INDIVIDUAL PROJECT

Program Name: **BCS – IT**

Course Code**: CSC 2330**

Course Name: **Software Project Management**

Assignment: **Individual Project**

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Submitted By:

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Semester: **Third**

Intake: **September, 2019**

Submitted To:

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Department: **BCS - IT**

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Cable Distributor

Introduction:

Cable distributor is the IT project in which clients want to have websites having different pages like homepage, about page where mission, vision and goals are listed and photographs and some recent activities or events using simple and attractive layout and designs.
In this project We are going to develop a website for Cable distributor named as ARK Distributor. In ARK Distributor users can access live TV channels, Movies, recorded TV and video on demand content. These services are available over a variety of platforms including smart phones, tablets and web. ARK Distributor is a first OTT/IPTV Platform in Nepal having Nepal Government license to Operate IPTV. ARK Distributor is operated under NITV STREAMZ PVT LTD with company located in Kathmandu. Being the team of market leaders in streaming and triple play multiscreen device delivery solution, ARK Distributor will focus to develop open platform where anyone can bring their contents to sell and make the business partnering with us.

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Project Charter Template		
Project Name		Website for Cable Distributor
Description & Goals		To start online cable distribution to the public and connect with customer through website online.
Scope	In	1. The scope of this project is to start the online payment system and online subscription of the cable that we want to make available in Cable Distributor company. 2. No need to have a line to subscribe any channels. It will provide the service of subscribing from the website and pay from the same website without installing third-party applications.
	Out	It only supports the Khalti payment system only though other payment system like E-Sewa.
Business Case		Make the website mobile responsive and increases business on mobile devices.
Constraints	Time	Project must be completed by 1st May, 2021
	Budget	रु 350,000.00
	Quality	The system should support the popular payment system.
Deliverables		1. The deliverables of this project include the project charter, WBS, Budget Analysis and Reports, Gantt Chart, Websites requirements fulfilled. 2. Content that fits industry-standard screens size.

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Project Manager	Keshav Bhandari
Estimated Budget	रु 350,000.00
Key Resources	Similar types of other organization's websites.
Key Milestones	
20th January, 2021	Starting the project consulting with the stakeholders and collecting all the required documents for the project.
1st February, 2021	Create landing page with detailed information of the system.
5th March, 2021	Deploy the landing page which include the ad-revenue features.
31st March 2021	Adding the features like payment gateway, subscription and so on.
7th April, 202	Backend implementation.
17th April, 2021	Unit Testing of the system.
27th April, 2021	System Integration and Testing.
1st May, 2021	System Deliver.
Project Approved	Keshav Bhandari and Jonish Ghimire
Date	1st January, 2021

Core Members and Stakeholders:

Name	Role	Position
Jonish Ghimire	Client	CEO
Keshav Bhandari	Project Manager	Manager
Narayan Neupane	Project Member	Developer
Jeevan Sharma	Project Member	Developer
Ankit Raymajhi	Project Member	Requirement Analysist
Basanta Nepali	Project Member	System Integrator and Testing Experts

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Project Scope Management:

Project Scope Management is a defined process for completing a temporary project. It is an essential element for the function of any team, ensuring maximum efficiency, eliminating unnecessary or redundant work, and keeping a team on the same page every step of the way. Project scope will also help manage the client's expectations and keep the project on time and on budget.

Project Title: Cable Distributors

Objectives of Project: To start online cable distribution to the public and connect with customer through website online.

Date of Authorization: 1st January, 2021

Project Start Date: 20th January, 2021

Project Completion Date: 1st May, 2021

Project Manager:

Keshav Bhandari	
Phone:	(+977) 9869260495
Email:	imksav@gmail.com
Facebook:	IMKSAV
Instagram:	IMKSAV
LinkedIn:	IMKSAV
Twitter:	IMKSAV
GitHub:	IMKSAV

Budget Information:

Clients are informed that the project will be completed in a budget of रु 350,000.00.

Key Milestones:

- Starting the project consulting with the stakeholders and collecting all the required documents for the project.
- Create landing page with detailed information of the system.
- Deploy the landing page which include the ad-revenue features.
- Adding the features like payment gateway, subscription and so on.
- Backend implementation.
- Unit Testing of the system.
- System Integration and Testing.
- System Deliver.

Project Success Criteria Determination:

- Content that fits industry-standard screens size.
- Must fulfill all the requirements of client.
- Availability and flexibility of the system during its use.

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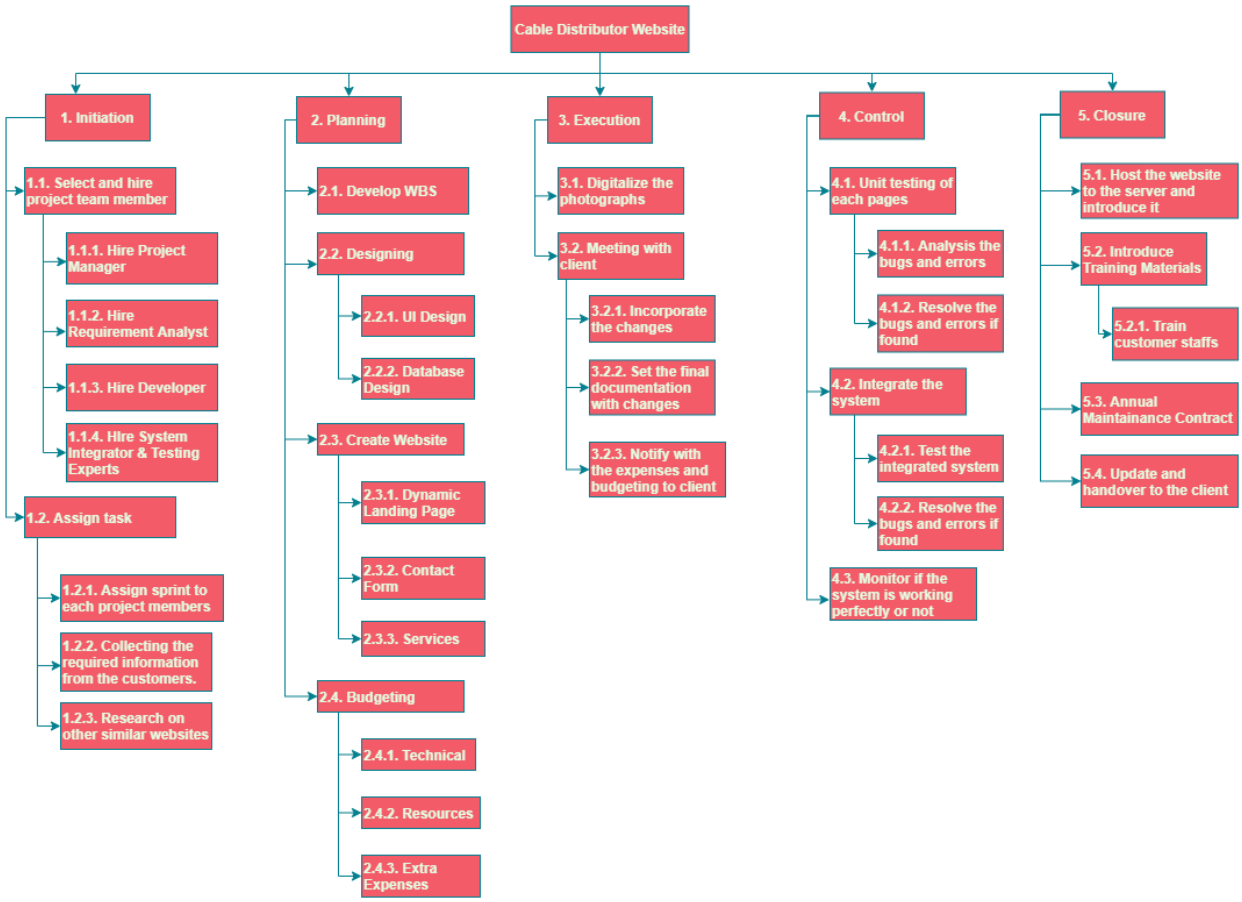
Work Breakdown Structure (WBS):



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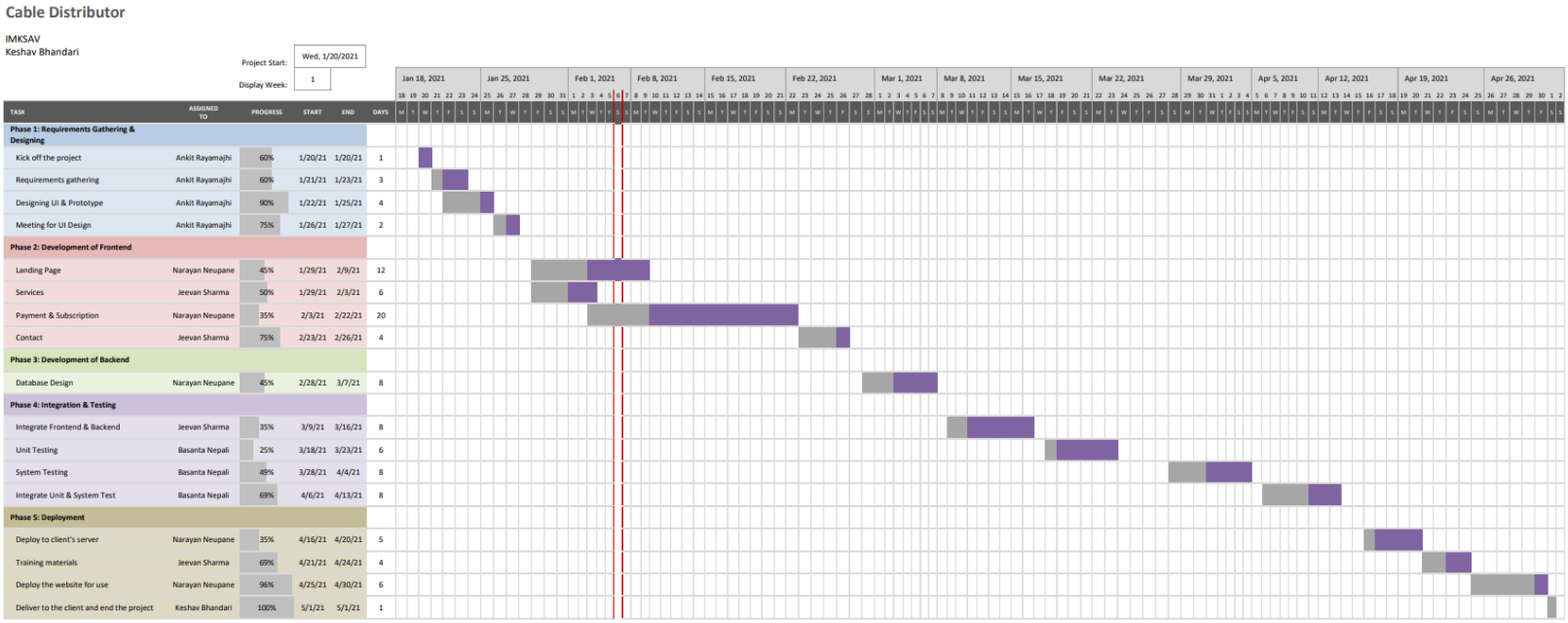
Gantt Chart:



TASK	ASSIGNED TO	PROGRESS	START	END	DAYS
Phase 1: Requirements Gathering & Designing					
Kick off the project	Ankit Rayamajhi	60%	1/20/21	1/20/21	1
Requirements gathering	Ankit Rayamajhi	60%	1/21/21	1/23/21	3
Designing UI & Prototype	Ankit Rayamajhi	90%	1/22/21	1/25/21	4
Meeting for UI Design	Ankit Rayamajhi	75%	1/26/21	1/27/21	2
Phase 2: Development of Frontend					
Landing Page	Narayan Neupane	45%	1/29/21	2/9/21	12
Services	Jeevan Sharma	50%	1/29/21	2/3/21	6
Payment & Subscription	Narayan Neupane	35%	2/3/21	2/22/21	20
Contact	Jeevan Sharma	75%	2/23/21	2/26/21	4
Phase 3: Development of Backend					
Database Design	Narayan Neupane	45%	2/28/21	3/7/21	8
Phase 4: Integration & Testing					
Integrate Frontend & Backend	Jeevan Sharma	35%	3/9/21	3/16/21	8
Unit Testing	Basanta Nepali	25%	3/18/21	3/23/21	6
System Testing	Basanta Nepali	49%	3/28/21	4/4/21	8
Integrate Unit & System Test	Basanta Nepali	69%	4/6/21	4/13/21	8
Phase 5: Deployment					
Deploy to client's server	Narayan Neupane	35%	4/16/21	4/20/21	5
Training materials	Jeevan Sharma	69%	4/21/21	4/24/21	4
Deploy the website for use	Narayan Neupane	96%	4/25/21	4/30/21	6
Deliver to the client and end the project	Keshav Bhandari	100%	5/1/21	5/1/21	1

[Click Here to View Full Project Documents.]

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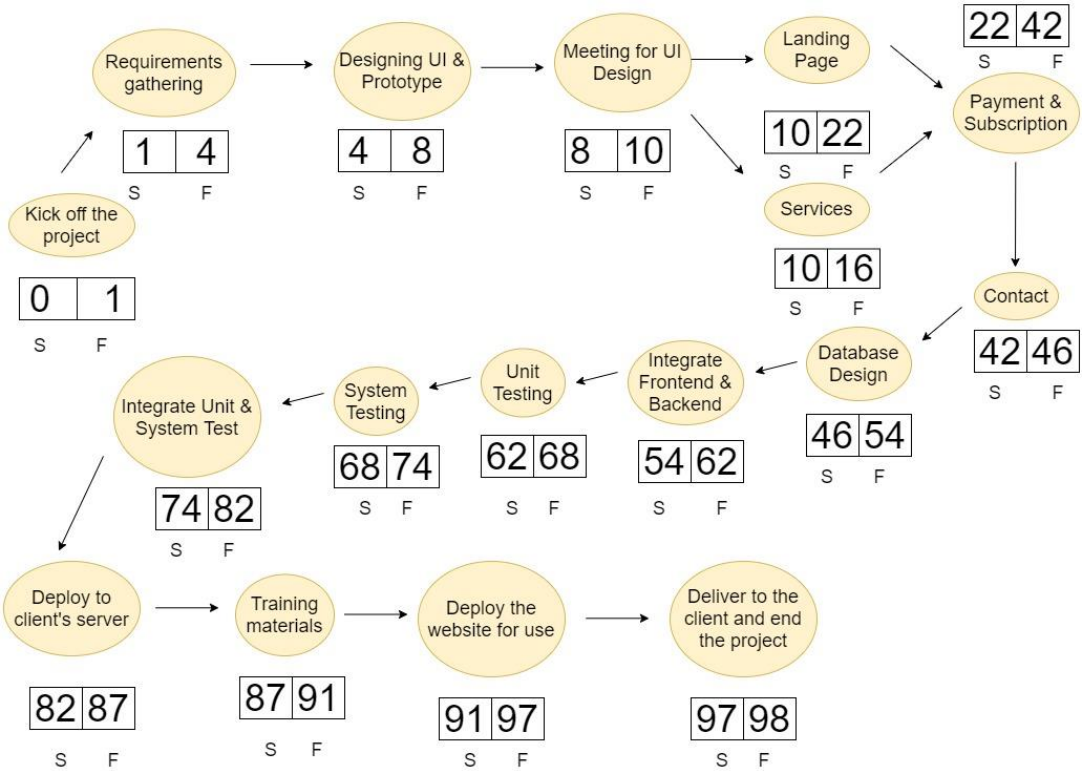
Network Diagram:

Critical Path Method:

The critical path method (CPM), also referred to as critical path analysis (CPA), could be a scheduling procedure that uses a network diagram to depict a project and therefore the sequences of tasks required to finish it, which are called paths. Once the paths are defined, the duration of every path is calculated by an algorithm to spot the critical path, which determines the full duration of the project. The critical path method (CPM) is employed in project management to form project schedules and helps project managers create a timeline for the project. The critical path method includes:

- Identifying every task necessary to complete the project and the dependencies between them.
- Estimating the duration of the project tasks.
- Calculating the critical path based on the tasks' duration and dependencies to identify the critical activities.
- Focusing on planning, scheduling and controlling critical activities.
- Setting project milestones and deliverables.
- Setting stakeholder expectations related to deadlines.



S for Start day and F for Finish day

Critical path is defined as: 1-4,4-8,8-10,10-22,22-42,42-46,46-54,54-62,62-68,68-74,74-82,82-87,87-91,91-97,97-98 and project is completed in 98 working days.

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Project Cost Estimation:

Project cost estimation is that the process of predicting the amount, cost, and price of the resources required by the scope of a project. Since cost estimation is about the prediction of costs instead of counting the particular cost, a particular degree of uncertainty is involved. This uncertainty arises from the very fact that the project scope definition is rarely entirely complete until the project has been finished, at which point all expenses are made and an accountant can determine the precise amount of cash spent on resources. for various reasons cost estimation is critical like investment decisions, comparing alternative plans, budgeting, cost control, and validation. For the Cable Distributor project, we've following criteria to charge to the client.

S.N.	Tasks	Fixed Cost	Working Days	Total Cost
1	Travel & Communication	रु 2,000.00	1	रु 2,000.00
2	Domain Registration	रु 3,500.00	1	रु 3,500.00
3	Hosting	रु 18,000.00	1	रु 18,000.00
4	Documentation	रु 1,500.00	3	रु 4,500.00
5	Designing UI and Prototype	रु 1,500.00	4	रु 6,000.00
6	Meetings	रु 290.00	6	रु 1,740.00
7	Research on different websites	रु 525.00	4	रु 2,100.00
8	Database design	रु 1,050.00	8	रु 8,400.00
9	Web pages	रु 728.00	22	रु 16,016.00
10	Payment integration	रु 15,000.00	1	रु 15,000.00
11	Data collection	रु 875.00	7	रु 6,125.00
12	Photographs	रु 730.00	6	रु 4,380.00
13	Incorporate changes	रु 1,050.00	5	रु 5,250.00
14	Local server	रु 3,500.00	1	रु 3,500.00
15	Routers	रु 2,000.00	1	रु 2,000.00
16	Data entry	रु 355.00	8	रु 2,840.00
17	Unit testing	रु 728.00	7	रु 5,096.00
18	System testing	रु 551.00	3	रु 1,653.00
19	Annual Maintenance Cost	रु 15,000.00	1	रु 15,000.00
20	Training materials	रु 7,500.00	1	रु 7,500.00
21	Trainings	रु 6,500.00	1	रु 6,500.00
22	Ankit Rayamajhi	रु 450.00	10	रु 4,500.00
23	Narayan Neupane	रु 600.00	51	रु 30,600.00
24	Jeevan Sharma	रु 600.00	22	रु 13,200.00
25	Basanta Nepali	रु 800.00	22	रु 17,600.00
26	Keshav Bhandari	रु 1,500.00	98	रु 147,000.00
	Total	रु 86,832.00	Grand Total	रु 350,000.00

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Project Risk Management:

Project risk management is that the process of identifying, analyzing and so responding to any risk that arises over the life cycle of a project to assist the project remain on target and meet its goal. Risk management isn't reactive only; it should be a part of the look process to work out risk which may happen within the project and the way to manage that risk if it of course occurs.
A risk is anything that would potentially impact your project's timeline, performance or budget. Risks are potentialities, and in an exceedingly project management context, if they become realities, they then become classified as "issues" that has to be addressed. So, risk management, then, is that the process of identifying, categorizing, prioritizing and planning for risks before they become issues.

Risks	Description	Potential Response
Miscommunication	Due to miscommunication, set tasks cannot be accomplished on time due to which bad impression will be felt to the clients.	Research into a project should be undertaken as early as possible. Any ambiguities need to be addressed immediately to provide clarity from the outset. Establishing a culture of in-depth understanding ensures that a question raised is relevant, and the answer kept clear and consistent. Set tasks should be specific, measurable and above all, timely. Elements that relate to return on investment and respond directly to the client goals are a priority. A leading project manager will not only pay attention to these details but ensure that they are kept at the forefront of operations. Tasks with a clear outline and communicable resolution will be better understood by those working on it.
Lack of client's participation	This issue creates huge impact on project success because until and unless the clients participate and interact with developer during the project any changes or complete requirements are met or not is unidentified.	Meeting should be held frequently if any changes are required and feedbacks are important.
Leave application	Most of the time developer get absent during the project working hours which may lead to delay in project so project manager should manage such leave days and should ask developer to complete the task at any cost if necessary, they should work on holidays also.	Project manage should allow the leave to the developer on emergency case only or should give permission to work from home so they can complete the given task though they can't attend the physical working area.
Request for huge changes ate the end of project	This issue is seen much more during the project. Clients get silent during the meeting or do not participate in meeting but at the end of the project they ask for the changes which may lead to start again from the beginning to that project which delay in project completion.	Meeting should be held before and after the project partial portion complete or starting. This will give the idea to developer do they need to change the project or continue on what they are working.

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Risk Assessment:

n many projects, risks are identified and analyzed in a very random, brainstorming, fashion. this is often often fatal to the success of the project, as unexpected risks arise, which haven't been assessed or planned for and must be forbidden on an emergency basis, instead of be prepared for and defended against in a very planned, measured, manner. it's essential that potential risks are identified, categorized, evaluated & documented. instead of observe each risk independently and randomly, it's way more effective to spot risks so group them into categories, or, to draw up a listing of categories and so to spot potential risks within each category. In general, the subsequent are the usually followed phases in Risk Assessment.

- **Risk Identification:**
  Before plunging into risk assessment, the project manager will have compiled an inventory of risks from previous project experiences. These are reviewed at the start of the project as some way to spot some common risks. this may also give an insight to the members to predict possible risks. While there are many methods for identifying risks, the Crawford Slip method is extremely common and effective. Each risk identified and discussed should be stated in a very complete sentence which states the explanation for the chance, the risk, and therefore the affect that the chance has on the project.
- **Categorize and Group Duplicates:**
  Categorizing risks could be a thanks to systematically identify the risks and supply a foundation for awareness, understanding and action. Each project will have its own structure and differences. Categorization makes it easy to spot duplicate risks and acts on trigger for determining additional risks. the foremost common, easy and also the handiest method for this can be to post the sticky notes on an oversized board where the manager has posted categories. The participants then put their risks on the board beneath the suitable category. As they identify duplicate risks, they stick the duplicates on top of the opposite. The project manager then discusses the risks identified under each category with the participants. All the risks identified, categorized should be documented for the approval of all stakeholders.
- Qualify Risks (Assign Probability and Impact to Each Risk):
  The key questions to assess any risk in projects are:
  - What is the risk – how will I recognize it if it becomes a reality?
  - What is the probability of it happening – high, medium or low?
  - How serious a threat does it pose to the project – high, medium or low?
  - What are the signals or triggers that we should be looking out for? A risk assessed as highly likely to happen and as having a high impact on the project will obviously need closer attention than a risk that is low in terms of both probability and impact.
- **Documentation of Risks:**
  The Project Manager will enter all the risks, probability-impact scores, and responses and maintain a document to elucidate all risks. The high scoring risks are added to the Project Management Plan. This document also will be included as an appendix to the Project Management Plan. Additionally, the chances with a high score are going to be added to the project schedule as a way to trace the risk at the proper time. Although these risks are added to the schedule, the schedule itself isn't necessarily changed. This step is to supply awareness and visibility to the participants of all high scoring risks throughout the project's lifecycle.

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Project Communication Management:

Project communication management is a collection of processes that help make sure the right messages are sent, received, and understood by the right people.
Here is the way of communication during the project.

S.N.	Project Discussion Topics	With Whom	When	How	Issued By
1	Milestones	Core Project Team Members	Weekly	Microsoft Teams & Email	Project Manager
2	Status of Project	Stakeholder & Project Manager	Weekly	Email	Project Manager
3	Issue Reports	Project Manager	Fortnight	Microsoft Teams & Email	Team Members
4	Change Request	Stakeholder & Team Members	Anytime	Physical Meeting	Stakeholder
5	Increment Report	Team Members, Stakeholder	Weekly	Physical Meeting	Project Manager

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Project Closure:

In this phase we conclude our project and deliver to the clients. Though in this phase some of the tasks will still opened which is to be checked and close all the pending tasks. The things we have to do in this phase are:

- Close all the open tasks.
- Prepare the report of the entire projects.
- Complete the documentation according to the requirement documentation.
- Collect feedbacks from entire project members as well as clients.
- Training and materials to be provided to the concern depart.
- Wrap the project successfully.

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Conclusion:

The project will be delivered to the stakeholders and feedbacks are collected. Some changes might be required to change after completing the project also. We will check and update the clients about their requirement, project cost, and all possible risk that the project faced and will be faced using the system. Once the concerned people satisfied the project is to be called as successfully completed.