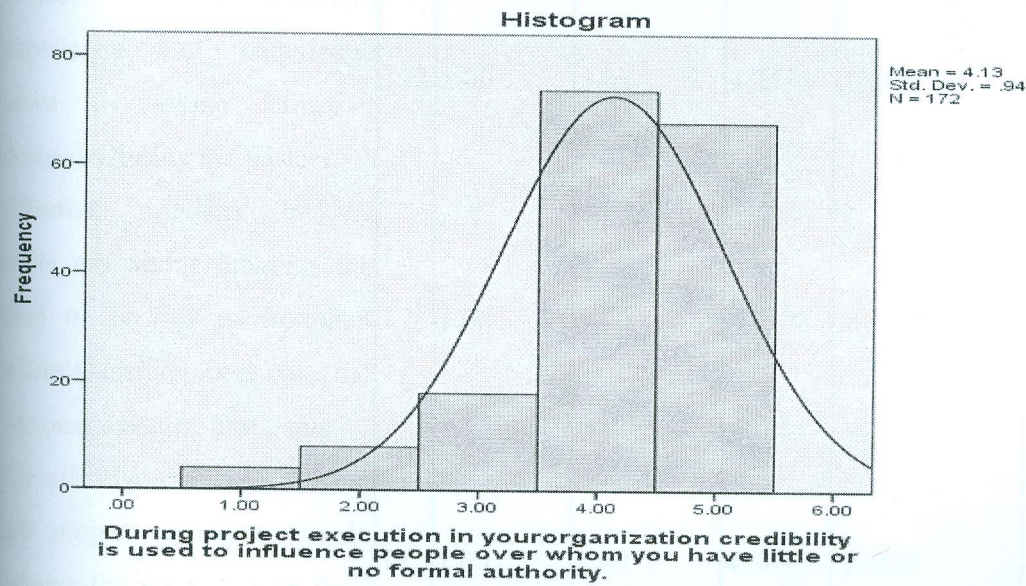
During project execution in your organization credibility is used to influence people over whom you have little or no formal authority.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	4	2.3	2.3	2.3
disagree	8	4.7	4.7	7.0
neutral	18	10.5	10.5	17.4
agree	74	43.0	43.0	60.5
strongly agree	68	39.5	39.5	100.0
Total	172	100.0	100.0	

Table 20: Frequency Table for during project execution in your organization credibility is used to influence people over whom you have little or no formal authority

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 5: During project execution in your organization credibility is used to influence people over whom you have little or no formal authority

5.4.2. Effective Decision Making
Descriptive statistics and frequencies for effective decision making are given below.

5.4.2.1 Descriptive Statistics

Following table provides a summarized view of effective decision making variable which has been calculated on the basis of five different dimensions used to calculate it. Detailed information of those dimensions in terms of descriptive statistics is also given.

Effective Decision Making

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
At every turn in every project phase, project team needs to make timely and effective decisions.	172	1.00	5.00	4.4186	.87145	.759
Conflicts often arise between project team members and require decision making skill sets to prevent the project from delay.	172	1.00	5.00	4.3140	.88207	.778
Project management experience and knowledge assist in taking effective decisions during the project.	172	1.00	5.00	4.2558	.93891	.882
Effective decision making skills are about creating the kind of project environment where team members can find personal meaning and value.	172	1.00	5.00	4.4128	.81539	.665
For effective decision making the project manager should involve the team to take their opinions.	172	1.00	5.00	4.3895	.93939	.882
Valid N (list wise)	172					

Table 21: Descriptive Statistics for Effective Decision Making

(Source: Generated by the author using IBM SPSS based on data collected)

5.4.2.2. Frequencies

Descriptive statistics has been performed in terms of frequencies for all dimensions. Summary measures can be generated in this test for all variables pertaining to the dimensions in different forms, for example, frequency tables or charts.

There are five data columns in the provided data tables. First column displays scale information on the basis of which information was collected. It also provides brief information about number of respondents who provided information on a given scale for the variable. It also provides relevant percentages of the responses by the respondents. Heading of following tables is name of the relevant dimension variable. Cumulative percentages are also given in the end of each data table. Following information has been assessed in SPSS regarding frequencies of the dimensions.

The information has also been analyzed on the basis of charts generated using SPSS. Histogram charts have been generated to analyze trend of the feedback by the respondents. The histogram demonstrates the estimation of a given variable on x-axis and its frequencies on y-axis. It also demonstrates the mean of given values, standard deviation and total responses which helps in analyzing the input. The trend has been depicted using normal curve in histograms.

5.4.2.2.1 At every turn in every project phase, project team needs to make

timely and effective decisions.

The result in following table shows that most of the respondents (58%) strongly agreed on this dimension which states that at every turn in every project phase, project team needs to make timely and effective decisions. However, 33.1% of the respondents have agreed to the fact that at every turn in every project phase, project team needs to make timely and effective decisions.

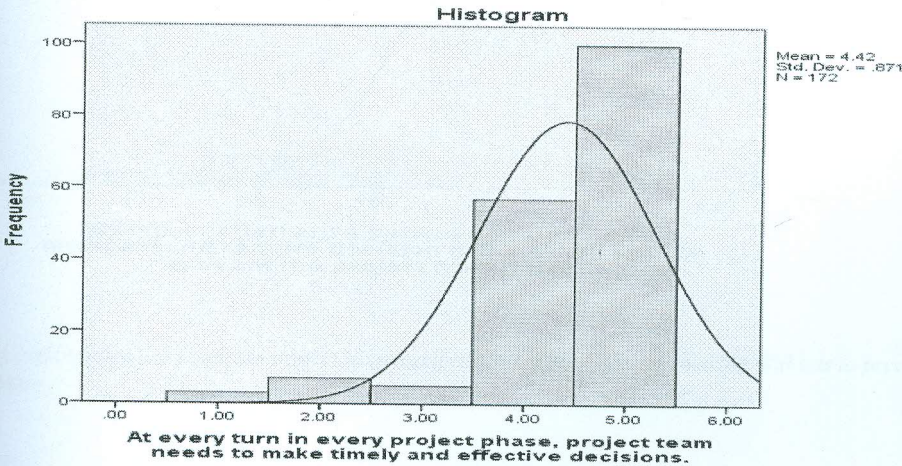
At every turn in every project phase, project team needs to make timely and effective decisions.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	3	1.7	1.7	1.7
disagree	7	4.1	4.1	5.8
neutral	5	2.9	2.9	8.7
Valid agree	57	33.1	33.1	41.9
strongly agree	100	58.1	58.1	100.0
Total	172	100.0	100.0	

Table 22: Frequency Table for at every turn in every project phase, project team needs to make timely and effective decisions

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses



5.4.2.2.2. Conflicts often arise between project team members and require decision making skill sets to prevent the project from delay.

The result in following table shows that most of the respondents (50%) strongly agreed in response on this dimension which states conflicts often arise between project team members and require decision making skill sets to prevent the project from delay.

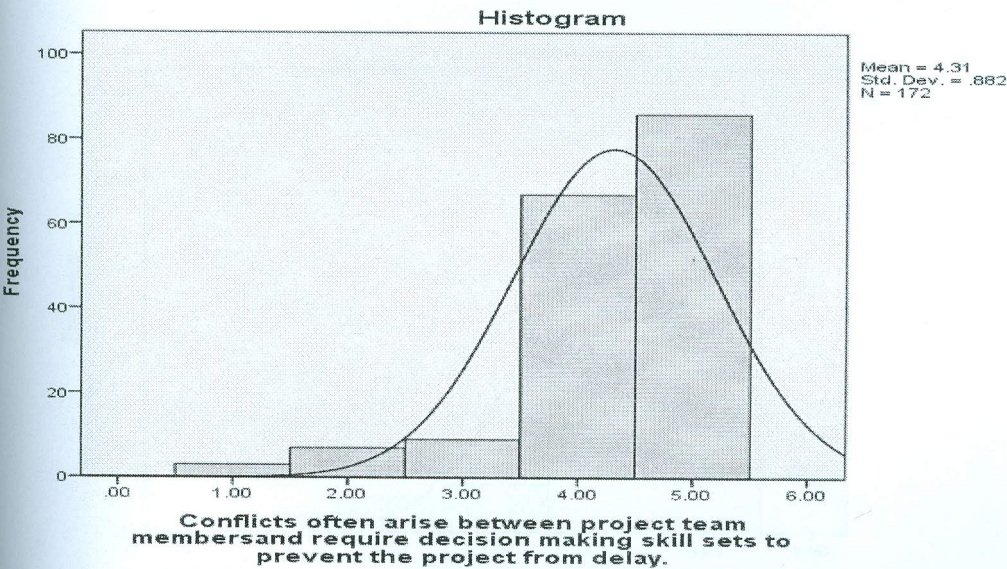
Conflicts often arise between project team members and require decision making skill sets to prevent the project from delay.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	3	1.7	1.7	1.7
disagree	7	4.1	4.1	5.8
neutral	9	5.2	5.2	11.0
Valid agree	67	39.0	39.0	50.0
strongly agree	86	50.0	50.0	100.0
Total	172	100.0	100.0	

Table 23: Frequency Table for Conflicts often arise between project team members and require decision making skill sets to prevent the project from delay

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 6: Conflicts often arise between project team members and require decision making skill sets to prevent the project from delay

5.4.2.2.3. Project management experience and knowledge assist in taking effective decisions during the project

The result in following table shows that most of the respondents (48%) strongly agreed in response on this dimension which states that project management experience and knowledge assist in taking effective decisions during the project

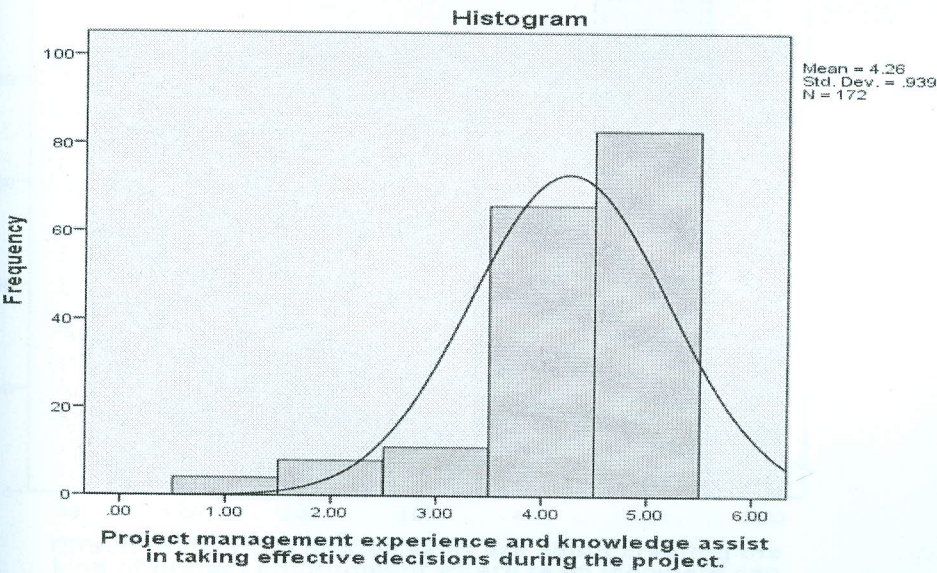
Project management experience and knowledge assist in taking effective decisions during the project.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	4	2.3	2.3	2.3
disagree	8	4.7	4.7	7.0
neutral	11	6.4	6.4	13.4
agree	66	38.4	38.4	51.7
strongly agree	83	48.3	48.3	100.0
Total	172	100.0	100.0	

Table 24: Frequency Table for Project management experience and knowledge assist in taking effective decisions during the project

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 7: Project management experience and knowledge assist in taking effective decisions during the project

5.4.2.2.4. Effective decision making skills are about creating the kind of project environment where team members can find personal meaning and value

The result in following table shows that most of the respondents (55.8%) strongly agreed in response on this dimension which states that effective decision making skills are about creating the kind of project environment where team members can find personal meaning and value.

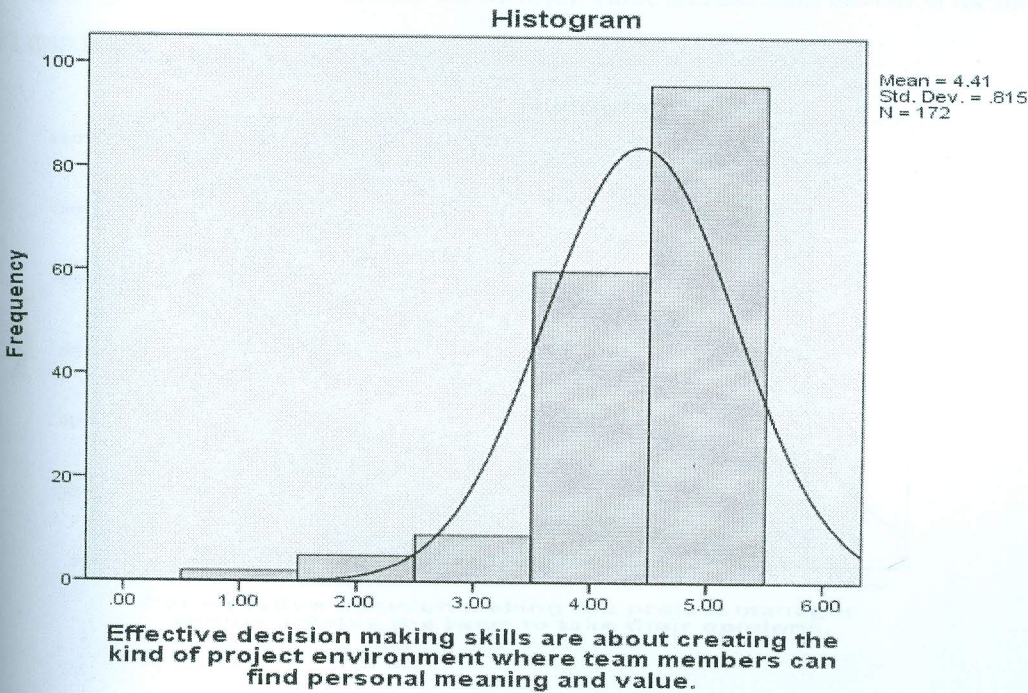
Effective decision making skills are about creating the kind of project environment where team members can find personal meaning and value.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	2	1.2	1.2	1.2
disagree	5	2.9	2.9	4.1
neutral	9	5.2	5.2	9.3
agree	60	34.9	34.9	44.2
strongly agree	96	55.8	55.8	100.0
Total	172	100.0	100.0	

Table 25: Frequency Table for Effective decision making skills are about creating the kind of project environment where team members can find personal meaning and value

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 8: Effective decision making skills are about creating the kind of project environment where team members can find personal meaning and value

5.4.2.2.5. For effective decision making the project manager should involve the team to take their opinions.

The result in following table shows that most of the respondents (59.3%) strongly agreed in response on this dimension which states that for effective decision making the project manager should involve the team to take their opinions.

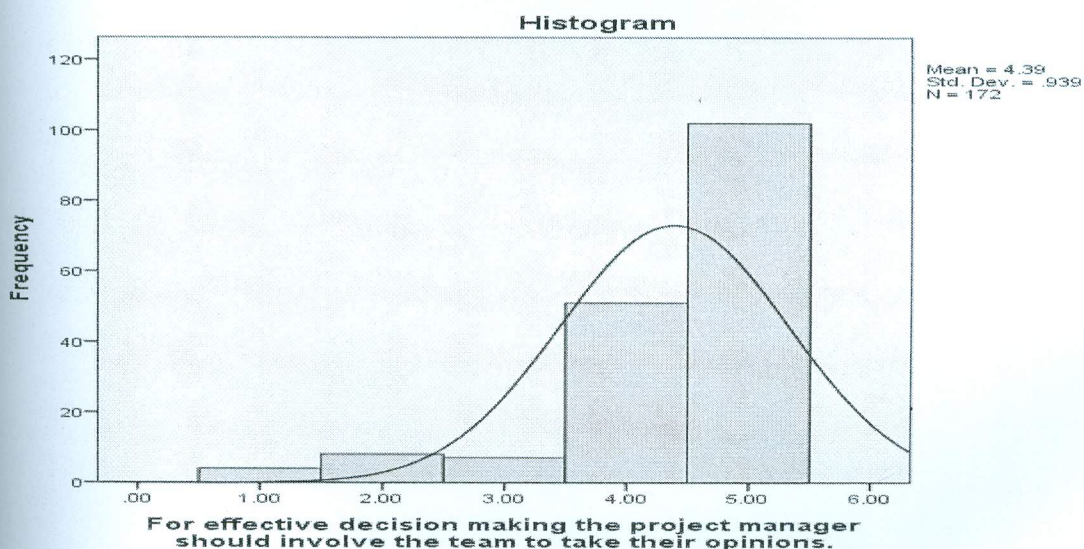
For effective decision making the project manager should involve the team to take their opinions.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	4	2.3	2.3	2.3
disagree	8	4.7	4.7	7.0
neutral	7	4.1	4.1	11.0
agree	51	29.7	29.7	40.7
strongly agree	102	59.3	59.3	100.0
Total	172	100.0	100.0	

Table 26: Frequency Table for effective decision making the project manager should involve the team to take their opinions

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 9: Effective decision making the project manager should involve the team to take their opinions

5.4.3. Professional Communication

Descriptive statistics and frequencies for Professional Communication are given below.

5.4.3.1. Descriptive Statistics

Following table provides a summarized view of professional communication variable which has been calculated on the basis of five different dimensions used to calculate it. Detailed information of those dimensions in terms of descriptive statistics is also given below.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
With professional communication skills you can unite the employees around a common goal and generate greater productivity.	172	1.00	5.00	4.2907	.84972	.722
The communication depends upon the requirement specified by the stakeholders of the project	172	1.00	5.00	4.0174	.92068	.848
communications management strategy. The project stakeholders determine the frequency of communication during life of the project.	172	1.00	5.00	3.3837	.96329	.928
Professional communication strategy assists in managing relations with the stakeholder which ultimately results in smooth execution of the project.	172	1.00	5.00	4.3314	.99152	.983
Openness in communication helps the team members to improve mutual trust between them.	172	1.00	5.00	4.5407	.86083	.741
Valid N (list wise)	172					

Table 27: Descriptive Statistics for Professional Communication

(Source: Generated by the author using IBM SPSS based on data collected)

5.4.3.2. **Frequencies**

Descriptive statistics has been performed in terms of frequencies for all dimensions. Summary measures can be generated in this test for all variables pertaining to the dimensions in different forms, for example, frequency tables or charts.

There are five data columns in the provided data tables. First column displays scale information on the basis of which information was collected. It also provides brief information about number of respondents who provided information on a given scale for the variable. It also provides relevant percentages of the responses by the respondents. Heading of following tables is name of the relevant dimension variable. Cumulative percentages are also given in the end of each data table. Following information has been assessed in SPSS regarding frequencies of the dimensions.

The information has also been analyzed on the basis of charts generated using SPSS. Histogram charts have been generated to analyze trend of the feedback by the respondents. The histogram demonstrates the estimation of a given variable on x-axis and its frequencies on y-axis. It also demonstrates the mean of given values, standard deviation and total responses which helps in analyzing the input. The trend has been depicted using normal curve in histograms.

5.4.3.2.1. With professional communication skills you can unite the employees around a common goal and generate greater productivity.

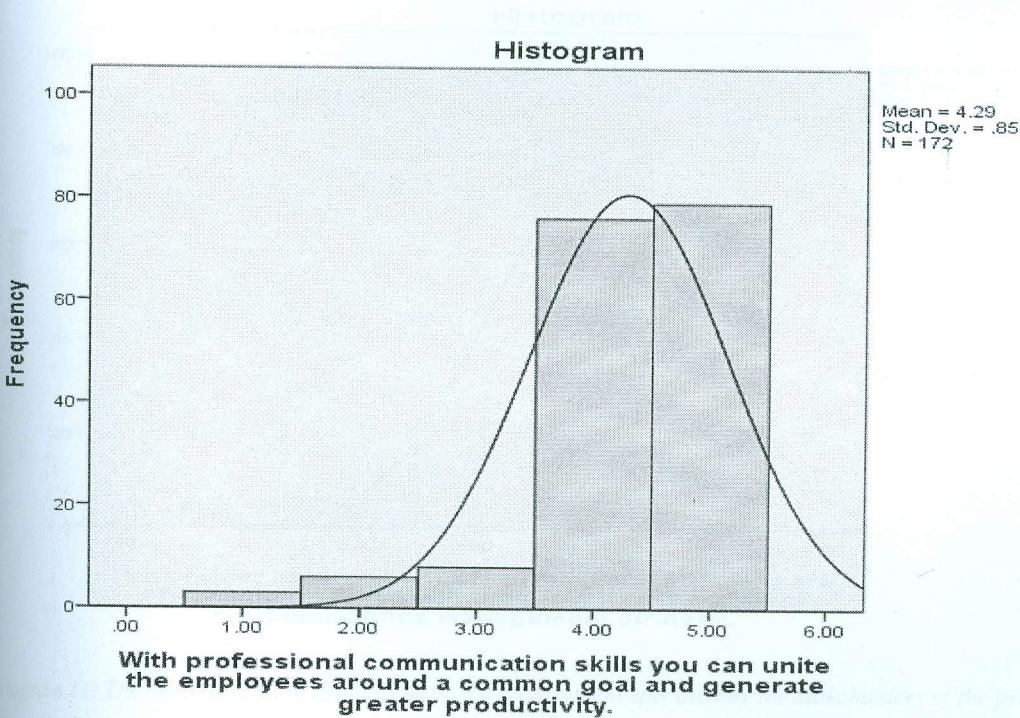
The result in following table shows that most of the respondents (45.9%) strongly agreed in response to this dimension that with professional communication skills you can unite the employees around a common goal and generate greater productivity.

With professional communication skills you can unite the employees around a common goal and generate greater productivity.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	3	1.7	1.7	1.7
disagree	6	3.5	3.5	5.2
neutral	8	4.7	4.7	9.9
agree	76	44.2	44.2	54.1
strongly agree	79	45.9	45.9	100.0
Total	172	100.0	100.0	

Table 28: Frequency Table for with professional communication skills you can unite the employees around a common goal and generate greater productivity

(Source: Generated by the author using IBM SPSS based on data collected)
Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 10: With professional communication skills you can unite the employees around a common goal and generate greater productivity

5.4.3.2.2. *The communication depends upon the requirement specified by the stakeholders of the project.*

The result in following table shows that most of the respondents (49.4%) agreed in response on this dimension which states that the communication depends upon the requirement specified by the stakeholders of the project.

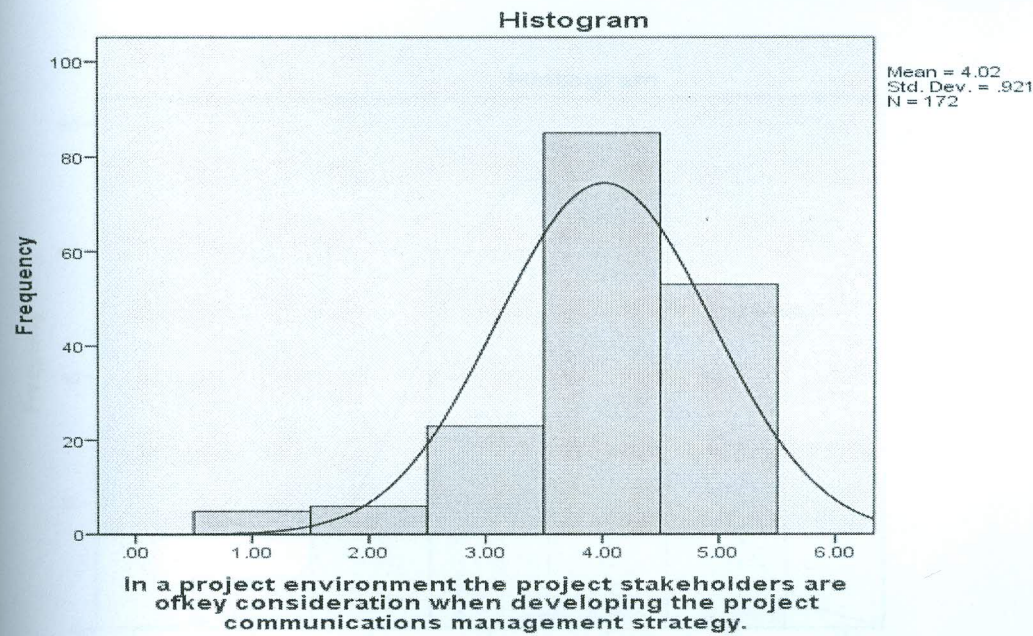
The communication depends upon the requirement specified by the stakeholders of the project.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	4	2.9	2.9	2.9
disagree	6	3.5	3.5	6.4
neutral	23	13.4	13.4	19.8
agree	85	49.4	49.4	69.2
strongly agree	53	30.8	30.8	100.0
Total	172	100.0	100.0	

Table 29: Frequency Table for The communication depends upon the requirement specified by the stakeholders of the project

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 11: The communication depends upon the requirement specified by the stakeholders of the project

5.4.3.2.3. The project stakeholders determine the frequency of communication during life of the project.

The result in following table shows that most of the respondents (40.1%) agreed in response to this dimension which states that the project stakeholders determine the frequency of communication during life of the project.

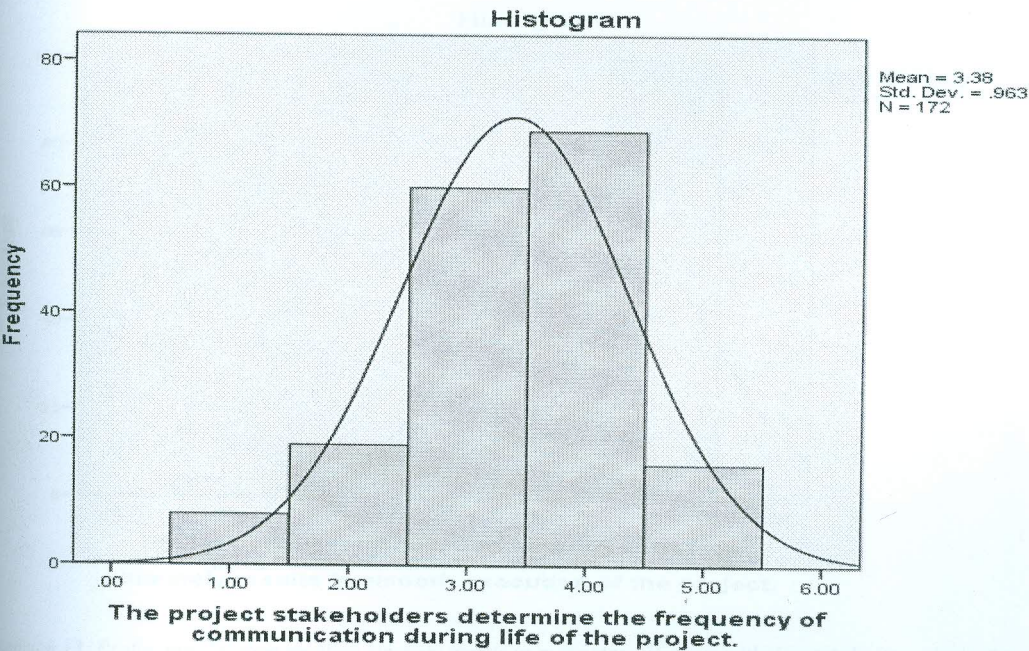
The project stakeholders determine the frequency of communication during life of the project.

	Frequenc y	Percent	Valid Percent	Cumulative Percent
strongly disagree	8	4.7	4.7	4.7
disagree	19	11.0	11.0	15.7
neutral	60	34.9	34.9	50.6
agree	69	40.1	40.1	90.7
strongly agree	16	9.3	9.3	100.0
Total	172	100.0	100.0	

Table 30: Frequency Table for The project stakeholders determine the frequency of communication during life of the project

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 12: The project stakeholders determine the frequency of communication during life of the project

5.4.3.2.4. Professional communication strategy assists in managing relations with the stakeholder which ultimately results in smooth execution of the project.

The result in following table shows that most of the respondents (58.1%) strongly agreed in response to this dimension which states that professional communication strategy assists in managing relations with the stakeholder which ultimately results in smooth execution of the project.

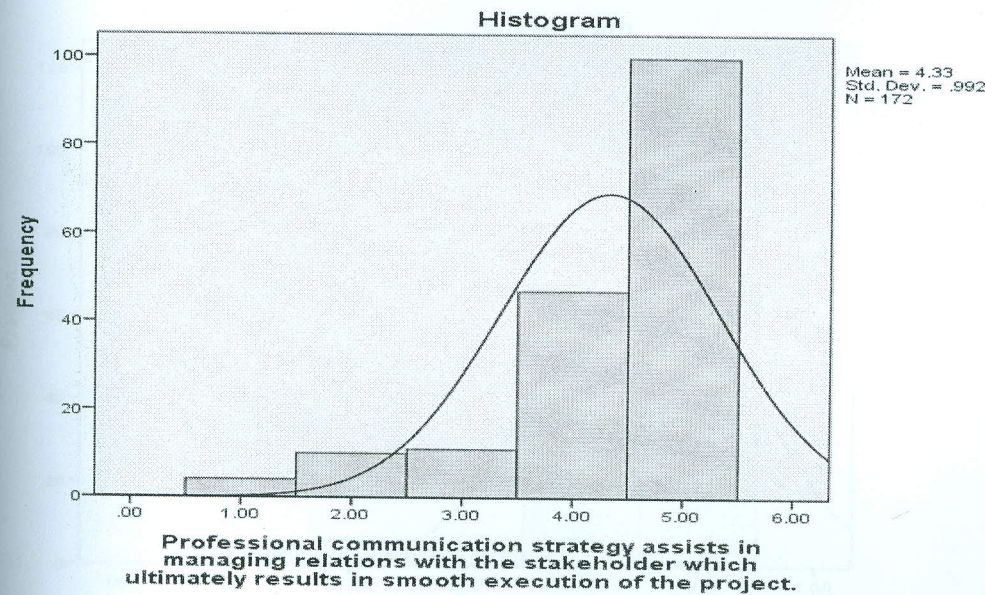
Professional communication strategy assists in managing relations with the stakeholder which ultimately results in smooth execution of the project.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	4	2.3	2.3	2.3
disagree	9	5.8	5.8	8.1
neutral	11	6.4	6.4	14.5
agree	47	27.3	27.3	41.9
strongly agree	100	58.1	58.1	100.0
Total	172	100.0	100.0	

Table 31: Frequency Table for Professional communication strategy assists in managing relations with the stakeholder which ultimately results in smooth execution of the project

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 13: Professional communication strategy assists in managing relations with the stakeholder which ultimately results in smooth execution of the project

5.4.3.2.5. Openness in communication helps the team members to improve mutual trust between them.

The result in following table shows that most of the respondents (69.8%) strongly agreed in response to this dimension which states that openness in communication helps the team members to improve mutual trust between them.

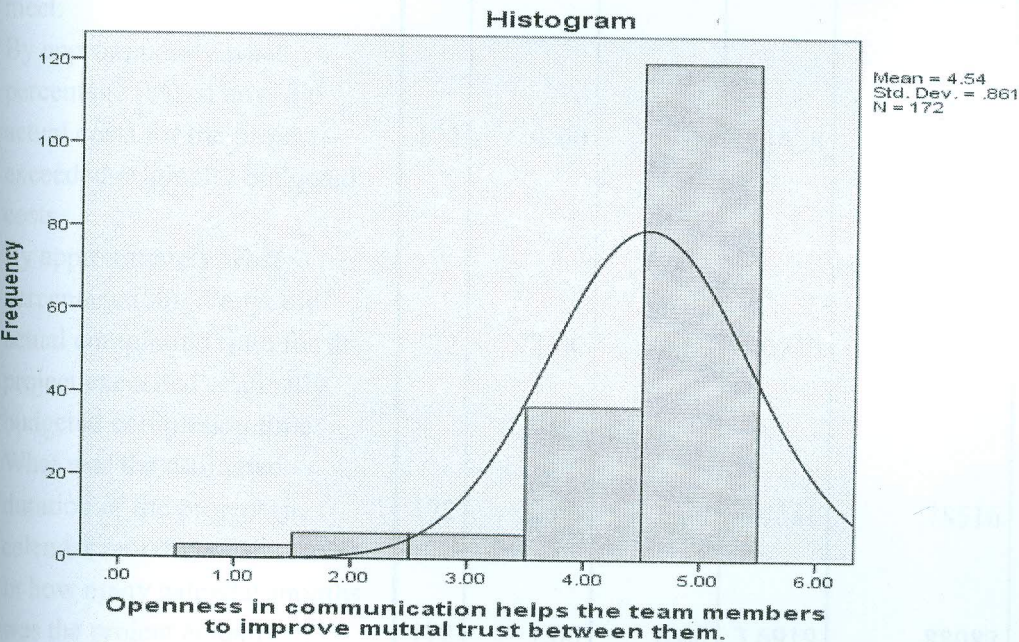
Openness in communication helps the team members to improve mutual trust between them.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	1.7	1.7	1.7
	disagree	6	3.5	3.5	5.2
	neutral	7	3.5	3.5	8.7
	agree	37	21.5	21.5	30.2
	strongly agree	120	69.8	69.8	100.0
	Total	172	100.0	100.0	

Table 32: Frequency Table for Openness in communication helps the team members to improve mutual trust between them

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 14: Openness in communication helps the team members to improve mutual trust between them

5.4.4. Project Objective Achievement

Descriptive statistics and frequencies for project objective achievement are given below.

5.4.4.1. Descriptive Statistics

Following table provides a summarized view of project objective achievement variable which has been calculated on the basis of seven different dimensions used to calculate it. Detailed information of those dimensions in terms of descriptive statistics is also given.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
By timely communication with senior management and stakeholders of the project, organization can more effectively achieve their project objectives.	172	1.00	5.00	4.6105	.83386	.695
Effective decision making play a vital role in meeting project budget and schedule.	172	1.00	5.00	4.6512	.84143	.708
By managing the internal and external stakeholders in every phase of a project, project Schedule and budget can be meet.	172	1.00	5.00	4.6279	.89895	.808
By approximately what percentage (%), if any, did actual costs for the project exceeded originally budgeted costs	172	1.00	5.00	3.1628	.96561	.932
By approximately what percentage (%), if any, did actual completion time for the project exceeded originally budgeted completion time	172	1.00	6.00	4.0930	1.10425	1.219
What was the estimated duration of the project (in calendar months)	172	2.00	6.00	4.0581	.78516	.616
In how many calendar months was the project actually completed	172	1.00	6.00	3.6919	.88082	.776
Valid N (list wise)	172					

Table 33: Descriptive Statistics for Project objective achievement

(Source: Generated by the author using IBM SPSS based on data collected)

5.4.4.2. **Frequencies**

Descriptive statistics has been performed in terms of frequencies for all dimensions. Summary measures can be generated in this test for all variables pertaining to the dimensions in different forms, for example, frequency tables or charts.

There are five data columns in the provided data tables. First column displays scale information on the basis of which information was collected. It also provides brief information about number of respondents who provided information on a given scale for the variable. It also provides relevant percentages of the responses by the respondents. Heading of following tables is name of the relevant dimension variable. Cumulative percentages are also given in the end of each data table. Following information has been assessed in SPSS regarding frequencies of the dimensions.

The information has also been analyzed on the basis of charts generated using SPSS. Histogram charts have been generated to analyze trend of the feedback by the respondents. The histogram demonstrates the estimation of a given variable on x-axis and its frequencies on y-axis. It also demonstrates the mean of given values, standard deviation and total responses which helps in analyzing the input. The trend has been depicted using normal curve in histograms.

5.4.4.2.1. By timely communication with senior management and stakeholders of the project, organization can more effectively achieve their project objectives.

The result in following table shows that most of the respondents (75.6%) strongly agreed in response to this dimension which states that by timely communication with senior management and stakeholders of the project, organization can more effectively achieve their project objectives.

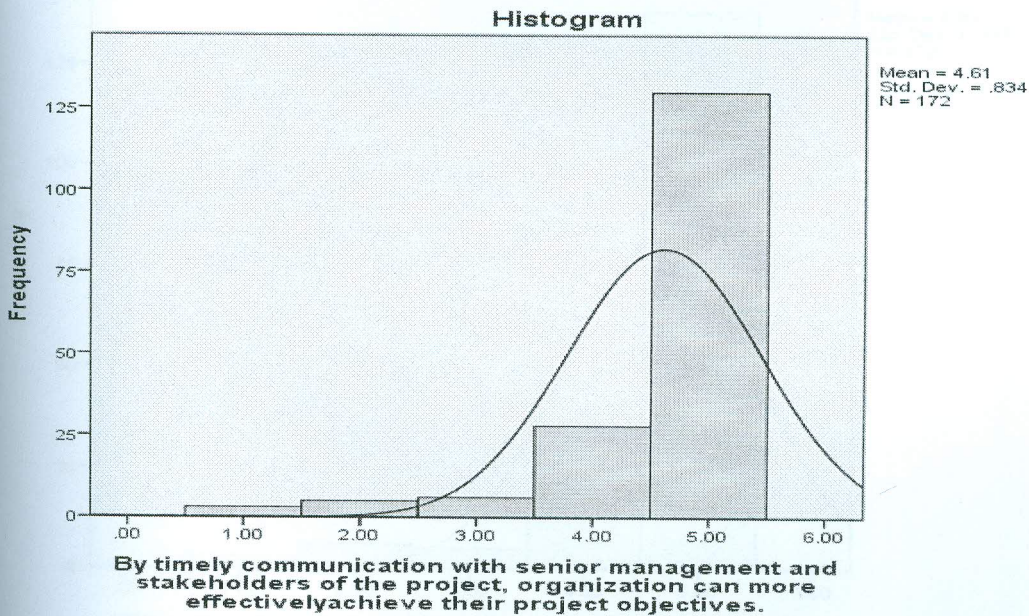
By timely communication with senior management and stakeholders of the project, organization can more effectively achieve their project objectives.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	3	1.7	1.7	1.7
disagree	5	2.9	2.9	4.7
neutral	7	3.5	3.5	8.1
agree	28	16.3	16.3	24.4
strongly agree	130	75.6	75.6	100.0
Total	172	100.0	100.0	

Table 34: Frequency Table for by timely communication with senior management and stakeholders of the project, organization can more effectively achieve their project objectives

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 15: By timely communication with senior management and stakeholders of the project, organization can more effectively achieve their project objectives

5.4.4.2.2. Effective decision making play a vital role in meeting project budget and schedule.

The result in following table shows that most of the respondents (80.2%) strongly agreed in response to this dimension which states that effective decision making play a vital role in meeting project budget and schedule.

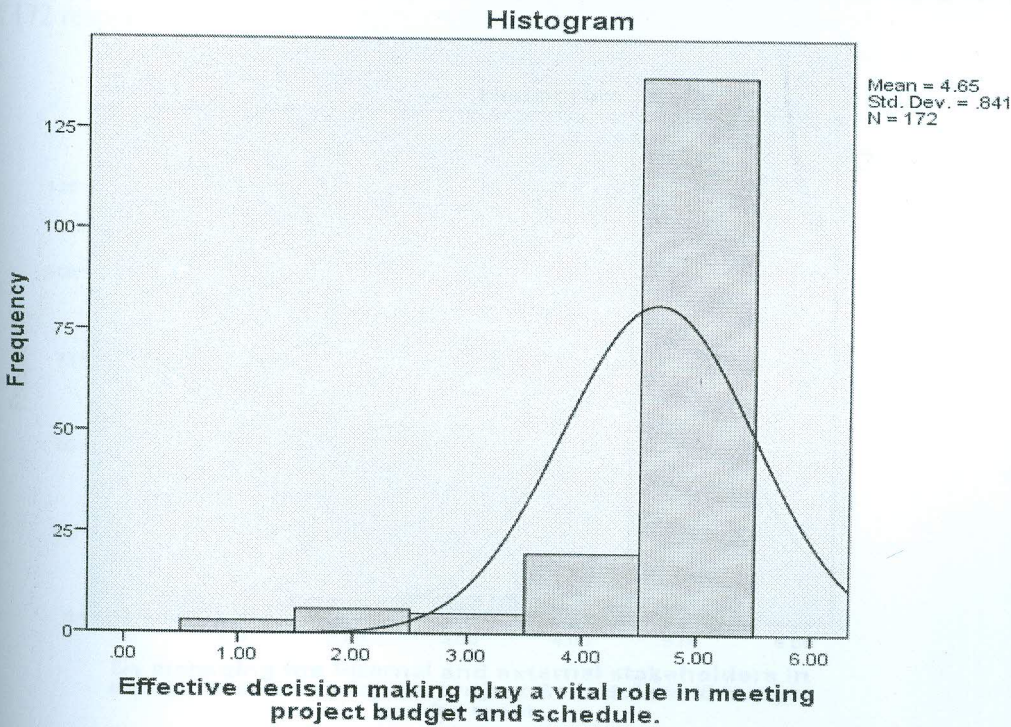
Effective decision making play a vital role in meeting project budget and schedule.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	3	1.7	1.7	1.7
disagree	6	3.5	3.5	5.2
neutral	5	2.9	2.9	8.1
agree	20	11.6	11.6	19.8
strongly agree	138	80.2	80.2	100.0
Total	172	100.0	100.0	

Table 35: Frequency Table for Effective decision making play a vital role in meeting project budget and schedule

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 16: Effective decision making play a vital role in meeting project budget and schedule

5.4.4.2.3. By managing the internal and external stakeholders in every phase of a project, project Schedule and budget can be meet.

The result in following table shows that most of the respondents (80.8%) strongly agreed in response to this dimension which states that by managing the internal and external stakeholders in every phase of a project, project Schedule and budget can be meet.

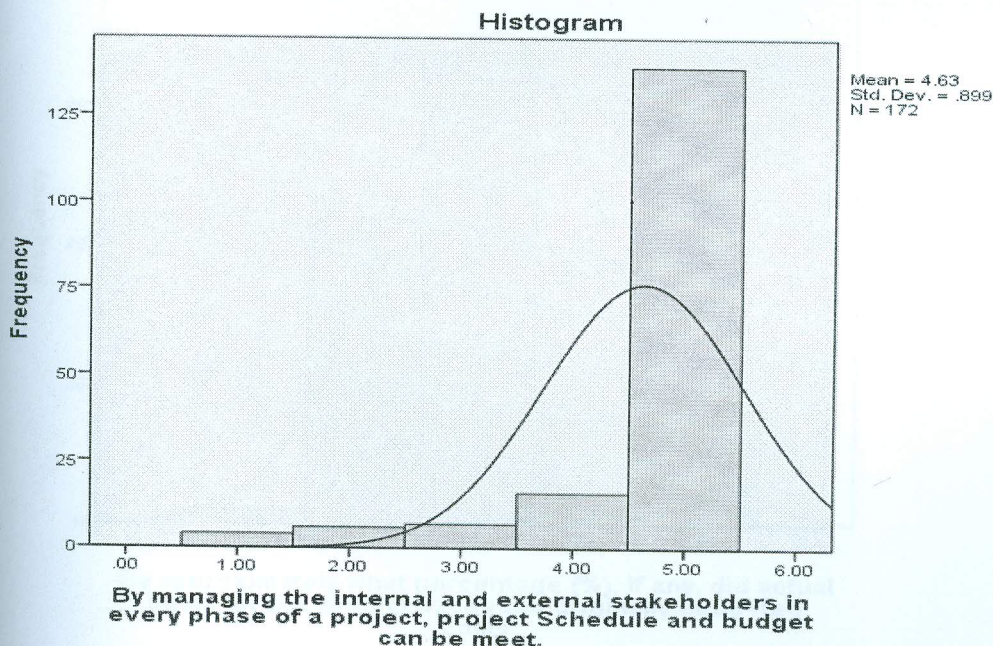
By managing the internal and external stakeholders in every phase of a project, project Schedule and budget can be meet.

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly disagree	4	2.3	2.3	2.3
disagree	6	3.5	3.5	5.8
neutral	7	4.1	4.1	9.9
agree	17	9.3	9.3	19.2
strongly agree	139	80.8	80.8	100.0
Total	172	100.0	100.0	

Table 36: Frequency Table for by managing the internal and external stakeholders in every phase of a project, project Schedule and budget can be meet

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 17: By managing the internal and external stakeholders in every phase of a project, project Schedule and budget can be meet

5.4.4.2.4. By approximately what percentage (%), if any, did actual costs for the project exceeded originally budgeted costs

The result in following table shows that most of the respondents (39.5%) said that between 11 to 30 percent of the project exceed their original project budgeted cost.

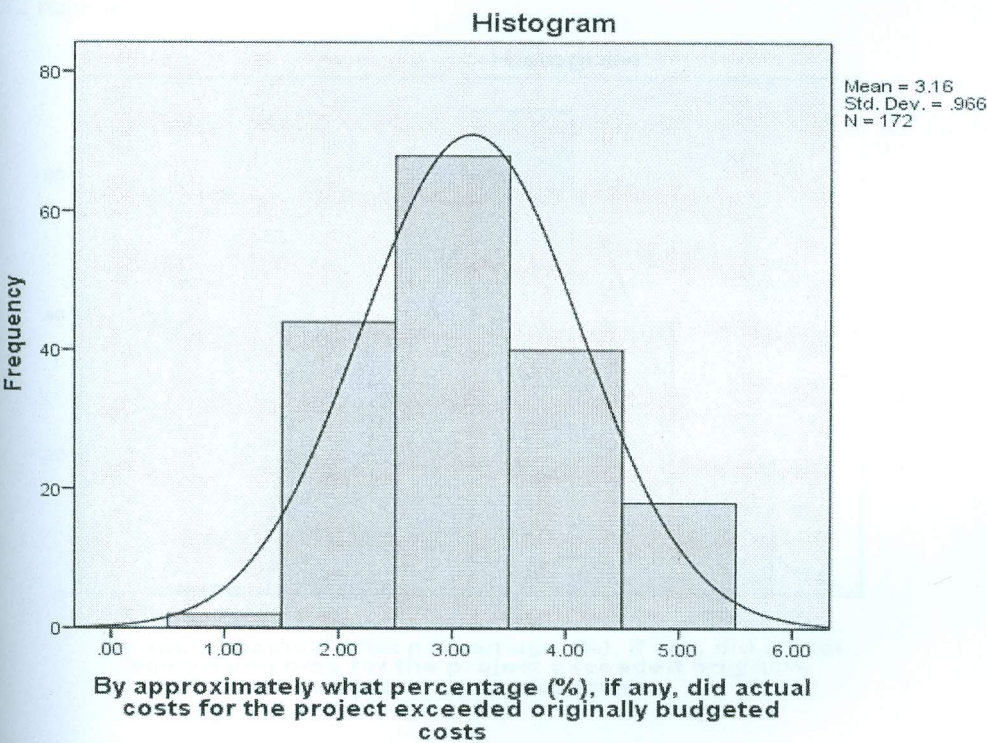
By approximately what percentage (%), if any, did actual costs for the project exceeded originally budgeted costs

	Frequency	Percent	Valid Percent	Cumulative Percent
0%	2	1.2	1.2	1.2
1-10%	44	25.6	25.6	26.7
11-30%	68	39.5	39.5	66.3
31-70%	40	23.3	23.3	89.5
71-100%	18	10.5	10.5	100.0
Total	172	100.0	100.0	

Table 37: Frequency Table for by approximately what percentage (%), if any, did actual costs for the project exceeded originally budgeted costs

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 18: By approximately what percentage (%), if any, did actual costs for the project exceeded originally budgeted costs

5.4.4.2.5.By approximately what percentage (%), if any, did actual completion time for the project exceeded originally scheduled completion time

The result in following table shows that most of the respondents (40%) said that 31 to 70 percent of the project exceeded originally scheduled completion time.

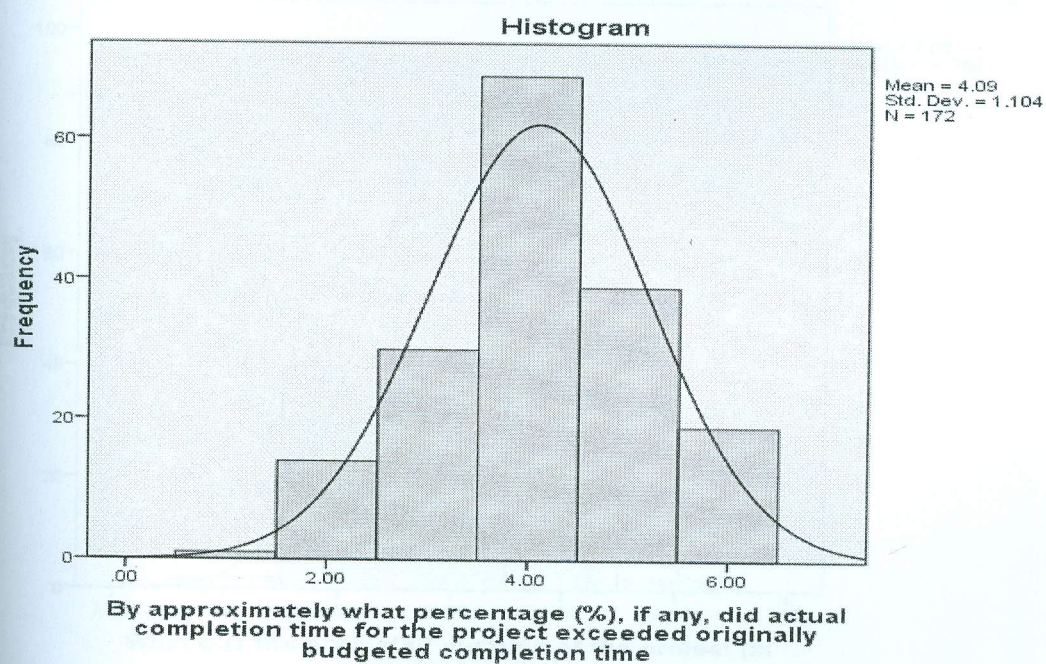
By approximately what percentage (%), if any, did actual completion time for the project exceeded originally scheduled completion time

	Frequency	Percent	Valid Percent	Cumulative Percent
0%	1	.6	.6	.6
1-10%	14	8.1	8.1	8.7
11-30%	30	17.4	17.4	26.2
Valid 31-70%	69	40.1	40.1	66.3
71-100%	39	22.7	22.7	89.0
more than 100%	19	11.0	11.0	100.0
Total	172	100.0	100.0	

Table 38: Frequency Table for by approximately what percentage (%), if any, did actual completion time for the project exceeded originally scheduled completion time

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 19: By approximately what percentage (%), if any, did actual completion time for the project exceeded originally scheduled completion time

5.4.4.2.6. What was the estimated duration of the project (in calendar months)

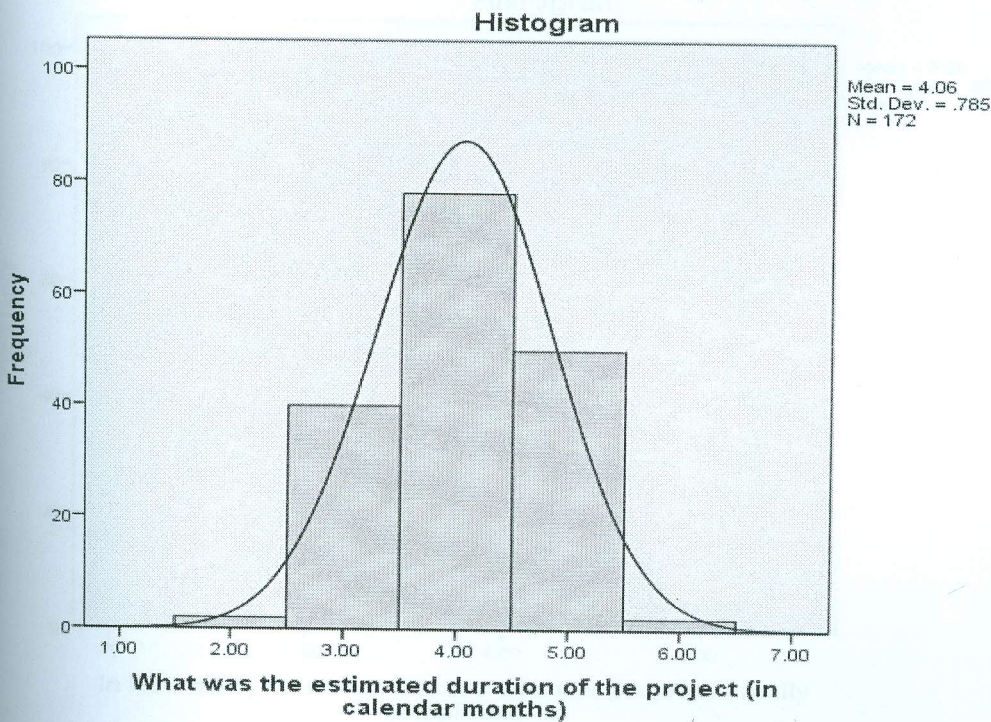
The result in following table shows that most of the respondents (45%) said that 13 to 18 months was the estimated duration of their project.

What was the estimated duration of the project (in calendar months)				
	Frequency	Percent	Valid Percent	Cumulative Percent
3-6 months	2	1.2	1.2	1.2
7-12 months	40	23.3	23.3	24.4
Valid 13-18 months	78	45.3	45.3	69.8
more than 18 months	50	29.1	29.1	98.8
6.00	2	1.2	1.2	100.0
Total	172	100.0	100.0	

Table 39: Frequency Table for what was the estimated duration of the project (in calendar months)

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 20: What was the estimated duration of the project (in calendar months?)

SPSS Statistics Techniques Used

5.4.4.2.7. In how many calendar months was the project actually completed?

The result in following table shows that most of the respondents (48.8%) said that in 13 to 18 months the project was actually completed.

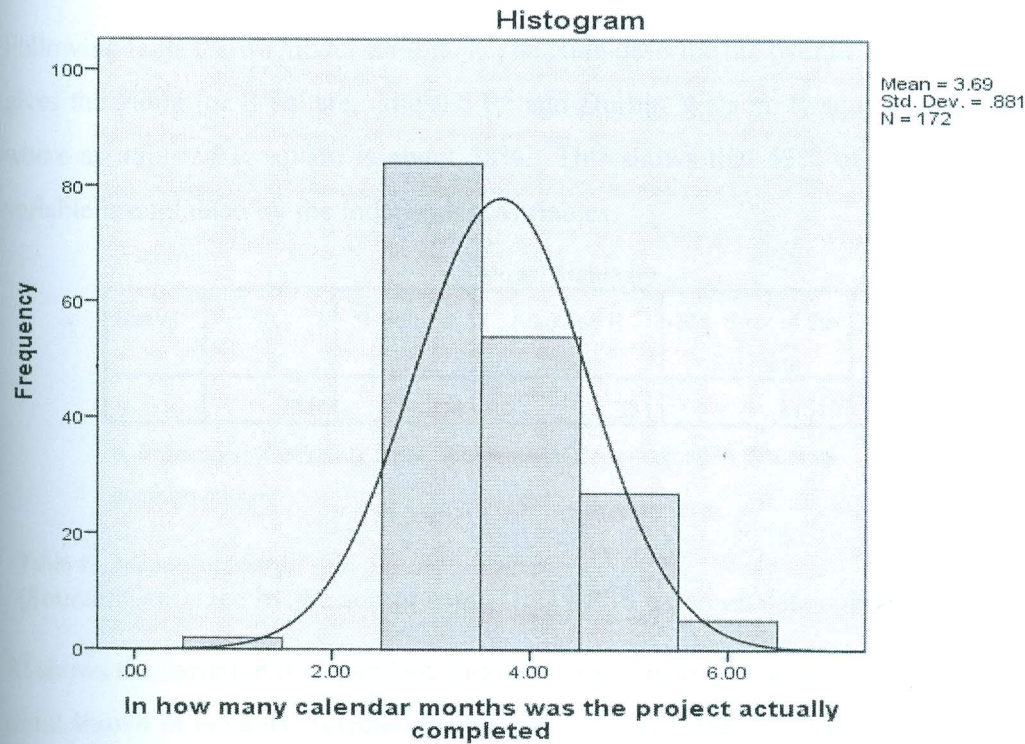
In how many calendar months was the project actually completed

	Frequency	Percent	Valid Percent	Cumulative Percent
less than 3 months	2	1.2	1.2	1.2
7-12 months	54	31.8	48.8	50.0
Valid 13-18 months	84	48.4	31.4	81.4
19-24 months	27	15.7	15.7	97.1
more than 24 months	5	2.9	2.9	100.0
Total	172	100.0	100.0	

Table 40: Frequency Table for in how many calendar months was the project actually completed

(Source: Generated by the author using IBM SPSS based on data collected)

Histogram generated for this variable shows mean value and standard deviation for the total of 172 responses.



Histogram 21: In how many calendar months was the project actually completed?

terms of schedule and budget). Also the values of adjusted R^2 and R^2 do not have major difference which shows that there are no redundant values among Independent Variables (Field, 2009).

Durbin Watson:

Field (2009), “Durbin Watson test helps in measuring the assumptions of independent variable via checking the correlation present in nearby residual. Durbin J and Watson G.S (1951) “This test is used to measure the serial correlation between error”. Some researchers say that the value of the Durbin Watson test can range as a general rule of thumb between 1 and 3 and is dependent upon total set of data and the number of independent variables used (Field, 2009). The ideal value for Durbin Watson test is around 2.0 (Durbin J. & Watson G. S. 1951) which shows non- correlation of residuals or deviations between regression line and actual data points (Field, 2009). The result of Durbin Watson value as shown in Table No 41 is 1.886 which is around 2.0. This shows that there is no auto correlation among the variables.

The following table show the ANOVA which shows the significance at .000 level.

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	20.706	3	6.902	69.035	.000 ^b
Residual	17.696	177	.100		
Total	38.401	180			

a. Dependent Variable: Project objective achievement
b. Predictors: (Constant), SEM, Professional Communication, Effective decision making
Table 42: ANOVA
(Source: Generated by the author using IBM SPSS based on data collected)

Analysis of Variance or ANOVA determine the model practicality by rejecting the null hypothesis, it usually is done in regression analysis and it is also known as F test. In table 42, p value is less than 0.05 that is .000 and F test value is higher that shows the independent variable have strong explanatory power for dependent variable and strong evidence for rejection of null hypothesis.

Model	Unstandardized		Standardized	t	Sig.	Collinearity	
	Coefficients		Coefficients			Statistics	
	B	Std. Error	Beta			Tolerance	VIF

1	(Constant)	1.359	.332		5.619	.000		
	Effective decision making	.969	.075	.689	12.929	.000	.618	1.617
	Professional Communication	.391	.097	.213	4.024	.003	.537	1.496
	SEM	.362	.075	.247	4.816	.001	.721	1.318

a. Dependent variable project objective

Table 43: coefficient

(Source: Generated by the author using IBM SPSS based on data collected)

The table 43 shows that the independent variables have positive significant relationship with dependent variable. The model strongly rejects the null hypothesis (Field, 2009). The sign of beta is positive which shows that that independent variables have positive relationship with dependent variable, i.e. effective decision making, professional communication and SEM (stakeholder engagement management) all are positive and significant as the value of significances are less than 0.05. The table 43 helps us determine the following major results:

Relationship between independent and dependent variable:

From table 43 we deduce that

- Coefficient of effective decision making is 0.969 which shows that 1-unit change in effective decision making brings about 0.969-unit change in dependent variable (Project objectives achievement)
- Coefficient of professional communication is 0.391 which shows that 1-unit change in professional communication brings about 0.391-unit change in dependent variable (Project objectives achievement)
- Coefficient of stakeholder engagement management is 0.362 which shows that 1-unit change in stakeholder engagement management brings about 0.362-unit change in dependent variable (Project objectives achievement)

Contribution of Independent Variable in the Model

Field 2009, beta values (standardized coefficient) tell us the comparison of contribution among the independent variable and dependent variable. These values show the impact of each independent variable in the model.

Independent variable, effective decision making shows 68% predictability for the dependent variable project objective achievement and is significantly higher than other variables. Also, we can see that stakeholder engagement management, professional communication has 24.7 and 21.3 percent contribution for the model respectively.

The VIF value is below ten and lies between 1.3 and 1.6 which shows nonexistence of collinearity in the model (Hair, et. al., 2006). P value for Sig are also less than 0.05 showing higher probability of predictability and explanatory power of the variables (Cooper D. & Schindler P 2013).

5.5.2. Analysis Results

The results of the analysis carried out based on the table No. 43 are as follows:

- 1. Stakeholder engagement management has significant positive relationship with project objectives achievement (In terms of meeting schedule and budget)
- 2. Effective decision making has significant positive relationship with project objectives achievement (In terms of meeting schedule and budget)
- 3. Professional communication has significant positive relationship with project objectives achievement (In terms of meeting schedule and budget)

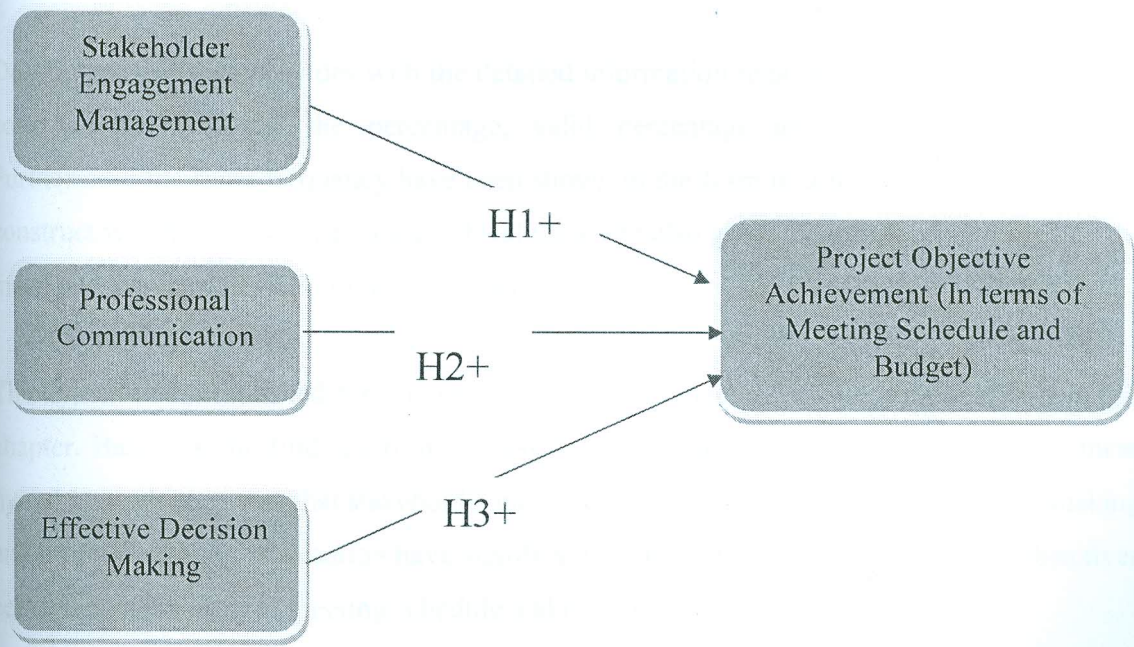


Figure 9: Analysis Result

5.6. Chapter Summary

In this chapter, data collection has been described and data reliability has been verified. Starting with sample profile showing that forty companies were contacted out of which only 24 provided with feedback. Sample profile also provided with the details regarding the respondent's gender, education, role in project, experience, international certifications if any and the number of projects completed up till now in his career.

Furthermore analysis on reliability of the collected data has been provided for the constructs of the study i.e. stakeholder engagement management, professional communication, effective decision making and project objectives achievement followed by item wise statistics showing mean and standard deviation. The overall Cronbach's alpha was also found to be of satisfactory level.

This chapter also gives the details of descriptive statistics of data collected through research questionnaire. SPSS has been used for the same. Descriptive statistics has been performed for the main constructs of this research study i.e. stakeholder engagement management, effective decision making, professional communication and project objectives achievement.

Descriptive statistics provides with the detailed information regarding the frequency for each construct followed by the percentage, valid percentage and cumulative percentage. Furthermore the same frequency have been shown in the form of a histogram for each of the construct which provides with the graphical view and also gives the information regarding the mean and standard deviation for the construct.

The hypotheses established for this research study (in chapter 3) have been analyzed in this chapter. Based on the findings from regression the researcher has provided results of these hypotheses which shows that stakeholder engagement management, effective decision making and professional communication have significant positive relationship with project objectives achievement (In term of meeting schedule and budget).

Next chapter concludes this research thesis by providing findings of this research. Limitations of current research work and potential or scope for future work.

Chapter 6

Summary & Conclusion

6.1 Chapter Introduction

This chapter provides overall summary of this dissertation. It also concludes this study. It provides summary of the results. Limitations of current research work and potential or scope for future work has also been provided.

Following sections have been described in this chapter.

8.2 Research Highlights

8.3 Research Findings

8.3.1 Stakeholder Engagement Management and Project Objective Achievement.

8.3.2 Effective Decision Making and Project Objective Achievement.

8.3.3 Professional Communication and Project Objective Achievement.

8.4 Implications for Soft Skills

8.5 Limitations and scope for future research

8.6 Conclusion

8.7 Recommendation

8.8 Chapter Summary

6.2 Research Highlights

This research study was initiated by identifying its objectives followed by a detailed literature review. The literature review provided a base for establishing a theoretical framework for the research and setting hypothesis for the research. Then data was collected through a research questionnaire and was validated using Cronbach's alpha. A detailed data analysis was undertaken followed by testing of the hypothesis and its findings.

The power utility sector projects of Punjab are mainly turnkey project with usually consists of design, supply, manufacturing, erection, testing and commissioning. These design and related technical data of the equipment which is being supplied are approved by the competent authorities who include National Transmission and Dispatch Company (NTDC) & Distribution Company's (DISCOs) depending upon the project under consideration.

The power utility sector project of Punjab are usually of 1 year duration for 132 kV grid station however the duration for 220 kV and 500 kV grid station may vary from 2 to 5 years. These projects consists of the following steps required for technical data approval of the equipment which is to be procured and installed for any subject grid station by the competent authority (NTDC) and respective Disco.

These projects of 1 year require at least 08 months of approval & ordering and 04 months for execution. Many ongoing projects have been withheld for past 2 to 3 years due to various reasons which may include the following but not limited to:

1. Consultant does not approve the data submitted by the EPC Contractor and an exchange of hundreds of letters is done resulting in nothing but only delay in scheduling.
2. Due to miscommunication with the supplier the manufacturing gets delayed.
3. NTDC does not even bother to entertain technical data or specifications lying on their table for months.
4. Respective DISCO has not provided with the required information to proceed with orientation of feeding line.
5. Litigation.
6. Right of way (ROW). etc.

The motivation for the present research study has been derived from these above mentioned limitations.

6.3 Research Findings

This research was initiated with an objective to identify the impact that soft skills i.e. stakeholder engagement management, effective decision making and professional communication have on achievement of project objectives. Based on this, major findings of this research study are given below.

6.3.1 Stakeholder Engagement Management and Project Objective Achievement

The study has gone through a detailed literature review and found soft skills as a multidimensional construct. Soft skills were not directly observed, however, it is indirectly measured with the help of Stakeholder engagement management, effective decision making, and professional communication. Six different dimensions have been identified in this study for measuring the impact of stakeholder engagement management. These findings were aligned with the previous studies where researchers identified the importance of stakeholder engagement management during the life of the project and its overall impact on the achievement of project objectives (Verzuh 2004, Wideman 2002, Hudson 2005, Frey & Thorsten 2011, J.Teller 2012, M Voss and A. Kock 2013, Madeeha Shah and Imran haider Naqvi 2014). The study measured impact of soft skills in Pakistani power sector projects and showed that stakeholder engagement management has significant positive relationship with project objectives achievement.

6.3.2 Effective Decision Making and Project Objective Achievement.

In this study another variable which was used to measure the impact of soft skills on project objectives achievement in public power utility project in Punjab is effective decision making. Five different dimensions have been identified in this study for measuring the impact of effective decision making on project objectives achievement. These findings were aligned with the previous studies where researchers identified the importance of effective decision making during the life of the project and its overall impact on the achievement of project objectives (Borne 2006, Ireland 2009, Shenhar and Dvir 2007, Azzopardi 2007, Bista 2007, Dinsmore 1999, Lewis 2003, Lundin and Hartmat 2000). The study measured impact of soft skills in Pakistani power sector projects and showed that effective decision making has significant positive relationship with project objectives achievement.

6.3.3 Professional Communication and Project Objective

Achievement

Another very critical variable which was used to measure the impact of soft skills on project objectives achievement in public power utility project in Punjab is professional communication. Five different dimensions have been identified in this study for measuring the impact of professional communication on project objectives achievement. These findings were aligned with the previous studies where researchers identified the importance of professional communication during the life of the project and its overall impact on the achievement of project objectives (NCSPM 2007, Motschnig-Pitrik 2006, PMI 2004, Gillard 2009, L.R. Yang, C.F. Huang, and T.J. Hsu 2014Merison 2006). The study measured impact of soft skills in Pakistani power sector projects and showed that professional communication has significant positive relationship with project objectives achievement.

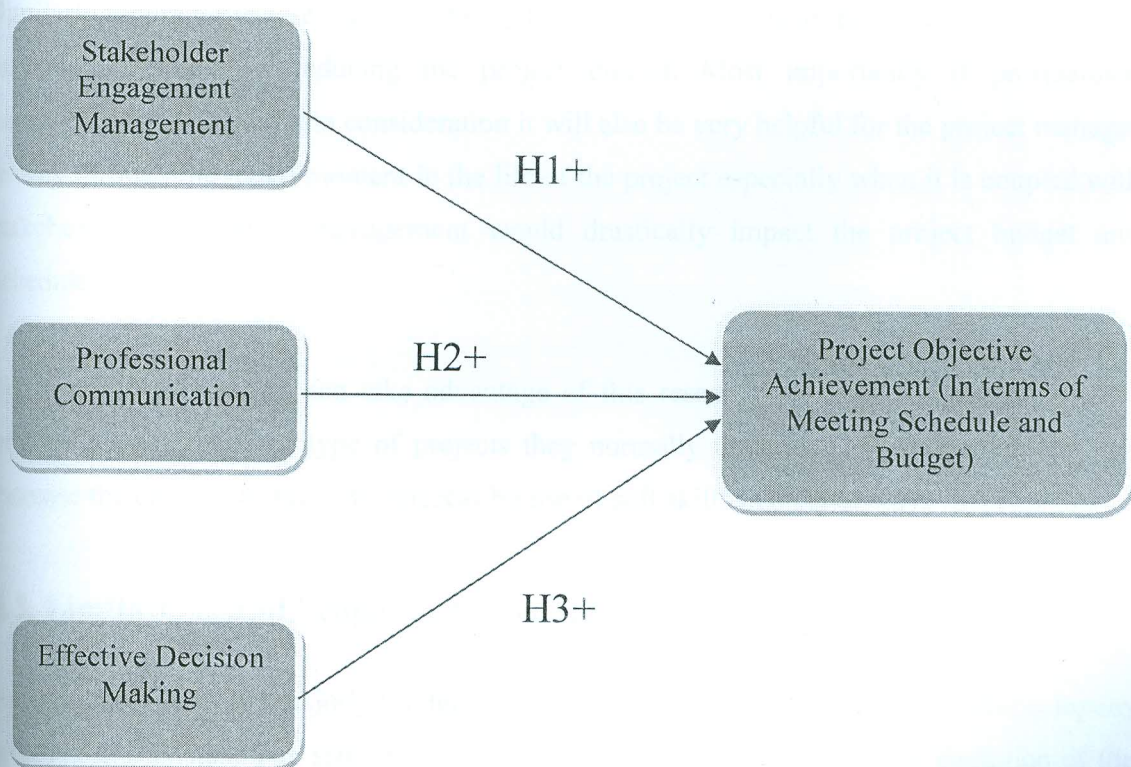


Figure 10: Research Findings

6.4 Implications for Soft Skills

The results of this study can be used by project managers of power sector companies. They can reduce their failures by thorough use of soft skills. The dimensions identified in this study may be used by project managers to maintain the cost performance index and schedule performance index for their respective projects.

This study can help project managers to achieve project objectives through the use of professional communication, effective decision making, and stakeholder engagement management. After identification of the project stakeholder and engaging them periodically throughout the life of the project many different problem can be resolved easily and hence releasing the pressure from the project schedule.

Similarly taking project decisions on the right time, project manager can save time which will automatically help in reducing the project budget. Most importantly if professional communication is taken into consideration it will also be very helpful for the project manager to way through the tough moment in the life of the project especially when it is coupled with stakeholder engagement management would drastically impact the project budget and schedule.

Power sector companies can take advantage of this research by developing some kind of profiles for the different type of projects they normally undertake. The organizations can increase the chances of projects' success by use of soft skills in a better way.

6.5. Limitations and Scope for future Research

Results of this study are majorly limited to cohort of private engineering power sector company employs in Pakistan. The size of the sample is small, which is a very key limitation of the study. This research has not covered all aspects related to soft skills of project management since it is such a vast domain. There was no authentic source confirming the total number of companies. The research has been undertaken based on the projects undertaken by companies. However, there can be other companies which have not been working in Pakistan on different projects. This research does not cater the projects undertaken by those organizations. Increased sample frame could provide more validated results for this study topic.

This research used single respondent for a project for data collection. It would be more interesting to have multiple respondents from a project assessing independently for the impact of soft skills on these power sector project. Similarly, a detailed research is recommended based on different project and organizational characteristics

However, considering the project management is a vast field situated in many different professions, it can be said that the finding of this study are definitely valuable within the broad field of project management.

6.6 Conclusion

Hard skills such as scheduling, budgeting, and metrics etc. of project management are usually considered for successfully completing the project which are without any shadow of a doubt very important. It has been realized that big quantum of work and studies are in place for organizing and executing the project systematically. A number of hard skills are also in place to measure the progress and objectives of projects. However, the importance of soft skills is generally not considered to achieve project objectives. Public Power utility projects of Punjab are usually consisting of long procedure requiring step by step approval from respective approving authorities. Once the role of hard skills for these projects is completed, in order to attain timely approvals and dealing with the consultant throughout the life time of the project, the use of soft skills come into play. Strong follow ups are required with professional communication, effective decision making and stakeholder engagement management without which it is impossible to get any submitted technical data, drawings and specifications approved. The research study has brought new dimensions in understanding that soft skills has significantly positive relation with achievement of project objective. This research will indeed helped to explore more knowledgeable avenues related to the topic and it will also help power sector professionals.

6.7 Recommendations

The research may be used by project managers to select implementation strategies to achieve desired project outcome. Power sector professionals may get more insight in linking stakeholder engagement management, professional communication and effective decision making with the achievement of project objectives.

6.8 Chapter Summary

This chapter provided an overall summary of this dissertation. It has also concluded this study and provided summary of the results. Limitations of current research work and potential or scope for future work has also been provided. In the end a brief conclusion of the study is provided which show that the traditional view of achieving project objectives by the use of hard skill can be improved. The use of soft skills, if coupled with hard skill, can produce remarkable results.

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Appendices

Following appendices are included in this section.

- Appendix-I Research Questionnaire
- Appendix-II Questionnaire Coding Scheme for SPSS
- Appendix-III Correlation
- Appendix-IV Authors and their work on soft skills

Appendix-I Research Questionnaire

Adopted from

- Joe Campana (2010), the soft skills of project Management,
- Saleem Haddad (2014), the effect of soft skills on project management, The British university of Dubai.



Bahria University Lahore Campus
Department of Management Sciences

Research Study: Impact of Soft Skills on Public Power
Utility Projects of Punjab

This survey is being carried out to collect data for my MS research study as a requirement of MS degree in Project Management at Bahria University Islamabad (Lahore Campus). Based on your experience in projects, you are requested to answer these questions on the basis of your last completed project. Thank you for your attention and cooperation.

Contact Detail: Ali Hassan | Cell: 0343 1452948 | Email: alihassan1956@yahoo.co.uk

PART A: DEMOGRAPHIC

1. The number of years of project management experience you have?
 - a. 1-2 Years
 - b. 3-5 Years
 - c. 6-8 Years
 - d. 9-10 Years
 - e. More than 10 Years
2. What is your educational qualification?
 - a. Diploma
 - b. Bachelors

- c. Masters
- d. MS/Mphil
- e. Doctorate

3. Gender

- a. Male
- b. Female

4. How many years of experience do you have in the present organization?

- a. < 3 years.
- b. 3-6 years.
- c. 7-10 years.
- d. 11-14 years
- e. 15 years

5. Which of the following best describes your role in the project?

- a. Supervisor
- b. Project engineer
- c. Project Manager
- d. Management
- e. Senior Management
- f. Other Please specify _____

6. How many projects have you completed in your career before this project?

- a. < 5 Projects.
- b. 5-10 Projects.
- c. 11-20 Projects.
- d. 20-40 Projects.
- e. Above 40 Projects

7. By approximately what percentage (%), if any, did actual costs for the project exceeded originally budgeted costs?

- a. 0%
- b. 1-10%
- c. 11-30%
- d. 31-70%
- e. 71-100%
- f. More than 100%

8. By approximately what percentage (%), if any, did actual completion time for the project exceeded originally budgeted completion time?

- a. 0%
- b. 1-10%

- c. 11-30%
- d. 31-70%
- e. 71-100%
- f. More than 100%

9. What was the estimated duration of the project (in calendar months)?
- a. Less than 3 Months.
 - b. 3-6 Months.
 - c. 7-12 Months.
 - d. 13-18 Months.
 - e. More than 18 Months

10. In how many calendar months was the project actually completed?
- a. Less than 3 months
 - b. 3-6 Months.
 - c. 7-12 Months
 - d. 13-18 Months
 - e. 19-24 Months
 - f. More than 24 Months

Please respond to each of the following Statement relate to your feelings about your organization. Please show the extent to which you believe this organization has the feature described in the statement.				
1=Strongly Disagree	2= Disagree	3= Neutral	4=Agree	5= Strongly Agree

PART B: STAKEHOLDER ENGAGEMENT MANAGEMENT

No.	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Your organization focuses on communicating continuously with the stakeholder to determine their needs and expectation	1	2	3	4	5
2	Your organization focuses on dealing with issues when they arise	1	2	3	4	5
3	Your manager of the project negotiates continuously and implement desires of the stakeholder	1	2	3	4	5
4	Your organization focuses on conflict management and fostering stakeholder engagement appropriately	1	2	3	4	5
5	The stakeholders in your organization require regular commuincation	1	2	3	4	5
6	By managing the internal and external stakeholders in every phase of a project, project objectives can be achieved	1	2	3	4	5

7	During project execution in your organization credibility is used to influence people over whom you have little or no formal authority.	1	2	3	4	5
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PART C: EFFECTIVE DECISION MAKING

No	Statement	Strongly disagree	Disagree	Neutral	Agree	strongly agree
1	At every turn in every project phase, project team needs to make timely and effective decisions	1	2	3	4	5
2	Conflicts are often uninformed members on project team and require decision making skill sets to prevent the project from delay	1	2	3	4	5
3	Project management experience and knowledge assist in taking effective decisions during the project	1	2	3	4	5
4	Effective decision making skills are about creating the kind of project environment where team members can find personal meaning and value	1	2	3	4	5
5	For effective decision making the project manager take decision individually	1	2	3	4	5
6	For effective decision making the project manager involve the team to take their opinions	1	2	3	4	5

PART D: PROFESSIONAL COMMUNICATION

No	Statement	Strongly disagree	Disagree	Neutral	Agree	strongly agree
1	With professional communication skills you can unite the employees around a common goal and generate greater productivity	1	2	3	4	5
2	The communication depends upon the requirement specified by the stakeholders of the project	1	2	3	4	5
3	The methods for communication is determined by the stakeholders	1	2	3	4	5
4	Professional communication strategy assists in managing relations with the stakeholder which ultimately results in smooth execution of the project.	1	2	3	4	5
5	Openness in communication helps to team members to improve mutual trust between them.	1	2	3	4	5

PART E: PROJECT OBJECTIVE ACHIEVEMENT

No.	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Through professional communication with senior management and stakeholders of the project organization can complete their project on schedule and within budget	1	2	3	4	5
2	Through effective decision making, project can be completed within schedule and budget	1	2	3	4	5
3	By managing the internal and external stakeholders in every phase of a project, project objectives can be achieved	1	2	3	4	5

Please share, if you have any further comments with regards to achievement of project objectives in terms of meeting project schedule and budget.

Many, many sincere thanks for your assistance and cooperation in completing this questionnaire



Appendix-II Questionnaire Coding Scheme for SPSS

This appendix contains coding scheme detail of the questions used in the research questionnaire. This information has been used in statistical package IBM SPSS. Question ID scheme is as follows:

PART B: STAKEHOLDER ENGAGEMENT MANAGEMENT

Question ID Detail:

<A for Part-A><Q for Question><Question number in part A><Sub part detail, if any>

Q. No	Q. ID	Question Description	Answer Type	Coding scheme
1	SEM 1	Your organization focuses on communicating continuously with the stakeholder to determine their needs and expectation	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
2	SEM 2	Your organization focuses on dealing with issues when they arise	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
3	SEM 3	Your manager of the project negotiates continuously and implement desires of the stakeholder	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
4	SEM 4	Your organization focuses on conflict management and fostering stakeholder engagement appropriately	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
5	SEM 5	The stakeholders in your organization require regular communication.	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
6	SEM 6	By managing the internal and external stakeholders in every phase of a project, project objectives can be achieved	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree

7	SEM 7	During project execution in your organization credibility is used to influence people over whom you have little or no SEM formal authority.	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
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PART C: EFFECTIVE DECISION MAKING

Question ID Detail:

<B for Part-B><Q for Question><Question number in part B><Sub part detail, if any>

Q. No	Q. ID	Question Description	Answer Type	Coding scheme
1	EDM 1	At every turn in every project phase, project team needs to make timely and effective decisions	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
2	EDM 2	Conflicts are often uninvited members on project team and require decision making skill sets to prevent the project from delay	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
3	EDM 3	Project management experience and knowledge assist in taking effective decisions during the project	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
4	EDM 4	Effective decision making skills are about creating the kind of project environment where team members can find personal meaning and value	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
5	EDM 5	For effective decision making the project manager take decision individually	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
6	EDM 6	For effective decision making the project manager involve the team to take their opinions	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree

PART D: PROFESSIONAL COMMUNICATION

Question ID Detail:

<D for Part-D><Q for Question><Question number in part D><Sub part detail, if any>

Q. No	Q. ID	Question Description	Answer Type	Coding scheme
1	PC 1	With professional communication skills you can unite the employees around a common goal and generate greater productivity	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
2	PC 2	The communication channel required for the project are dependent upon the needs of the stakeholders.	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
3	PC 3	The frequency of communication depends upon the requirement of the stakeholders.	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
4	PC 4	Professional communication strategy assists in managing relations with the stakeholder which ultimately results in smooth execution of the project.	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
5	PC 5	Openness in communication helps to team members to improve mutual trust between them.	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree

PART E: PROJECT OBJECTIVES

Question ID Detail:

<E for Part-E><Q for Question><Question number in part E><Sub part detail, if any>

Q. No	Q. ID	Question Description	Answer Type	Coding scheme
1	PO 1	Through professional communication with senior management and stakeholders of the project organization can complete their project on schedule and within budget	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
2	PO 2	Through effective decision making, project can be completed within schedule and budget	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree
3	PO 3	By managing the internal and external stakeholders in every phase of a project, project objectives can be achieved	Numeric	1.Strongly Disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly Agree

Appendix-III Correlation

Correlation between stakeholder engagement management and project objective achievement

Correlations		Project objective achievement	SEM
Project objective achievement	Pearson Correlation	1	.821**
	Sig. (2-tailed)		.000
	N	172	172
SEM	Pearson Correlation	.821**	1
	Sig. (2-tailed)	.000	
	N	172	172

** . Correlation is significant at the 0.01 level (2-tailed).

Correlation Results of Latent Variables (stakeholder engagement management and project Objective Achievement) (Source: Generated by the author from IBM SPSS)

Correlations between the effective decision making and project objective achievement

Correlations		Project objective achievement	Effective decision making
Project objective achievement	Pearson Correlation	1	.757**
	Sig. (2-tailed)		.000
	N	172	172
Effective decision making	Pearson Correlation	.757**	1
	Sig. (2-tailed)	.000	
	N	172	172

** . Correlation is significant at the 0.01 level (2-tailed).

Correlation between Variables (effective decision making and project objective achievement)
(Source: Generated by the author from IBM SPSS)

Correlations between with professional communication and project objective achievement

Correlations

		Project objective achievement	Professional Communication
Project objective achievement	Pearson Correlation	1	.712**
	Sig. (2-tailed)		.000
	N	172	172
Professional Communication	Pearson Correlation	.712**	1
	Sig. (2-tailed)	.000	
	N	172	172

** . Correlation is significant at the 0.01 level (2-tailed).
Variable Professional communication and project objective achievement
(Source: Generated by the author from IBM SPSS)

Appendix-IV Authors and their work on soft skills

Author	Year	Work
Bourne	2006	The management of the soft skills as the key to project success.
PMI	2004	Project management is the application of skills, tools, techniques to meet the project requirements. It typically involves managing not only time, cost, and scope, but also identifying the project stakeholders and their requirements.
Ireland	2006	Project management is the managerial activities needed to lead a project to a successful end.
Phillips	2003	Project management has within it a secondary and more ambitious challenge which is to maintain and integrate the needs of all project stakeholders.
Schwalbe	2002	Positing that project management has within it three broad areas: the stakeholders, the nine knowledge areas (PM BOK), and the project deliverables.
Verzuh	2005	A project can be boiled down to three key success factors agreement amongst all stakeholders, Effective communication between all stakeholders and Management support.
Shenhar and Dvir	2007	Since the beginning of civilization, people have been involved in projects.
Hartley	2003	It has been since the 1950s that organizations started applying systemic project management tools and techniques to complex projects
Azzopardi	2007	The 1950s marked the beginning of the modern Project management era. Project management was formally recognized as a distinct discipline arising from the management discipline.
Bista	2007	Project management solutions are in demand across the world as a fundamental force to complete projects within not only a defined scope, time, and cost constraints, but also the recognition that project stakeholders play an important part in successful project.
Lewis	2003	At present ultra modern project management systems deliver innovative solutions and its management possesses through the latest tools and techniques, systems and schemes with scientific evidences and statistical explanations, and the recognition of the need to meet the stakeholder's expectations.
Schwalbe	2000	People in virtually every industry began to apply different aspects of project management to their projects.
Dinsmore	1999	Traditionally project management literature targeted how to deal with the specifics of the project such as time, cost and specifications.
Wideman	2002	Successful project management is characterized as being on time and within-budget, but unfortunately, simply being on time and within budget does not necessarily mean that project has also been

		successful.
PMI	2004	Five key skills a project manager should exhibit these include: •Effective communication and exchange of information with all project stakeholders; •Influencing stakeholders; •Showing leadership; •Motivating all stakeholders related to the project; and •Negotiation and conflict management, and conferring with others (namely stakeholders) to gain and reach agreement.
Dinsmore	1999	The measurement of individual competence in managing projects calls for reaching beyond knowledge-based education, but to move into the field of competence assessment
Verzuh	2005	The project manager is a leader, and that the role of the project manager is not only that of managing the project management tool set, but also leading and managing all the project stakeholders.
Maylor	1999	The key responsibilities of the project manager as being creating clear and attainable project objectives, managing the project requirements & stakeholders and managing the four main components of a project cost, time, quality, and scope.
PMI	2004	The advent of more accessible and fast technology, it can be very useful in aiding the transfer and distribution of information amongst the project stakeholders.
Mersino	2006	Project manager is typically the centre of all project communications and, that having great information is going to be a function of the relationships and stakeholder management.
Wideman	2002	The success or failure of a project is almost entirely dependent upon the people and the management of the soft components.
NCSPM	2007	Project communications management ensures the timely and appropriate generation, collection, dissemination, storage and disposal of project information through formal structures and processes.
NCSPM	2007	The key aspect of this competency is very clearly focused on identifying and considering all of the project stakeholders, as well as developing an inclusive communications strategy that accounts for all stakeholders information requirements.
NCSPM	2007	The performance outcomes, skills and knowledge required to integrate and balance the overall project management functions of scope, time, cost, quality, human resources, communications, risk and procurement and to align and track the project objectives to comply with all stakeholders' requirements.
Lundin and Hartmat	2000	There is a necessity to better understand these learning and development of the project management phenomena, the role of

		the project manager, and their interaction within a project setting.
PMI	2004	The analysis of project communications requirements is generally the output of, and results in, the sum of information needs of the project stakeholders.
Motschnig-Pitrik	2006	The majority of the students felt that it was easier for them to work in teams and to establish social relationship in the course on project management as way to develop their soft skills
Verzuh	2005	Project manager is the catalyst and driver who lifts the project, puts it into motion, and brings it to a successful conclusion on time and on budget, but also being aware of all the project stakeholders and what does success mean.
Hudson	2008	Project management capability building and success are very much linked to education with the movement from the classroom teaching approach to a more collaborative approach.
PMI	2004	Project manager needs to consider a number of factors that impinge upon and dictate the communications technology that could be used in a project.
Teoh	2008	Today's project manager needs to be not only up-skilled on the changes and evolution of project management, but also one of the keys areas of people management.
Gillard	2009	It is becoming more evident that success in the role of project manager cannot be attained with a technical skill set only
PMI	2004	The project manager should consider the potential communication channels, paths, and methods required by the individual stakeholder groups or individuals.
Woodward	2005	A new and alternate paradigm of how project success should be viewed, that is, the need to look through the lens of the project soft skills , stakeholder and communication management.
Madeeha Shah and Imran Haider Naqvi	2014	Companies need project management (PM) to deal with the increasing number of projects and used it to ensure strategic arrangement and adequate use of available resources
Frey, Thorsten	2011	The importance of Governance structures in IT project management'', European Conference on Information System.
L. R. Yang, C. F. Huang, and T. J. Hsu	2014	Knowledge & leadership to improve project and organizational performance'', International Journal of Project management.
M. Voss, and A. Kock	2013	Impact of relationship value on project success investigating the moderating effects and characteristics and external turbulence.
J. Teller	2012	Formalization of project portfolio management is a moderating role in portfolio complexity.

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