

# WhatsApp for Teams - Synthesis and Ideation

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## Overview

WhatsApp for Teams is a standalone application aimed at improving the team collaboration capabilities of the original WhatsApp Messenger. The target customers are transient or temporary teams such as student groups or early-stage startup teams (who have not yet zeroed down on another collaboration tool such as Slack). Customer interview notes and insights can be found [here](#).

## Tasks Performed in Interviews

Since chats on personal messengers are sensitive, the scope for observational learning was limited. Instead, interviewees were asked to open any of their WhatsApp student team groups (created for assignments) and answer a set of questions regarding their

1. Most common types of conversations
2. Scheduling communications
3. Polling and surveying communications
4. Brainstorming communications
5. Management of reminders
6. Management of files on WhatsApp and
7. Assignment follow-up communications.

## Key Interview Takeaways

The following were some of the key insights gained:

1. WhatsApp student groups are very common among Asian communities. A typical group has an average size of 4, with each member being a part of 2-3 other project groups. These groups are functional and active for 2-4 months.
2. Messages regarding scheduling (when to meet) are the most common type of conversations. These communications can be particularly long during working school days when everyone is busy or has their own priorities and events.
3. Taking opinions of others on WhatsApp group chats is often not effective. Teammates often digress from the opinion polled or sometimes do not respond at all due to (1) the flurry of other responses or (2) the effort and thought needed.
4. Students using WhatsApp manage most of their reminders on Google applications effectively
5. Students do not have any need to star important messages discussed in groups

# Affinity Diagram



Affinity Diagram: The Big Picture

I do not reply to scheduling messages at all if I'm available throughout the day. I wait for others to tell their availability

A link is shared on [whentomeet.com](http://whentomeet.com)

We schedule all meetings at night because people are busy during class hours

An average of 10-12 messages are shared over 2-5 hours before arriving at a time

## Scheduling Troubles

Scheduling gets difficult during school hours. People have different priorities

It's most irritating when a majority of members on the group agree to a time but later some one comes and changes it

What is inconvenient about scheduling over WhatsApp is having to wait for people to respond

We send a number of messages to schedule on WhatsApp and then send an invite on Google Calendar

I keep reminders on my Google Home but I forget if I'm not near it

## Better Reminders

I manage reminders on Google Calendar. Works well unless I get busy

Sometimes I ignore Calendar reminders because there's so many of them

1. Scheduling  
2. Discussions on Deadlines

1. Scheduling  
2. Discussions on Deadlines

1. Scheduling  
2. Project Updates  
3. Greeting Messages

1. Links (Meeting or Google Doc)  
2. Scheduling  
3. Random Banter

## Most Common Types of Messages

Most of my WhatsApp groups have about 4 people

## Typical size of groups

Groups larger than 5 start becoming unproductive

One of my groups has 3 people and the other has 5. Average is usually around 3

The average group size is 4

Average group size is 5 or 6

I've been using WhatsApp since 2010

I've been using WhatsApp since 2012

## User of WhatsApp Since...

Student groups last for about a mini or a semester

Student groups are usually for the duration of the course

## How long are you a part of these groups

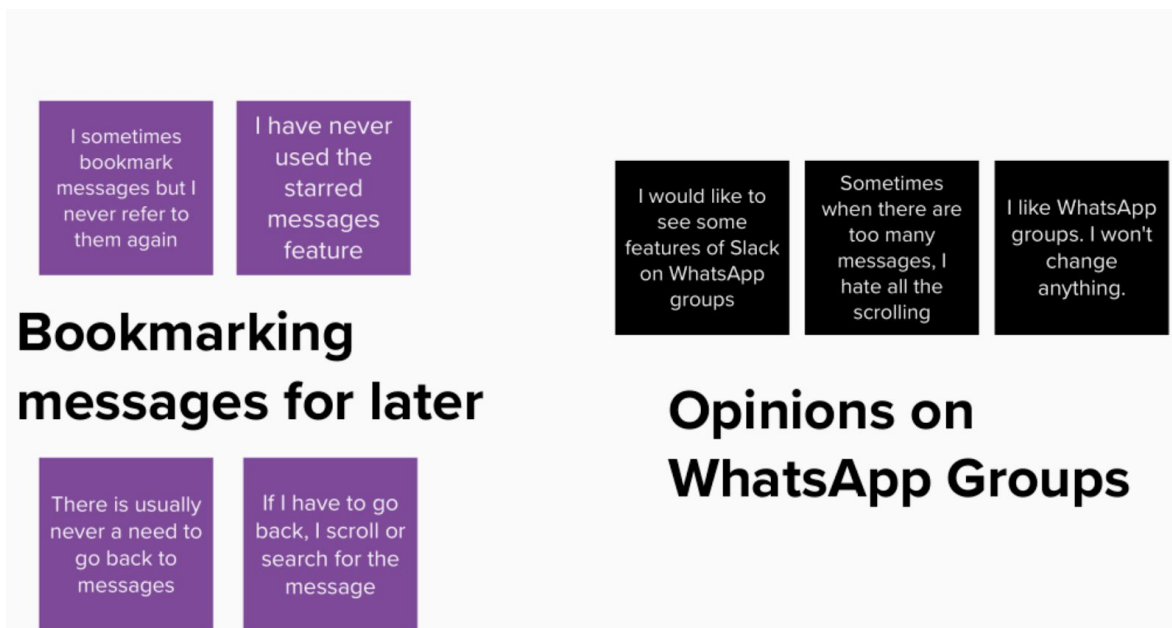
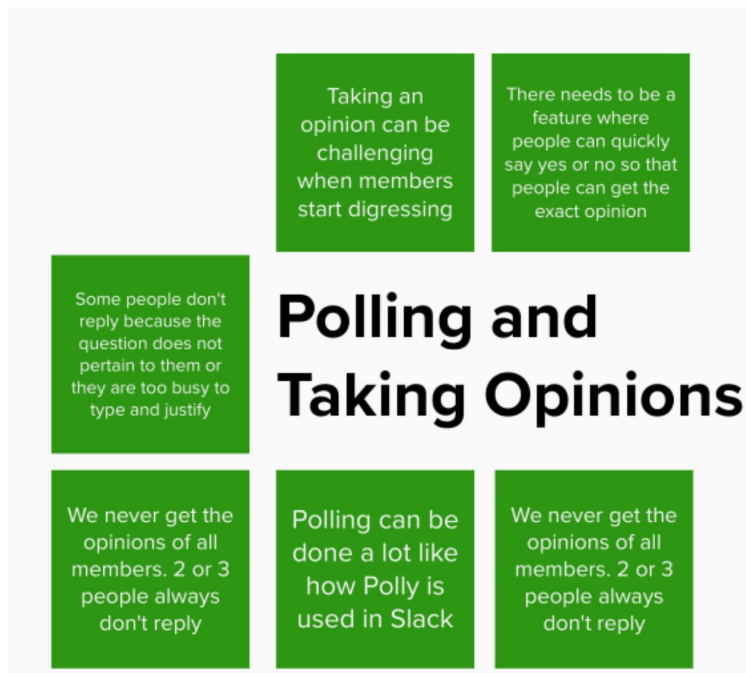
I'm part of 4 WhatsApp student groups this semester

I'm part of 3 WhatsApp student groups this semester

Every semester on average I'm part of 3-4 WhatsApp groups

I'm part of 2 WhatsApp student groups this semester and I've been part of 6 in my previous semesters

## Number of WhatsApp Groups



Figures: Individual Themes and Patterns



**Figure: Top 3 Takeaways**

Three key insights that can be derived from the research are summarized as follows:

1. Scheduling for a meeting among groups is the single biggest pain point that currently exists in using WhatsApp for teams. There needs to a method to quickly poll the availabilities of members without having to send text messages back and forth
2. Students find taking opinions of group members a real pain because some members tend to digress a lot or change the direction of the chat to something else. The person polling needs a method to collect objective responses with maximum participation
3. There is a lot of interaction between WhatsApp and Google Calendar. After a meeting link is sent, some people may still miss the meetings if they have notifications switched off on their phones or their Google Calendar is flooded with events. There can be a better method to remind people of meetings.

## User Personas



**Name:** Raju Venkatasty Birala

Student, Team Member

**Background:** Raju is an Indian graduate student completing the second semester of his Product Management degree. He is presently part of 4 WhatsApp student groups and uses the application daily to collaborate with his team members.

**Goals:**

1. Collaborate with team members virtually to get their opinions and ideas on assignment execution
2. Attend team meetings on time
3. Mark important messages for later

**Quotes:**

“Getting pertinent responses to the questions I ask in the group is really important to me. But I’m often disappointed! My teammates keep digressing on to some other topic”



**Name:** Yuan (Jason) Xu

Student, Team Leader

**Background:** Jason is an American undergraduate student in the final semester of his Computer Science degree. He had to download WhatsApp recently since a majority of his Asian classmates were collaborating on the platform. Jason is a natural leader and is always leading all his student teams.

**Goals:**

1. Schedule meetings quickly
2. Send out reminders to people to attend the meeting

**Quotes:**

“WhatsApp, unlike Slack, has no integration to Google Calendar. Scheduling meetings involves exchanging a few hundred messages before we find a time that fits for everyone!”

## User Flow Diagram

### List of Activities Frequently Performed by Teams on WhatsApp

1. Scheduling meetings with team members
2. Discussion on deadlines and due dates
3. Updates on progress in assignments by individual members
4. Questions to poll the opinion of members on the group
5. Sharing of links to references, videos, and external readings
6. Sharing of non-essential files
7. Sharing congratulatory messages
8. Sharing greeting messages

The task of my choice that I find is most frequent and the one which is the biggest pain point of the current users interviewed is that to do with scheduling a time to meet on WhatsApp. We analyze this activity further

### Activity Analysis - **Scheduling**

#### **Goals**

To find a time to meet that works the schedules of all team members quickly and effectively

#### **Activities**

1. The team leader or (sometimes a team member) opens the group chat
2. He posts the question for when everyone is free to meet
3. Team members respond with availabilities one-by-one
4. Leader proposes and polls for a suitable time based on everyone's replies
5. The group collectively agrees until someone disagrees due to personal conflicts
6. The group repeats steps 4 and 5 over multiple text messages until a time is determined which works for everyone
7. Team leader sends out a Google Calendar invite with or without an agenda of the meeting
8. Team members and team leader attends the meeting when the time comes

#### **Applications Used**

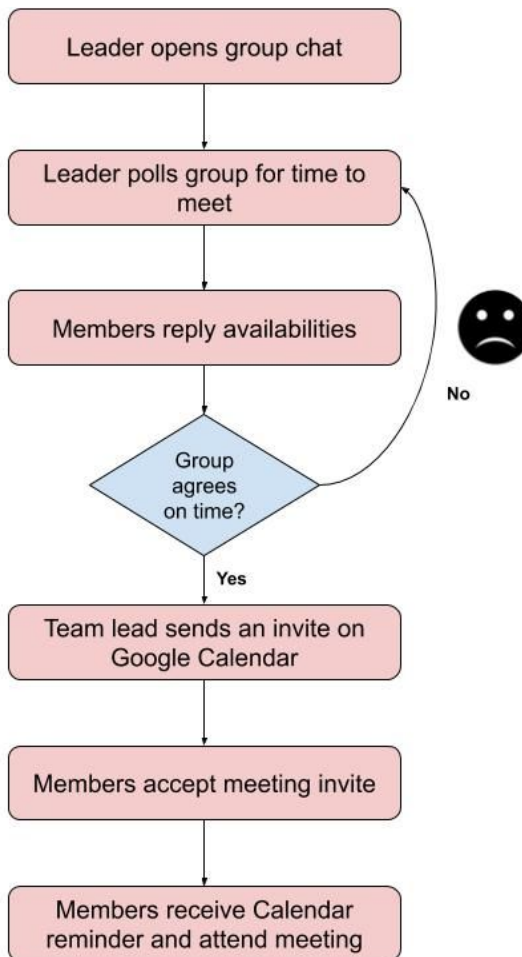
Mobile phones with Android or iOS, WhatsApp Messenger, Google Calendar

#### **Pain Points**

1. Members have to wait for long before a time is fixed and finalized
2. Members have to exchange a large number of text messages before a time is fixed and finalized
3. The team leader has to exit the application and send a Google Calendar invite for the time that was chosen by team members

## User Flow

**Goal:** To find a time to meet that works the schedules of all team members quickly and effectively on WhatsApp Messenger



## Rationale for Selection

Among the key pain points identified during customer interviews, I chose to focus on the issue of scheduling due to the following reasons:

1. Scheduling seems to be the issue that students often find most frustrating among all other pain points identified with WhatsApp. This frustration is often not directed to the app, but to other members of the group who are causing inconvenience. These frustrations and inconveniences may manifest into damaging student relationships if the occurrence is frequent.
2. The issue is dependent on the timeliness of human input as opposed to issues that can be fixed by software or UI improvements alone. Hence designing a solution that allows users to seamlessly schedule on WhatsApp is one that I find exciting since it's quite different from other issues identified.
3. This issue is one that I have personally identified with WhatsApp in the past. Creating and prototyping a design that solves this issue is one I would find personally fulfilling and satisfying



## POV

### POV Statement 1

As a team leader in a student WhatsApp group, I need to be able to schedule meetings with my teammates quickly and seamlessly because we presently end up sending several messages back and forth before a time is fixed that works for everyone.

### POV Statement 2

As a team member in a student WhatsApp group, I need to be able to quickly poll my team members for their opinions because they usually digress into other subjects and I often do not get the response I'm looking for

### POV Statement 3

As a team member in a student WhatsApp group, I need to be reminded of the agenda and time of the meeting more effectively because my calendar is usually flooded with meeting invites and I sometimes forget or miss my meetings.

# Ideation

## How Might We (HMW)

**Integrate from Calendar:** HMW make schedules from Google Calendar available on WhatsApp?

**Integrate to Calendar:** HMW we push out planned times from WhatsApp to Calendar?

**Bringing Reminders to WhatsApp:** HMW display group reminders on WhatsApp?

**Reminder from a Person:** HMW get one teammate to remind another of activity at a specific time?

**Polling Availability:** HMW allow team members to input their free times without sending messages across?

**Given them Choice:** HMW we suggest possible meetings times on the app based on the availability of members?

**Efficient Polling:** HMW allow polling to take place in a manner wherein we record maximum participation with minimal effort?

## List of Ideas

### Problem Statement 1 - Scheduling

Scheduling is often painful with team members having to go back and forth with their availabilities before time is fixed that works for everyone

#### *Ideas:*

1. Allow team members to quickly fill out their availability on the WhatsApp interface when a team lead sends a request.
  - a. The meeting is automatically booked for the earliest availability OR
  - b. The meeting is booked after the team lead sends a confirmatory message
2. WhatsApp automatically predicts possible available slots of members and asks them to choose multiple. Team lead chooses most frequently picked slot
3. WhatsApp automatically checks the synced calendar app of team members and suggests slots that work for everyone. Team votes. Team lead picks the most frequently picked slot.
4. Team members send a voice clip of their availabilities and WhatsApp automatically compiles and chooses the earliest slot
5. Members are taken to an interface of Google Calendar where they quickly fill out their availability. What is followed is similar to step 1.
6. Keep a persistent message on the group chat window until a time is reached that works for everyone
7. Team members can set their availability outside the group. That way multiple student groups can leverage a member's availability data

### Problem Statement 2 - Polling

Asking for opinions on groups can be quite challenging as the response rate is sometimes low and some members tend to digress

### *Ideas*

1. Create a persistent message type that remains on the group chat window until everyone replies to it (increasing participation and response rate)
2. Force team members to answer the poll when they open WhatsApp on their phones or open the chat window (increasing response rate and participation)
3. Allow the questioner to give options in the form of buttons which the poll participants would just have to click to indicate their opinion (increasing quality of response)
4. Send out a different type of notification that would urge participants to respond to the poll more quickly
5. Allow the member taking the poll to dismiss or delete non-relevant answers so that he is getting accurate responses and opinions
6. Allow members to send out quick gesture response to the poll (swipe to agree or double-tap the phone to say no) on their lock screen

### **Problem Statement 3 - Reminders**

There are a lot of activities (reminders, sending ou invites on Google Calendar) that take place outside WhatsApp which can be brought into the app that offers a more holistic experience to the team members

### *Ideas*

1. Meeting invites for Google Calendar can be automatically generated on the app hence reducing the need for team leaders to go outside the app
2. The messenger can automatically drop reminder messages on the group when it is time for a meeting or to check if a specific submission was posted on time
3. Team leaders can schedule messages on WhatsApp to be sent in the future that would remind members of meetings

# Idea Selection

## Ideas Selected and Rationale for Selection

The three ideas selected to be pursued are

1. **Scheduling:** Allow team members to quickly fill out their availabilities on the WhatsApp interface when a team lead sends a request (via a persistent message or separate push notification). The meeting is automatically booked for the earliest availability. The Rationale for selection is as follows
  - a. The speed of finding a common time is the primary issue that we are tackling here. At the same time, we do not want to compromise on allowing users to explicitly make their availability known to the team. Hence this idea finds the perfect balance between speed and information.
  - b. Members can sometimes go on a rant about why they are unavailable for a certain time even though their team members might not require this information. This would help cut down such unnecessary conversation.
  - c. Automatically booking the earliest common availability is desirable over allowing the team leader to choose. The problem we are trying to solve is the tardiness of responses. A human input in between can cause this.
  - d. Voice is perhaps not a desirable medium of input as some people may not be comfortable with talking their availability to their phones out in the open. Hence a touch-enabled input is preferred.
  - e. A person's availability can be centrally tracked by WhatsApp but this would be taking away the flexibility of allowing individuals to prioritize different student groups differently.
  
2. **Polling:** Create a persistent message type that remains on the group chat window until everyone replies to it (increasing participation and response rate). Allow the questioner to give options in the form of buttons which the poll participants would just have to click to indicate their opinion (increasing quality of response). The Rationale for selection is as follows
  - a. Often the person asking the poll is looking for objective responses. The best possible way to get the type of responses this person is looking for is to make his team members choose among the various options he foresees.
  - b. By making the message persistent on the chat window, group members are constantly reminded to answer the poll with an objective response rather than a subjective one. Thus this method helps both to increase participation as well as make it easier on the responders.
  
3. **Reminders:** The messenger can automatically drop reminder messages on the group when it is time for a meeting or to check if a specific submission was posted on time. The Rationale for selection is as follows
  - a. WhatsApp notifications are usually the ones that receive the most attention among WhatsApp users in comparison to notifications from other applications. By sending out reminders on the app in the form of messages, we are increasing the probability of members paying heed to the reminder.

- b. Allowing the integration with Google Calendar although it would appear like a valuable design decision, is probably one that is extremely difficult in turning to fruition. This would require an API level collaboration between the two technology giants Google and Facebook which is very unlikely to happen.

## Reflection on Synthesis and Ideation

I'm overall quite satisfied with the above process I undertook for deciding the design ideas I wished to pursue for WhatsApp Teams. By placing all the information collected from user research on an affinity diagram, it allowed me to get a quick visual representation of where people found the most friction in using the app (i.e. scheduling and taking quick polls of members). After identifying a few of these pain points, I found the divergent thinking exercise in listing down as many ideas as possible quite beneficial. What I did not expect at the start of the ideation exercise is that - some of these seemingly 'stupid' ideas (like having a persistent message on the chat window) have underlying advantages that indeed solve user pain points. Hence some of these ideas can be used to build upon others or be used in combination with others to create a better product experience for users.

Some of the important design decisions I had to take could be summarized as follows:

1. I had to maintain the core philosophy of WhatsApp Messenger in being a simple text messaging application. Hence, I could immediately rule out several ideas around third-party integration which would severely affect the simplicity of the app
2. Voice inputs although they excel at reducing the effort of input from the user side, have not received significant adoption. The % of people who talk to their phones via Siri or Alexa are still comparatively low in comparison to those who interact with a touch interface. Hence I could rule out several ideas around voice for input.
3. I also had to consider the part of the application that's most important in the minds of the user - the one that creates the most cognitive impact. This was important in my decision to pursue WhatsApp messages as a method to remind users of meeting times and deadlines, as WhatsApp messages do receive relatively high attention in comparison to notifications from other applications.
4. A lot of the decisions I had taken in choosing an idea revolved around how myself and my interviewees treat message notifications on my phone and what students around me (my classmates and others in Tepper) usually do to overcome scheduling issues (such as use [www.whentomeet.com](http://www.whentomeet.com) for quick scheduling).

One of the major issues I'd run into while conducting the process is the inability to view a few of these group assignment conversations while interviewing. Interviewees would mostly be unwilling to share their screens on how they use the app, and hence I had to rely on their first-person insights in creating my affinity diagram. Another challenge I'd often run into was that students would often be very quick to jump in and provide solutions to some of the things that they find broken in WhatsApp. Hence I had to take extra effort in directing them back to a story-like narration.

A part of the process that worked well for me was the ideation. I was able to generate a vast number of ideas with some of the brainstorming techniques we'd learned in class, and I found the principle of going for quantity instead of the quality of ideas very useful in the process of

ideation. Zoom as a medium for conducting interviews was also a positive experience given the ability to record meetings and receive auto-transcribed interview notes.

For the next time, I would love to take in-person interviews to more closely assess some of the cues interviewees give out other than their spoken content (facial expressions and body language). I would also love to do affinity diagrams using actual sticky notes as opposed to doing them on Mural. Another technique I'd like to explore further is framing HMW questions for problems outside of digital services (such as physical products).