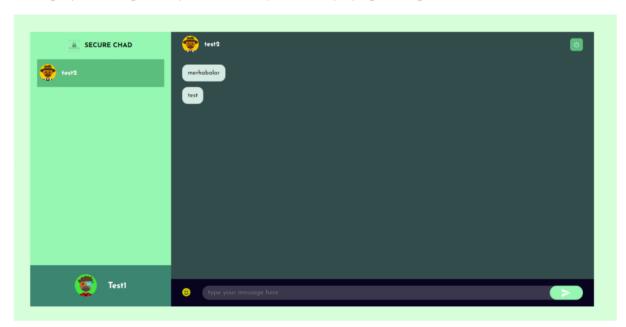
1900005528-Ahmet Kaan Memioğlu, 1900005485-Emrecan Üzüm, 1900003587-Şükrü Erim Sinal Secure Chatting Platform MVP Report

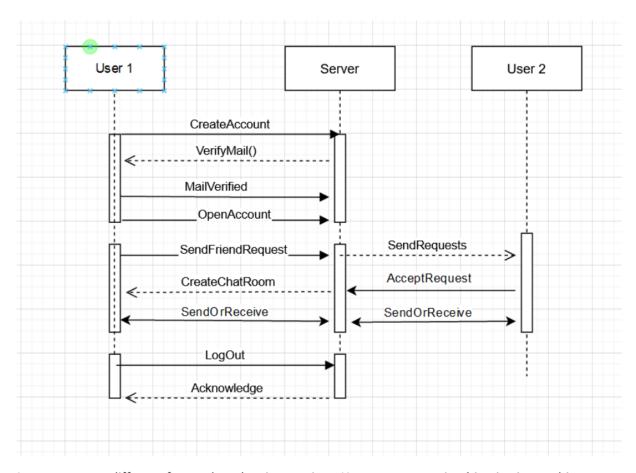
In the MVP version of our project, we have succeeded in presenting a few features, starting with the most important of our functional promises. We have features such as instantaneous display of the message, instant sending and encryption, which are our primary functions. In addition, we added viewing old messages as a prototype to our project's MVP model. We provided the encryption function with the AES algorithm we are developing.

We have prepared a prototype design in order to receive feedback on the design of our project and the ergonomic comfort of the user. We presented a prototype to users in terms of where to send the message, positioning the keyboard, user input and displaying message friends.



We offered the trial version of the project to people who have the potential to use the product. We took note of their feedback and usage experience to review.

In user's point of view, What they can do is, "Users create individual accounts without requiring a mobile phone. Only a mailbox is sufficient to employ account but of course with compulsory mail verification and optional two factor authentication to ensure security of accounts. After getting into main page, they are able add any other people to chat screen via unique user ids or create a group to chat with other people at the same time. Moreover, even if user get lost its internet connection, Web site won't be renew itself totally to re-achieve connection. Because our web site offers offline mode allowing for looking past messages, non-sent messages are waited in queue in order to send them to receivers.



It may not very different from other chatting services. However, our main objective is to achieve same operations not using mobile phone number or the mobile phone itself necessarily. You will only need an email account which is free to create as well and be able to use in mobile and desktop platform

Identifying business idea-

Our app is trying to be a suitable and desirable platform in the Web Based platforms because our competitors are a little bit behind on the web-based parts of their applications.

It is trying to close the gap of those user's needs.

Average cost for MVP for an average app will be figures like "starting from \$20K" and "up to \$223K for an app like WhatsApp." Unfortunately, there's no single accurate number.

Real-time chat apps have changed the way we communicate and are changing the way we sell and buy things. Companies building a chat app create a million opportunities and benefits for the employees, partners, clients, and prospects they may not know yet. Telegram's success shows that the messenger's market still has room for new players and ideas.

The Chat Application market revenue was Million USD in 2016, grew to Million USD in 2022, and will reach Million USD in 2029, with a CAGR of during 2022-2029. Considering the influence of COVID-19 on the global Chat Application market, this report analyzed the impact from both global and regional perspectives. From production end to consumption end in regions such as North America, Europe, China, and Japan, the report put emphasis on analysis of market under COVID-19 and corresponding response policy in different regions.

As more organizations continue to focus on specialized consumer bases, the worldwide Chat Application market is becoming increasingly competitive. Since the beginning of the pandemic, most companies have chosen different techniques to regional market conditions to recover from the pandemic. For example, most of the European customers continue to emphasize brands with a strong purpose and high values, whereas in several Asia Pacific economies, there has been a fundamental change away from critical items. The reports analyze the company activities, SWOT analysis, and economic profile of Chat Application Industry.

Based on TYPE, the Chat Application market from 2022 to 2029 is primarily split into:

Cloud-Based

On-Premises

Based on applications, the Chat Application market from 2022to 2029 covers:

For Android

For IOS

WhatsApp--The most popular messaging app in the world, with over five billion downloads and two billion active users

Facebook Messenger--Facebook's own messaging app isn't too shabby either, reaching five billion downloads a year after WhatsApp

Snapchat--Snapchat kickstarted photo sharing and has since branched out its platform into a fully-fledged social network

Telegram--Popular alternative messaging app in Central Asia and the Middle East, known for strong proprivacy stance

WeChat--China's messaging super-app, with more than one billion users in the country and thousands of mini-programs

LINE--Popular in Indonesia, Japan, Taiwan, and Thailand. Part of Naver and SoftBank's tech conglomerate, Z Holdings

iMessage--Apple's messaging platform has about one billion users, although how many use it as the primary platform is unknown

Discord--Originally built as a communications platform for gamers, Discord has branched out into a whole host of other communities

Signal--Hyper-focused on privacy and security, Signal has built a loyal following of disgruntled ex-WhatsApp and Facebook users

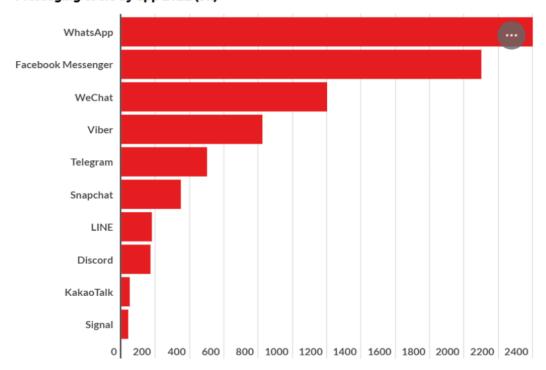
Viber--Another messaging app that has been able to target emerging markets, such as Eastern Europe and the Middle East

Kakao Talk--South Korea's homegrown messaging app, which is also the most popular in the country, with over 40 million active users

The dominance of Facebook and WhatsApp is even more apparent in India, with 92% of all sessions on these two apps. Penetration of Telegram and Signal, which saw its usage skyrocket during WhatsApp's privacy update, has not made much of dent in total sessions.

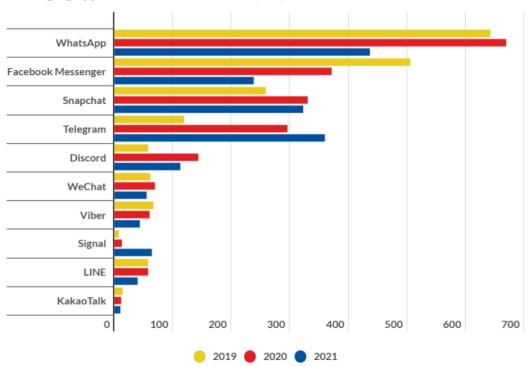
And here is Market Research of the Chatting apps in visual graphics:

### Messaging users by app 2022 (bn)

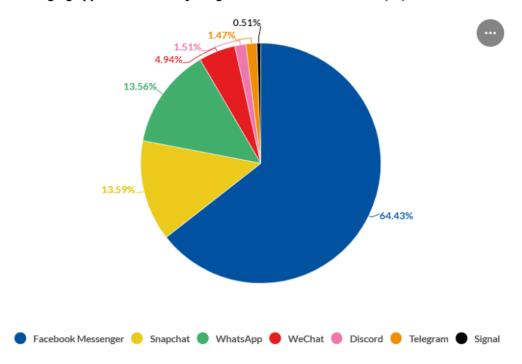


Sources: Company data, TechCrunch

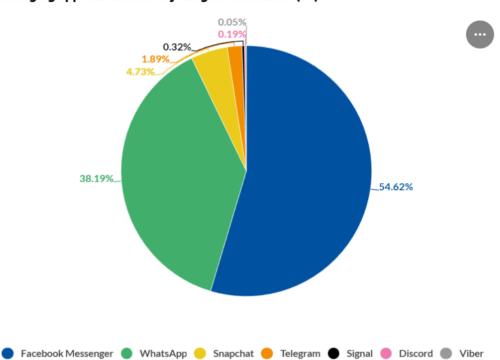
# Messaging app downloads 2019 to 2021 (mm)



## Messaging app marketshare by usage in the United States 2021 (bn)



## Messaging app marketshare by usage in India 2021 (bn)





### Third-party services

User authentication via phone number

#### nexmo

Authentication with social media accounts or email





User data storage











Real-time engine



Socket.io

Push notifications







Emails



Elastic Email

SMS

(ii) twillo Twilio

### Android

iOS

### Back-end Development

Programming language









JavaScript

Express

Framework

Express 4 Ruby on Rails Database

> MySQL MySQL

API documentation



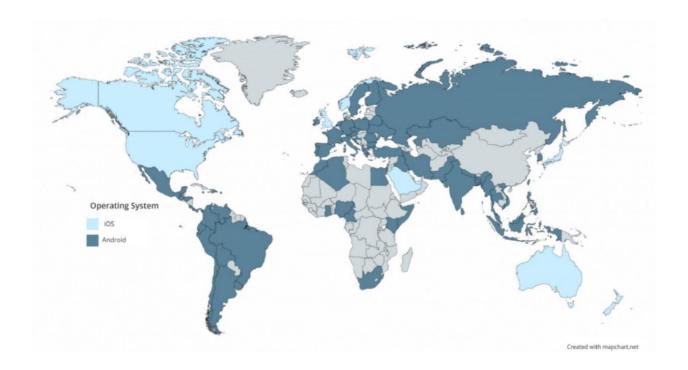
Swagger

Infrastructure

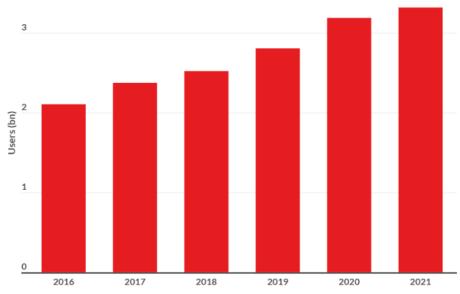




Amazon Web Services



# Messaging app annual users 2016 to 2021 (bn)



 $Sources: Business \, Insider, \, eMarketer, \, Kommandotech$