

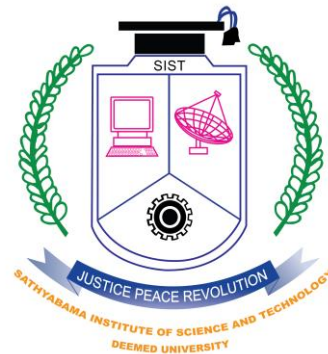
EFFECTIVE COMMUNICATION MANAGEMENT FOR BUILDING INTERIOR FITOUT PROJECTS

A Thesis

Submitted in partial fulfillment of the requirements for the award of
Master of Architecture degree in Building Management

by

ALBART.A (39840003)



**DEPARTMENT OF ARCHITECTURE
SCHOOL OF BUILDING AND ENVIRONMENT**

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

Accredited with Grade "A" by NAAC

JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI - 600 119

MAY 2021



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BONAFIDE CERTIFICATE

This is to certify that this Report is the bonafide work of **ALBART.A (39840003)** who carried out the Thesis entitled "**EFFECTIVE COMMUNICATION MANAGEMENT FOR BUILDING INTERIOR FITOUT PROJECTS**" under our supervision from January 2021 to May 2021.

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ABSTRACT

Through this study, we can understand how Communication management in Auditorium interior project execution and management of Stakeholders can be applied in the construction industry, in particular to the procurement and supply, communication management sectors, and how they can be made more efficient, transparent, and accountable to all participants participating in this project.

Through this study, we can identify the communication management factors that influence project success; and it proposes a conceptual improvement model to enhance communication-management practice for successful project delivery.

The aim of this study is to ensure efficient coordination and monitoring of stakeholders in the management of Auditorium interior project and to ensure that the project fulfills its three constraints – Time, Cost & Quality. Effective management of Stakeholders plays an important role in case of Interior Turnkey projects.

There are many stakeholders who are been actively involved in many Interior projects. Managing them and completing the project on time brings success to the project. Stakeholders can be managed through effective communication. Success is denoted by completion of project on time, on cost, with quality.

Communication on projects is challenging! There are so many individuals to communicate with from the very beginning through to implementation and evaluation – and they all want to be communicated with differently!

This thesis study will discuss best practices for engaging stakeholders early on and continuing to communicate and engage stakeholders and others throughout the project lifecycle. The use of technology enables for more effective communications in such situations along with an understanding of cultural differences and their impact on how we process communications received.

TABLE OF CONTENTS

CHAPTER No.	TITLE	PAGE No.
	ABSTRACT	v
	LIST OF TABLES	xv
	LIST OF FIGURES	xviii
1	INTRODUCTION	1
1.1	INTRODUCTION	1
1.2	AIM	1
1.3	OBJECTIVE	1
1.4	SCOPE	2
1.5	METHODOLOGY	2
2	LITERATURE REVIEW	3
2.1	EFFECTIVE COMMUNICATION MANAGEMENT	3
2.1.1	Introduction	3
2.1.2	Effective Communication Management	3
2.1.3	Stakeholder Relationship Management	3
2.1.4	Objective	4
2.1.5	Methodology	4
2.1.5.1	First Phase	4
2.1.5.2	Second Phase	5

2.1.6	Results	5
2.1.6.1	Major Problems in Managing Stakeholder Relationships	5
2.1.6.2	The main areas where communication could be used in stakeholder relationship management	5
2.1.7	Inferences drawn from the study	5
2.1.8	Communication Framework for Stakeholder Relationship Management	6
2.1.9	Conclusion	7
2.2	RETHINKING INTERNAL COMMUNICATION	7
2.2.1	Introduction	7
2.2.2	Triple C Model	7
2.2.3	Main areas of project Communication Management	8
2.2.4	Project communication management framework	9
2.3	MANAGING COMMUNICATIONS EFFECTIVELY AND EFFICIENTLY	11
2.3.1	Aim	11
2.3.2	Simple Communication Plan Components	11
2.3.3	Poor Communications and the Impact on Our Projects	11
2.3.3.1	Poor Team Communications	11
2.3.3.2	Poor Stakeholder Communications	11
2.3.4	Communication Modes and Styles	11

2.4	STEPS TO ESTABLISH INTERNAL COMMUNICATION STRATEGY	12
2.4.1	Assess Your Current Internal Communication Strategy	12
2.4.2	Identify Your Key Metrics	13
2.4.3	Set Realistic Goals and Segment Your Audience	13
2.4.4	Evaluate your progress	13
2.4.5	Internal communications best practices	14
2.4.5.1	Ensure Consistency in Communication	14
2.4.5.2	Include Metrics Whenever Possible	14
2.4.5.3	Provide Channels for Feedback and Ideas	14
2.4.5.4	Encourage Cross-Departmental Communication and Collaboration	15
2.4.5.5	Avoid Communication Overload	15
2.4.5.6	Use Internal Communications to Recognize and Praise Success	15
3	CASE STUDY	16
3.1	PROJECT DETAILS	16
3.2	ORGANIZATIONAL CHART	16
3.1.1	Internal Stakeholders	16
3.1.2	External Stakeholders	17
3.3	LIST OF ACTIVITIES	18

3.4	VARIOUS STAGES & STAKES INVOLVED	19
3.5	PROJECT MEETING CALENDAR & MOM	19
3.6	STAKEHOLDERS INVOLVEMENT	20
3.7	PROJECT COMMUNICATION PROTOCOL	20
3.8	RASI MATRIX	21
3.9	VARIOUS PHASES & COMMUNICATIONS MADE	23
3.9.1	Initiation Phase	23
3.9.2	Construction Phase	26
3.10	PROCUREMENT	29
4	ANALYSIS	34
4.1	PROJECT TIMELINE	34
4.1.1	Analysis	35
4.1.2	Analysis of Timeline delays & Communications made	36
4.2	COSTING	37
4.3	QUALITY	37
4.4	INFERENCE	37
4.5	SUGGESTIONS	37
4.6	MAPPING THE STAKEHOLDER ISSUES	37
4.7	BITRIX 24	38
4.7.1	Overview	38
4.8	PROPOSED PROJECT TIMELINE	39
4.8.1	Difference between Proposed & Actual Timeline	40
4.8.2	Impact Assessment on the Proposed Project Timeline	40
4.8.2.1	Process	41

4.8.2.2	People	41
4.8.2.3	Costing	41
4.8.2.4	Quality	41
4.8.2.5	Communication	41
4.8.2.6	Policy or Guidelines	42
4.8.3	Impact Analysis	42
4.8.4	Risk Assessment	42
4.8.5	RASI Matrix	42
4.9	COSTING ANALYSIS AFTER CHANGING TIMELINE	43
4.9.1	Communication	44
4.10	QUALITY ASPECTS	44
4.10.1	Quality Management Process	44
4.10.2	Quality Checklist	45
4.10.3	Communications	46
4.10.4	Communication Plan	46
4.11	RESULTS	47
5	CONCLUSION	53
5.1	DIGITAL COMMUNICATION	53
5.2	COMMUNICATION STRATEGIES	53
5.2.1	Steps to ensure that meetings stay on Schedule	54
5.2.2	Be Transparent, Clear & Concise	54
	REFERENCES	55

LIST OF TABLES

TABLE No.	TITLE	PAGE No.
3.1	Project Details	16
3.2	Various stages & Stakes Involved	19
3.3	Project Meeting Calendar & MOM	19
3.4	Stakeholders Involvement	20
3.5	Project Communication Protocol	20
3.6	RASI Matrix	21
3.6.1	RASI Matrix	21
3.7.1	Initiation Phase	23
3.7.2	Designing Phase	23
3.7.3	Finalizing Auditorium location	24
3.7.4	Estimation of Costs	25
3.7.5	Procurement	25
3.7.1.1	Civil Works	26
3.7.1.2	HVAC	26
3.7.1.3	Fire Fighting	27

3.7.1.4	Acoustics	27
3.7.1.5	Flooring	27
3.7.1.6	Plumbing	28
3.7.1.7	Carpentry & Painting	28
3.7.1.8	CCTV & Data lines	28
3.7.1.9	Inter lines	29
4.1.1	Analysis	36
4.1.2	Analysis on the delays and the communications made	36
4.2	Proposed Vs. Actual Timeline	40
4.3	Risk Assessment	42
4.4	RASI Matrix	42
4.5	Costing Analysis	43
4.6	Communications made for approval	43
4.7.1	Quality Checklists for Point wiring	44
4.7.2	Quality Checklist for Electrical works	44
4.7.3	Quality Checklist for Painting works	45
4.8	Communication Plan	46

LIST OF FIGURES

FIGURE No.	TITLE	PAGE No.
1.1	Methodology	02
2.1	Communication Framework	06
2.2	Triple C Model	08
2.2.1	Project Communication Management	08
2.2.2	Communication Management Framework	09
2.2.3	Communication Management Framework	10
3.1	Organizational Chart	16
3.1.1	Internal Stakeholders	16
3.1.2	External Stakeholders	17 – 18
3.1.3	List of Activities	18
3.2.1	Electrical	29
3.2.2	Lighting	30
3.2.3	CCTV Works	30
3.2.4	Air Conditioning	31
3.2.5	Acoustics	31
3.2.6	Grid Ceiling	32
3.2.7	Painting	32

3.2.8	Carpets	33
3.2.9	Chairs	33
4.1	Project Timeline	34 – 35
4.2	Mapping the stakeholder Issues	37
4.3	Proposed Project Timeline	39 – 40
4.4	Impact Assessment	40
4.5	Impact Analysis	42
4.6	Quality Management Process	43
4.7	Home Page	47
4.8	Flooring group	47
4.9	Self Chat	48
4.10	Event Planner	48
4.11	Task Planner	49
4.12	Project Deadlines	49
4.13	Tasks Completed	49
4.14	Tasks in Progress	50
4.15	Gantt Chart	50
4.16	Work groups & Projects	50
4.17	Work Schedule	51
4.18	Absence Chart	51

4.19	Calendar Schedule	51
4.20	Project Calendar	52
4.21	Meeting	52

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Effective management of Stakeholders plays an important role in case of Interior Turnkey projects. There are many stakeholders who are been actively involved in many Interior projects. Managing them and completing the project on time brings success to the project. Stakeholders can be managed through effective communication. Success is denoted by completion of project on time, on cost, with quality.

It is a challenge to communicate on projects! From the very beginning through implementation and evaluation, there are many people to communicate with – all want to be communicated differently! In addition, the communication varies according to our role in the project, the phase of the project we are in and with.

This thesis study will discuss best practices for engaging stakeholders early on and continuing to communicate and engage stakeholders and others throughout the project lifecycle. The use of technology enables for more effective communications in such situations along with an understanding of cultural differences and their impact on how we process communications received.

1.2 AIM

To ensure efficient coordination and monitoring of stakeholders in the management of Auditorium interior project and to ensure that the project fulfills its three constraints – Time, Cost & Quality.

1.3 OBJECTIVE

To Identify and Evaluate different stakeholders involved in an Auditorium interior project. To Map the stakeholders for their value or participation in the project. To engage with stakeholders and build a productivity.

Establish a Strategic Engagement Strategy for stakeholder participation. To ensure that the project fulfills the cost, time and quality aspects. Manage the work performed by stakeholders and track them.

1.4 SCOPE

Communication flow in an Auditorium interior project. In terms of communication management the cost, time and quality aspects are considered and calculated. Manage the work performed by stakeholders and track them for increase the productivity.

1.5 METHODOLOGY

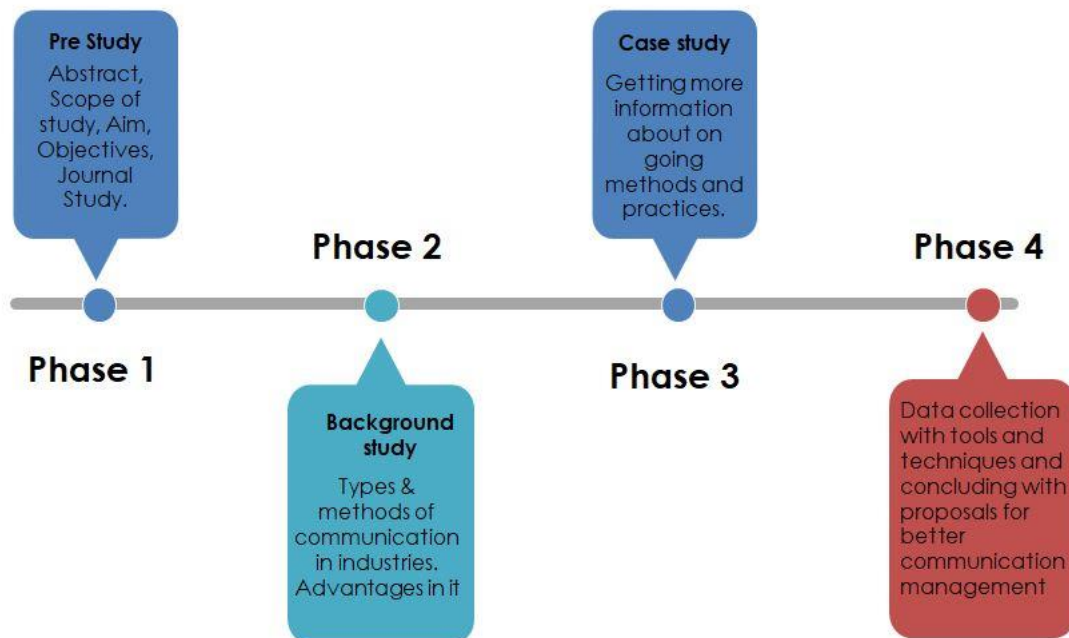


Figure 1.1: Methodology

CHAPTER 2

LITRETURE STUDY

2.1 EFFECTIVE COMMUNICATION MANAGEMENT: A KEY TO STAKEHOLDER RELATIONSHIP MANAGEMENT IN PROJECT-BASED ORGANIZATIONS (JOURNAL)

- Kirti Rajhans

2.1.1 Introduction:

For any successful organization, effective stakeholder relationship management is an essential requirement. It is a key factor and has a direct impact on the organization's overall environment and profitability. In the face of the different stakeholders that have different kinds of expectations and needs, a methodological approach is necessary to proactively manage stakeholder relations.

Effective communication management can serve as a strong tool to systematically manage the stakeholder relationships at multiple levels. The main objective of the study is to explore the use of effective communication in stakeholder relationship management and also to find out a methodological framework to use communication as an effective tool for managing successful stakeholder relationships at all levels.

2.1.2 Effective Communication Management:

Effective Communication Management refers to systematic initiatives directed towards planning, monitoring and controlling all communication channels within an organization. Aspects of communication management include developing corporate communication strategies, designing internal and external communications directives, and managing the flow of information, including online communication. Communication management in projects in many ways is a proactive endeavor from management side to manage the expectations and requirements of all stakeholder groups involved in the project.

2.1.3 Stakeholder Relationship Management:

Project relationships are those relationships that occur between the project manager and the project's stakeholders as well as those that occur among the project stakeholders

themselves. Project relationships are a network which comprises all relationships within and around the project. In the process of managing stakeholders and delivering value to them, it is important to properly manage the stakeholder relationships. Managing relationships within and around any project activity includes balancing the conflicting needs and expectations of various stakeholders.

2.1.4 Objective:

The objective of this study is to fill this gap in literature and explore the use of effective communication in stakeholder relationship management. The aim is also to find out a methodological approach and a framework to use communications as an effective tool for managing successful stakeholder relationships at all levels.

2.1.5 Methodology:

2.1.5.1 First Phase

The first phase consisted of conducting semi-structured interviews with experienced industry professionals who had practical experience in the stakeholder management area and thus had a better understanding of the issues related to stakeholder relationship management and its implications. The interview questions included but were not limited to the following questions:

- Who in your opinion are the most important stakeholders in case of the industry in which you are working?
- To what extent managing stakeholder relationships is important for the success of a project?
- What are the typical problems observed in managing stakeholder relationships in projects?
- In your opinion, can effective communication management, if implemented as a systematic process, serve as a tool to manage stakeholder relationships in a better way?
- In which different ways can such communications management process help in successful project stakeholder relationship management?

2.1.5.2 Second Phase

The second phase of the study consisted of preparing and conducting a questionnaire survey with the objective of further exploration and validation of major applications of communication management in stakeholder relationship management.

2.1.6 Results:

2.1.6.1 Major Problems in Managing Stakeholder Relationships

1) Information distortion 2) Delay in information 3) Miscommunication between important stakeholders 4) Conflicts between the client and the contractors or internal conflicts amongst the project team 5) Lack of single point of contact 6) Lack of trust amongst the stakeholders.

2.1.6.2 The main areas where communication could be used in stakeholder relationship management

1) Managing stakeholder expectations 2) Managing stakeholder engagements 3) To facilitate project monitoring and control 4) To overcome resistance to change 5) For better performance of the project team 6) As a tool for risk management 7) For effective project leadership 8) A link between projects and organizational strategy 9) To facilitate project operations 10) Building long-term relationships.

2.1.7 Inferences drawn from the study:

1) Importance of Stakeholder Relationship Management in Project Success 2) Awareness in Organizations About Practices for Good Stakeholder Relationship Management 3) Effectiveness of Existing Stakeholder Relationship Management Policies 4) Communications Play a Crucial Role in Stakeholder Relationship Management 5) Communication as a Tool to Manage Stakeholder Expectations 6) Effective Communication to Manage Stakeholder Engagement 7) Inefficiency in Communication Affects Stakeholder Engagement 8) Role of Communication in Facilitating Project Monitoring and Control Through Stakeholder Relationship Management 9) Positive Communication Helps the Project Teams to Overcome the Resistance to Change 10) Effective Internal Communication Facilitates Better Performance of Project Team 11) Use of Communication

as a Tool for Risk Management, Communication Prepares and Helps Project Leadership in Downward Stakeholder Relationship Management 12) Communication Serves as a Link Between Projects and Organizational Strategy 13) Communication Facilitates Project Operations 14) Effective Communication Helps to Build Long-Term Relationships with Stakeholders.

2.1.8 Communication Framework for Stakeholder Relationship Management:

Building and maintaining healthy and long-term stakeholder relations requires that the stakeholders are engaged, supportive and involved in the project activities. Appropriate communication can bring value to the stakeholder management process by nurturing positive perceptions and managing the stakeholders' expectations in an appropriate way.

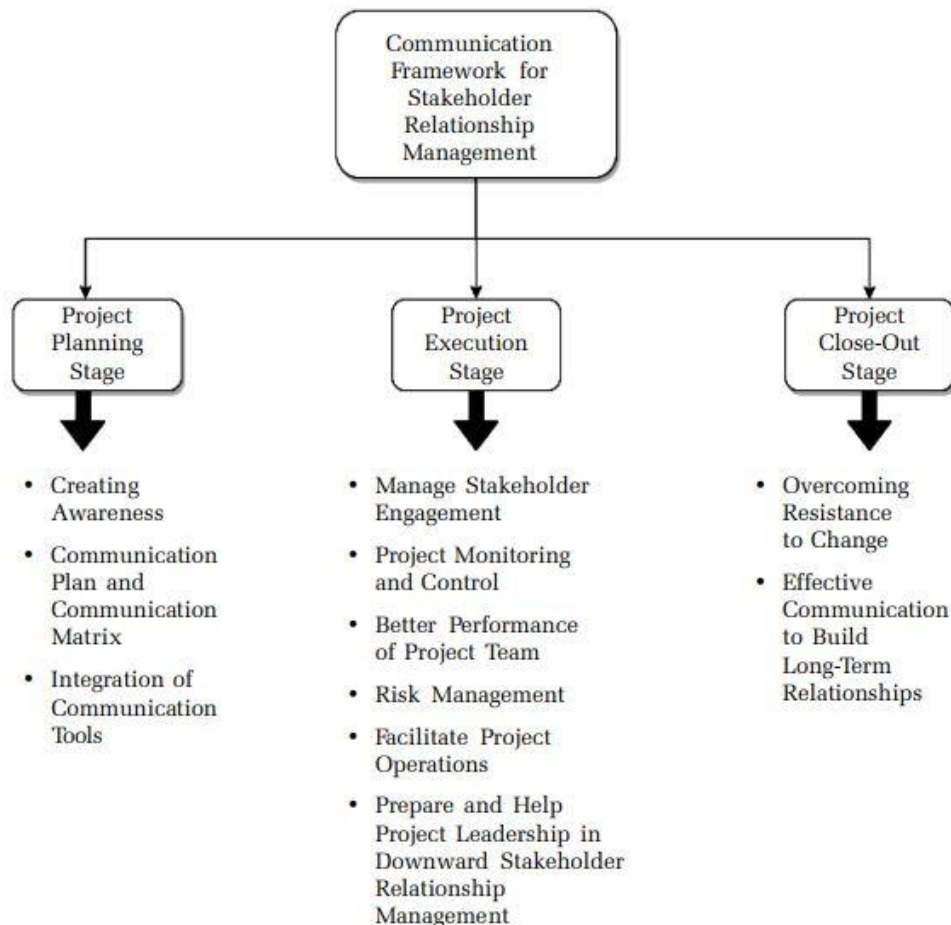


Figure 2.1: Communication Framework

2.1.9 Conclusion:

This study concludes that though there is awareness about the importance of stakeholder relationship management in general, there is a lack of dedicated and planned efforts to manage these relationships which are the backbone of stakeholder management and are ultimately very important for the success of the project.

2.2 RETHINKING INTERNAL COMMUNICATION: A STAKEHOLDER APPROACH (JOURNAL)

- Jana Samáková

2.2.1 Introduction:

Trends in project management show an enhanced role of the project manager with focus not only on hard skills but also on soft skills. The ability to motivate, develop and manage project team, solve interpersonal conflicts and to effectively communicate are important skills of successful project manager.

On the other hand a good project manager must be able to organize resources, to plan and prepare detailed working procedures, to approve the executed work and manage according to the project scope costs, schedule, quality and risks.

All these tasks must be accomplished together with the parallel communication with all stakeholders. Therefore it is important that project managers and all parties seek for effective forms of communication.

2.2.2 Triple C Model:

Effective communication is one of the main elements of project management. Communication is a critical part between people, ideas and information.

The “Triple C Model” talks about it. Triple C model symbolizes the integrated stages of communication, cooperation and coordination in a project environment.

The model is an effective project planning and control tool. Triple C model facilitates better understanding and involvement based on foundational communication. The Triple C approach elucidates the integrated involvement of communication, cooperation, and coordination. Communication is the foundation for cooperation, which in turn is the foundation for coordination. Communication leads to cooperation, which leads to coordination, which leads to project harmony, which leads to project success.



Figure 2.2: Triple C Model

2.2.3 Main areas of project communication management:

Taking into account differences in the management of project communication in functional oriented, process-oriented and project-oriented companies the selected four main areas that should be the part of the project communication management. In each area was defined the typical elements of project communication management.

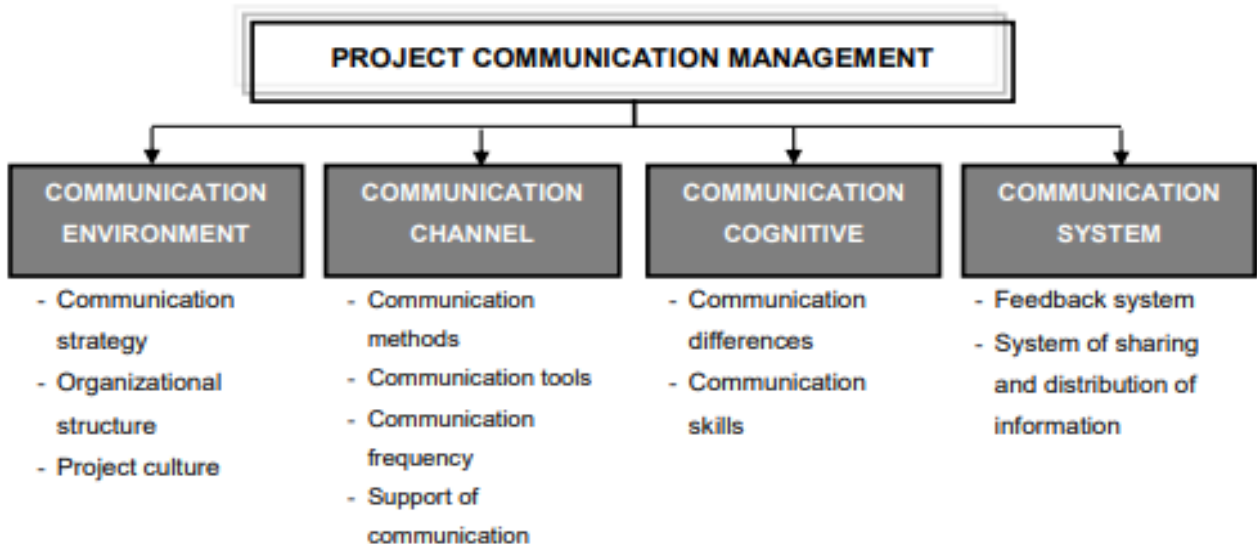


Figure 2.2.1: Project Communication Management

2.2.4 Project communication management framework:

For the improvement of the project management communication we have defined project communication framework as a combination of logical related communication methods, tools and techniques for a successful initialization, planning, implementation, control and administrative closure of the project communication.

The project communication management framework defines the communication process in the project management process groups (initiating, planning, executing, monitoring and controlling and closing process group).

Each process group contains the process of project communication, which is divided into the defined sub process.

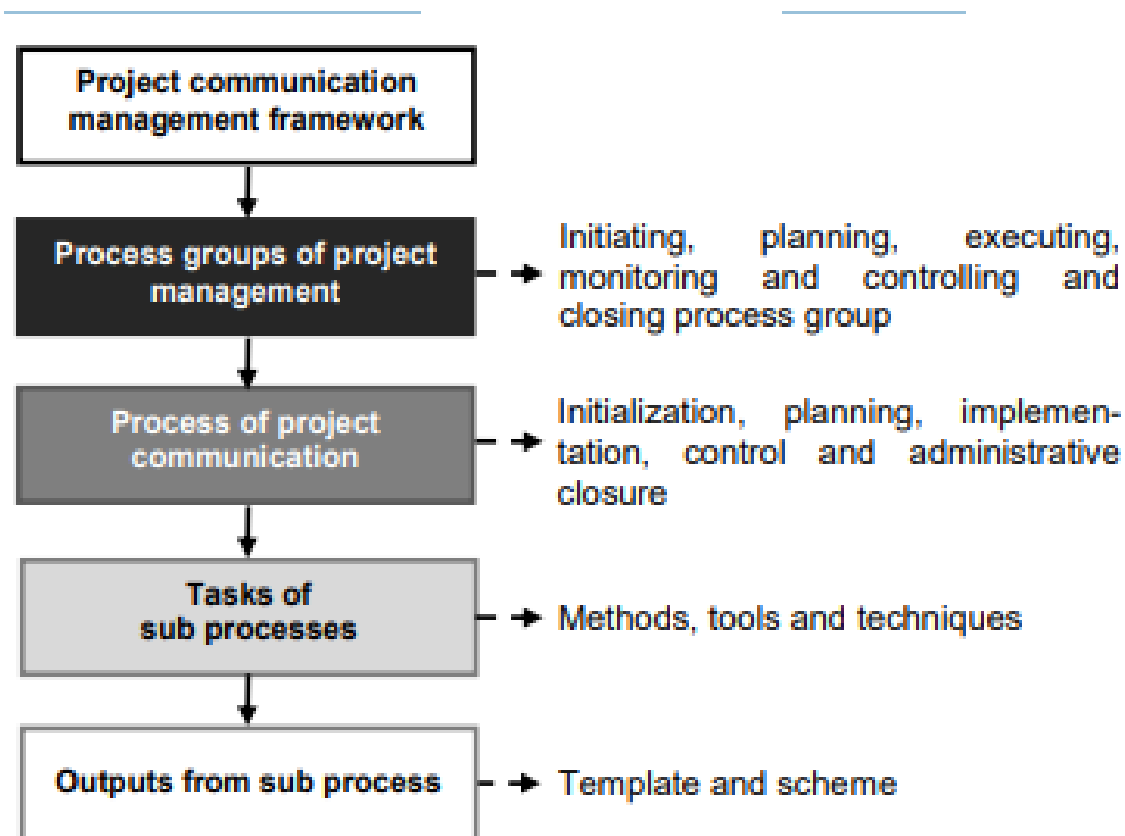


Figure 2.2.2: Communication Management Framework

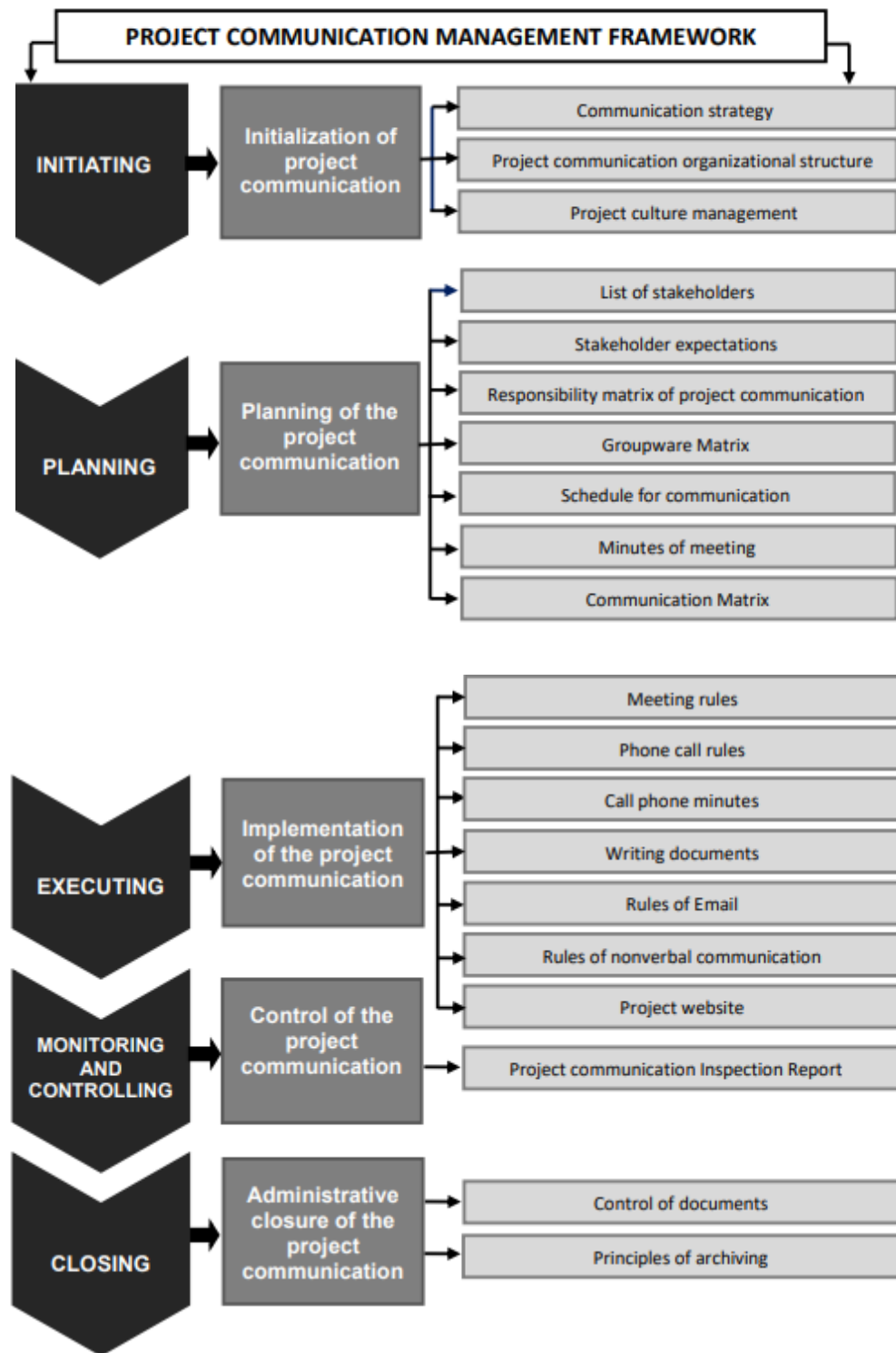


Figure 2.2.3: Communication Management Framework

2.3 MANAGING COMMUNICATIONS EFFECTIVELY AND EFFICIENTLY (INTERNET)

2.3.1 Aim:

Improve the effectiveness of communications overall, including frequency and quality. Keeping individuals engaged in the initiative through open communications. Getting stakeholders involved in communications through enabling for more effective two-way conversations.

2.3.2 Simple Communication Plan Components:

- With whom we will communicate (e.g., leadership team)
- What will be communicated (e.g., status report on project)
- When we will communicate (e.g., monthly)
- How we will communicate (e.g., at the leadership meeting)
- Format for our communications (e.g., presentation at the meeting)

2.3.3 Poor Communications and the Impact on Our Projects:

2.3.3.1 Poor Team Communications

1) Misunderstanding around project goals and objectives 2) Missed deadlines 3) Conflicts between team members 4) Individual team members moving in different directions 5) Decreased productivity on the project leading to increased timelines and going over budget 6) Lack of commitment on the part of project team members in accomplishing the work of the project.

2.3.3.2 Poor Stakeholder Communications

1) Lack of or limited buy-in and commitment to the project 2) Misunderstanding around stakeholder expectations on what is considered project success 3) Conflicts between the project team and stakeholders, or between stakeholder groups 4) Stakeholders who may actively work against the project being accomplished 5) Failed projects

2.3.4 Communication Modes and Styles:

- Modes, or channels, for communicating might include:

- One-on-one meetings/casual conversations in the hallway or in the cafe for those who are local to you
- Small group or department meetings
- All-staff meetings
- Lunch and learns or before or after hours get-togethers
- Internal website or portal established specifically for the project
- Email
- Chat technology
- Project newsletters
- Virtual meetings
- Conference calls/videoconference calls

2.4 STEPS TO ESTABLISH INTERNAL COMMUNICATION STRATEGY (INTERNET)

2.4.1 Assess Your Current Internal Communication Strategy:

Most of the organizations have an internal communication strategy already in use. If not, creating one would enhance their employee satisfaction and have a positive effect on efficiency. Few of the questions you should immediately address when assessing your internal communication strategy, include:

- Where do you currently stand?
- Where will you be eventually?
- How do you plan to get there?
- How long would it take?
- Who all are involved in that journey?

Answering these questions or planning to have a resolution is important in reconstructing your strategy.

2.4.2 Identify Your Key Metrics:

Analyzing these metrics will give you a first-hand report of areas which need more attention. Below are some of the metrics which give organizations a basic idea of their current position.

- Behavioural
- Attitudinal
- Technical

2.4.3 Set Realistic Goals And Segment Your Audience:

Mapping business goals with the internal communication strategy help in setting realistic and measurable goals. Ideally, goals should be specific, measurable, achievable (for targets), relevant, and time-limited. Once you have an idea of what could foster your internal communication strategy, it's time to know who to target. Your strategy should always target a specific audience, even when it is intra-organizational. Employees need to be informed about news and organization information regularly, so it is smart to segment out your audience first. This will help you to map out your communication strategy more strategically.

2.4.4 Evaluate your progress:

Key performance indicators shouldn't be utilized only to track progress. Gain insights from them and consistently enhance to achieve best outcomes. Do a frequent assessment of your internal communication strategy and incorporate it into the core foundation of your business.

- How well do you think we are communicating internally?
- Are we doing everything we can to keep our organizational vision open/ transparent?
- What setbacks limit you from working with others on projects?
- Do you believe we could increase our communications across departments?

- What constraints prevent you from better internal communication each day?
- Where can we improve the most on company communication?

An internal communications strategy is crucial for any successful organization, despite its size. By creating a cohesive strategy, organizations can effectively reach their business objectives, improve employee engagement and ultimately have a positive impact on the bottom line.

2.4.5 Internal communications best practices:

2.4.5.1 Ensure Consistency in Communication

The absence of strategic and effective internal communication makes an organization fail to ensure the consistency between external and internal messages.

In large decentralized organizations, information does not flow evenly and consistently through all departments. Maintaining an optimal and consistent internal communication approach rests as much on the expectations and beliefs of employees as on potential effects of the organization. Communicating frequently and consistently helps in building trust and buy-in from employees and internal stakeholders.

2.4.5.2 Include Metrics Whenever Possible

Often measuring how the organization is performing can reflect your team's work ethic. These metrics will help employees to know about the specific approaches or metrics that communicators use to demonstrate the ROI for their organization's internal communication initiatives.

2.4.5.3 Provide Channels for Feedback and Ideas

Targeting focus groups to collect feedback from both employees and managers is another effective method. Diverse methods and channels are available for use to collect feedback from your employees in addition to sharing ideas regarding the workplace, products, working procedures etc. Frequently collecting feedback and ideas in an organization can help you remain aligned to goals, create strategies, develop products and services, improve relationships, and much more. Continued learning is the key to improving.

2.4.5.4 Encourage Cross-Departmental Communication and Collaboration

Cross-departmental communication is key to getting your employees to learn from one another. Have a Q&A session or a special gathering between different departments to communicate, collaborate and share insights.

2.4.5.5 Avoid Communication Overload

Keeping things simple, brief & to the point and sending out your internal newsletter with relatively less frequency can help you to cut-down communication overload. You need to focus on sending the right information to the right people at the right time. Forward-thinking organizations are using social intranet features such as a forum to combat any potential communication disconnects and overload.

2.4.5.6 Use Internal Communications to Recognize and Praise Success

Employee recognition can make your employees feel valued and appreciated. Recognizing employee's effort and contribution through your internal communication software will be one of the best practices which is beneficial not only to boost employee morale but also to maximize the organization's productivity and growth.

CHAPTER 3

CASE STUDY

3.1 PROJECT DETAILS

Table 3.1: Project details

PROJECT DETAILS	
Location	Kundrathur, Chennai
Total Built up Area	68,000 Sq. ft
Area of Auditorium	6000 Sq. ft
Total no of Consultants	9
Total no of Contractors	12

3.2 ORGANIZATIONAL CHART

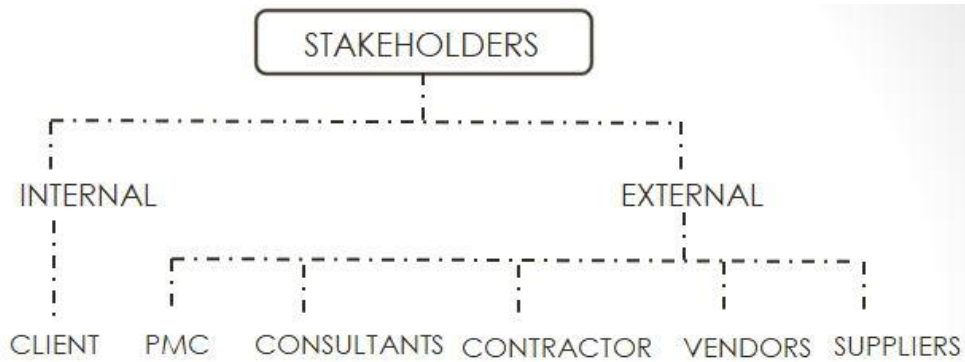


Figure 3.1: Organizational chart

3.2.1 Internal Stakeholders:

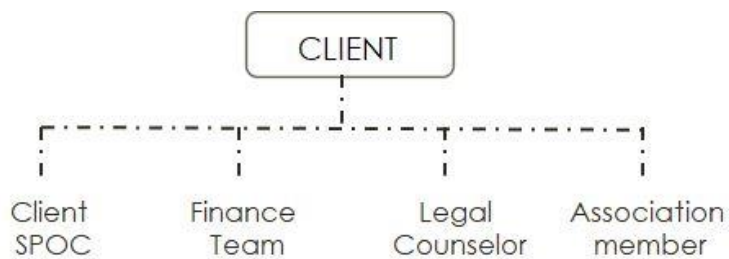
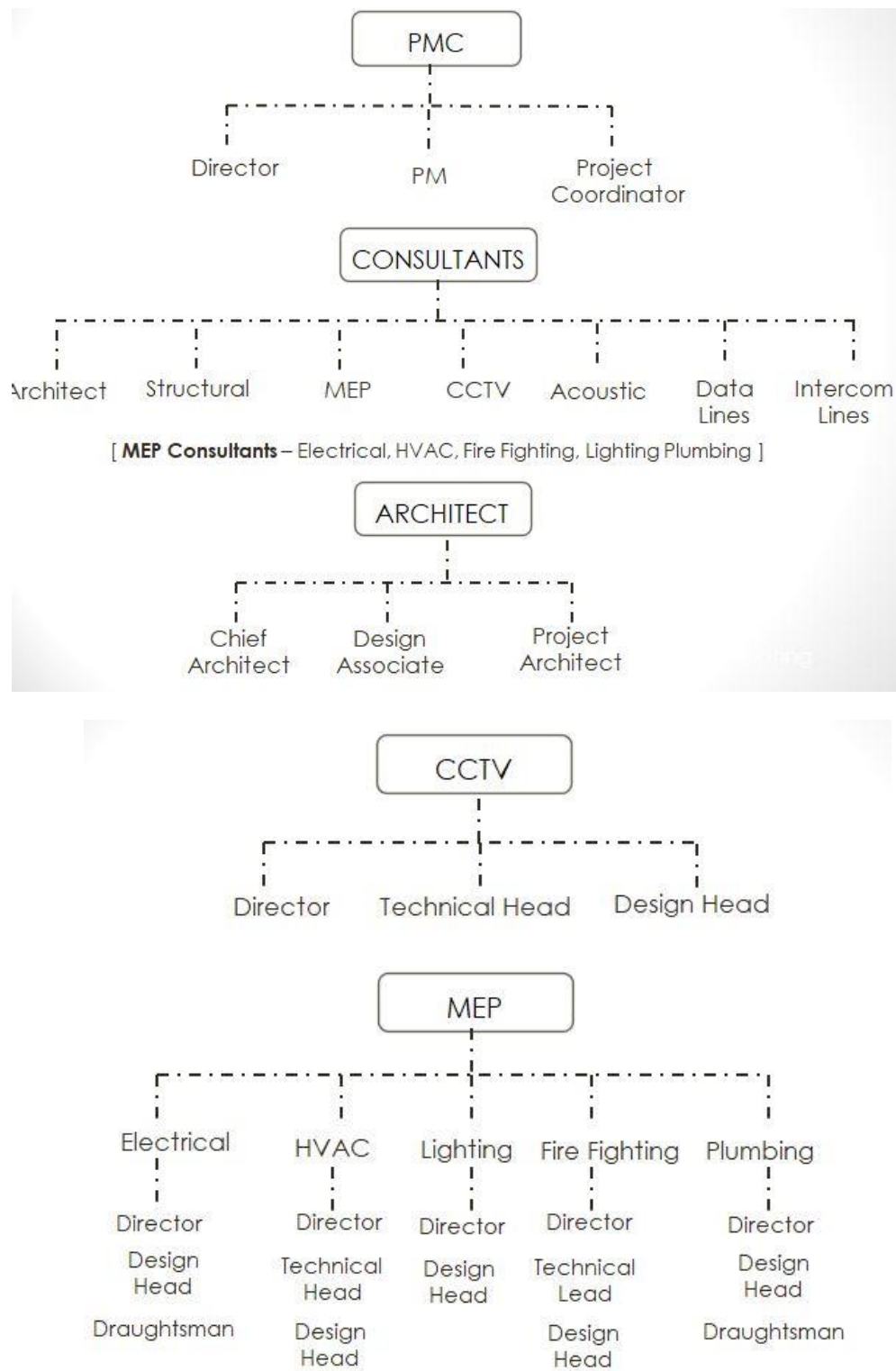


Figure 3.1.1: Internal stakeholders

3.2.2 External Stakeholders:



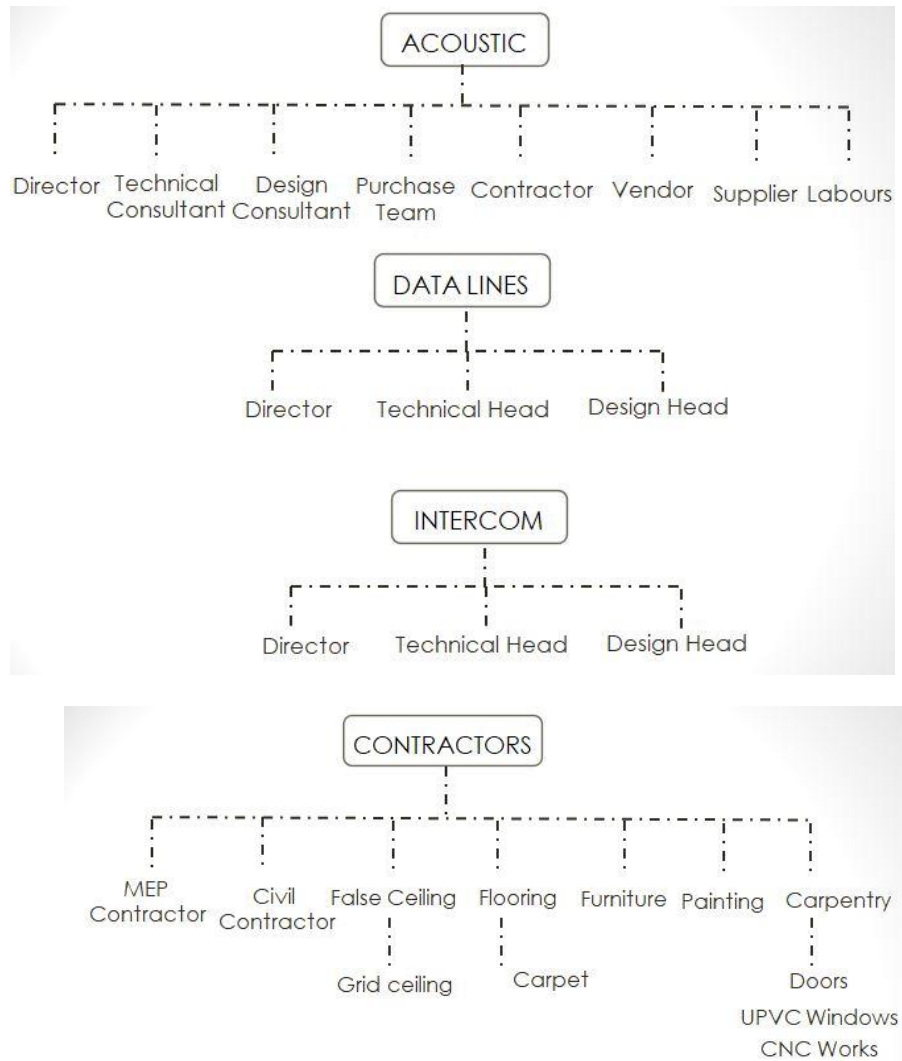


Figure 3.1.2: External stakeholders

3.3 LIST OF ACTIVITIES

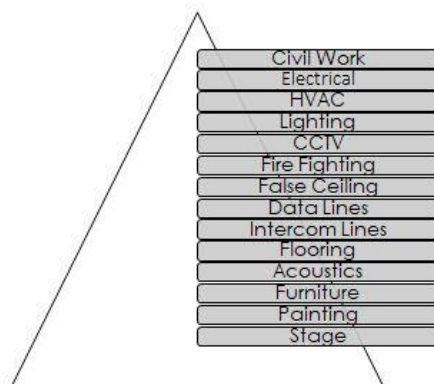


Figure 3.1.3: List of Activities

3.4 VARIOUS STAGES & STAKEHOLDERS INVOLVED

Table 3.2: Various Stages & Stakes Involved

PROCESS	STAKEHOLDERS INVOLVED
STAGE 1	
Initial Greeting	Client , Client SPOC, Legal Counselor, Director, Project Manager
Design Meeting	Client , Client SPOC, Consultants, Project Manager
Sketch Development	Client ,Architect, Project Manager
Best Fit Presentation	Client , Client SPOC, Architect, Consultants, Project Manager
STAGE 2	
Concept Drawings	Client , Client SPOC, Architect, Project Manager, Consultants
Budget Established	Client , Project Manager, Director
Concept Presentation	Client , Client SPOC, Architect, Project Manager, Consultants
STAGE 3	
Client Approval	Client , Client SPOC, Project Manager, Director
STAGE 4	
Working Drawings	Client , Architect, Project Manager, Consultants
Authority Approval	Architect, Client ,Project Manager
STAGE 5	
On – site Construction	Client SPOC, Project Manager, Consultants & Contactors
Project Handover	Client, Client SPOC, Legal Counselor , Project Manager

3.5 PROJECT MEETING CALENDAR & MOM

Table 3.3: Project Meeting Calendar & MOM

MEETINGS	STAKEHOLDERS INVOLVED	FREQUENCY
Strategic Project Review (Governance Call)	This is a high-level meeting between Client and PMC to review the overall developments, Budget, decisions required and the forward planning	Fortnight basis or as and when required and recommended duration shall be maximum 1 hour
Design Co-ordination & Review meetings	Client, PMC, Architects & Consultants. This meeting will be scheduled during the pre-construction stage of the project.	The duration of this meeting shall be 1 hours to 2hours as and when required.
Progress Review meetings	Project Review meeting chaired Project Manager, attended by Client, Architect and all consultants / contractor / vendors.	➤ It will be held on weekly basis. ➤ Venue of this meeting will be at Project site office.
Out of the Calendar meetings	Based on the project requirement, Client or PMC may convene out of the calendar meetings with sufficient prior notice.	The host of the meeting shall circulate the agenda with required participant details at least a day prior to the meeting date.

3.6 STAKEHOLDERS INVOLVEMENT

Table 3.4: Stakeholders Involvement

Stakeholder	Overall Project In charge	Design Co - ordination	Schedule Management	Cost Management	Quality Management	EHS	Inspection & Approvals
Director	✓						
Project Manager	✓	✓	✓	✓	✓	✓	✓
Project coordinator		✓	✓	✓	✓	✓	✓
Architect	✓	✓	✓	✓	✓		✓
Other Consultants		✓	✓	✓	✓	✓	✓
Contractors			✓	✓	✓	✓	✓
Client	✓						✓
Client SPOC		✓	✓	✓	✓	✓	✓
Finance team - Client			✓	✓			✓

3.7 PROJECT COMMUNICATION PROTOCOL

Table 3.5: Project Communication Protocol

Communication From		Subject	Communication To (Mail)	
Category	Stakeholder		Team	Stakeholder
Client	Client SPOC	Design, drawings, construction and quality	Architect	➤ Project Architect ➤ Design Associate
			PMC	➤ Project Manager ➤ Project Coordinator
			Service Consultant (If Applicable)	➤ Design Head ➤ Manager
		Progress	PMC	➤ Project Manager ➤ Manager – Civil ➤ Project Coordinator ➤ MEP Consultant
Project Manager	PM	Design, drawings, construction and quality	Architect	➤ Project Architect ➤ Design Associate
			Client	➤ Client ➤ Client SPOC
			Service Consultant (If Applicable)	➤ Design Head ➤ Manager
Project Manager	PM	Progress	Client	➤ Client ➤ Client SPOC
Consultants	Manager	Design, drawings, construction and quality	PMC	➤ Project Manager ➤ Project Coordinator

3.8 RASI MATRIX

A responsibility assignment matrix, also known as RACI matrix or linear responsibility chart (LRC), describes the participation by various roles in completing tasks or deliverables for a project or business process. It is used for clarifying and defining roles and responsibilities in cross-functional or departmental projects and processes.

Table 3.6: RASI Matrix

R	Responsible for initiating, coordinating and closing out
A	Responsible for Approving
S	Support, facilitate & coordinate
I	Information for records

Table 3.6.1: RASI Matrix

Activity	Client	PMC	Consultants	Contractor
Project Initiation				
Project Scope	R	NA	NA	NA
Finalization of Architect and other Consultants	S	R	NA	NA
Project Brief	R	I	I	I
Schedule	A	R	I	I
Project Communications				
Meetings - coordinate and convene	S	R	S	NA
Progress Review meeting - Convene and conduct	S	R	S	NA
Safety Committee meetings - Convene and conduct	R	R	I	S
MOM	I	R	I	I
Project Status Report	I	R	NA	NA
Clarifications - initiating requests and coordinating	I	R	I	I
Clarifications - closing issues	A	R	R	R
Pre Construction				
Concept - Initiation	A	S	R	NA
Concept - Approval	A	R	S	NA
Schematic - Initiation	I	S	R	NA

Activity	Client	PMC	Consultants	Contractor
Schematic - Approval	A	R	S	NA
Design Brief Report - Preparation	I	I	R	NA
Design Brief Report - Approval	A	S	R	NA
Design Coordination	I	R	R	NA
Drawings - Review	I	R	R	NA
Drawings - Approval	A	R	R	NA
Construction Management				
Storage space, Construction Power, water, bore wells, Site security	A	S	NA	R
Site Survey, handing over of site to Vendors	R	S	NA	NA
Site Offices - Space allocation	A	S	NA	NA
Stores Management - Receipt, handling, accounting, storage, issuing, documentation	R	S	NA	NA
Vendor's Quality Plan	I	R	A	NA
Inspection of Materials at project site including sample materials	A	R	A	A
Acceptance of Quality of completed works	I	R	A	A
Acceptance of Quality tests at site	I	R	S	S

Activity	Client	PMC	Consultants	Contractor
Periodic inspection of ongoing works and approval	S	R	R	NA
Quality monitoring and reporting	I	R	I	I
Safety monitoring & reporting	I	R	NA	S
Progress Reporting	I	R	NA	NA
Vendor's Testing & Commissioning plan	I	R	A	NA
Snag list	I	R	R	R
Inspection & acceptance of rectified snags	A	R	R	R
Completion Certificates	A	R	A	A
Assets and final punch list	I	R	I	S
Assets handing over and taking over	A	R	I	S
Move in	R	S	I	I
Post Construction				
Vendor Final Payment certification	I	R	NA	NA
Documents Handover	A	R	NA	NA
Project Closure				
Project Commercial Closure	A	R	NA	NA
Close Out Report	A	R	NA	NA

3.9 VARIOUS PHASES IN PROJECTS & COMMUNICATIONS MADE

3.9.1 Initiation Phase:

Table 3.7.1: Initiation Phase

PHASE	STAKES INVOLVED	COMMUNICATION MADE	MODE OF COMMUNICATION
Initiation Phase	Client, Project Management Consultants & Contractors	The Client approached the PMC and the Scope of the project was been defined by the PM .	The client met the PM at PM Office
		After defining the Scope the Architect is first been selected by the PM Team.	The Architect was finalized through call and confirmation mail was sent after approval from client
		Then came the selection of other Consultants & Contractor .	The PM called and mailed all his known consultants and contractors and asked for quotations.
		The selection was done by the PM team.	The confirmation was given through call and mail.
		The PM team had contact with certain Consultants and Contractors, So the Stakeholders were been selected from them based on the decision of the PM .	
	Client, Project Management Consultants & Contractors	They thought that new Consultants and Contractors should be selected for certain activities like -, Acoustic and Seating cause of the Typology Auditorium .	The consultants mailed their quotations to the PM team. The confirmation was made through mail and call.

Table 3.7.2: Designing Phase

PHASE	STAKES INVOLVED	COMMUNICATION MADE	MODE OF COMMUNICATION
Designing Phase	Client, PM, Architect, MEP Consultants – (Technical heads and Design heads)	During the Designing phase first the Site measurements were been taken by the Architect and the Site outline was been drafted.	The PC called the Architect and asked to take the Site measurements.
		The Site measurements taken by the Architect matched the measurements given by the Client .	The Architect called and informed that the Site measurements are the same.
		Next the Architect carried out the Site Feasibility Study and Initial Design was Initiated.	The Architect mailed the feasibility study to the PM and Client
		The design went to numerous discussions and the Plan was been Finalized by the Client, Architect & Project Manager .	The initial discussion was made through call and mail. Final discussion was made at the architects office.
		After finalizing the basic design the Consultants came into role. The MEP Consultants were given floor plate and were asked to provide - Electrical, HVAC, Fire Fighting, Plumbing drawings.	The MEP consultants were called to the PM office and asked to create the respective drawings.

PHASE	STAKES INVOLVED	COMMUNICATION MADE	MODE OF COMMUNICATION
Designing Phase	Client, PM, Architect, MEP Consultants – (Technical heads and Design heads)	The Technical heads of the consultants carried out a feasibility study and instructions were given to the Design head on how to proceed with the drawing.	The technical heads called the PM and asked for permission to visit the site.
		During the course of time the Acoustic and Sealing Consultants and Contractors were been Shortlisted and Finalized by the PM .	The consultants mailed their quotations to the PM team. The confirmation was made through mail and call.
		The Acoustic Consultants were also given the floor plate and asked to come up with the drawings.	The consultant was called to the PM office and asked to create the respective drawings

Table 3.7.3: Finalizing Auditorium Location

ACTIVITY	ISSUE	STAKES INVOLVED &	SOLUTION	COMMUNICATION MADE
Finalizing location of Auditorium	Two proposals were given for the location of the auditorium.	Client, Client SPOC, Architect, Project manager.	As per the Suggestion given by Architect the Auditorium was designed in the Terrace floor.	The Architect & Project Manager was called by the Client to the site. The Architect was asked to do a feasibility check for finalizing the location of Auditorium.

ACTIVITY	ISSUE	STAKES INVOLVED & MODE OF COMMUNICATION	SOLUTION	COMMUNICATION MADE
Finalizing location of Auditorium	Two proposals were given for the location of the auditorium. One option is to locate the Auditorium in Ground Floor and the second option is to locate it in the terrace floor.	Client, Client SPOC, Architect, Project manager. MODE : The Client made a call to the PM and Architect and asked them to come to site.	As per the Suggestion given by Architect the Auditorium was designed in the Terrace floor.	The Architect said that if the Auditorium is located in the Ground floor, the Play area and Parking space will get disturbed if the Auditorium is located in Ground floor and it is better to locate it in the terrace . The suggestion given by the architect was accepted by the Client and PM and the second option of locating the Auditorium in terrace was finalized.

Table 3.7.4: Estimation of costs

PHASE	STAKES INVOLVED	COMMUNICATION MADE	MODE OF COMMUNICATION
Estimation of Costs	Client, PM, PC, Architect, Consultants & Contractors	The next most important stage after the Design stage is Budgeting .	The client met the PM at PM Office during Initiation phase.
		The Budgeting will be done by the Consultants and Contractors and was been Initially approved by the Project Coordinator .	The Estimations were mailed to the PC.
		After the estimation is done Value Engineering was done to cut down some unnecessary costs in the project .	The PC asked the internal team in PM office to carry out the process.
		After value engineering is done , it is been approved by the PM and been Submitted to the Client for approval.	The budget was mailed to the PM. The PM after approval mailed it to client for approval.
		The Estimation is submitted in a detailed manner to the Client.	The PM called the Client and asked the client to come to PM office .

Table 3.7.5: Procurement of Materials

PHASE	STAKES INVOLVED	COMMUNICATION MADE	MODE OF COMMUNICATION
Procurement of materials	Client, PM, PC, Vendors	After finalizing the Budget of the project Procurement is been done.	The PM called the Client to his office and the budget was signed off.
		The Vendors were shortlisted and asked for Quotations.	The vendors were called by the PC and mailed them the estimation.
		The Vendors are been finalized by the PM and been approved by the Client ..	The PM finalized the Vendor through call and sent confirmation mail after discussing with client.
		The long lead items are first been ordered followed by the short lead items.	The PC called the vendors and placed the order.
		The tracking of the materials is done by the Project coordinator .	The tracking was done through the tracking link given by the vendor.

3.9.2 Construction Phase:

Table 3.7.1.1: Civil Works

ACTIVITY	STAKES INVOLVED	WORKS DONE	COORDINATIONS MADE	COMMUNICATION MADE
Civil Works	Client SPOC , Contractor, Architect , Project manager, Roofing Consultant, Lighting & Electrical Consultant Labours	Pillar support for Roofing. Concreting was done to support the roofs	The Contractor was given the drawing by Architect . The Architect , PM and Client SPOC were present in site to make sure that the work happens properly.	The Architect called the contractor and gave him the drawings. The Architect called the PM and asked the PM and Client SPOC to come to the site to check the work executed.
		The auditorium is located in the terrace floor, so the floor was very slopped. Leveling was done to make sure the floor is only slightly tapered.	The issue was identified by the PM and the Civil contractor was asked to rectify it. The Client SPOC was also available in site for the activity	
Civil Works	Client SPOC , Contractor, Architect , Project manager, Roofing Consultant, Lighting & Electrical Consultant Labours	Stage works were been done by the Civil Contractor in the auditorium. Lighting and Electrical consultants were involved simultaneously during construction of stage.	The PM was available in site cause there were 3 activities that took place during the making of the stage. The Civil Contractor carried out the stage works. There was good coordination among the Lighting, Electrical Consultant and Civil Contractor.	The Architect called the contractor and gave him the drawings. The Architect called the PM and asked the PM and Client SPOC to come to the site to check the work executed.

Table 3.7.1.2: HVAC

ACTIVITY	STAKES INVOLVED	WORKS DONE	COORDINATIONS MADE	COMMUNICATION MADE
HVAC	Client SPOC , Contractor, Project manager, HVAC , Electrical & Lighting Consultant, False Ceiling Contractor, Labours	The HVAC works were started after quarter of the electrical and false ceiling works were done. The False Ceiling was completed and Lights were been fixed after the completion of HVAC works.	The PM was actively involved during the HVAC works. The Electrical and False ceiling Consultants were also actively involved during the process. The Lighting consultants came into role after the completion of all the above works. There was a good coordination among the Stakeholders.	The PM and the required consultants were on the site to make sure the work is executed properly.

Table 3.7.1.3: Fire Fighting

ACTIVITY	STAKES INVOLVED	WORKS DONE	COORDINATIONS MADE	COMMUNICATIONS MADE
Fire Fighting	Client SPOC , Architect, Contractor, Project manager , Labours	Horse Reels were provided near the Entrance and Emergency Exit.	The Horse reels were been located as per the standards by the Consultant . Client SPOC , Architect, Contractor, Project manager were available in site while fixing the Horse Reels.	The PM called the Architect and Contractor and asked them to be in the site while fixing the Hose Reels.

Table 3.7.1.4: Acoustics

ACTIVITY	STAKES INVOLVED	WORKS DONE	COORDINATIONS MADE	COMMUNICATIONS MADE
Acoustics	Client SPOC , Project manager, Consultant, Architect, Labours, Carpenters	The acoustics were been done only on the wall surfaces. The acoustics were done after the completion of False Ceiling & HVAC works. CNC Panels were used as Acoustic element.	The PM and Client SPOC was actively involved during the Acoustic work. The Consultant & Architect were on site to make sure that the Design is been executed as per the drawings. The carpenters were on site for fixing the Panels.	The PM called the Architect and Consultant and asked them to be in the site to make sure that the Design is executed as per the drawings.

Table 3.7.1.5: Flooring

ACTIVITY	STAKES INVOLVED	WORKS DONE	COORDINATIONS MADE	COMMUNICATIONS MADE
Flooring	Client SPOC , PM, Labours Contractor, Electrical Contractor	Capet flooring was done on top of the cement flooring. Electrical contractor were also involved during flooring.	The Flooring contractor along with Client SPOC & PM were on site during the laying of Carpets. The Electrical contractors were also available there cause some electrical works needs to be done on the floor.	The PM and the Client SPOC along with the required contractors were on the site to make sure the work is executed properly.

Table 3.7.1.6: Plumbing

ACTIVITY	STAKES INVOLVED	WORKS DONE	COORDINATIONS MADE	COMMUNICATION MADE
Plumbing	Client SPOC , Contractor, Project manager , Labours	The plumbing works were done in two locations one was in the roofing , from the gutters to the Rain water harvesting tank and the second was for Outdoor AC Units.	The Plumbing Contractors were on site during two different stages – At the start during roofing and towards the End to connect Outdoor AC Units to the drains. The PM and Client SPOC were also available during Plumbing.	The PM and the Client SPOC along with the Plumbing contractor were on the site to make sure the work is executed properly.

Table 3.7.1.7: Carpentry & Painting

ACTIVITY	STAKES INVOLVED	WORKS DONE	COORDINATIONS MADE	COMMUNICATION MADE
Carpentry	Client SPOC , Project manager, Carpenters, Acoustic Consultant	Fixing of Doors, UPVC windows and CNC Panels were done by the carpenters.	The PM , Acoustic Consultant and Client SPOC was actively involved during the Carpentry work. They made sure that the paneling is done properly.	The PM mailed and asked the Acoustic consultant to come to the site during the execution of carpentry works in the Acoustic panels.
Painting	Client SPOC , PM, Labours Contractor,	Painting was done at 3 Stages . 1 st coating – During the roofing, 2 nd Coat – during Civil works, 3 rd Coating – After fixing the Fixtures.	The PM, Client SPOC & Contractor were on site to make sure the Painting done is of good finish and to prevent wastage of materials.	The PM and the Client SPOC along with the Painting contractor were on the site to make sure the work is executed properly.

Table 3.7.1.8: CCTV & Data lines

ACTIVITY	STAKES INVOLVED	WORKS DONE	COORDINATIONS MADE	COMMUNICATION MADE
CCTV	Client SPOC , Project manager, Consultant	Fixing of CCTV Cameras	The PM , Consultant and Client SPOC was actively involved during the CCTV work. They made sure that the cameras are fixed as per the drawings.	The PM mailed and asked the consultant to come to the site along with the labours during the execution.
Data Lines	Client SPOC , Contractor	The data lines were done by the labours sent by the consultant	Contractor & Client SPOC was on site to make sure the lines are laid as per the drawing.	The Contractor was called by the PM and was asked to make sure that the work is been executed properly.

Table 3.7.1.9: Inter lines

ACTIVITY	STAKES INVOLVED	WORKS DONE	COORDINATIONS MADE	COMMUNICATION MADE
Inter lines	Client SPOC , Contractor	The Intercom lines were done by the labours sent by the consultant	Contractor & Client SPOC was on site to make sure the lines are laid as per the drawing.	The Contractor was called by the PM and was asked to make sure that the work is been executed properly.

3.10 PROCUREMENT

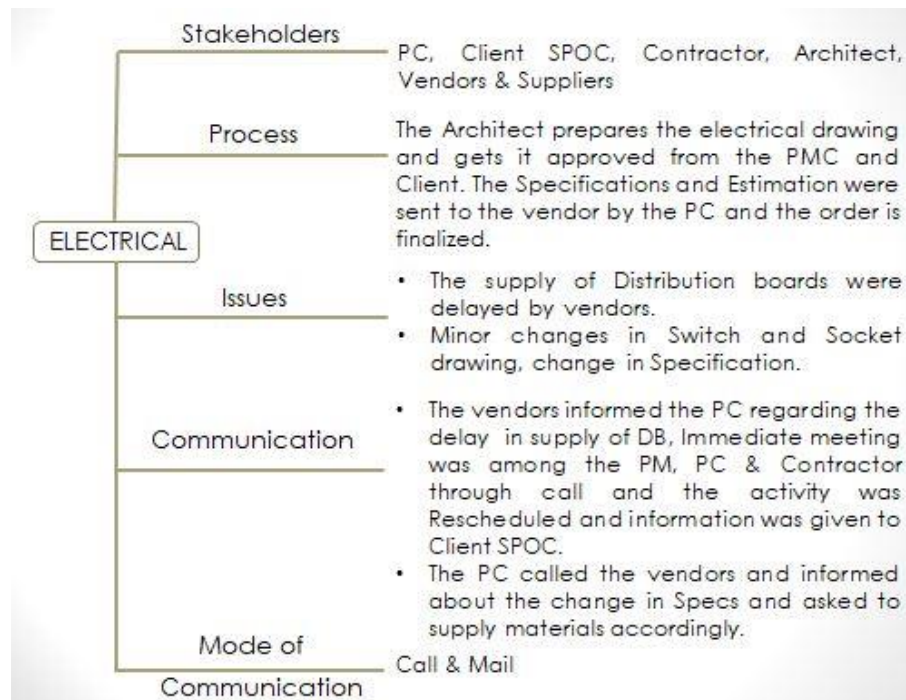


Figure 3.2.1: Electrical

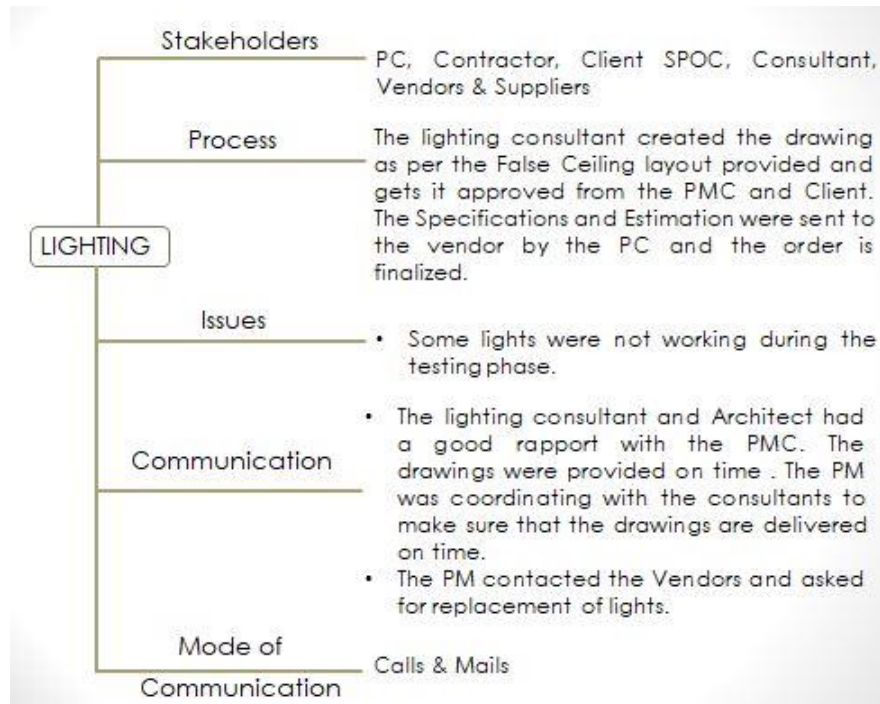


Figure 3.2.2: Lighting

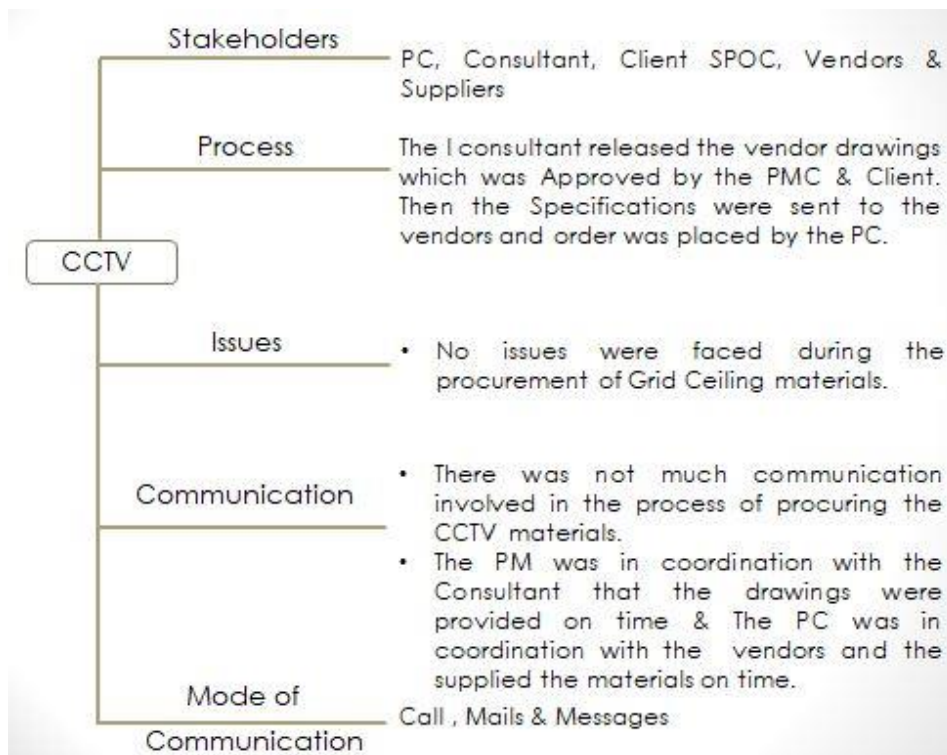


Figure 3.2.3: CCTV Works

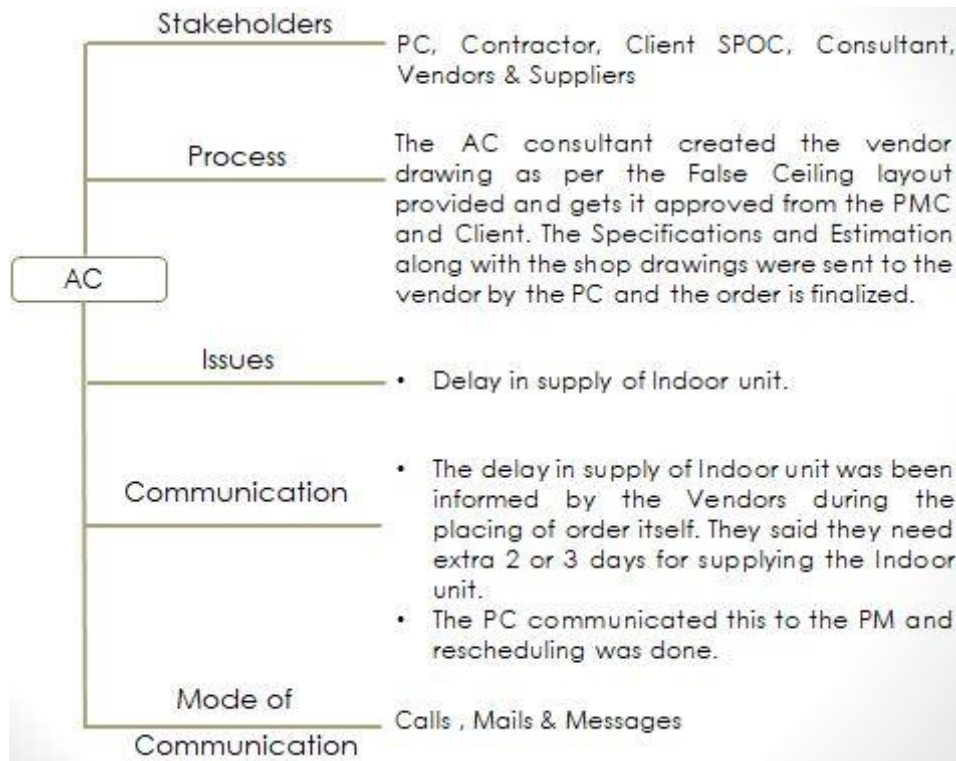


Figure 3.2.4: Air Conditioning

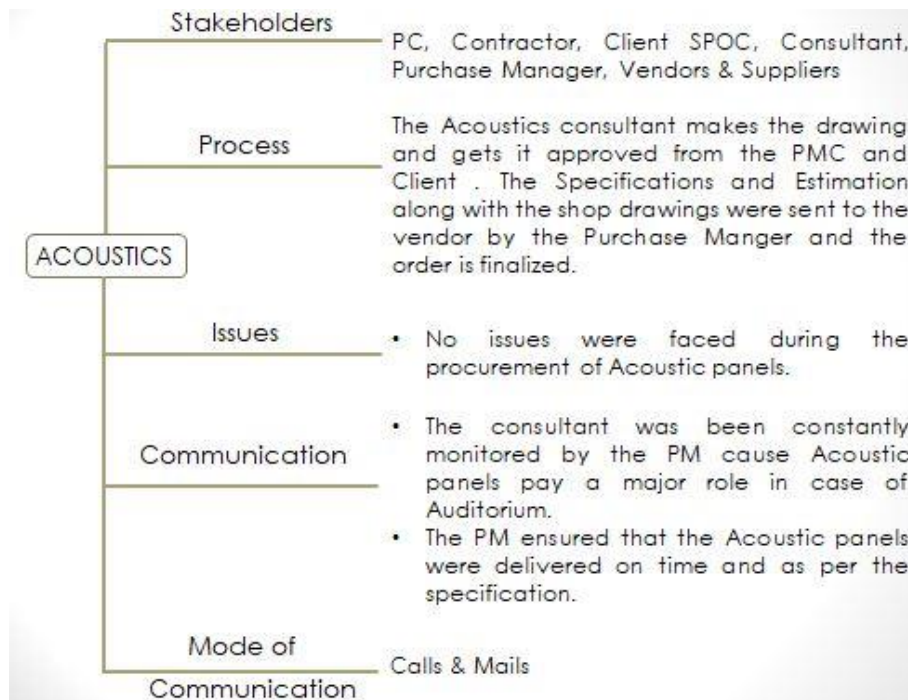


Figure 3.2.5: Acoustics

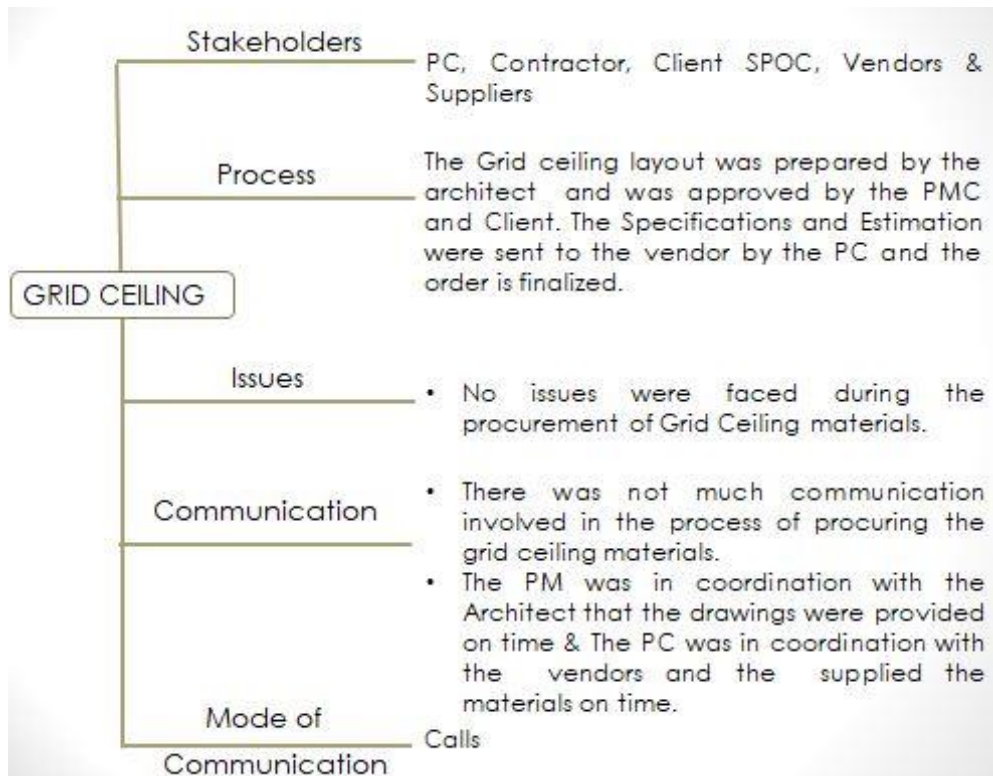


Figure 3.2.6: Grid Ceiling

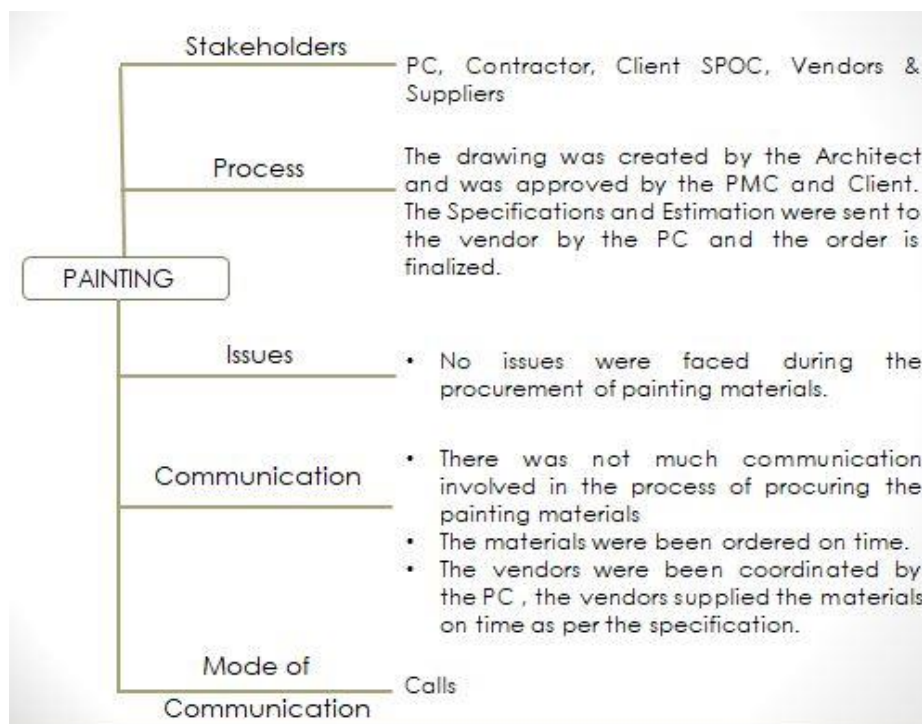


Figure 3.2.7: Painting

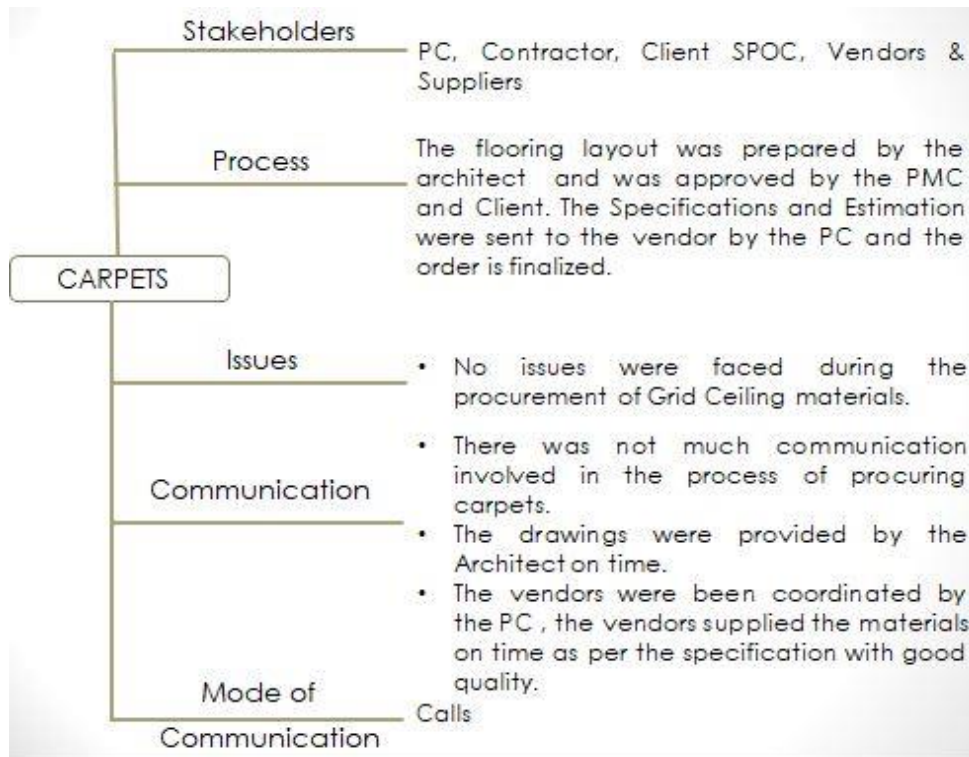


Figure 3.2.8: Carpets

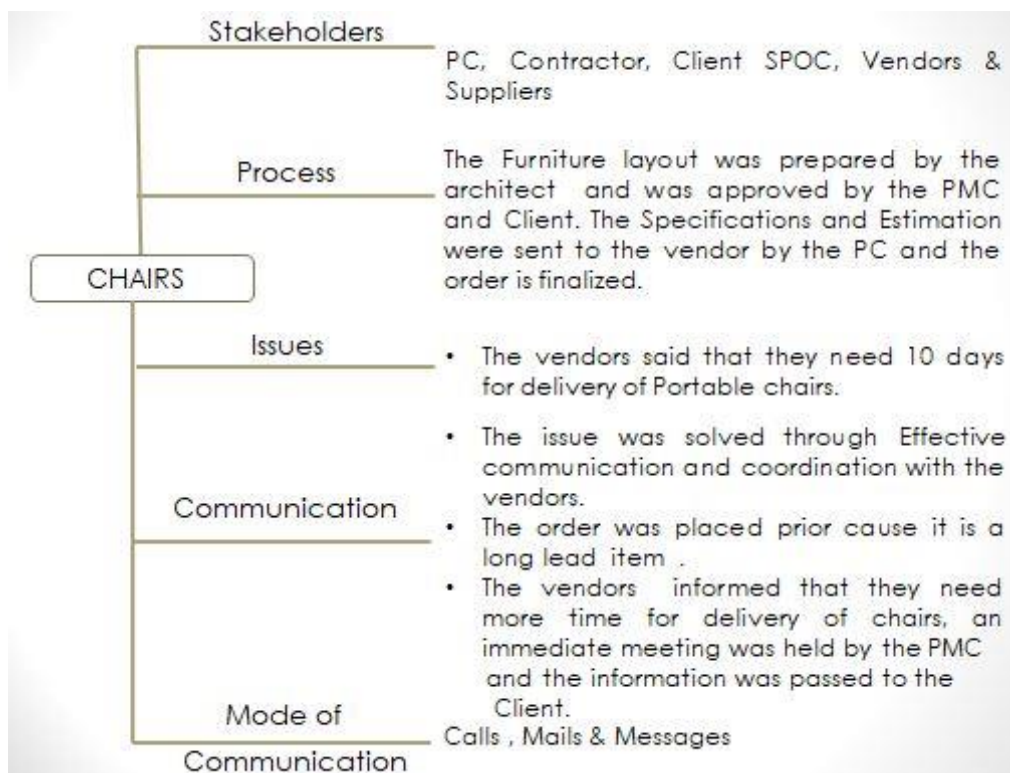
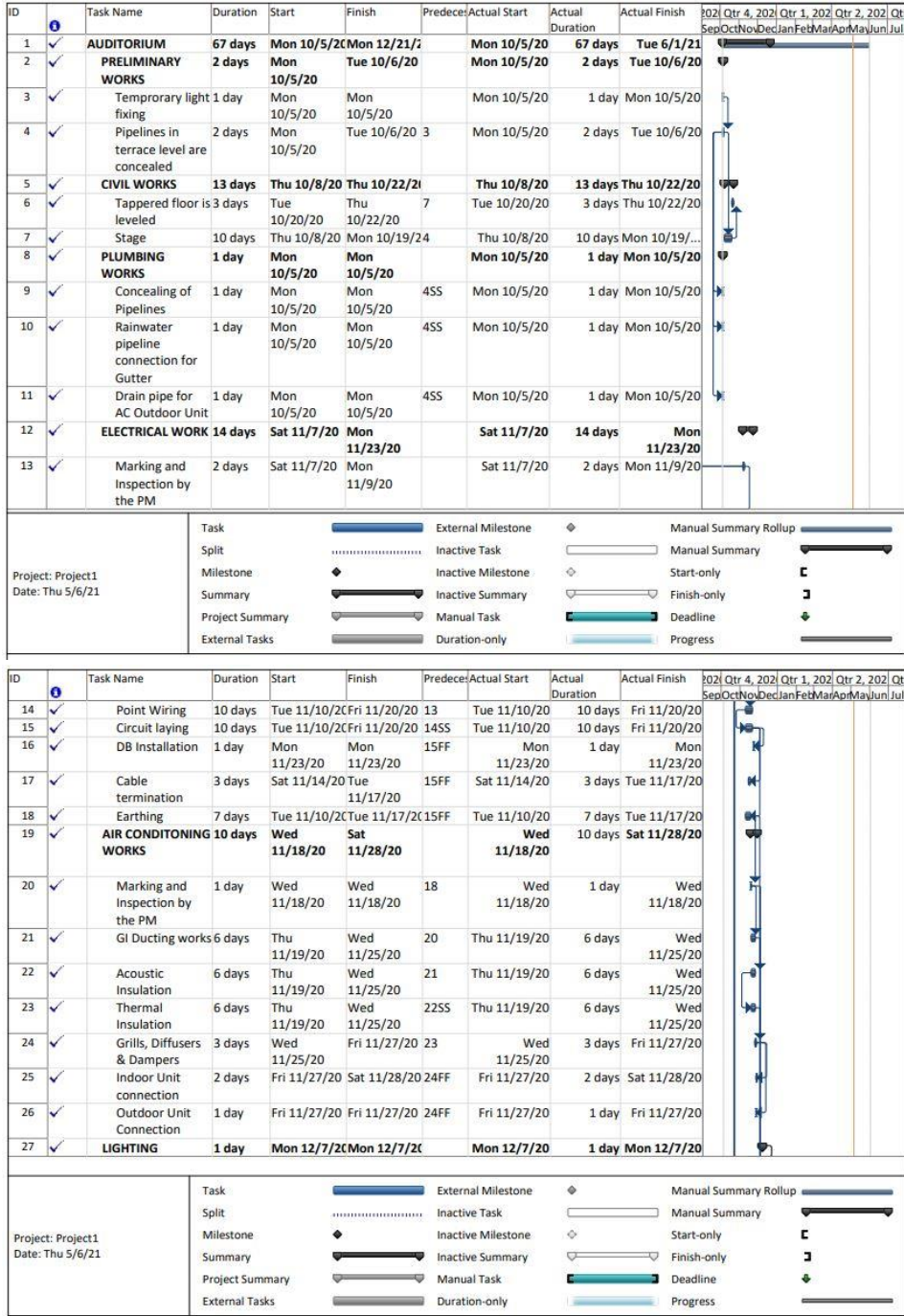


Figure 3.2.9: Chairs

CHAPTER 4

ANALYSIS & RESULTS

4.1 PROJECT TIMELINE



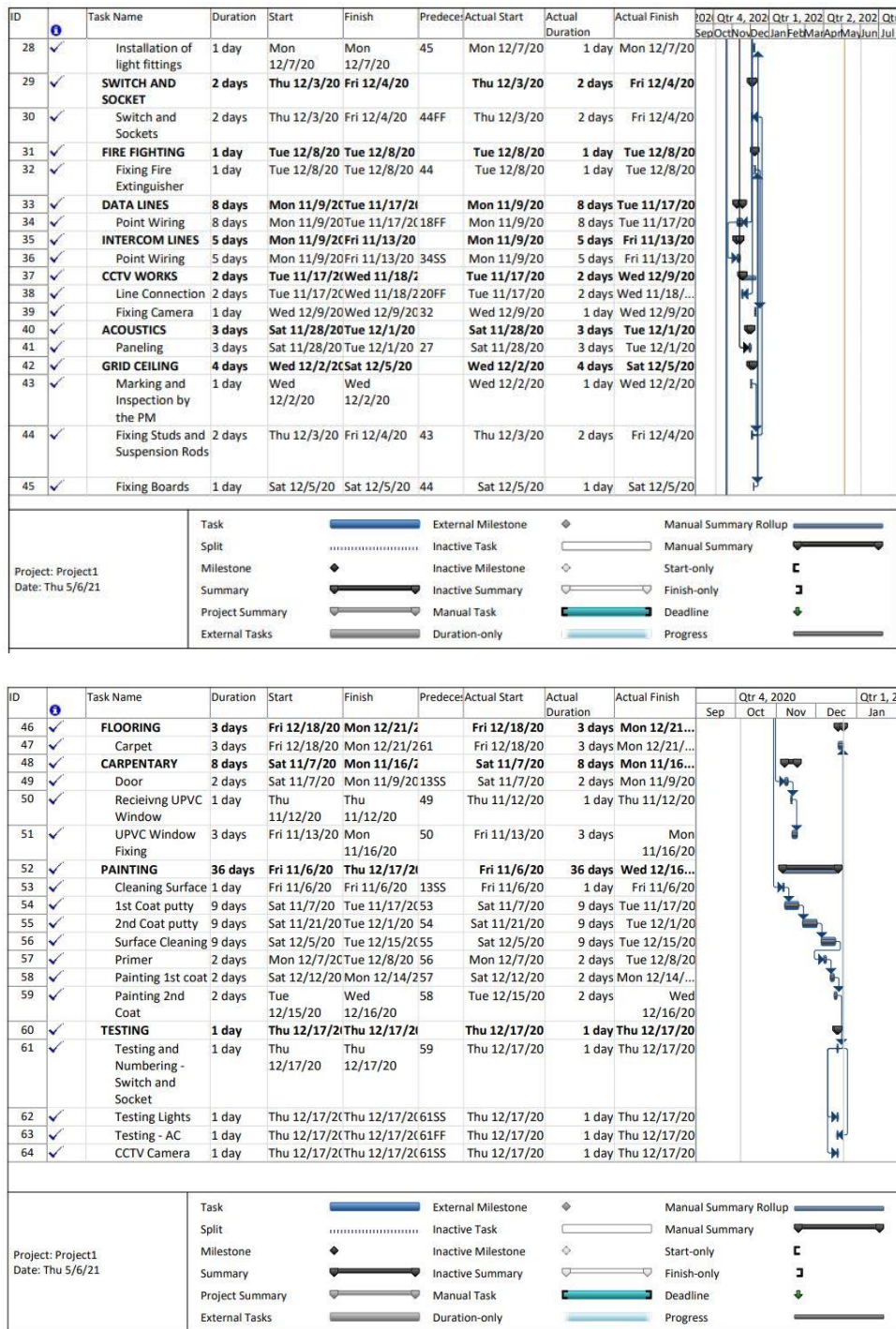


Figure 4.1: Project Timeline

4.1.1 Analysis:

Analysis is carried out on the timeline of the project. The timeline of the work executed is compared to the actual timeline planned. The issues in timeline of the project during

execution is been identified and the communications made are been analyzed. This analysis is to identify how effective the communications are made and the issues are solved.

Table 4.1.1: Analysis

ACTIVITY	NO OF DAYS PLANNED	ACTUAL
Temporary Light fixing	3	3
Civil Works	13	13
Plumbing	1	1
Electrical	13	14
Air Conditioning	9	10
Fire Fighting	1	1
Data Lines	8	8
Intercom Lines	5	5
CCTV	2	2
Acoustics	3	3
Grid Ceiling	4	4
Flooring	3	3
Carpentry	8	8
Painting	35	36
Furniture	1	1

4.1.2 Analysis of the Timeline delays and Communications made:

Table 4.1.2: Analysis on delays and the communications made

ACTIVITY	STAKES INVOLVED	ISSUE	COMMUNICATION MADE	MODE
Electrical	Client SPOC , PM, Electrical Contractor , Labours	The labours were not able to reach the site cause of heavy rains.	The labours informed the Contractor that they would not be able to come to Site. The contractor informed the PM about unavailability of labours. The PM informed the Client about the delay.	Call & Mail
AC	Client SPOC , PM, PC, Vendors	Delay in supply of Indoor unit.	The delay in supply of Indoor unit was been informed by the Vendors. The PC informed the PM about the delay and the activity was Rescheduled	Call & Message
Painting	Client SPOC , PM & Contractor ,	The wall putty took extra time for drying.	The issue was noted by the contractor and the information was given to the PM. The PM informed the Client about the unexpected delay.	Call & Message

4.2 COSTING

There were no issues in terms of the Budgeting. The budget was in alignment with the actual budget that was planned.

4.3 QUALITY

- There was no quality issues been faced.
- The labours were very effective and the quality of work executed was good.
- There was good communication and Coordination in the project to attain the quality.
- Quality Inspections and Checks were done on weekly basis.

4.4 INFERENCE

There was not much issues in terms of Time, Cost and Quality in the project. So the Analysis on Triple Constraints and the communication cannot be done.

4.5 SUGGESTIONS

- The timeline of the project is reduced by 10 days and its impact on cost and quality of the project is studied.
- The Communication and Stakeholder management involved in the process is also studied.
- Communication Plan & Strategies are done to reduce the timeline of the project.

4.6 MAPPING THE STAKEHOLDER ISSUES

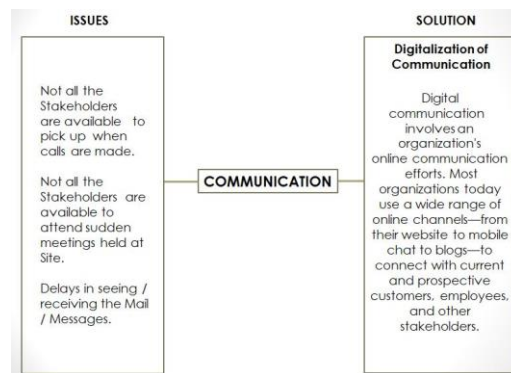


Figure 4.2: Mapping the Stakeholder issues

4.7 BITRIX 24

Bitrix24 is a collaboration software with complete tools for management, collaboration, and communication.

Bitrix24 gives you a unified platform for your files, projects, messages, tasks, and contacts. You can immediately use the platform by simply registering for an account and then inviting your colleagues. Through the Activity Stream, everyone in your team can keep track of tasks and effectively work together to progress on the project.

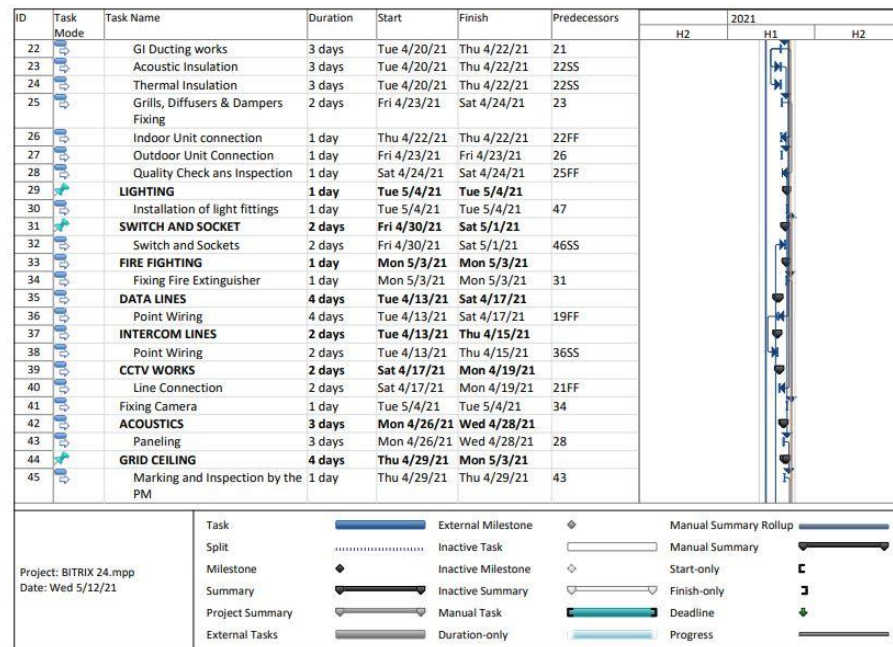
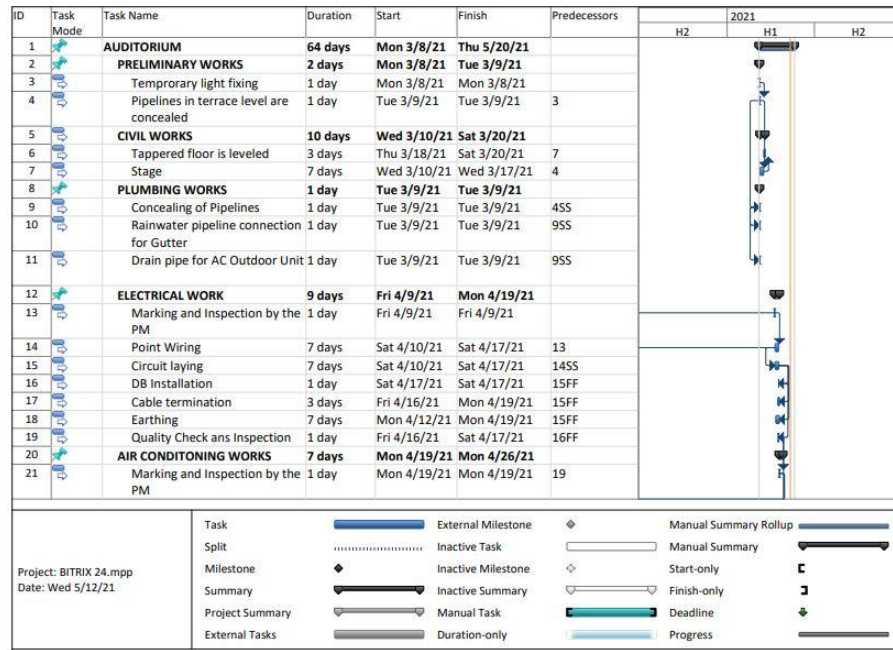
Its main solutions include social network, tasks and projects, CRM, document management, file sharing, calendar and planning, sales team management, email, telephone, and HR management. It also has a mobile solution that works on your smartphone or tablet whether it's Android, iPhone, or iPad.

4.7.1 Overview:

- Bitrix24 is a free collaborative tool available for up to 12 users.
- Both iOS and Android apps are also free.
- In paid plans, you do not have to pay for a separate user but for additional disk space and some optional features.
- It is equipped with comprehensive functions for intranet services.
- Company services include employee directory, task and work time reporting, absence chart, and visual structure.
- Time management tools include check-in/out feature, regular work reports, and daily planner.
- Time planning features include event scheduler, calendars, and meeting manager (with Cal DAV and Outlook sync).
- Document libraries with WebDAV support, versioning, and flexible permission systems.

- Bitrix24 offers a collaboration and communications platform for both internal and external operations.
- You can store, search, discuss, and share documents and other files
Coordinate projects, schedules, and tasks.

4.8 PROPOSED PROJECT TIMELINE



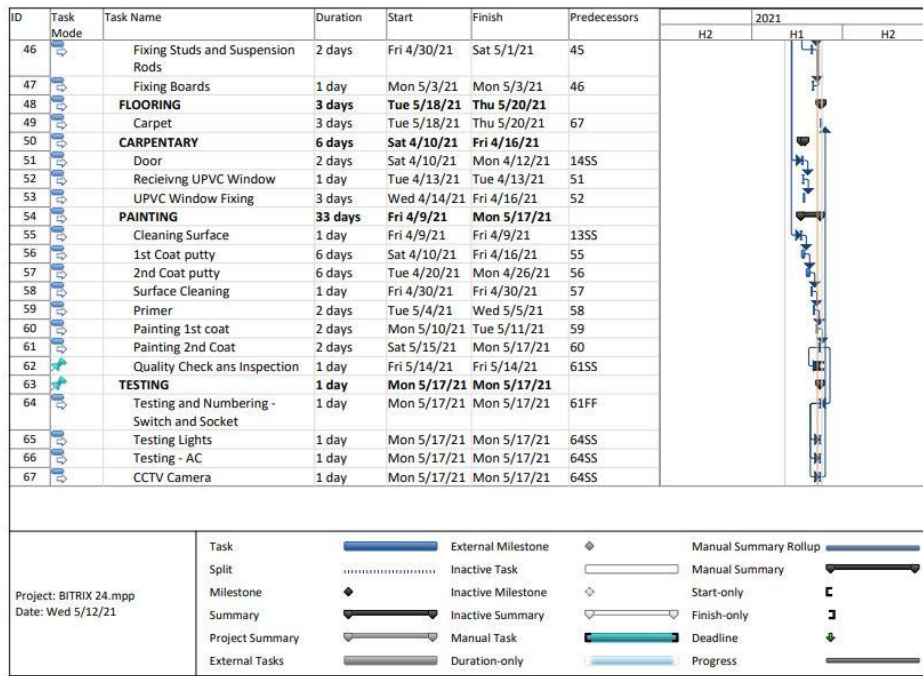


Figure 4.3: Proposed Project Timeline

4.8.1 Difference between Proposed and Actual Timeline:

Table 42:: Proposed Vs. Actual Timeline

Activity	Actual planned	Rescheduled
Civil Works - Stage	10 days	7 days
Electrical – Point wiring	10 days	7 days
Air Conditioning – Acoustic Insulation	6 days	3 days
Data lines	8 days	4 days
Painting - Putty	9 days	6 days

4.8.2 Impact Assessment on the Proposed Project Timeline:

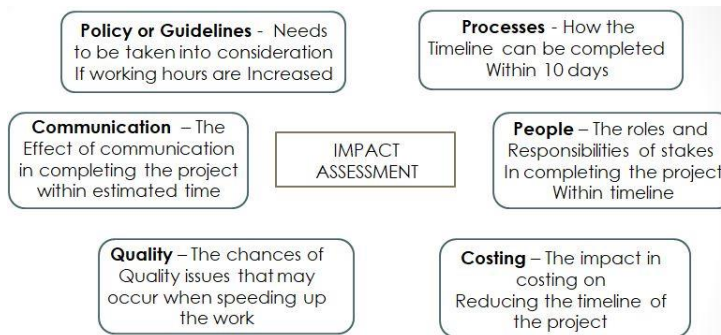


Figure 4.4: Impact Assessment

4.8.2.1 Process:

- The timeline is created in such a way that the Activities from which the days have been reduced doesn't have a severe impact on the project.
- The timeline can be achieved by increasing the number of labours in the activities.
- By constant communication and coordination the project can be completed within the timeline.

4.8.2.2 People:

- The Roles & Responsibilities of the Stakeholders needs to be created in terms of the Activities whose timelines have been reduced.
- The Stakeholders should know their importance in completing the activities within the Timeline.

4.8.2.3 Costing:

- There is definitely going to be changes in terms of costing, cause the number of labours are increased for completing the project within the timeline.
- The increase in cost is not too high and it will be acceptable by the Client .

4.8.2.4 Quality:

- There are chances of quality issues, cause the works are been speeded up to complete within timeline.
- Quality Inspection & Quality check needs to be done to make sure that the quality of the work executed is not bad.

4.8.2.5 Communication:

- Communication Plan & Communication strategies need to be created to make sure that proper communication is done.
- Mode of communication plays an important role in proper transfer of information.
- The project can be completed within the timeline with good quality through proper communication.

4.8.2.6 Policy or guidelines:

- Policy or Guidelines needs to be followed if the labours are working for more than 8 hours in a day.
- In such cases two sets of labours needs to be provided, One for Night shift and One for day Shift.

4.8.3 Impact Analysis:

IMPACT ANALYSIS									
ACTIVITY	Preliminary	Civil	Electrical	AC	Acoustics	Ceiling	Flooring	Data Line	Painting
NO						NO			
MILD	MILD				MILD		MILD		
LOW		LOW		MEDIUM					
MEDIUM			MEDIUM					MEDIUM	
HIGH									HIGH

Figure 4.5: Impact Analysis

4.8.4 Risk Assessment:

Table 4.3: Risk Assessment

RISK IDENTIFICATION			RISK ASSESSMENT				
RISK	PROJECT PHASE AT IDENTIFICATION	RISK DESCRIPTION	IMPACT DESCRIPTION	RISK CATEGORY IMPACTED	IMPACT SEVERITY	IMPACT PROBABILITY	RISK RATING
R1	Before Execution	Quality of work being Executed	The overall timeline of the project is been reduced	Quality	2.5	2.5	MEDIUM
R2	Before Execution	Budget been escalated	The number of labours are been increased	Cost	1	1	LOW

4.8.5 RASI Matrix:

Table 4.4: RASI MATRIX

Activity	Client	PMC	Consultants	Contractor
Rescheduling	A	R	S	I
Budgeting	A	R	S	S
Quality check & Inspections	S	R	R	I
Meetings	S	R	S	NA
Quality Monitoring & Reporting	I	R	NS	S
Progress Reporting	I	R	S	S
Testing	I	R	A	S

4.9 COSTING ANALYSIS AFTER CHANGING TIMELINE

- The cost of labours is decreased from the actual planned.

Table 4.5: Costing Analysis

COSTING ANALYSIS							
Activity	Actually Planned				After changing Timeline		
	Labour Cost / day	No of Labours	No of Days	Cost (Rs)	No of Labours	No of Days	Cost (Rs)
Civil works - Stage	900	3	10	27,000	4	7	25200
Electrical - Point Wiring	1200	2	10	24,000	3	7	25200
Air Conditioning - Ducting and Insulation	2000	2	6	24,000	3	3	18000
Data Lines	1200	2	8	19,200	3	4	14400
Painting - Putty	1100	3	9	29,700	4	6	26400
Overall Cost				123,900			109200

- There is no escalation in cost.
- The project timeline is decreased without increasing labour costs

4.9.1 Communication:

Table 4.6: Communications made for Approval

STAKES INVOLVED	COMMUNICATION MADE	MODE OF COMMUNICATION
Client, PMC	The budgeting can be done and be mailed to the PM. The Client after acceptance Approves the budget signs it.	Bitrix 24 – Schedule Meeting at PM Office

4.10 QUALITY ASPECTS

4.10.1 Quality management process:



Figure 4.6: Quality Management process

4.10.2 Quality Checklists:

Table 4.7.1: Quality Checklists for point wiring

Check list for Electrical- Wiring			
AUDITORIUM			
S.No	Description	Status	
		YES	NO
1.1.1	The wires to be pulled as per colour code and specified thickness.		
1.1.2	There is no joints in the wire.		
1.1.3	Earth wire to be pulled separately for each power points, A/C points, circuits.		
1.1.4	All 5 amps to be connected with earth.		
1.1.5	Check there is earth link in DB,		
1.1.6	Identification marking to be done in DB.		
1.1.7	All wiring to be terminated with connector		
CONSULTANT		PMC	CLIENT

Table 4.7.2: Quality Checklists for Electrical works

Check list for Electrical Works				
AUDITORIUM				
S.No	Description	Status		Remarks
		YES	NO	
1.1	Conduit fixing correctly applied			
1.2	Socket fixing correctly applied			
1.3	Ceiling light box correctly applied			
1.4	Light circuit completed			
1.5	Power circuit completed			
1.6	Dropping / Light sealed			
1.7	Paint marking properly applied			
1.8	Data lines are completed			
1.9	Intercom lines are completed			
2	CCTC Camera lines are completed			
CONSULTANT		PMC	CLIENT	

Table 4.7.3: Quality Checklists for Painting works

Check list for Painting				
AUDITORIUM				
S.No	Description	Status		Remarks
		YES	NO	
1.1.1	Check for any wall cracks			
1.1.2	Check the materials \ paints as approved make			
1.1.3	Check colour shade approved			
1.1.4	Cleaning of walls to be checked (Scrapping), Surface Finishing			
1.1.5	Cracks, Dampness, any leakage to be identified & repaired			
1.1.6	Openings are checked for its finished sizes			
1.1.7	Check whether conduits and electrical boxes are laid in position.			
1.1.8	Application of primary coat			
1.1.9	Application of coat as per specification to be checked			
1.1.10	Check other materiala covered neatly with masking tape			
1.1.11	Check for number of coat & final touch up work wheather completed			
1.1.12	Check for overall coverage & brush marks			
1.1.13	Check for cleaning in flooring, window & joinery after painting			
1.1.14	Check for any incomplete work and addition & alteration			
CONSULTANT PMC CLIENT				

4.10.3 Communications:

- The quality can be attained by monitoring the works on a daily basis.
- A photo of the work executed should be sent to the PM every day.
- Quality checks and Inspections should be done constantly.
- Weekly review on quality reports needs to be done.
- If any issues observed or noticed, immediate discussion or meeting should take place and the issue should be resolved.

4.10.4 Communication plan:

Table 4.8: Communication Plan

Communication Type	Objective of communication	Medium	Frequency	Audience	Owner	Deliverables
Progress Review Meetings	Review about the progress in the project and current state	Face to Face / Conference call	Weekly - Every Tuesdays	Client, Architect, Consultants / Contractors/ Vendors	PM	Agenda & Meeting Minutes
Project Team Meetings	Review about the project with the internal team members - PMC	Face to Face / Conference call	As Required	Project Team	PM	Agenda & Meeting Minutes
Monthly Project Status Meetings	Report on the live status of the project	Face to Face / Conference call	Monthly	PMO, Architect, Consultants / Contractors	PM	Agenda & Meeting Minutes
Project Status Reports	Report the status of the project including Activities, Progress and Issues	Face to Face / Conference call & Mail	Weekly - Every Thursdays	Client, Architect, Consultants / Contractors/ Vendors	PM	Agenda & Meeting Minutes
Quality Reports	Report of the quality of work been executed for the activities that are in risk	Call , Whatsapp / Mail	Daily basis	PM	Consultants / Contractors/	NA
Project Quality Reports	Report the quality of work executed and issues if any	Face to Face / Conference call & Mail	Weekly - Every Mondays	Client, Architect, Consultants / Contractors/	PM	Agenda & Meeting Minutes
Quality Inspections & Checks	Checking and Inspecting the quality of work been executed	Site	Weekly - Every Saturdays	Client SPOC, Architect, Consultants / Contractors	PM	NA
Out of Calendar meetings	Based on the Project Requirement / Unexpected Issues	Face to Face / Conference call	Depends on the requirement	Depends on the requirement	PM / Client	Agenda & Meeting Minutes

4.11 RESULTS

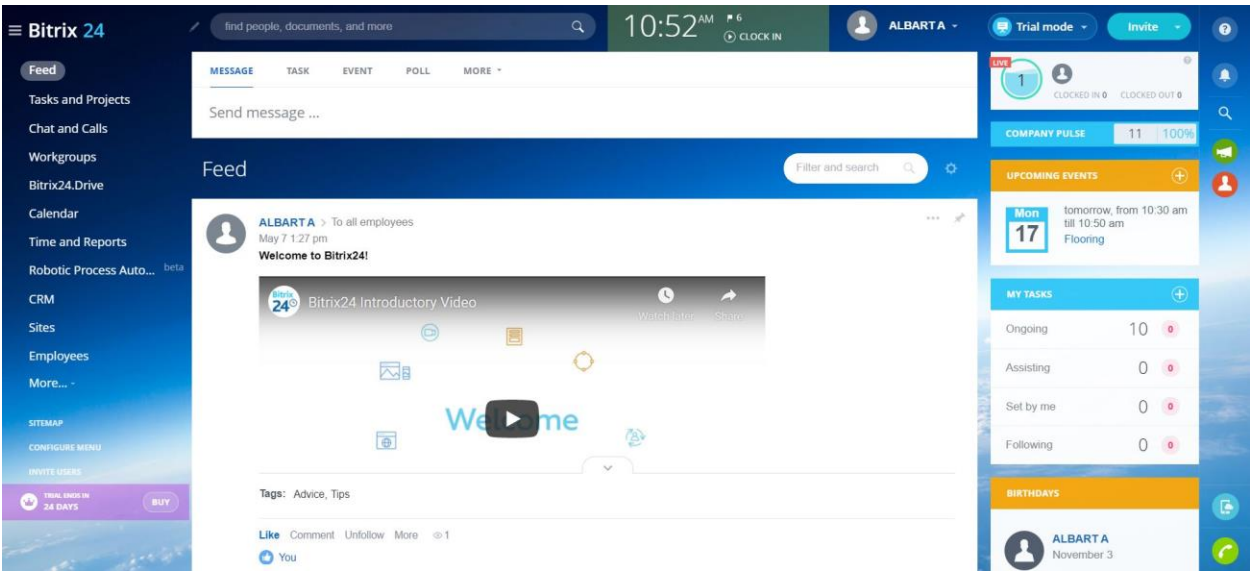


Figure 4.7: Home Page

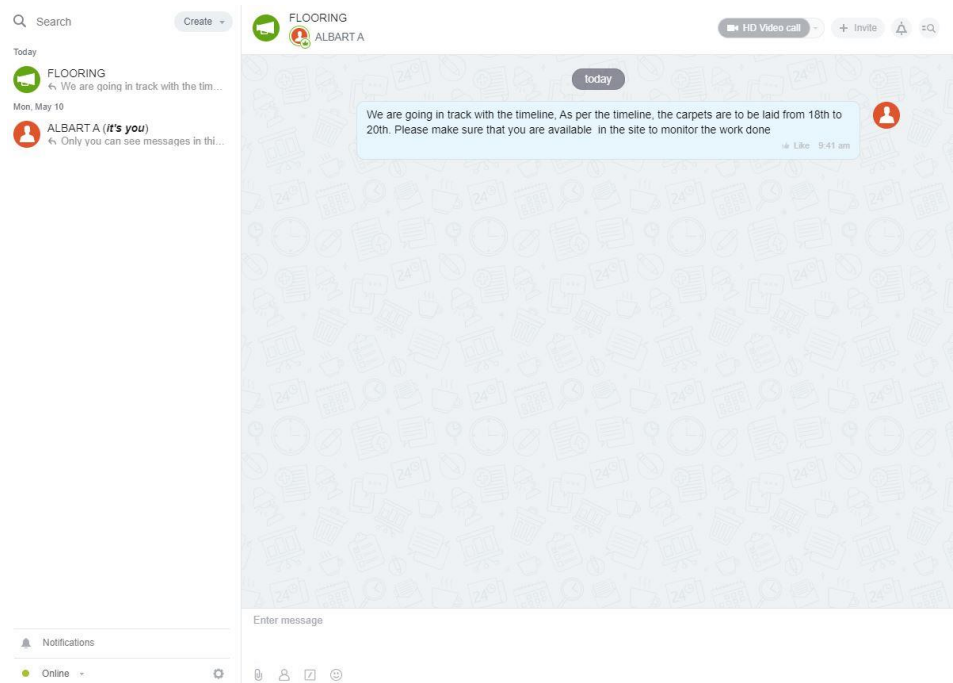


Figure 4.8: Flooring group

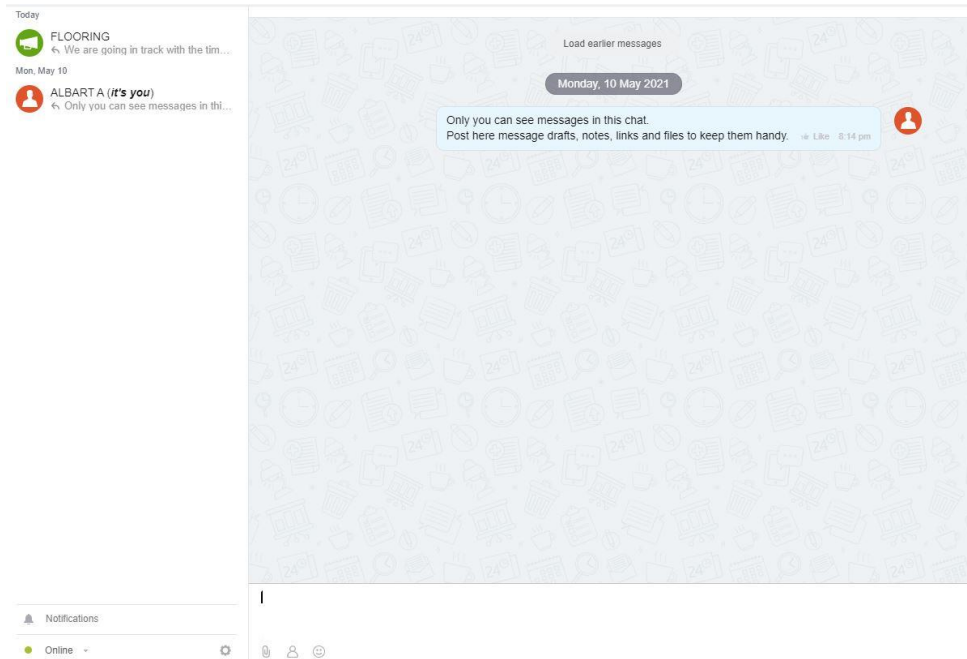


Figure 4.9: Self chat

New Event ☐ This event is important 🔔

Time Event date and time

05/16/2021 11:00 am — 05/16/2021 12:00 pm ☐ All day

[Time zone](#)

Calendar

Company calendar

Repeat

Don't repeat

Location

Location

Attendees

ALBART A [+ Add](#)

Attendees

ALBART A

Scale

☒ Notify when attendees confirm or decline invitation

15 May, Saturday								16 May, Sunday								17 May, Monday							
9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm	9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm	9 am	10 am	11 am	12 pm		

SAVE
CANCEL

Figure 4.10: Event Planner

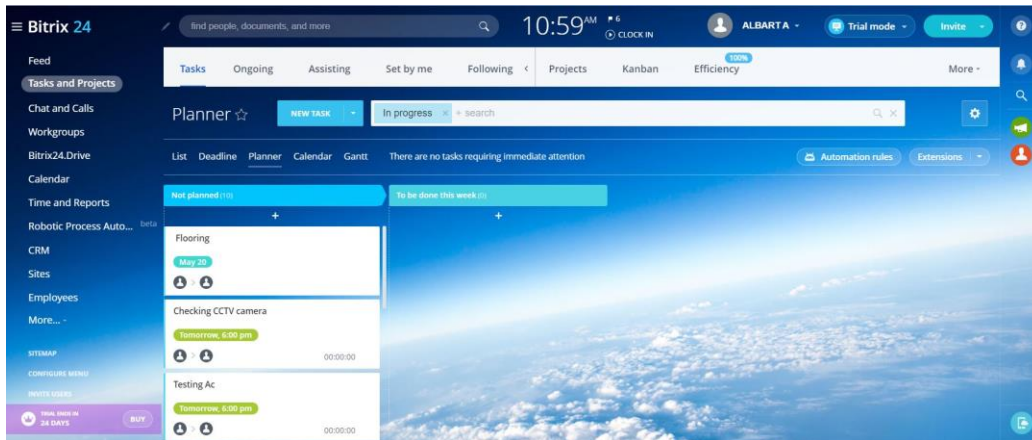


Figure 4.11: Task Planner

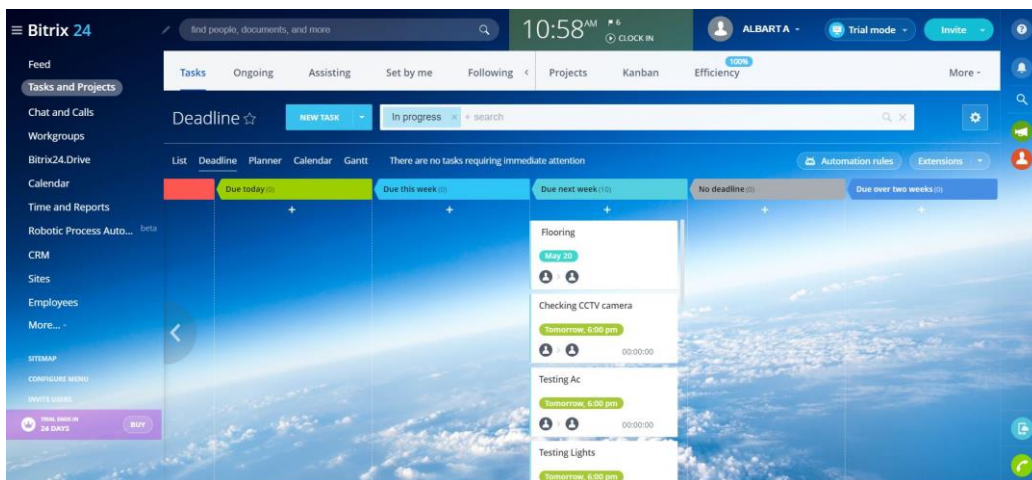


Figure 4.12: Project Deadlines

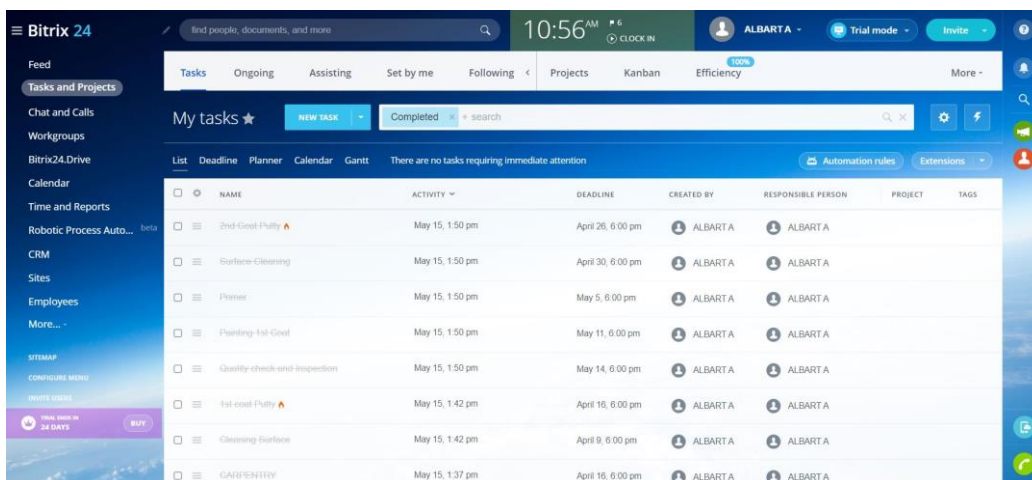


Figure 4.13: Tasks completed

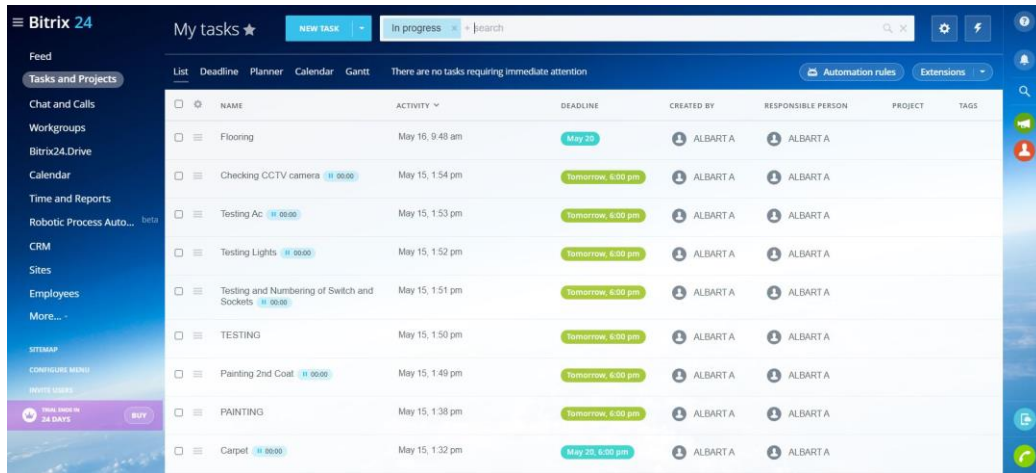


Figure 4.14: Tasks in progress

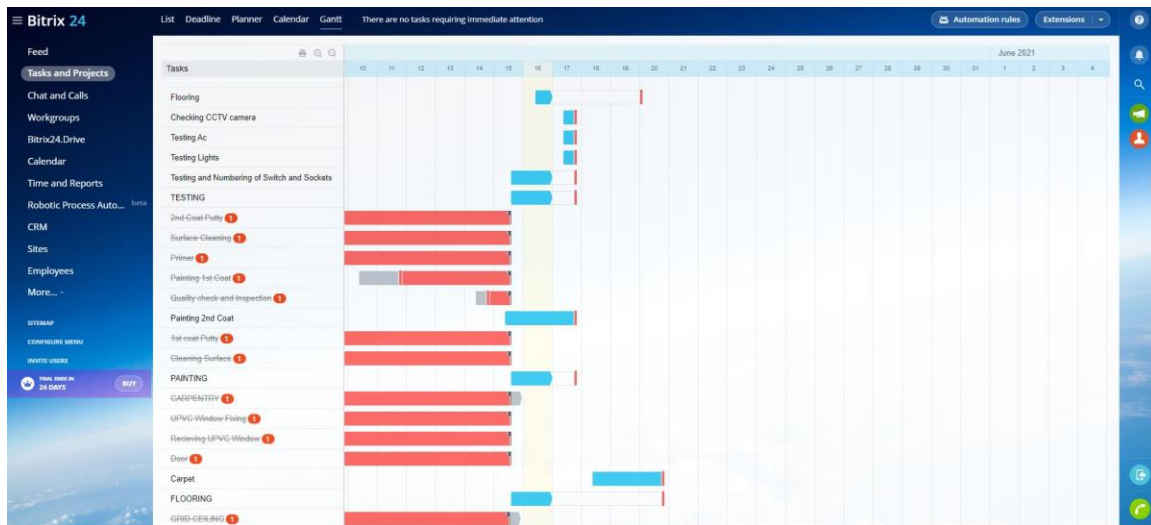


Figure 4.15: Gantt Chart

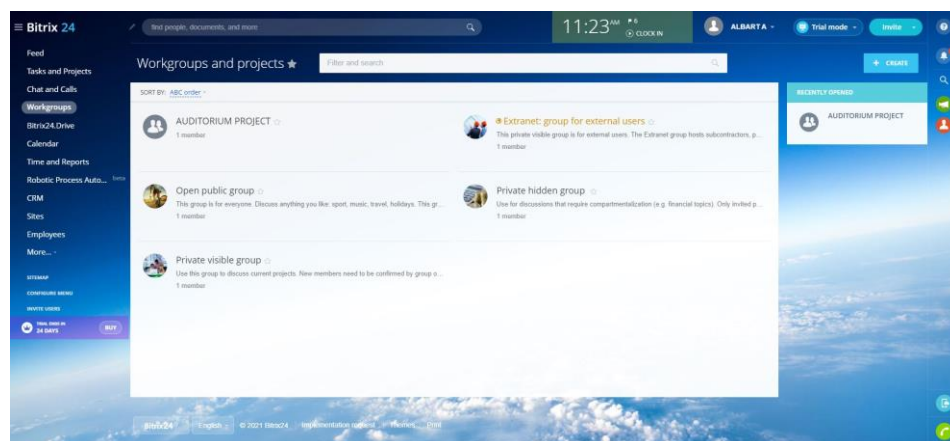


Figure 4.16: Work Groups & projects

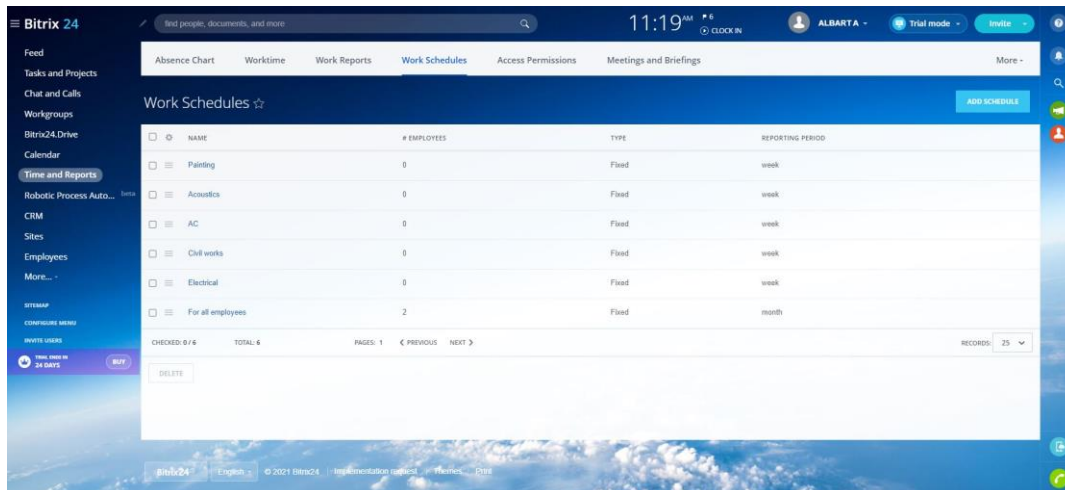


Figure 4.17: Work Schedules

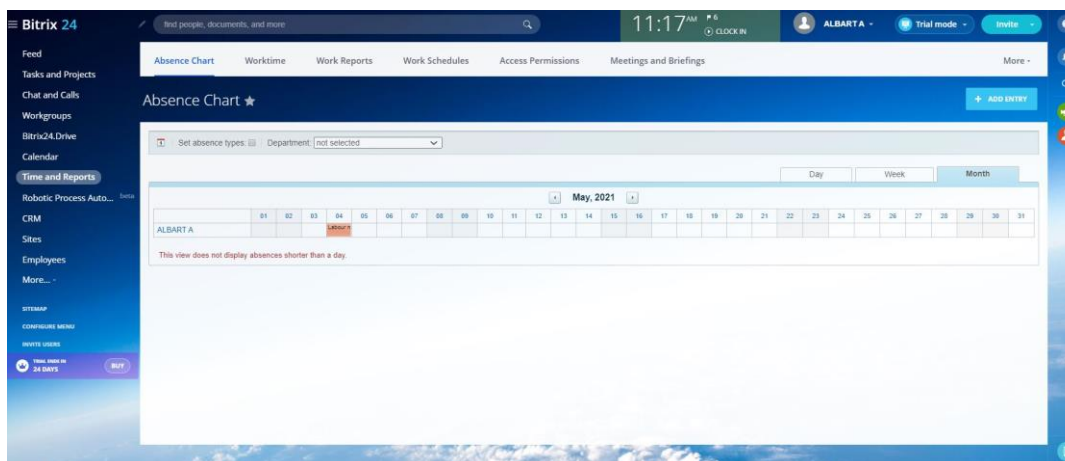


Figure 4.18: Absence Chart

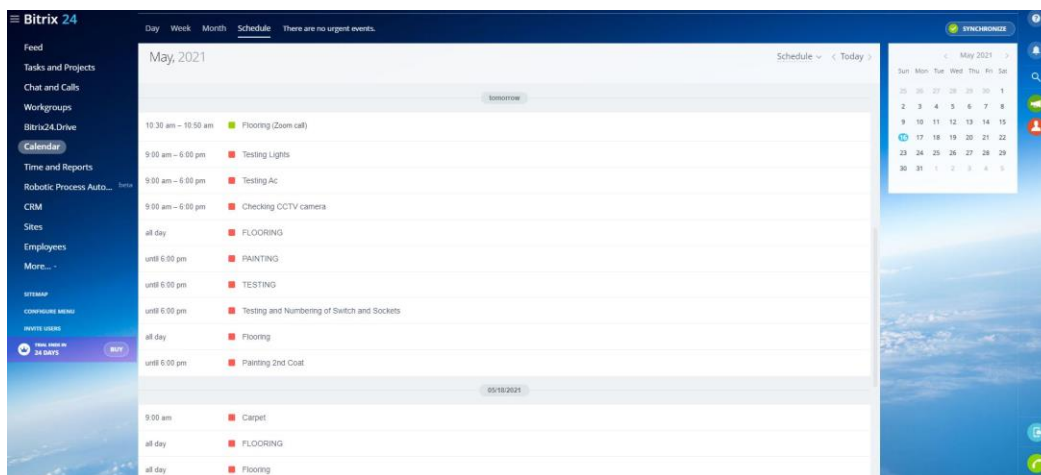


Figure 4.19: Calendar Schedule

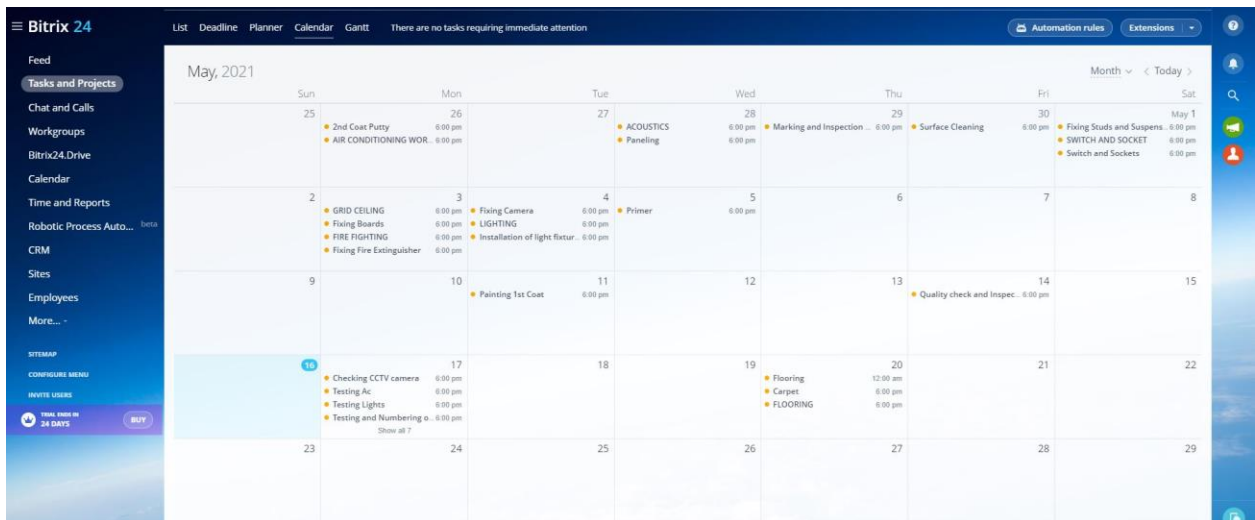


Figure 4.20: Project Calendar

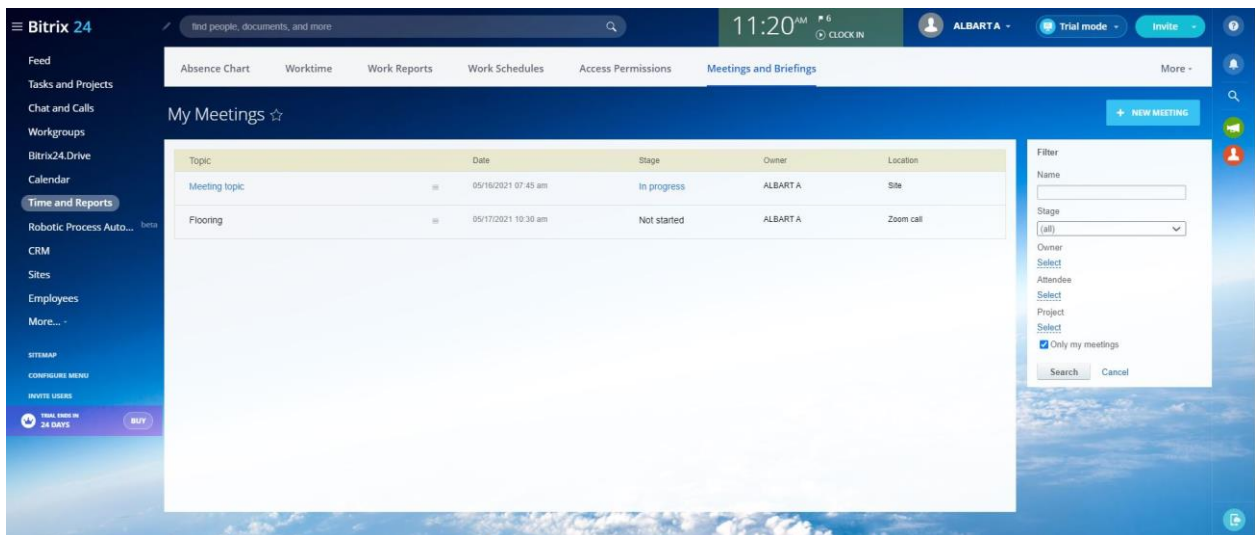


Figure 4.21: Meeting

CHAPTER 5

CONCLUSION

5.1 DIGITAL COMMUNICATION:

Most organizations today use a wide range of online channels—from their website to mobile chat to blogs—to connect with current and prospective customers, employees, and other stakeholders. Communication plays a major role in case of Stakeholder management. Stakeholders can be managed only through proper communication & Communications channels, that's when digitalization comes into picture.

Bitrix24 is a collaboration software with complete tools for management, collaboration, and communication.

Bitrix24 gives you a unified platform for your files, projects, messages, tasks, and contacts. You can immediately use the platform by simply registering for an account and then inviting your colleagues. Through the Activity Stream, everyone in your team can keep track of tasks and effectively work together to progress on the project.

5.2 COMMUNICATION STRATEGIES:

1. Meetings should happen very often and regularly.
2. Use the most appropriate tools of communication , most often conference calls are preferred.
3. Appreciations have to be done to keep the stakeholders motivated and focused.
4. Keep it interactive with the internal members of the PM team.
5. Training the team to work together when it comes to conflict resolution and crisis management.
6. The objectives should be laid out properly and its important to stay focused on the objectives throughout the project.
7. Digitalization of communication to make the communication more effective.

5.2.1 Steps to Ensure that the meetings stay on Schedule:

- Assign a timekeeper.
- Draft an agenda and send it to all team members prior to the meeting.
- Ask team members to be prepared to discuss the agenda items.
- Unless urgent, table any non-agenda issues raised, with the understanding that they will be up for discussion later.
- Schedule the next meeting in advance, and keep a record of discussion items to be carried forward.

5.2.2 Be Transparent, Clear & Concise:

- The purpose of the communication.
- The audience. (Are they team members, executives, vendors, clients or other stakeholders?)
- The desired outcome.

REFERENCES

Rajhans, Kirti, Effective Communication Management: A Key to Stakeholder Relationship Management in Project-Based Organizations (December 3, 2018). The IUP Journal of Soft Skills, Vol. XII, No. 4, December 2018, pp. 47-66.

Achterkamp, M. C. , & Vos, J.F. (2008). Investigating the use of stakeholder influence strategies in global projects. International Journal of Project Management, 26(7), 509–516.

Beringer, C. , Jonas, D. , & Gemünden, H.G. (2012). Establishing project portfolio management: An exploratory analysis of the influence of internal stakeholders' interactions. Project Management Journal, 43(6), 16–32.

<https://www.sciencedirect.com/science/article/abs/pii/S0263786310001171>

<https://www.proquest.com/openview/01ede0be91ff3be05b0368df03c6d138/1?pq-origsite=gscholar&cbl=706377>

https://www.researchgate.net/publication/324988369_The_effects_of_stakeholder's_engagement_and_communication_management_on_projects_success

<https://www.pmi.org/learning/library/managing-communications-effectively-efficiently-5916>