Challenges in Retrieving Important Messages in WhatsApp

WhatsApp Overview

- ~ 3 billion MAU globally.
- #1 messaging app in India.
- 100+ billion messages sent per day globally.
- World's most widely used messaging platform
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New grid

Business outcome

Improve search satisfaction by reducing friction in message retrival, making whatsapp a dependable system of record for personal and professional communication.

Product outcome

People often dig through WhatsApp chats to find "that one message" — an address, recipe, bill, photo, class notes, etc. Search barely works because chats are chaotic

KPI

- Daily Active Users (DAU) of Search Feature
- Search Success Rate of finding message
- User Feedback Score on Search Experience (via surveys or ratings)
- Adoption Rate of Advanced Filters or Sorting Options in Search
- Usage Frequency of Saved or Pinned Messages for Quick Access
- Rate of reduction in please resend message
- Average scroll time while searching

WhatsApp Competitor analysis

App	Approx % of Market share	Monthly active users (MAU)	Strenghs	Weakness
Whatsapp	~69%	~ 3 billion users	Reach & habit	Message retrieval
Telegram	~23%	~1 billion	Content first & groups	Network effect
Microsoft Teams	~7%	~ 320 Million	Structured work chats	Limited reach
Slack	~1%	~37 Million	work first	Small user base

Source: Meta, Microsoft, Salesforce investor reports; Telegram official blog; industry aggregations (Statista, DataReportal).

Target Audience And User Persona

Target Users - Business owners and Working Professionals - why?

- These people are wide and frequent users of whats-app both for their work and personal purpose.

- They are mostly tech savvy and make optimum use of whats-app primarily for work, sharing information/ documents and group communication.

- They mostly rely on whats-app for messaging, chat, share photos, send important documents, immediately without delay and to reach out to people thru audio and video call.

- They prefer speed and quick retrieval as it impacts their efficiency and quick decision making.
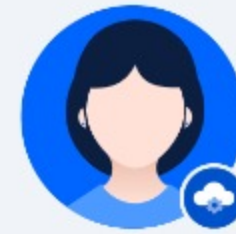
Small business owner Rupa - 38 years
she does small retail business from home.

Behaviour
- she uses whatsApp as her primary tool to share about her products and photos to her customers.
- she also manages her other works like receiving orders and payments thru WhatsApp

Pain Point
- she gets frustrated scrolling for long time.
- she is not able to search and find her previous orders and bank details and reply promptly.

Maths Tuition Krishna - 42 years
He is school teacher also runs tuition classes as after school privately.

Behaviour
- He mostly uses whatsapp to share study materials and assignments to his students
- He also prefers his students to submit the assignments thru whatsApp

Pain Point
- He is unable to do his work efficiently as his whatsApp gets loaded.
- He is unable to remember the exact key words to search for the document

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Techie Arjun - 42 years
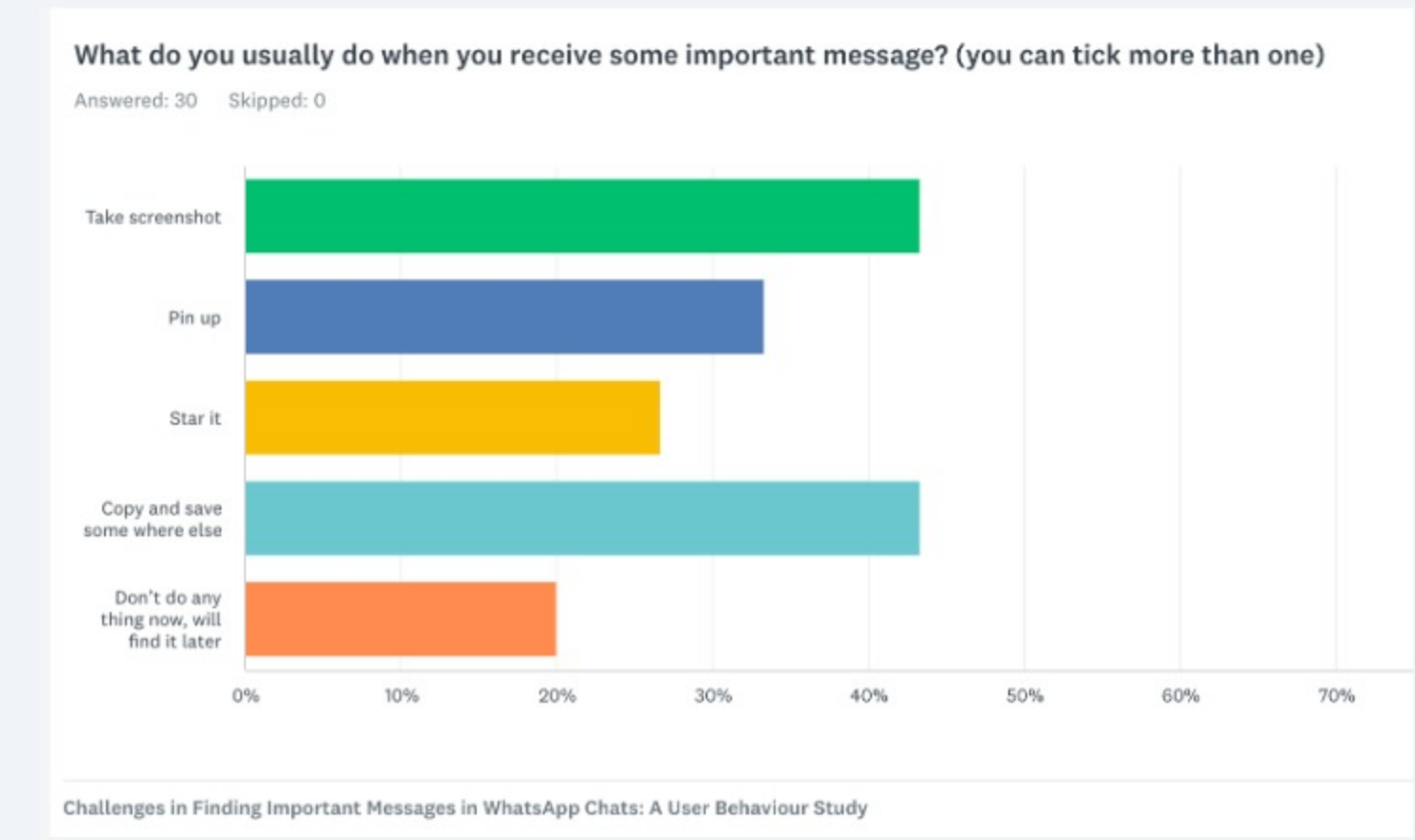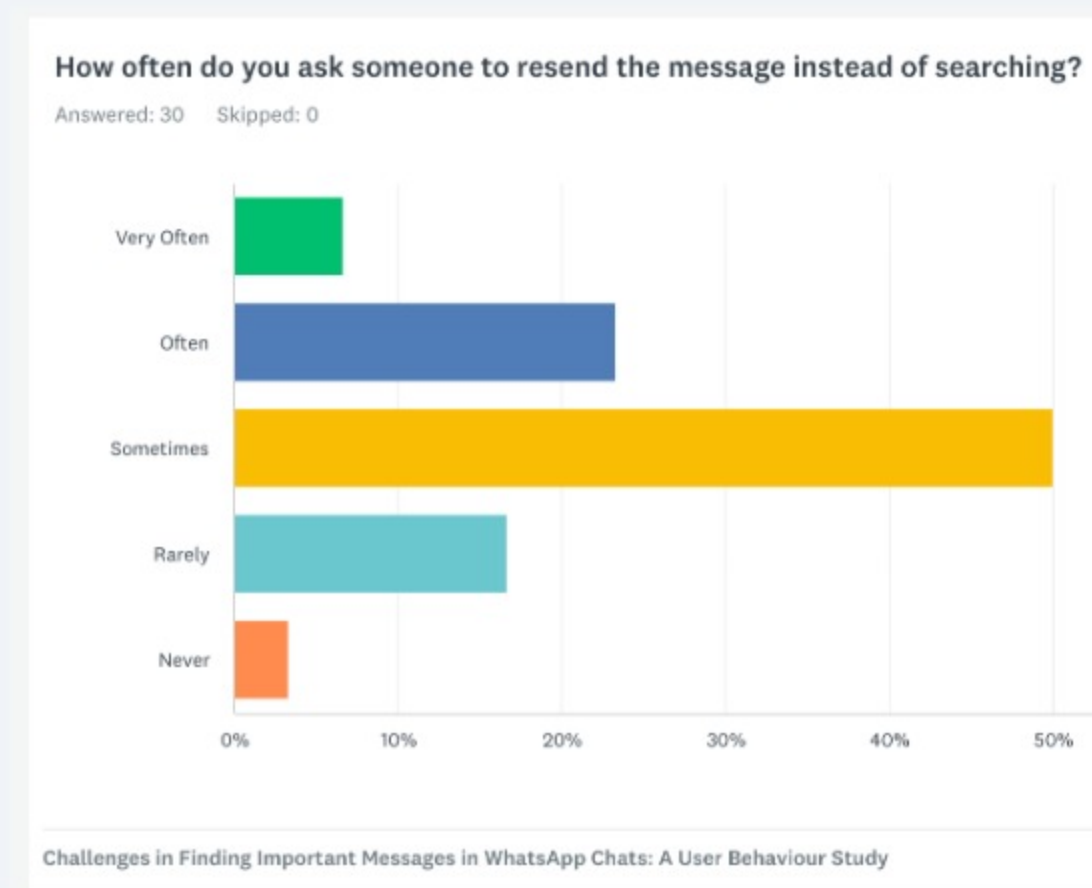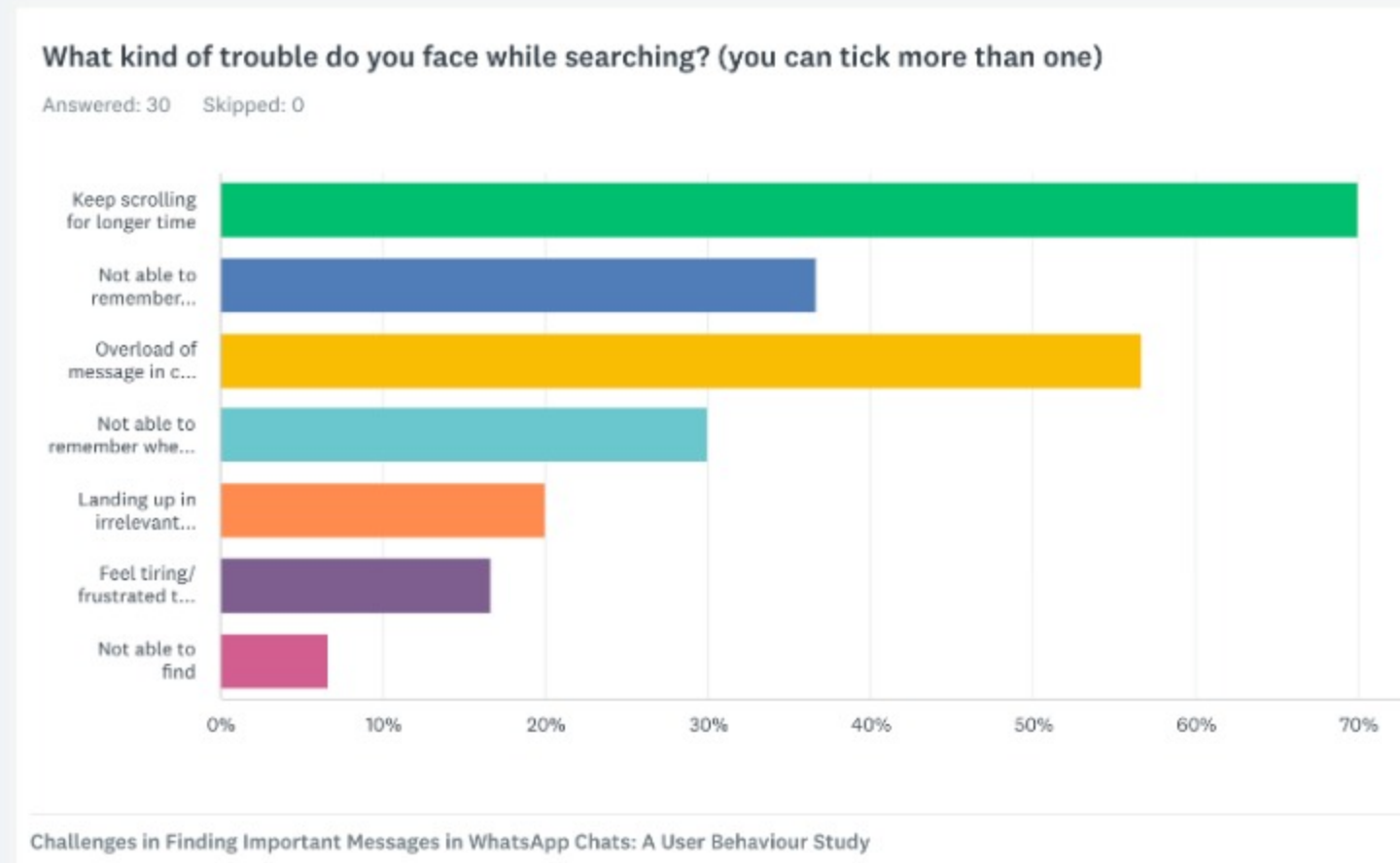He is a project manager in a mid size tech firm

Behaviour
- He mostly uses whatsApp to communicate with this colleagues, clients, vendors
- He feels quickness is really important to efficiently coordinate with every one

Pain Point
- He is unable to find old messages sent by his clients and respond quickly.
- He also struggles to search and find things like the bills and tickets details received from his vendors and often asks to resend.

Insights from user research

- 30 respondents User research and 6 interview shows following data

What kind of trouble do you face while searching? (you can tick more than one)
Answered: 30   Skipped: 0

How often do you ask someone to resend the message instead of searching?
Answered: 30   Skipped: 0

What do you usually do when you receive some important message? (you can tick more than one)
Answered: 30   Skipped: 0

70% say they scroll for long time   **50% ask to resend the messages**   **43% copy and save some where else**

Goals And Metrics

High Level Goals

- Enable working professional to quickly find and retrieve important messages of WhatsApp with minimum effort

Non Functional Metrics

- Increase in chat message loading time
- Increase in the bandwidth of message loading in WhatsApp

Functional Metrics

- % of increase in new search feature adoption
- % of increase in active users and user retention
- % of reduction is search time by the users
- % of increase in user satisfaction level
- % of rate of reduction in resend messages request

Problem Definition Canvas

Problem Statement

Working professionals and business owners struggle to retrieve important information from WhatsApp due to high message volume, excessive scrolling, and dependence on exact keyword search—leading to time loss, frustration, and repeated requests to resend information.

Who is facing the problem?

Working professionals and business owners who are wide and frequent users of whatsApp and use it primarily for work, sharing information/ documents and for group communication.

Why solve this problem now?

1) Pain points can be addressed by mostly an improvement and extension of the existing product feature as it is one of core activity in WhatsApp.

2) Increased reliance on WhatsApp for work.

3) Lead to high customer retention in competitive scenario.

4) Giving the users value of time saving leading to high brand image and out stand in the market.

Value for business

1) Increased active users.
2) Increase adoption in search option feature.
3) Increased customer satisfaction
4) Increased users trust
5) Increased brand image.
6) Reduction in resend message

Value for target Users

1) Increased user experience.
2) Increased efficiency in their work
3) Reduced time loss and frustration
4) Reduced other options to save important messages

Ideation and Rice framework

1) Advanced message filtration - Enable the users have advanced filters to find message the quickly reducing scrolling time

2) Quick save option - Enables users to instantly save important messages in a separate folder immediately when received to retrieve later quickly.

3) Relevant word search - Enable the users to use only relevant words to search instead of depending on exact key words and to prevent frequency of resend options

4) Reminder option - Enables to users to set reminders and WhatsApp will send notification/ reminders to the users to remind on the important dates or meeting

Rice Calculation

FEATURES	Reach(1-10)	Impact(1-5)	Confidence(0-1%)	Effort (1-10)	Total
Advanced message filter	6	3	0.8	5	2.88
Quick save option	9	5	0.9	5	8.1
Relevant word search	6	3	0.7	5	2.52
Reminder option	7	4	0.7	4	4.9

2.88
Advanced message filter

8.1
Quick Save Option

2.52
Relevant Word Search

4.9
Reminder Option

Solution and metrics

Quick save option -
Enables the users to save important message to a **separate folder with full message** to Links, documents, images. instantly when received, to use it later

Benefits of proposed new feature

- Quick save option enables instant saving of important messages to organised folders effortlessly for later retrieval
- Reduces scroll time through lengthy conversation histories
- Easy access to saved folders (links, documents, and images)
- Less reliance on exact keywords searching
- Fewer resend requests needed as important content remains accessible in dedicated saved locations

North Star Metrics

- Time to retrieve important message
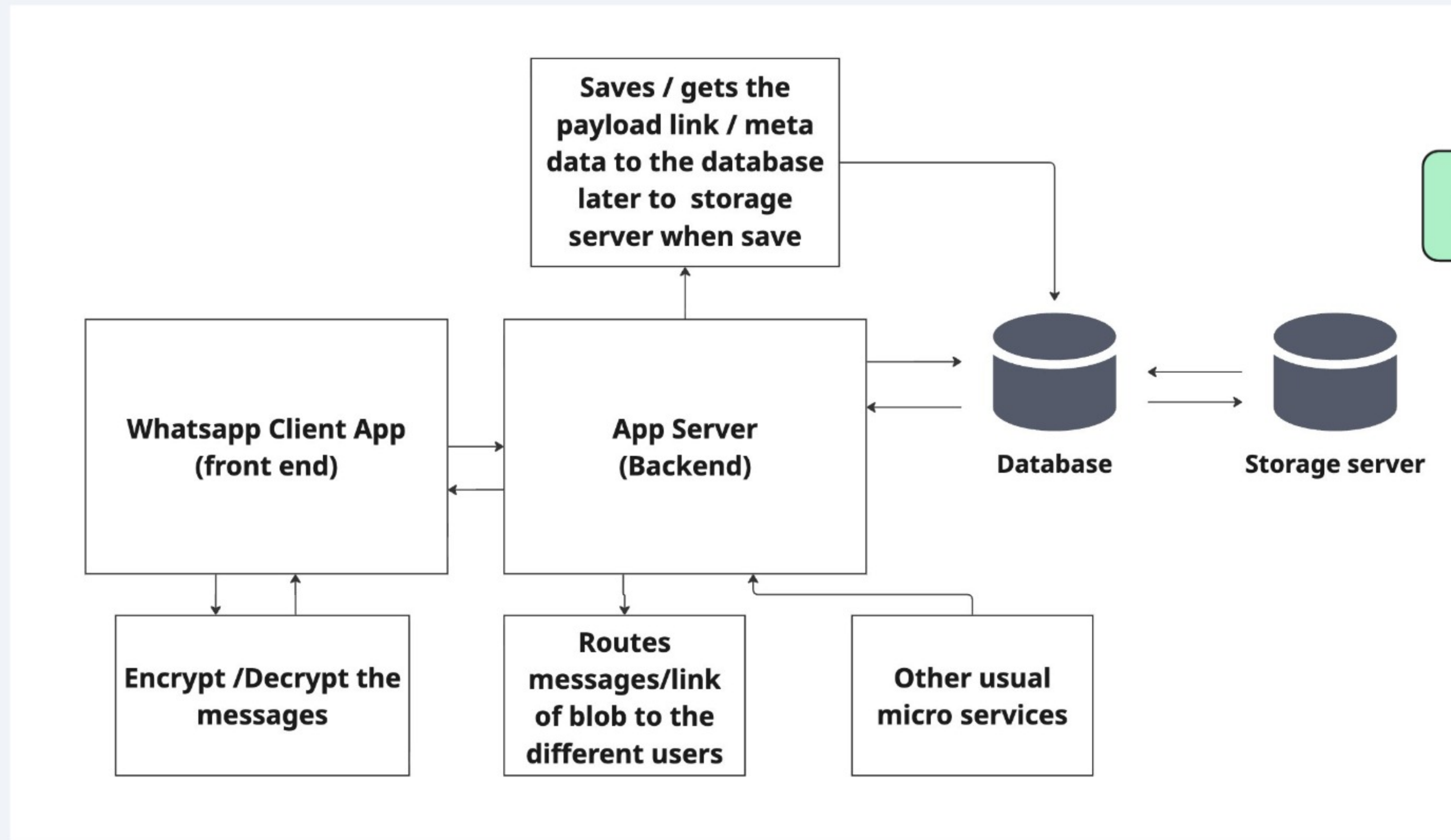
Guard Rail Metrics

- Latency issue
- Storage growth rate
- App performance impact
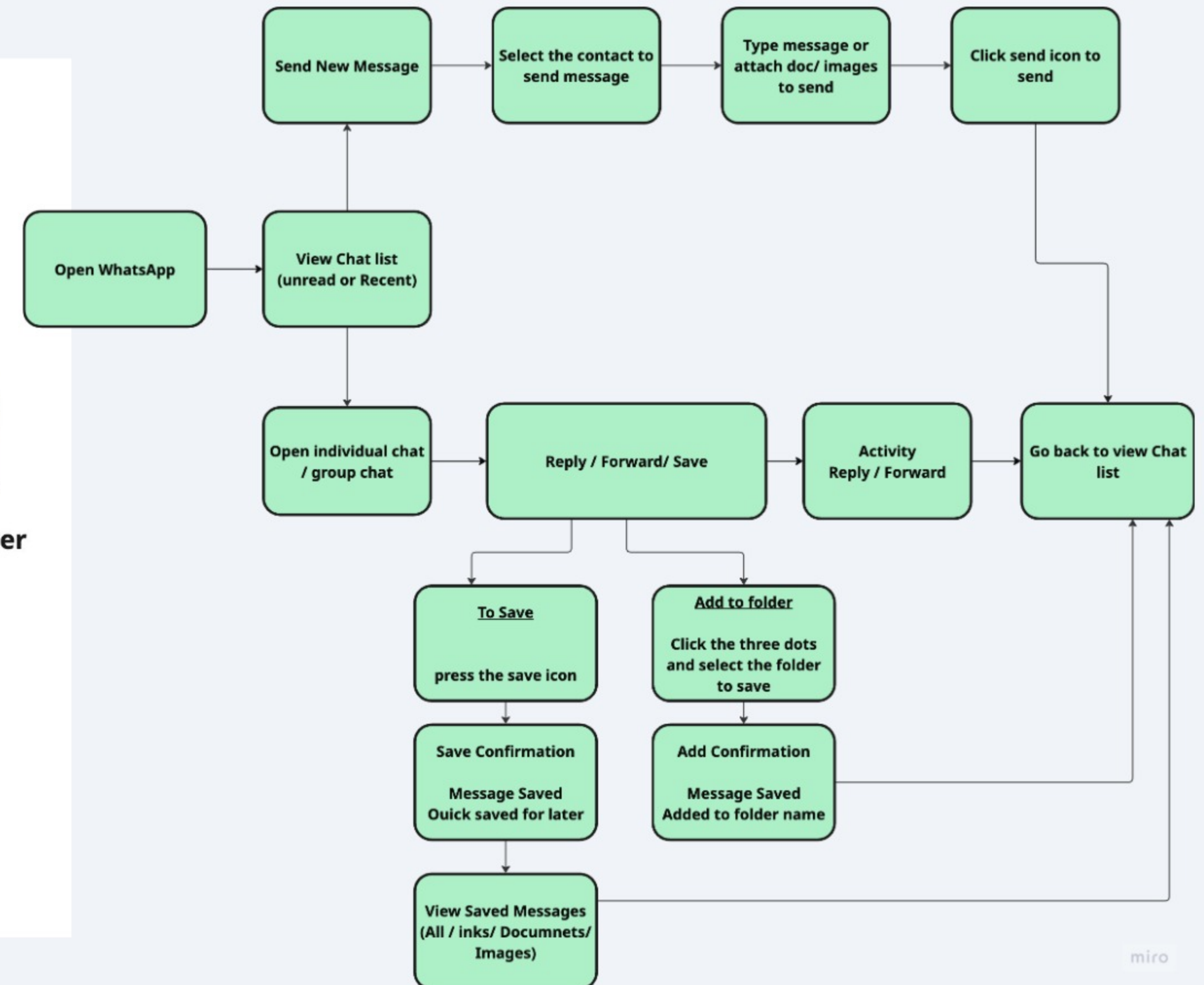- Overload of saved folders.

Leading Metrics

- Rate of adoption of quick save option by the users.
- % of retrievals from Saved Messages vs Search
- Rate of increase in users completing the save option funnel
- Rate of reduction in "Resend" message.
- Rate of click thru on save option icon.
- % reduction in scroll depth during retrieval
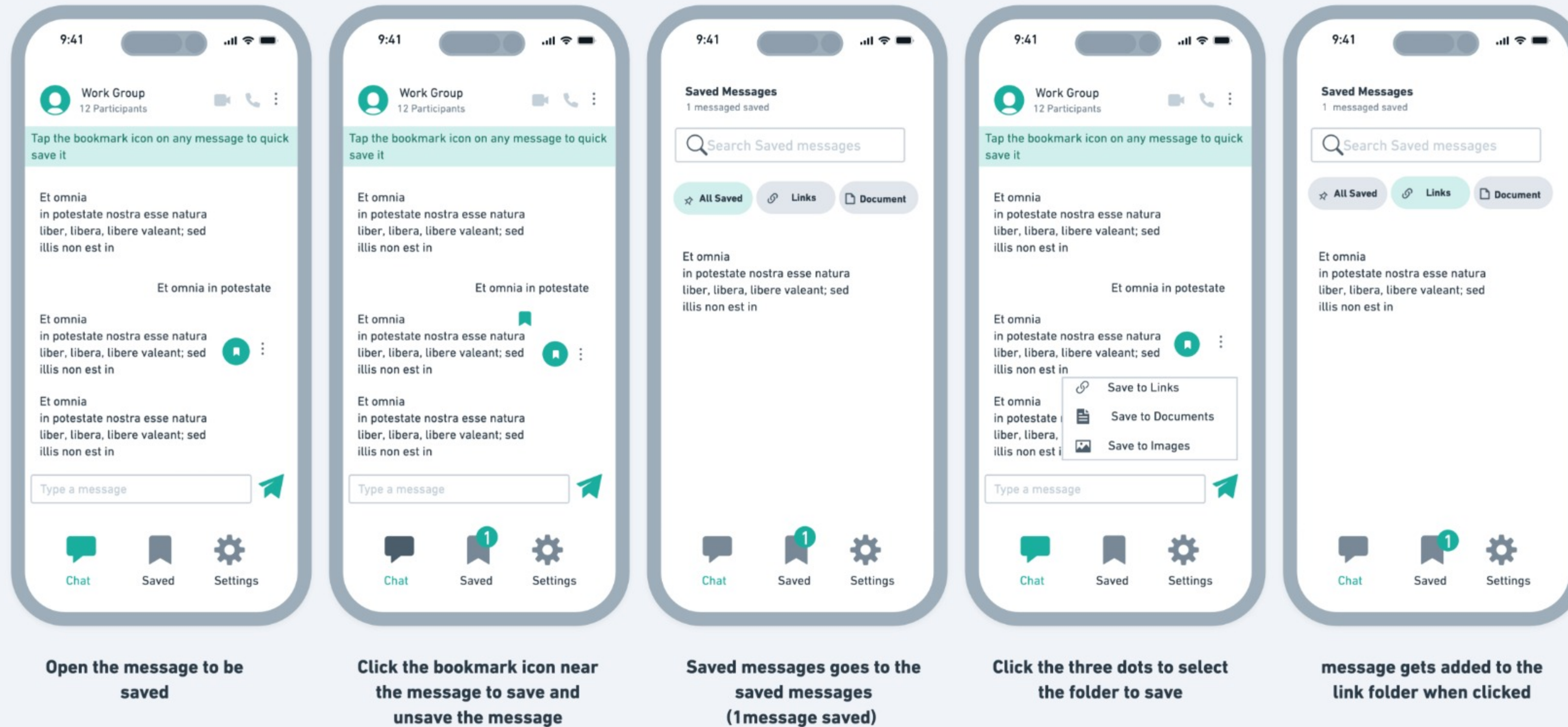
High Level System Design & User flow Diagram

System Design diagram

User flow diagram
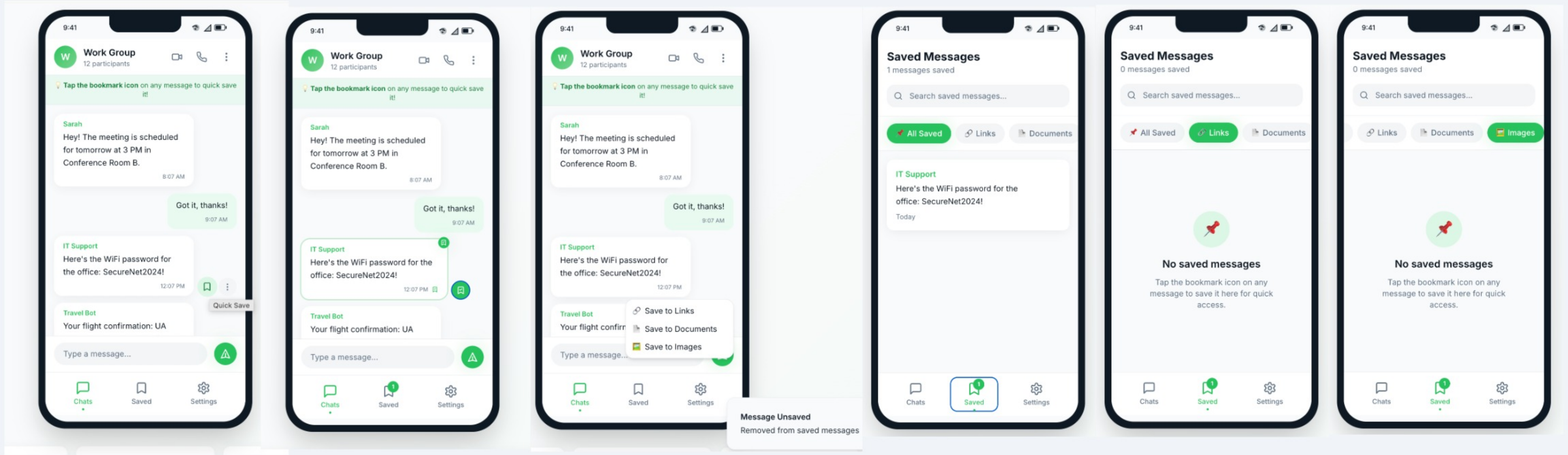
Wireframes of proposed new feature

Open the message to be saved

Click the bookmark icon near the message to save and unsave the message

Saved messages goes to the saved messages (1message saved)

Click the three dots to select the folder to save

message gets added to the link folder when clicked

Made with Whimsical

Risk and Mitigations

- **Increase of storage of whatApp**
- **Lack of awareness of new instantly save message option**

- **Over load of saved message folder**
- **Users save unwanted message thus leading to searching in saved folder also**

MVP of Proposed new feature

Research survey url click here - https://www.surveymonkey.com/r/Q9WF2M3

MVP of the proposed solution click here - https://message-memory.lovable.app/