Moodify
mental health matters

मानसिक बीमारी भी कोई बीमारी है ?
   - समाज

HEADLINES

10 October 2019 | Health

Worldwide, 800,000 people die by suicide each year - one every 40 seconds - making it the second leading cause of death among young people (aged 15 to 29), the World Health Organization (WHO) said on Thursday, spotlighting suicide prevention as the theme for this year's World Mental Health Day.

"Mental health has been neglected for too long,'' Secretary-General António Guterres said in a video message for the Day, saying it needs to be addressed urgently, as a matter "that concerns us all."

Mental health
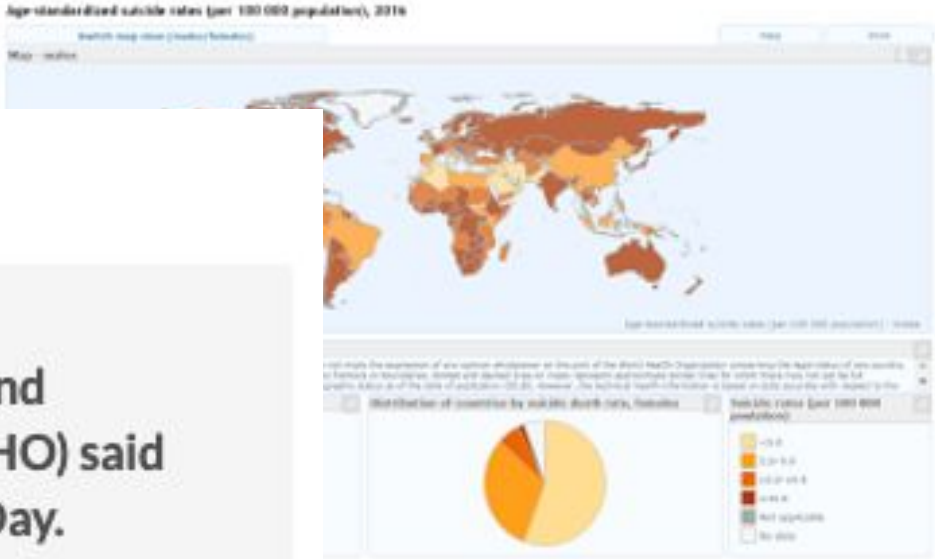
Age-standardized suicide rates: There were close to 800 000 suicide deaths worldwide in 2016. This indicates an annual global age-standardized suicide rate of 10.5 per 100 000 population. The major differences between high-income countries and low- and middle-income countries (LMICs) are that young adults and elderly women in LMICs have much higher suicide rates than their counterparts in high-income countries, while middle-aged men in high-income countries have much higher suicide rates than middle-aged men in LMICs.

View interactive graph

Read more

Suicide	Financing	Human resources
800 000	**< 2%**	**9**
persons approximately die from suicide globally each year (one death every 40 seconds)	of the global median of health budget is allocated to mental health in 2017	is the median number of health workers per 100 000 population
Suicide prevention	Mental Health Atlas 2017	Rate of psychiatrists and nurses

A report by the World Health Organisation (WHO) revealed that 7.5 per cent of the Indian population suffers from some form of mental disorder. Mental illnesses constitute one-sixth of all health-related disorders and India accounted for nearly 15% of the global mental, neurological and substance abuse disorder burden. The treatment gap, which is defined as the prevalence of mental illnesses and the proportion of patients that get treatment, is over 70 per cent. WHO also predicts that by 2020, roughly 20 per cent of India will suffer from mental illnesses. And to cater to this demographic, we have less than 4,000 mental health professionals.

When it comes to physical health, people are so conscious and aware these days. They know everything there is to know: what super-foods eat and what not to eat, what the latest diet fads are, what the most cutting-edge workouts to stay fit are, and how to monitor every aspect of their health with state-of-the-art fitness bands.

THE ECONOMIC TIMES | **Panache**   LATEST NEWS **Alibaba wins exch**

🏠 Home ▾ | Magazines | Panache | ET Magazine | Travel

Tech and Gadgets   Worklife   Cars & Bikes   Lifestyle   Food & Drinks   **Health**   People   Entertainment

Business News › Magazines › Panache › Mental health in India: 7.5% of country affected; less than 4,000 experts available

Benchmarks ›	NSE Gainer-Large Cap ›	FEATUR
Nifty	**Au Small Finance Ba...**	**Aditya**
11,840.45 ↓ -73.0	808.15 ↑ 89.75	Relief 9
		★★★

Mental health in India: 7.5% of country affected; less than 4,000 experts available

By next year, roughly 20 per cent of India will suffer from some form of mental illness.

Why Moodify ??

Inclined towards depression

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Inadequate information

1. Connect with nearby counsellor's
2. Book and connect with nearby yoga classes.
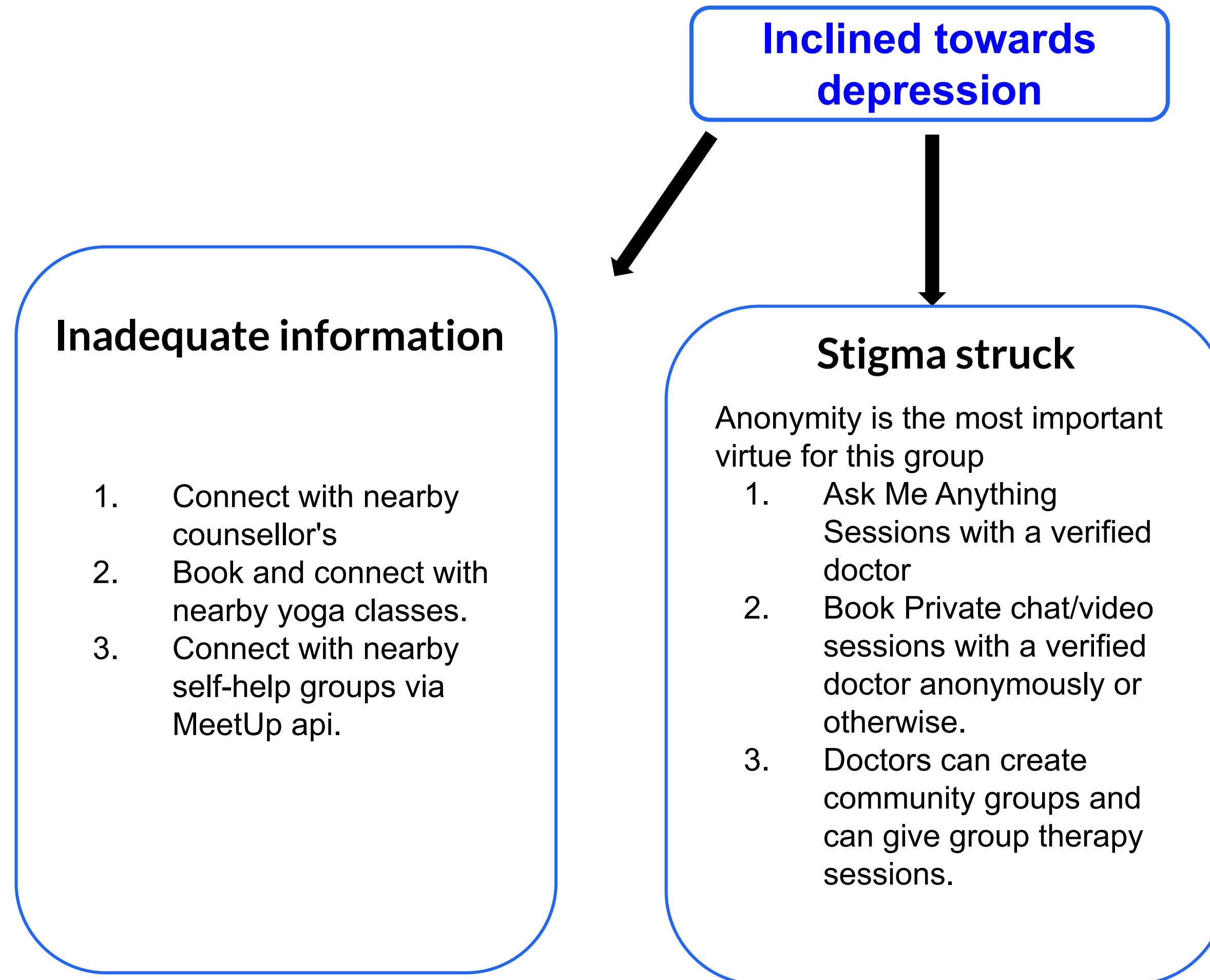3. Connect with nearby self-help groups via MeetUp api.

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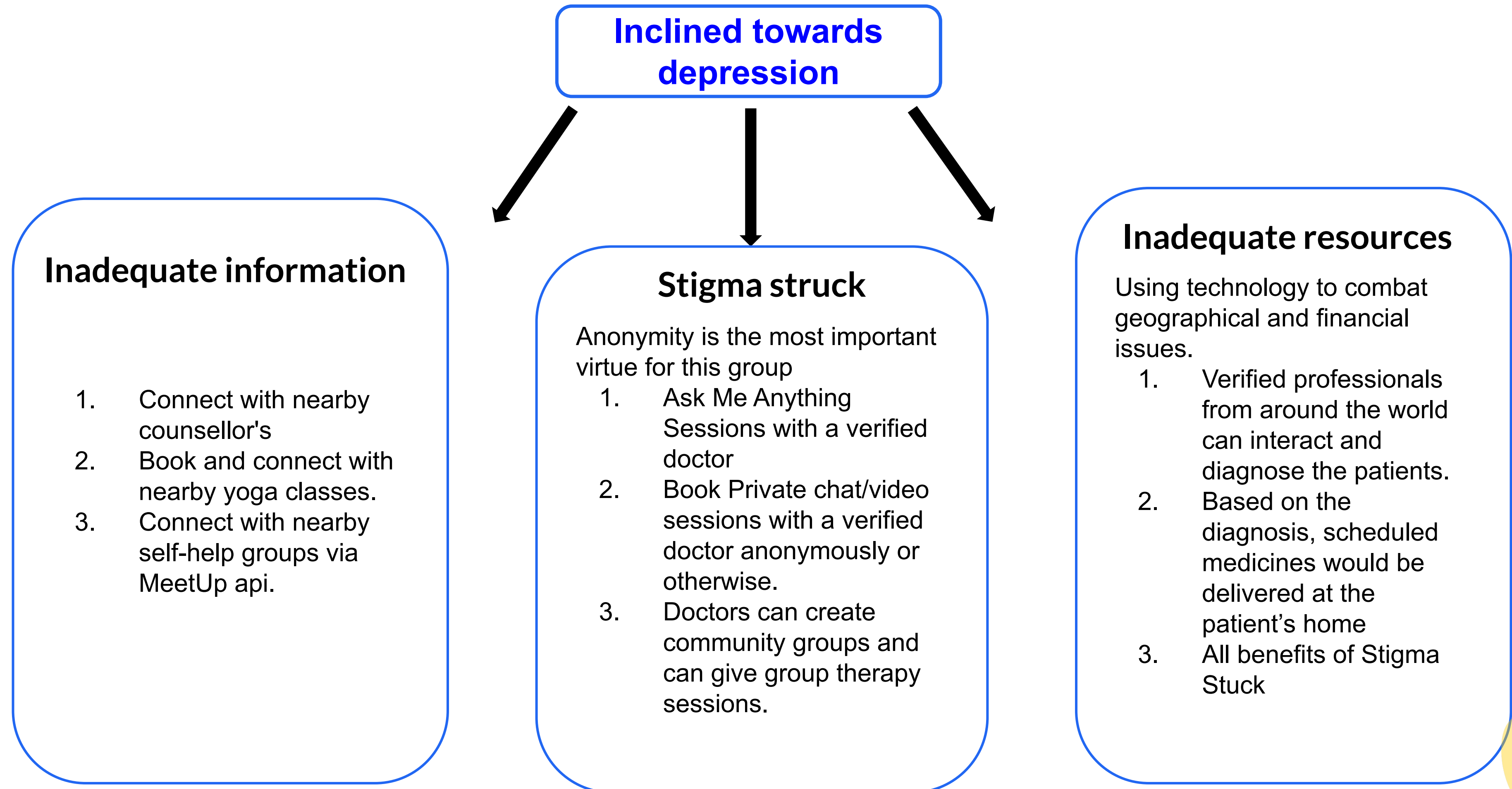
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Stigma struck

Anonymity is the most important virtue for this group

1. Ask Me Anything Sessions with a verified doctor
2. Book Private chat/video sessions with a verified doctor anonymously or otherwise.
3. Doctors can create community groups and can give group therapy sessions.

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Inadequate resources

Using technology to combat geographical and financial issues.
1. Verified professionals from around the world can interact and diagnose the patients.
2. Based on the diagnosis, scheduled medicines would be delivered at the patient's home
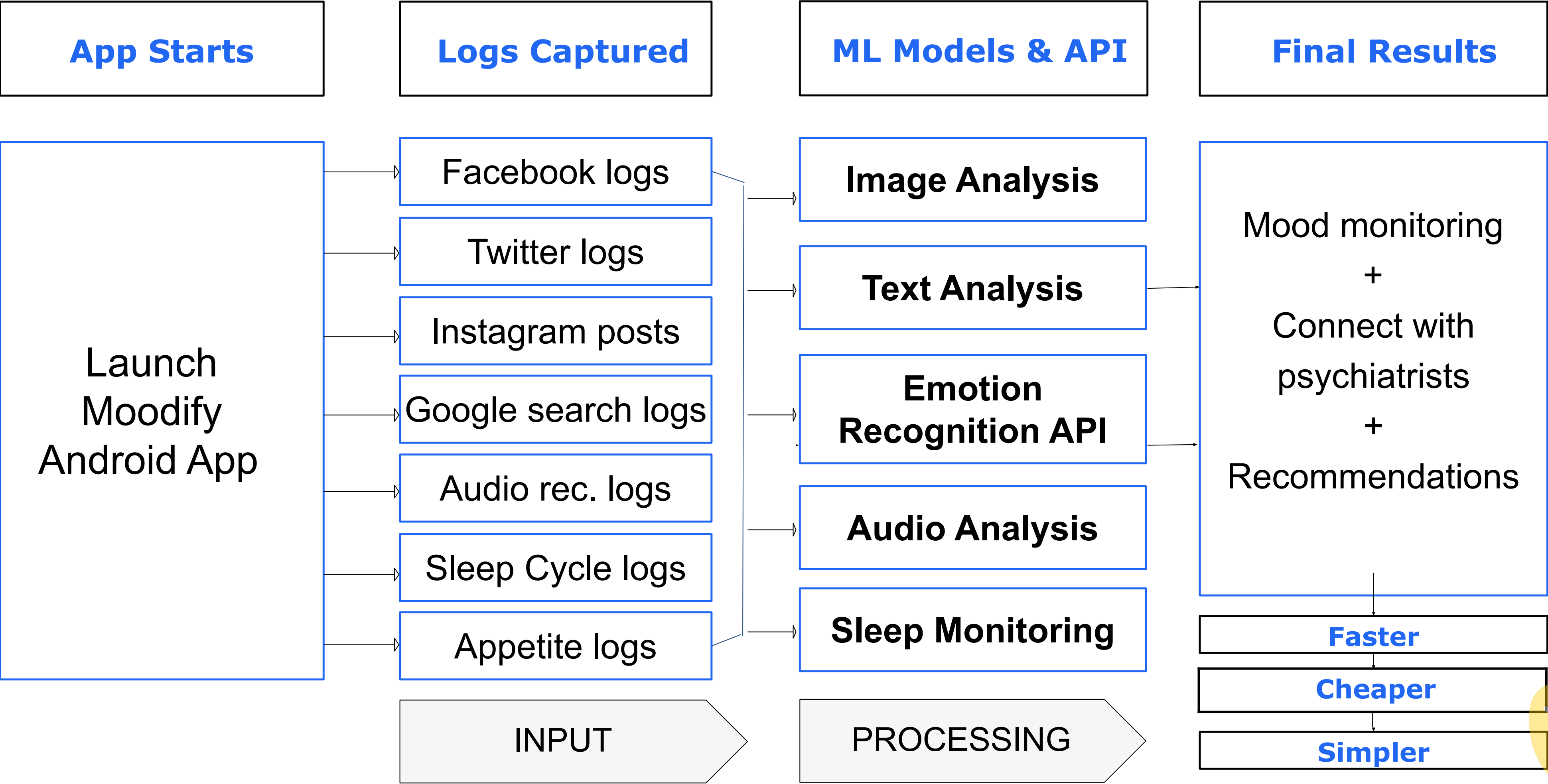3. All benefits of Stigma Stuck

Our Product

Moodify is a mobile app which uses AI-ML for analysing social media interaction and factors such as appetite, sleep cycle for self screening of mental well being. It provides a platform to connect with psychiatrists and counselor in case of possible deteriorating condition.

Socio-Economic Impact

Provides much cheaper & faster screening for otherwise neglected health issues in both rural and urban India making it reachable to all and thus earlier detection of mental diseases and direct improvement in quality of life in the country.

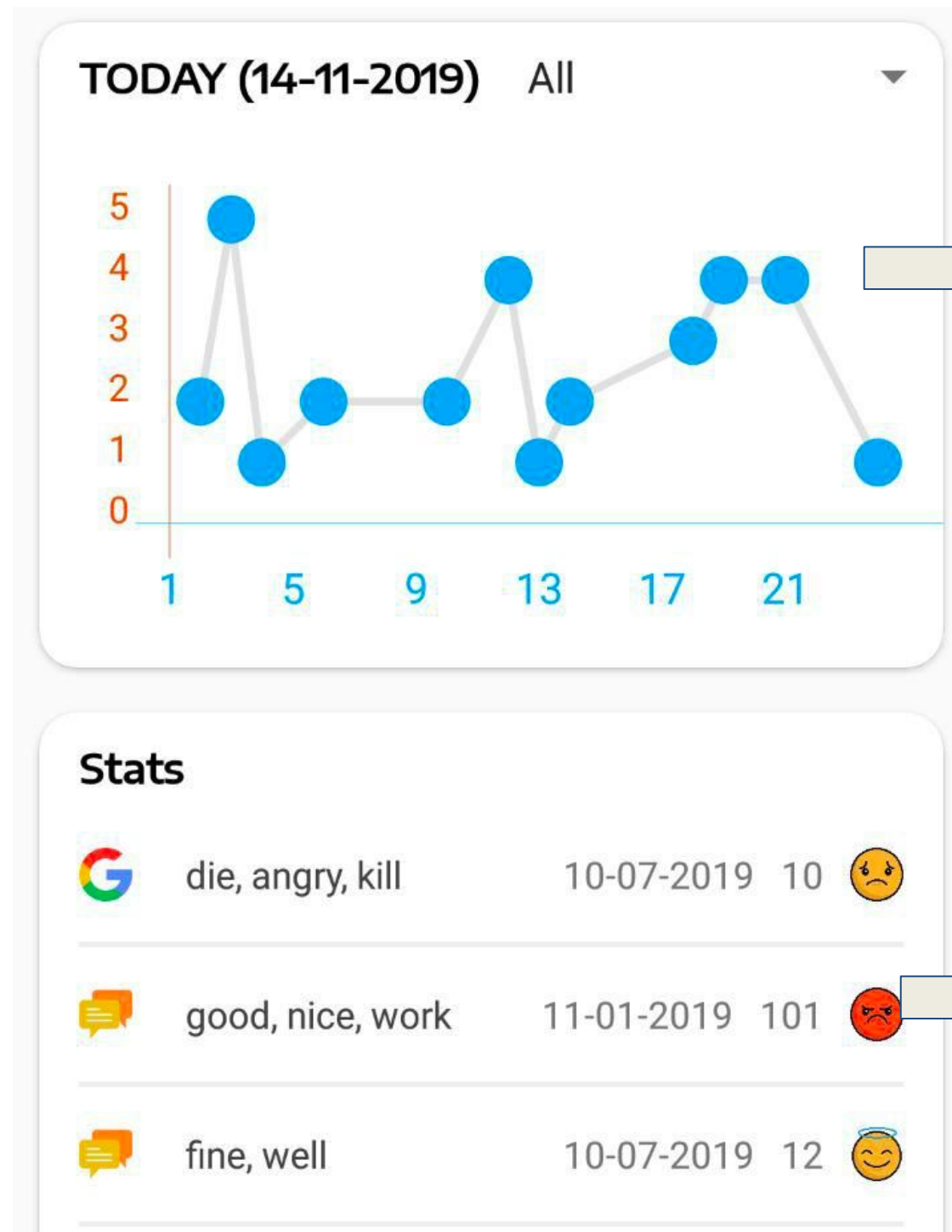# How Moodify works?

App Starts	Logs Captured	ML Models & API	Final Results

Launch Moodify Android App

Logs Captured:
- Facebook logs
- Twitter logs
- Instagram posts
- Google search logs
- Audio rec. logs
- Sleep Cycle logs
- Appetite logs

ML Models & API:
- Image Analysis
- Text Analysis
- Emotion Recognition API
- Audio Analysis
- Sleep Monitoring

Final Results:

Mood monitoring
+
Connect with psychiatrists
+
Recommendations

Faster

Cheaper

Simpler

INPUT   PROCESSING

Analytics

TODAY (14-11-2019)   All

A record graph plotted for score (mapped with mood) vs time to give to give real time changes in probable mood.

Stats

G	die, angry, kill	10-07-2019	10	😠
💬	good, nice, work	11-01-2019	101	😡
💬	fine, well	10-07-2019	12	😊

A columnar view of frequently used negative words from various sources like search history, posts etc along with the corresponding frequency.

ML Models Result

RawalRuchit
I have a new hand bag! It's faboulus !!
0.595 [[0.00228345]]
I blame school for my anxiety and depression
1.0 [[0.99898773]]
Too much homework has a negative impact on the GPA of High school students. Feeling overworked in school
0.926 [[0.34910616]]
Today was a great day, I love my college
0.376 [[0.00022749]]
172.30.21.29 - - [20/Oct/2019 19:06:25] "POST /getTwitter/2019-10-12%2007:15:18 HTTP/1.1" 200 -
typemachine

TWITTER

Instagram

got photo
<Request 'http://172.30.21.126:5000/instaArray' [POST]>
2019-10-19 21:19:29
Testing Image 2019-10-19 21:19:29
['Happy']
2019-10-19 14:09:28
Testing Image 2019-10-19 14:09:28
['Angry']
172.30.21.29 - - [20/Oct/2019 19:06:35] "POST /instaArray HTTP/1.1" 20

Text Analysis - Google logs

.\\n\\nyou\'re alone, walking through the city and all you see is abandoned and destroyed buildings and streets. just like playing fallout 4 and the last of us. i\'m really looking for a \\"soundtrack\\" for this type of scenery.\\n\\nalso, my favorite song from this genre is a gallant gentleman by we lost the sea. i love that guitar work, it\'s just astounding. i feel it completely catches the sad, alone world feeling.\\n\\nalready know the popular bands. "'
[('grieving', 1), ('illness', 1), ('least', 1), ('lost', 1), ('problems', 1), ('serious', 1), ('severe', 1), ('slow', 1), ('strike', 1), ('too', 1), ('worthless', 1), ('depressed', 1.8), ('depressing', 1.8), ('death', 2), ('emotional', 2), ('grief', 2), ('sad', 3.6), ('loss', 4), ('sadness', 7.2), ('depression', 9.0)]
{'grieving': 1, 'illness': 1, 'least': 1, 'lost': 1, 'problems': 1, 'serious': 1, 'severe': 1, 'slow': 1, 'strike': 1, 'too': 1, 'worthless': 1, 'depressed': 1, 'depressing': 1, 'death': 2, 'emotional': 2, 'grief': 2, 'sad': 2, 'loss': 4, 'sadness': 4, 'depression': 5}
172.30.21.29 - - [20/Oct/2019 19:06:25] "POST /typemachine HTTP/1.1" 200 -

Solution

- Moodify serves as a **bridge** between a professional caretaker and the user. We aggregate data and provide exhaustive reports for the doctor to better understand the context of their patient's ailment.

- We also provide real-time **mood based recommendations** which serve as trusted checkpoints in moments of high emotion displays, basically serving as a short term solutions.

Short term solution
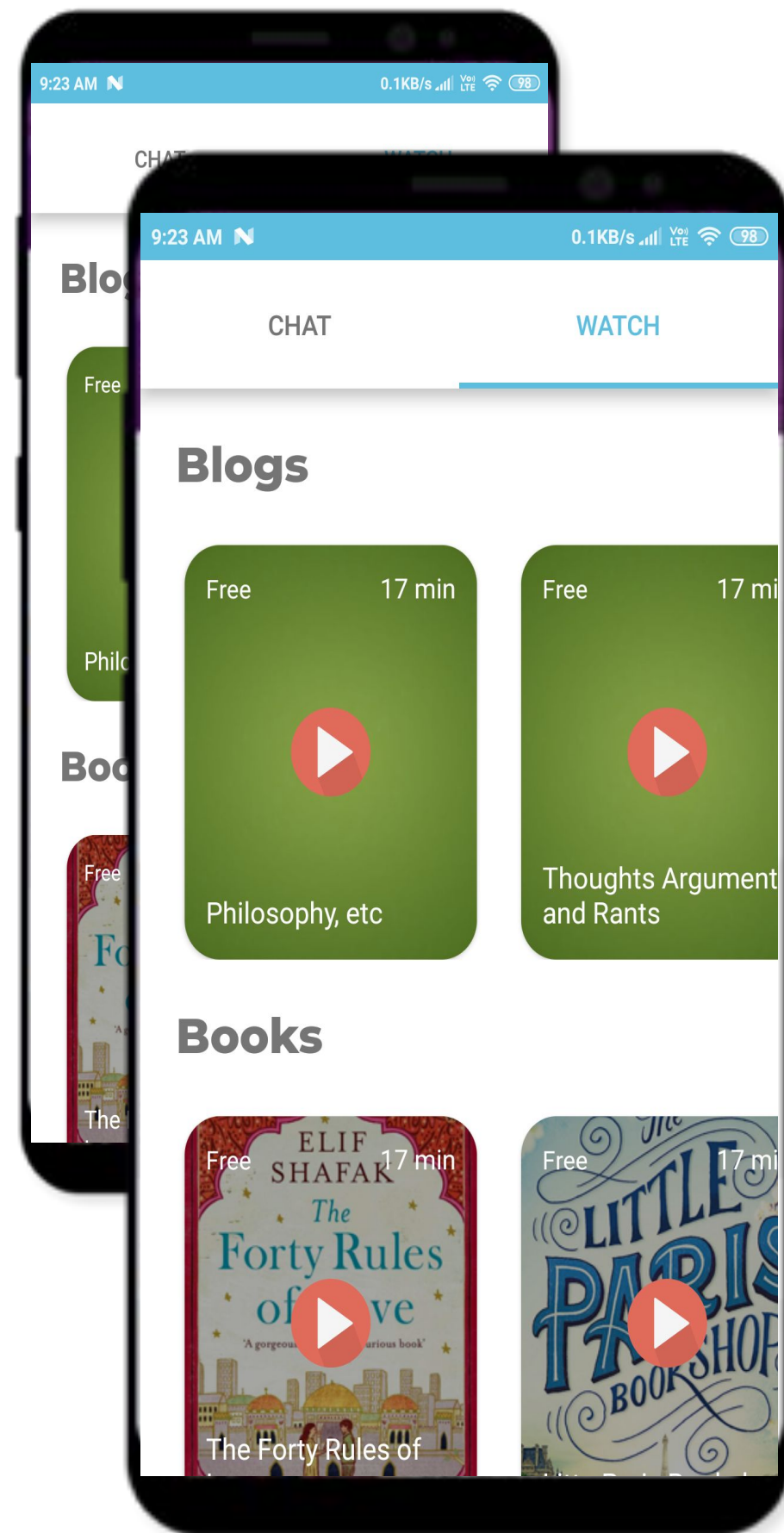
The app provides an interface between the user and the hospitals.

Sensitivity slider for chrome

#1 We realize that the Internet is full of nasty things, our sensitivity slider analyzes content of a webpage and blocks it automatically if flagged above a particular threshold.

Movies

#2 Generating real-time movie recommendations based on current evaluation of user's mood.

Music

#3 Music has more than enough firepower under it's sleeve to feed into ardent emotions as well as lighten the mood when needed. We generate real time suggestions based on user's mood.

Blogs

#4 Recommending appropriate blog-posts to best serve the user based on his/her current mood.
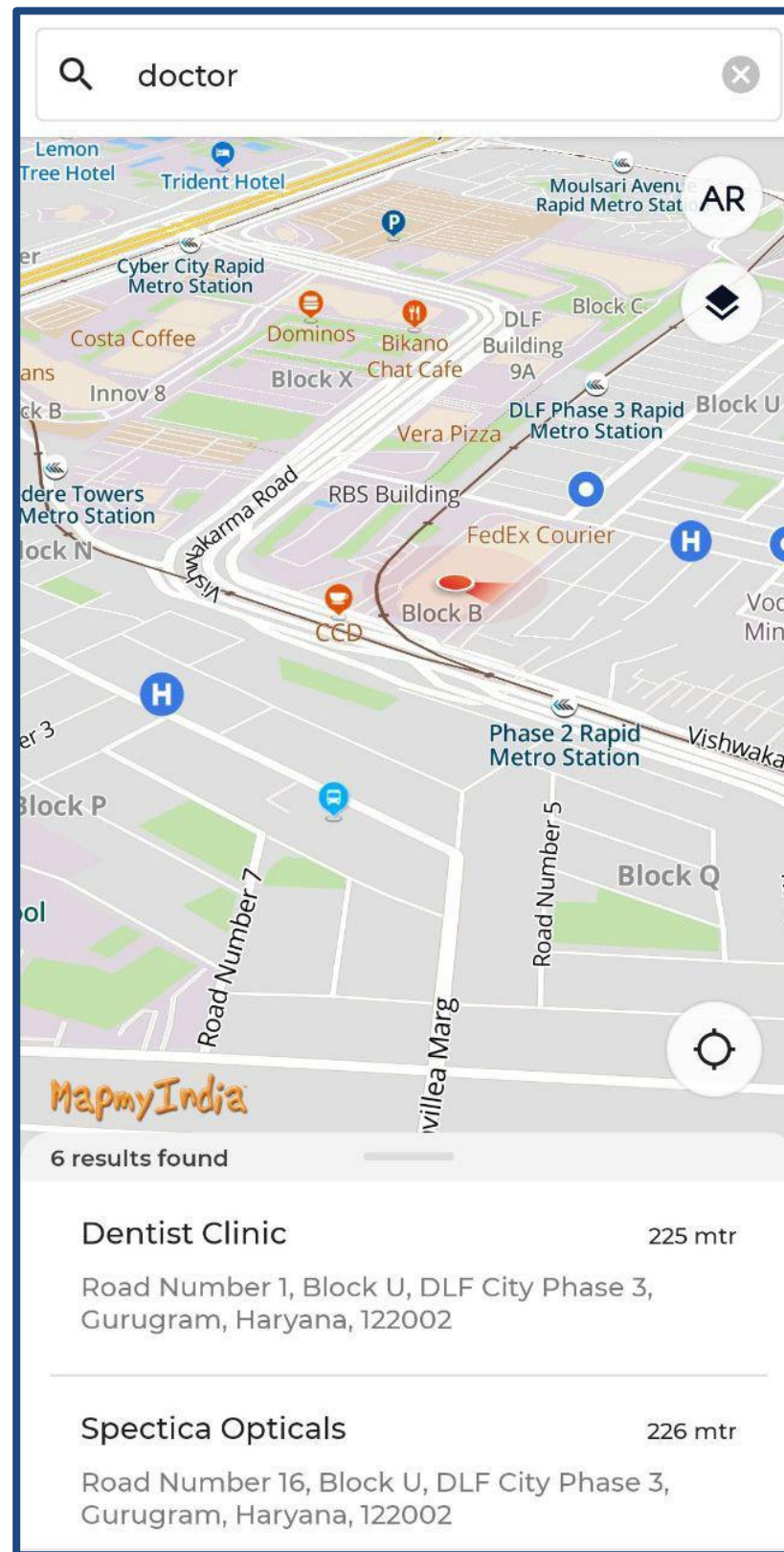
Books

#5 Real-time books recommendations based on current evaluation of user's mood.

Long term solution

Bridge

#1

Platform to connect to specialists
- anonymous chat to tackle the taboo.
- suggesting nearby counselors / psychiatrists.

Community

#2

Providing a platform for people having similar issues to interact with.

Stakeholders

Customer

Stakeholders

Doctors and counsellors

'They travel hours to see a doctor for a minute': India's mental health crisis

With fewer than two psychiatrists for every 100,000 people, experts are seeking innovative solutions to address the emergency

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District Mental Health Programme - bring mental health care to the **rural** and **disadvantaged** sections of society. **Currently**, there are more than **40 mental hospitals running in different parts** of the country that work towards the welfare and treatment of people with mental disorders.

Union Minister Choubey: Govt spent Rs. 949 cr on mental health awareness initiatives

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Microsoft Program of the 4-day workweek in Japan

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NGOs

Skill India scheme - no policy exists for training counsellors

NGOs-special initiatives-**implementing models** to combat alcoholism, depression and other problems, in addition to **training people** to work in the field of **mental health**.

Sangath, a Goa-based NGO, has started a **programme** which **trains lay psychologists to help people.**

Future Work

Trusted Doctors:
- suggest specialists arond.
- profile sharing with specific doctors only.

Cohort creation:
- family/friends to be grouped.
- Share important insights about each other.

Data Enrichment:
- Fitness bands
- Sleep trackers

Concise continuous report generation to be shared with specialists upon approval by user.
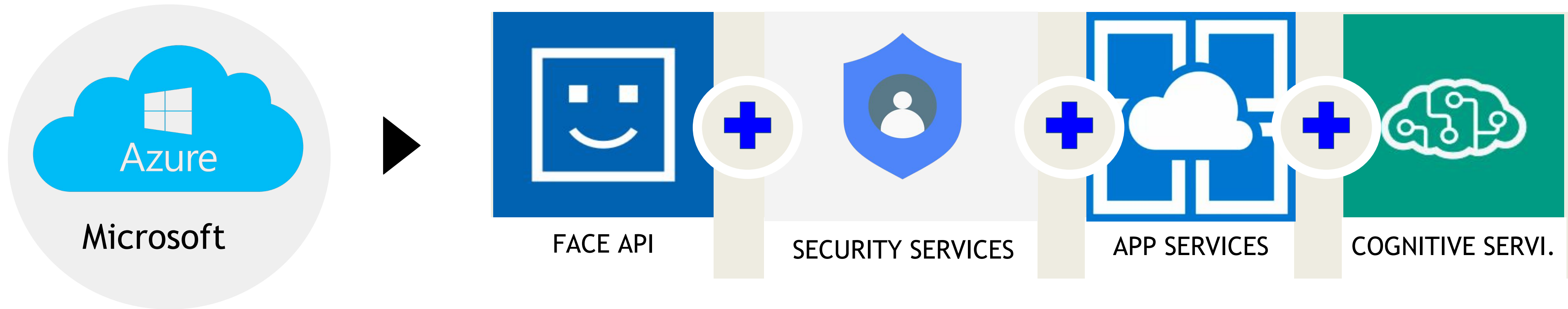
Data Analysis:
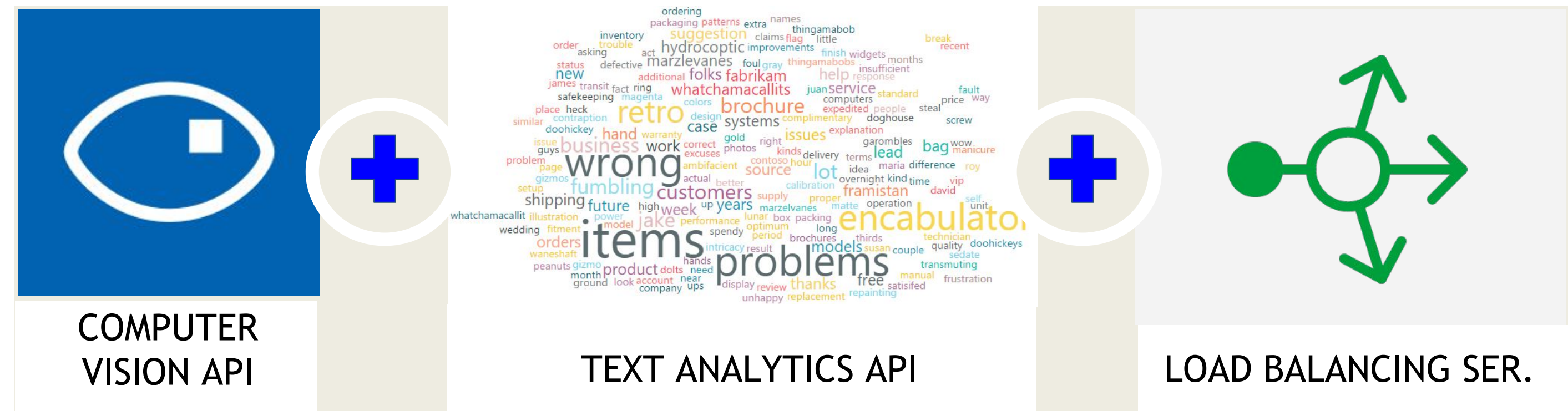- Government
- private companies

Chatbot:
- learn from doctor patient interactions.
- cut down basic conversation time.

Technology Stack

Microsoft Azure

FACE API **+** SECURITY SERVICES **+** APP SERVICES **+** COGNITIVE SERVI.

AND

COMPUTER VISION API **+** TEXT ANALYTICS API **+** LOAD BALANCING SER.

lots more…