

ASSIGNMENT

Table of Contents

1	Context	2
2	Background	2
2.1	About WhatsApp.....	2
2.2	WhatsApp in Covid Pandemic	3
3	Problem at Hand	5
3.1	Questions	5
3.2	Defining the Problem Statement – The What.....	5
3.3	Defining the reason to solve this Problem – The Why.....	5
3.4	Defining the users for whom the Problem needs to be solved – The Who	5
3.5	How does it align to the vision of the organization	5
4	Proposed Solution.....	6
4.1	Assumptions.....	6
4.2	High level Proposed Solution	6
4.3	Minimum Viable Product	6
4.4	Detailed User Story	6
5	Execution Plan.....	9
5.1	Feature Rollout Plan.....	9
5.2	Success Metric	9
6	Future Roadmap.....	9
7	References.....	9

1 Context

You lead the Product team at WhatsApp. It's post-pandemic 2021 and people have begun making plans for outings as you are headed to the new year.

Your team

2 backend engineers

1 front engineer

1 QA engineer

1 product designer

Your team practices agile deployments and has a quicker release cadence of twice a week. You are the sole product manager on this team. The team relies on you for all product specs, designs and expectations. You inspire the team with the vision as well.

Problem

After staying home for a large part of the past year, people have begun creating plans in abundance for offline events and occasions.

The problem at hand is that hosts and planners are not able to always form a plan. They are unable to align with other members of the plan across a number of variables. The planner often isn't able to find a middle ground and ends up dropping the plan altogether.

Business requirement

How can WhatsApp help users create plans and find alignment among plan invitees? Can we build a feature that empowers users to plan simple single-task activities like a dinner, a movie night, etc. right inside WhatsApp?

Task

Scope out a feature that focuses on creating plans inside the WhatsApp interface with the constraints in your team.

Draft a detailed PRD covering necessary research, action items and deliverables across your team (and if deemed necessary, beyond). It should most certainly include:

1. The reason behind building this feature and what problems it will solve
2. Detailed user stories for your features explaining their scope
3. Wireframes for all user interactions across the proposed feature

2 Background

2.1 About WhatsApp

WhatsApp is a cross-platform instant messaging service for mobile devices and PC. As of 2023, WhatsApp is the most popular mobile messenger app worldwide with approximately two billion monthly active users, outranking WeChat at 1.3 billion users, and Facebook Messenger at 930 million global users. It enables users to share text, images, video, voice messages, as well as supporting voice and video calling.

Launched in January 2009, WhatsApp was acquired in 2014 by social media giant Facebook for approximately 19 billion U.S. dollars, becoming the company's most successful messaging app despite having transformed its' flagship chat portal into a standalone app - Facebook Messenger - in 2010. Facebook CEO Mark Zuckerberg stated that Facebook's acquisition of WhatsApp was closely related to the Internet.org vision of more affordable and efficient internet access worldwide.

The number of global unique WhatsApp users increased by 26 percent from the beginning of 2020 to mid-2023 and is estimated to have reached 2.79 billion unique users by June 2023. In June 2023, WhatsApp was the most downloaded chat and messaging app worldwide, amassing approximately 45.85 million downloads across the Apple App Store and the Google Play Store.

WhatsApp's Mission statement remains - Let people communicate anywhere in the world without barriers which reflects in their value proposition and key activities. WhatsApp's value propositions are:

- Convenience - The user can communicate with anyone else in the world who has access to a smartphone with the internet, through an absolutely simple interface and instant contact;
- Cost - Users can keep in touch via text and voice messages or internet calls, and even share files at no cost;
- Security - All messages sent via WhatsApp are encrypted. This prevents the leakage of information exchanged privately;
- Features - Over the years, WhatsApp has been including new features that make sense to its audience, such as an in-built camera, group chat for up to 256 people, sharing status, and sending files up to 100 MB;
- Business - There is an application for companies, by which businesses can be promoted through advertisements. Companies can even create catalogs for release (now the business model is starting to make a little more sense, isn't it?).

WhatsApp's Competitors are Telegram Messenger, Signal Private Messenger, Discord, Snapchat, Skype.

WhatsApp SWOT Analysis

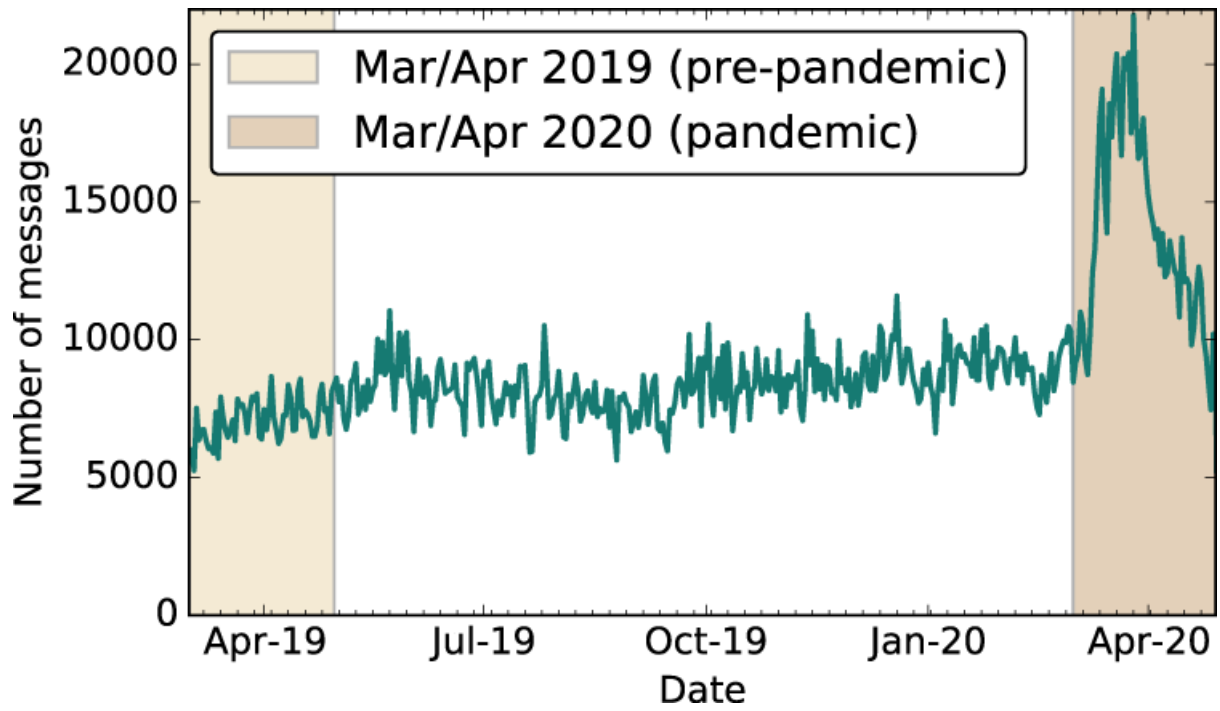
Strengths	Weakness	Opportunities	Threats
Customer Base	Data Privacy	Internet Penetration	Innovation
Technology	Online	Technological development	Regulations
Price		Penetration of Smartphones	Entry Barriers
Brand			
Availability			
Ad-Free			

2.2 WhatsApp in Covid Pandemic

In 2020, global users were spending over 19 hours per month on the popular chat app. By comparison, monthly WhatsApp usage saw an average of 17 hours per user on the platform in 2022, with Indonesia, Brazil, and Argentina being the markets with the largest amount of time spent on the platform in the last examined year.

The 2020 global coronavirus pandemic accelerated the adoption trends of digital tools and mobile communication channels in both social and professional contexts. According to a survey conducted

among professionals during the third quarter of 2022, around seven in 10 respondents reported using messenger services and chat apps like WhatsApp and Skype daily for work.



[Figure 1](#)

3 Problem at Hand

Covid has slowed down, and people are vaccinated. Amenities which were otherwise closed during the pandemic are slowly opening up and people are eager to meet their friends and families while enjoying like pre-pandemic times.

The problem at hand is that hosts and planners are not able to always form a plan. They are unable to align with other members of the plan across a number of variables. The planner often isn't able to find a middle ground and ends up dropping the plan altogether.

3.1 Questions

1. Why is there a need to build this feature?
2. Is it a part of larger vision that organization wants to work towards?
3. Why are users not able to find a middle ground and finalize a plan?
4. Are there any existing feature users can use?
5. Is the existing feature not able to solve this issue faced by the users? What is the cause?
6. Are there any particular users who are asking for this feature?

3.2 Defining the Problem Statement – The What

Hosts and planners in WhatsApp groups or otherwise users in general are not able to decide on a plan. Help them create, decide and finalize on a plan that involves planning single task activities in WhatsApp.

3.3 Defining the reason to solve this Problem – The Why

People rely on WhatsApp for easier and free to use communication with their loved ones, friends and family. They interact with each other as part of groups and chats in WhatsApp. Users can leverage WhatsApp to plan for excursions and occasions right inside their favourite communication application.

3.4 Defining the users for whom the Problem needs to be solved – The Who

Although in every group there are certain people who are the go-to hosts and planners for any group activities but finalizing on a plan is an issue faced by every member of the group.

3.5 How does it align to the vision of the organization

People will start using WhatsApp not just as a tool for communications and sending files over chats and groups but a tool to plan their simple activities like planning a Saturday movie night, dinner place etc.

4 Proposed Solution

WhatsApp launched Poll feature in late 2022, where it allows you to ask a question and add up to 12 different options poll responders can choose from. WhatsApp Poll are handy when you want to reach a consensus about a certain topic in a group chat. But there are certain limitations around Poll that may be causing users to be not able to reach to a final conclusion on a plan.

1. Poll are ever lasting in nature. They do not have a definite closing cue. People can change their votes which can lead to planning issues.
2. Poll creators cannot remind the users to vote.
3. There is no dedicated screen to look at all Poll in one place.

4.1 Assumptions

Our solution shall be built on top of Poll to enable users to make plans. Following assumptions are made: -

1. Poll feature shall continue to work and support the current functionality as it does currently.

4.2 High level Proposed Solution

Poll is a great feature to come to consensus on single task activities but has its own limitations when it comes to actually finalizing on a plan among the users of a group. This can be frustrating for the hosts and planners who come up with ideas for their weekend plans or any excursions and occasions. We will be enhancing the Poll feature to complete the user journey to support our Plans features.

4.3 Minimum Viable Product

1. Add a new tab in WhatsApp interface under the name of Plans.
2. Add a new option in the Poll asking "Create Poll for a Plan".
3. All Plans shall be visible under the new tab Plans inside WhatsApp.
4. Poll Creator shall be able to remind the users to vote on the Poll created for the Plan.
5. Users other than the Poll creator for the Plan shall be able to view the progress of the votes in the Plans tab.
6. Poll creator shall be able to publish the Plan after the votes are concluded and put it in the form of a message in the group from which Poll for Plan was created.

4.4 Detailed User Story

Goal: - To help hosts and planners in a WhatsApp group to create, decide and finalize on a plan that involves single task activities such as dinner venue, movie night etc.

Business Justification: - Hosts and planners are finding it difficult to find a middle ground when finalizing a plan. This story will cover this problem and explain the solution that will help users to come to a consensus around a plan.

Impact Area: - WhatsApp Main UI Headers, WhatsApp Poll, WhatsApp groups and chats

Approach: -

1. We will divide this user story from the perspective of Poll Creator, Group Admins and users participating the Poll for Plan.
2. Poll Creator

- a. User shall be able to see a new option in the Poll while accessing it from the attachment icon of a group or user chat.
 - b. This option shall be named "Create Poll for a Plan".
 - c. It will be a simple toggle button that shall reside above the current "Allow multiple answers" option.
 - d. Currently "Allow multiple answers" option is selected ON by default. With the introduction of this feature, it will be selected as OFF by default as to create a Poll for a Plan users should not be allowed to give multiple answers in order to simplify the planning process.
 - e. Once "Create Poll for a Plan" is selected as ON, "Allow multiple answers" option shall be disabled for any user action in OFF state. And user shall be asked to give the Plan title.
 - f. Users (group admin, poll creator, other users) shall not be able to change their votes after voting when Create Poll for Plan is selected.
 - g. Current limitations shall remain in place regarding the number of options with which Poll can be created which is 12.
 - h. Current limitations shall remain in place regarding the number of users with whom poll can be created.
 - i. Poll Creator shall be able to track the progress of the Poll for Plan under the new introduced Plans section in WhatsApp UI. The listing of plans shall be sorted according to the latest Plan on top and oldest in the bottom of the listing.
 - j. The Plan shall be visible in the form of cards with title given by the user while creating Poll for Plan followed by the group name/chat with user. Ex Dinner plan in Family group, Dinner plan with Sam.
 - k. Poll Creator shall be able to search a Plan with the Title they had given at time of creating the Poll for Plan, the group name in which Poll for Plan was created and the chat in which Poll for Plan was created.
 - l. On clicking the card, Poll creators shall be able to view the voting progress as to which user has voted for which option with their number on right and date and time stamp at bottom as per the current functionality.
 - m. At the bottom of this page shall be an option Remind users and Create Plan.
 - n. Poll creator shall be able to click on Remind users and users who have not yet voted in that group/chat shall be notified. Ex – Sam has asked you to vote for dinner plan in Family group.
 - o. On click of Create Plan user shall be asked to input a title for the plan and that shall be sent as a message in the group/chat in which Poll for plan was created.
 - p. Users shall be notified of the plan via notifications too. Ex – Dinner plan at 8 pm, Hyatt created in Family group
 - q. Once a Plan is created, remind users and create plan option shall be no longer visible and the cards shall have a tag Plan created in the listing page.
 - r. Poll creator shall have the option to Cancel plan at any time when Planning is in progress by clicking the Cancel plan option that appears by long pressing the plan card.
 - s. On clicking cancel plan, notification shall be sent to all users. Ex Dinner plan cancelled in Family group and that plan shall no longer be visible in the listing page of any user.
 - t. Poll creator shall be notified when any user has voted.
3. Users of the group/chat other who are voters. Voters are everyone in the group /chat including admins and poll creators.

- a. All users of the group chat in which Poll for Plan is created are voters including the Poll Creator and the Admins.
 - b. Once Poll Creator has created a Poll for Plan, users shall be able to see the Poll in the chat with the title given by the Poll Creator.
 - c. Users shall be able to vote only once.
 - d. After they have voted for an option, all options shall be disabled for them.
 - e. Other users should not be impacted who have not yet voted, they should be able to vote as they have not voted yet.
 - f. Users shall be able to view the progress of the Poll for Plan under the new introduced Plans section in WhatsApp UI. The listing of plans shall be sorted according to the latest Plan on top and oldest in the bottom of the listing.
 - g. The Plan shall be visible in the form of cards with title given by the Poll Creator while creating Poll for Plan followed by the group name/chat with user. Ex Dinner plan in Family group, Dinner plan with Sam.
 - h. On clicking the card, Users shall be able to view the voting progress as to which user has voted for which option with their number on right and date and time stamp at bottom as per the current functionality.
 - i. Users who are voters shall not have the option to remind users and create plan.
 - j. Users shall receive notification when Poll Creator has reminded them to vote if they haven't voted yet.
 - k. User shall receive notification when plan is cancelled.
 - l. User shall receive notifications when plan is created.
 - m. User shall not be able to view the cancelled plan in the Plans listing page.
 - n. Users shall be able to search a Plan with the Title they had given at time of creating the Poll for Plan, the group name in which Poll for Plan was created and the chat in which Poll for Plan was created.
 - o. Users who are voters shall not have option to cancel plan.
 - p. Users shall not be able to vote in Poll for a Plan that is cancelled and the vote in chat window shall be deleted for everyone after plan is cancelled.
4. Admins shall have no special powers in context of Poll for Plan. If they are Poll creators, they shall have options as Poll Creators and if they are normal users who are voters, then they shall have options as voters.

Acceptance Criteria: -

1. Poll Creator shall be able to create Poll for a Plan.
2. Users shall be able to vote through the chat window.
3. Users should not be able to vote more than once.
4. User should not be able to vote on multiple options.
5. Voters (poll creator, admins, users of group/chat) should be able to view the new Plans tab in the WhatsApp UI.
6. Voters should be able to view the Plans listing page.
7. Voters should be able to view the progress of the poll in the Plans tab and in the chat window.
8. Clicking on view votes should navigate them to Plan details in the Plans tab.
9. Users should receive notifications of reminder and cancellation.
10. Poll Creator should be able to create the plan and title of the finalized plan shall be sent as message in group/chat and notification.
11. Once a plan is cancelled, it should not be visible in listing page of users.

12. Once a plan is cancelled, vote for plan should not be visible in the chat window and users should not be able to vote thereafter.
13. Poll for Plan should be backward compatible.

5 Execution Plan

Team is made up of 2 backend engineers, 1 front engineer, 1 QA engineer and 1 product designer. Team practices agile deployments and has a quicker release cadence of twice a week.

5.1 Feature Rollout Plan

	Week 0	Week 1		Week 2		Week 3		
	Whole week	1st half	2nd half	1st half	2nd half	1st half	2nd half	
BE	Code analysis				Bug Fixes			
FE	Design Creation	BE integration with FE		Design changes if required as per importance and priority	Bug Fixes			
Designer	User Research for designs	Conduct Usability tests	Incorporate Feedback in design					
QA	Test cases preparation		QA to start testing		QA Test	Regression Test	Test report validation	
Product Manager	Story Grooming		Daily Scrums for updates/queries twice a day					Demo of the feature with stakeholders and team

Feature shall be rolled out in devices only at first with iOS and Android in the Australia and New Zealand. Gradually it shall be rolled out in other countries.

5.2 Success Metric

Number of Poll for Plan created/Number of Plans created *100 = Feature Adoption Rate

6 Future Roadmap

1. Introduction of Poll for Plan in desktop devices.
2. Integration with gmail to mark the calendars for a time specified by poll creator for the plan created.
3. More enhancement in Planning process.

7 References

1. <https://techcrunch.com/2023/05/04/whatsapp-create-single-vote-polls-forward-media-captions/>
2. <https://www.statista.com/topics/2018/whatsapp/#topicOverview>

3. <https://iide.co/case-studies/swot-analysis-of-whatsapp/>
4. <https://balsamiq.com/wireframes/desktop/#> - For wireframes designs