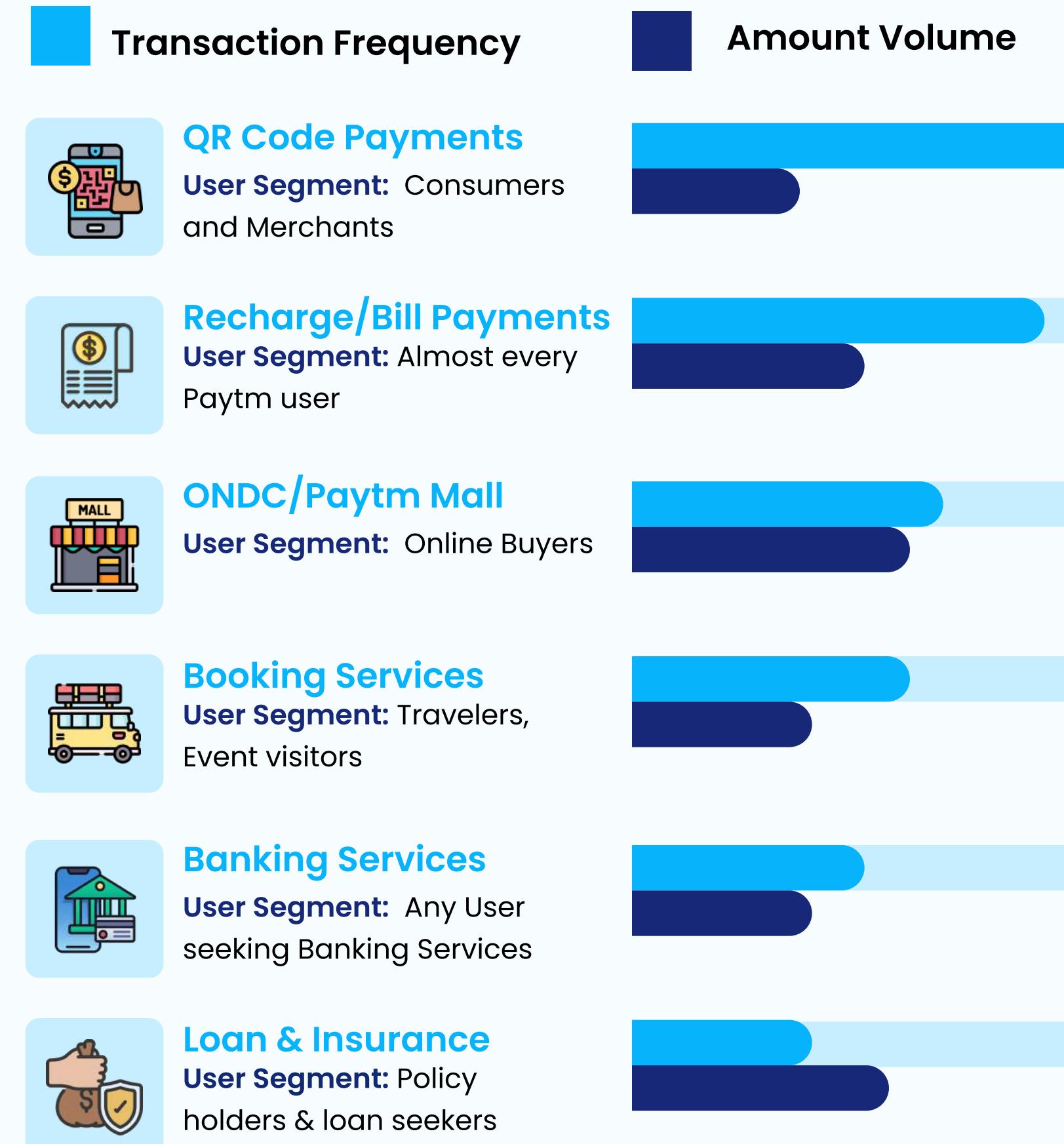




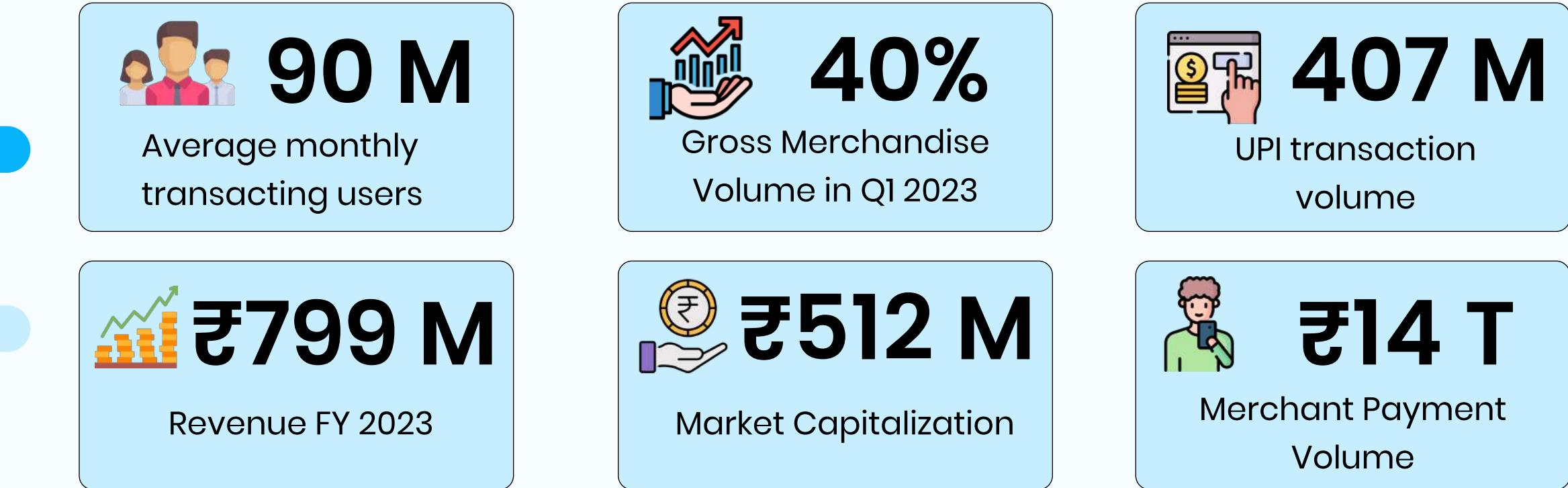
About

Paytm is an Indian **digital payment** and **e-commerce** platform that was founded in 2010 by Vijay Shekhar Sharma. Originally launched as a mobile recharge and bill payment service, it has since evolved into a comprehensive financial services provider with a wide range of offerings.

Top Features



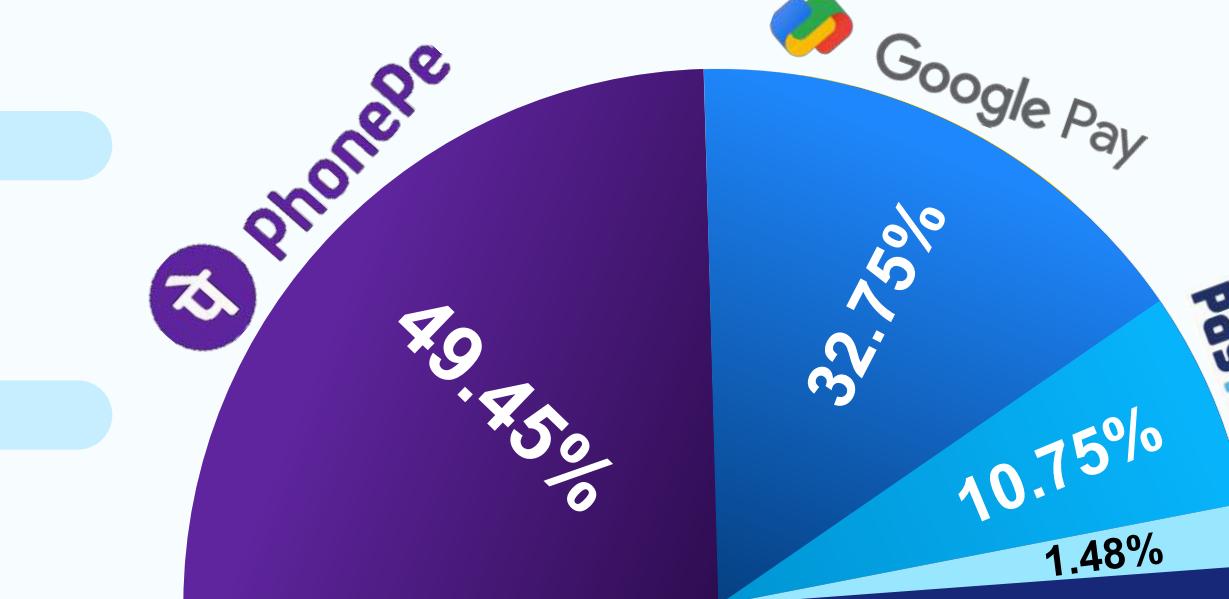
Statistics



Competitors & Market Share

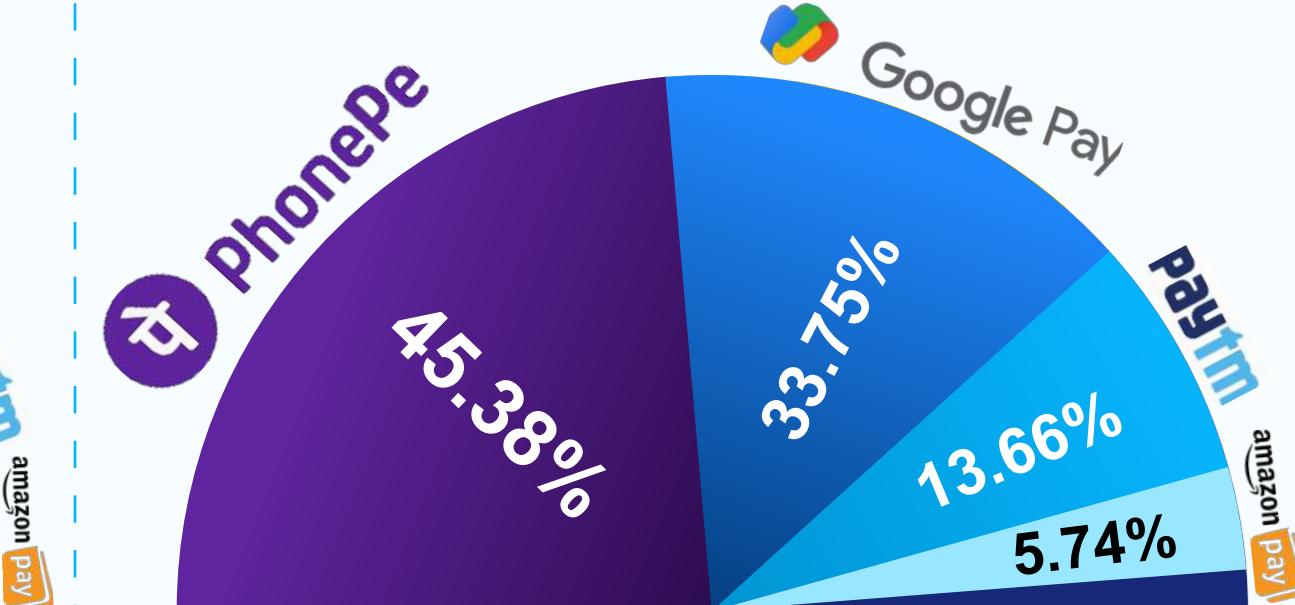
By Transaction Frequency

(850 Cr)



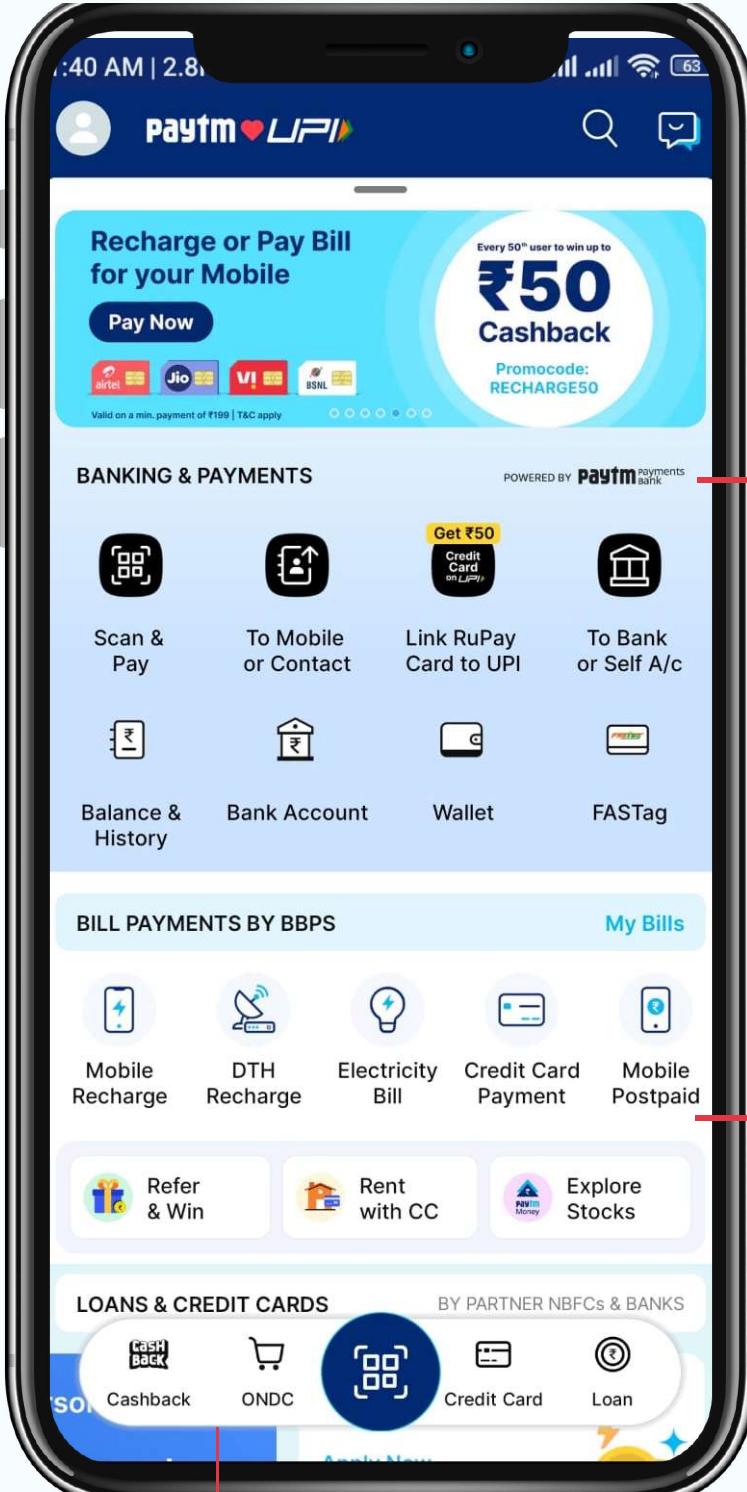
By Amount Volume

(14,00,000 Cr)





Current Version



Search feature
(Easy navigation, Live text for user attention & personalized suggestion)

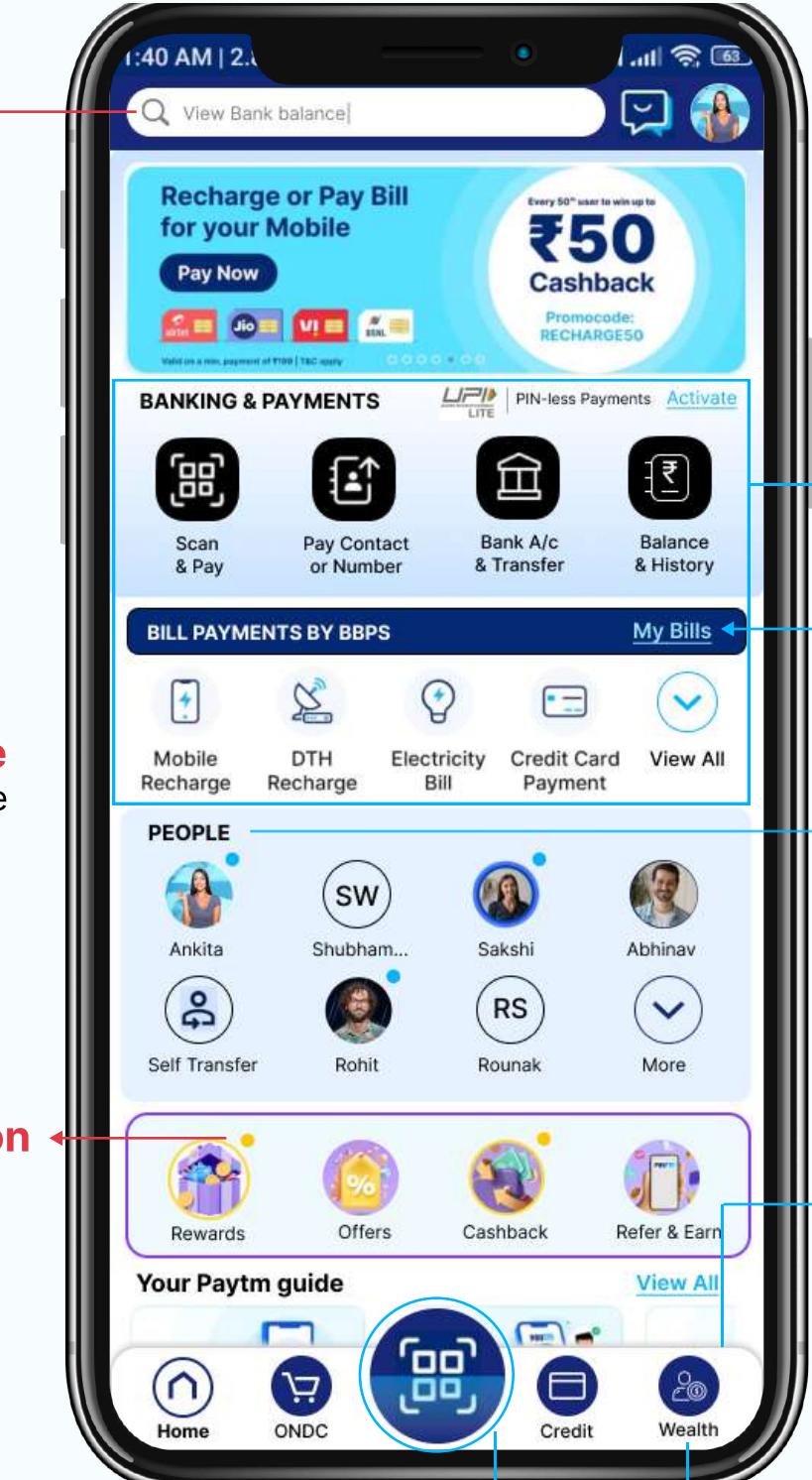
Clumsy homepage
Many features on single screen

Deals & Rewards section
Purple & Yellow colour, attractive icons, new notification indicator for user call-to-action

Old bottom Navigation

Not much use of Cashback & Loan section in the **most important "Navigation"** section

Old User



Simplified Payment section
Only 4 main features Combined **Bank account & Transfer**, Combined **Balance, History & Wallet**

Only 4 features in a section

New People feature

Easy payment to frequent receivers
New notification indicator for user call-to-action

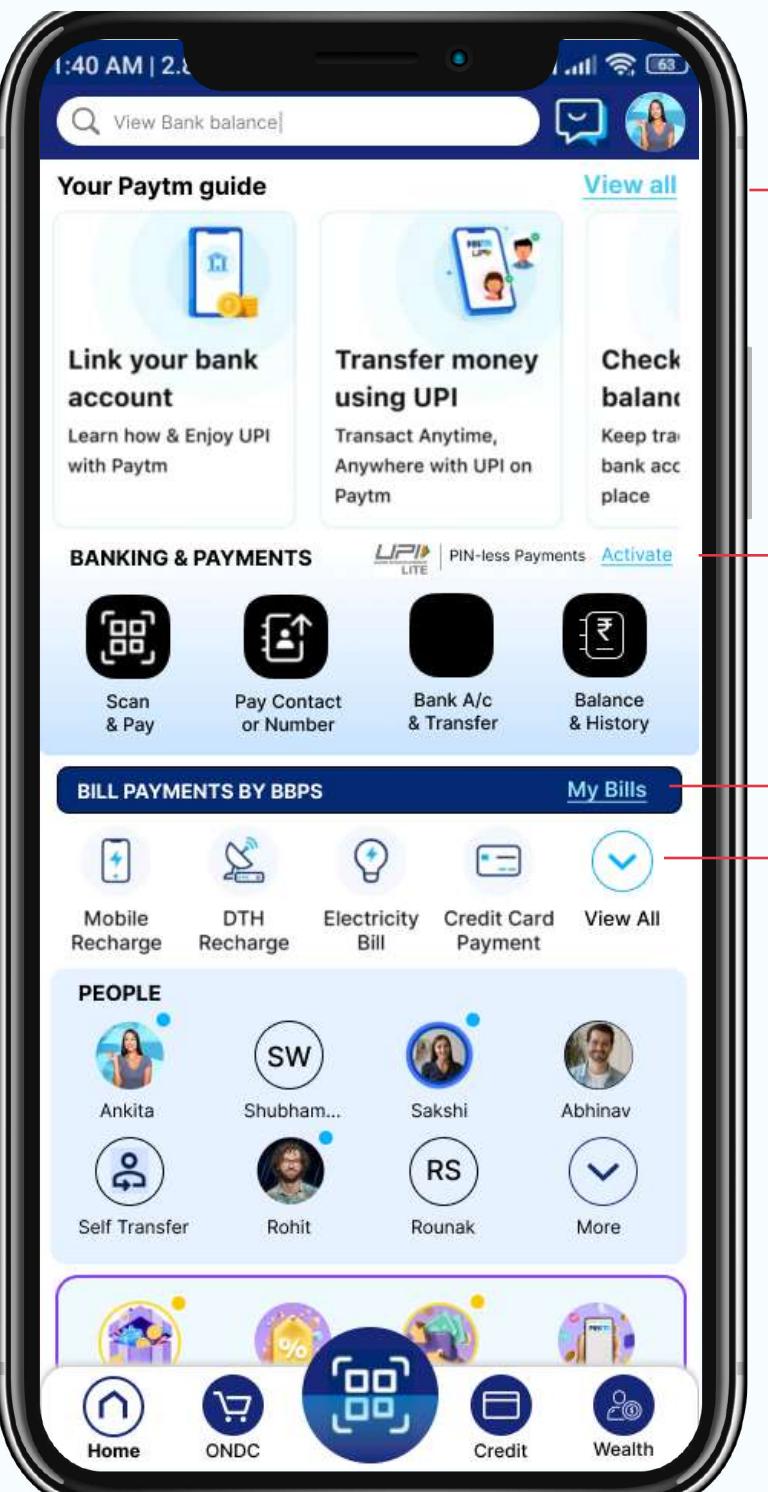
New bottom Navigation

Decrease vertical scrolling, & introduce section navigation to decrease confusion among users

QR Scan g.i.f
Grab User attention

Wealth
Combined Loan, Stocks and other features

For New User

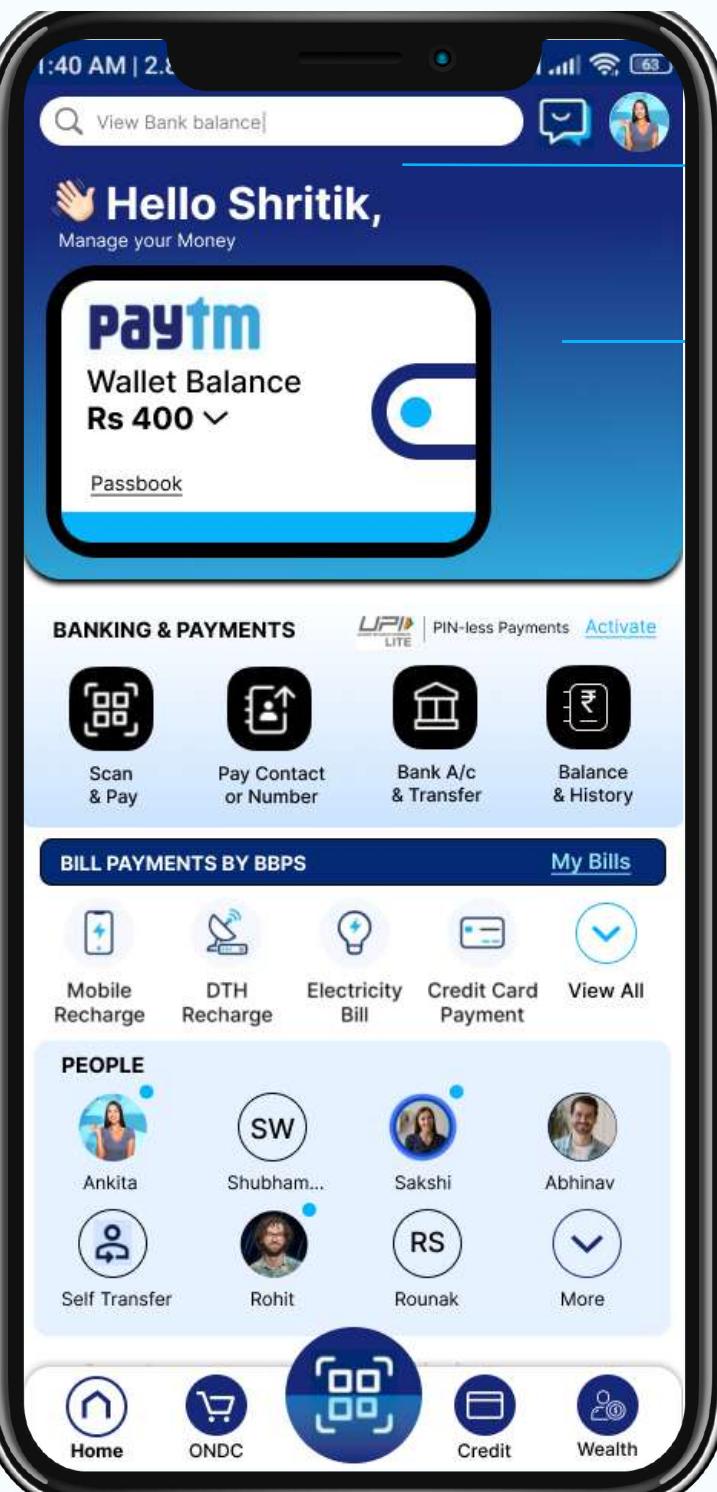


Paytm guide
On top for new users, as advertising new user have bad impressions

UPI LITE
Call-to-Action for UPI LITE setup

Underline (Looks clickable)
View all
If user wish to search more bill payment options
Reduces clumsiness of HomePage

Swipe Up



Swipe up section

Easy Passbook & Wallet access

Advertise auto side scroll after certain time

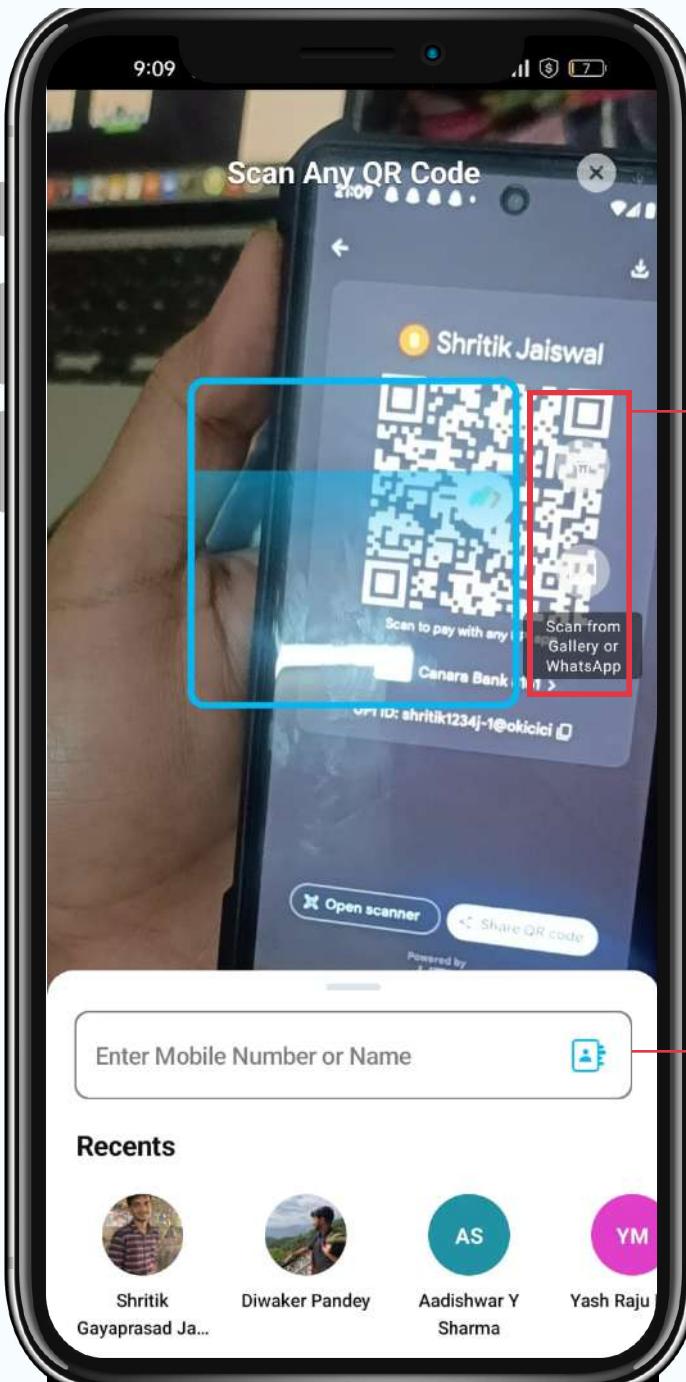
(Essential part of Revenue Model)

FEATURE PRIORITIZATION

Features	Live Search	People	Deals & Reward	Bottom Nav & scan g.i.f	Swipe Up	UI/UX section changes
Reach	10	8	9	10	7	10
Impact	9	6	7	9	5	9
Confidence	8	7	6	9	6	9
Effort	9	7	5	7	4	8
Score	80	48	75.6	115.7	52.5	101.25
Rank	#3	#6	#4	#1	#5	#2

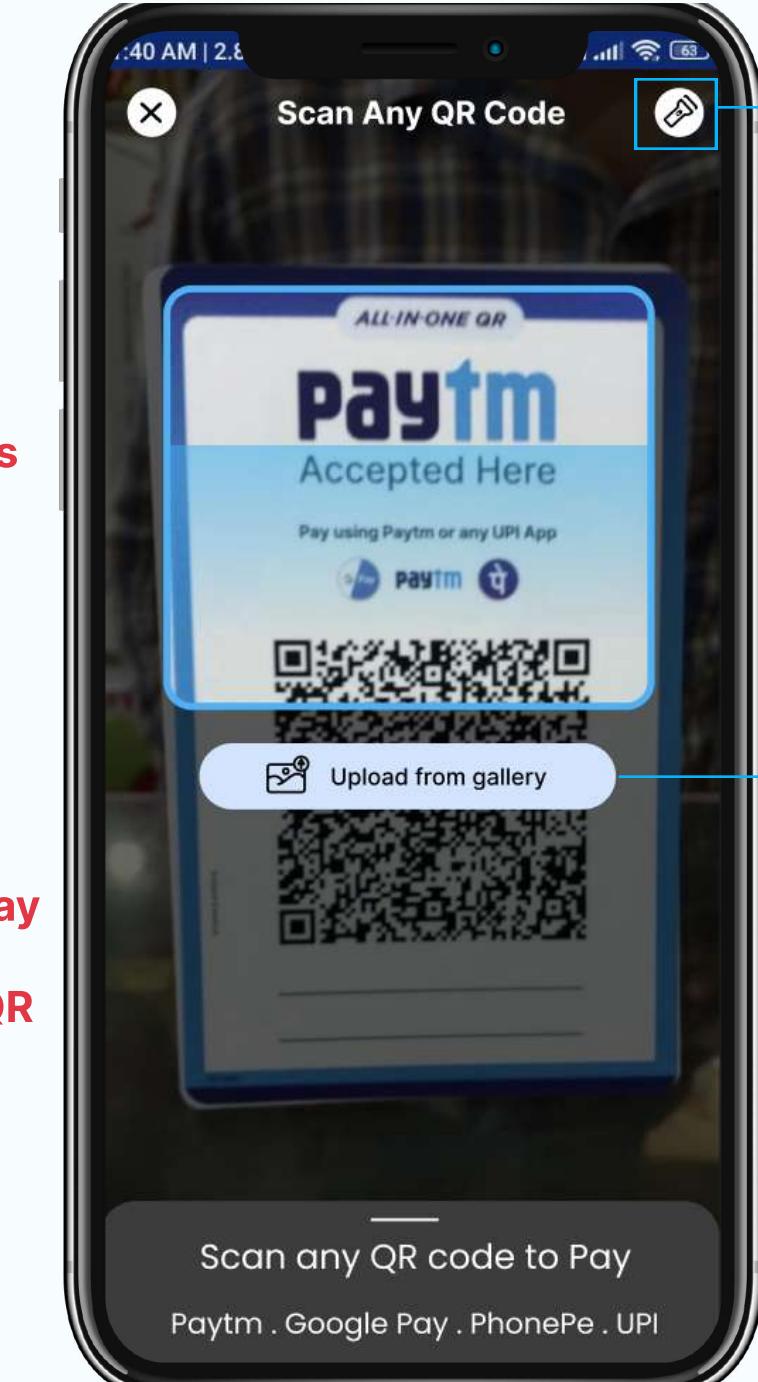


Original Scanner



- Less visible Torch & Gallery upload icons
- No Need of Pay Mobile when User opens QR code

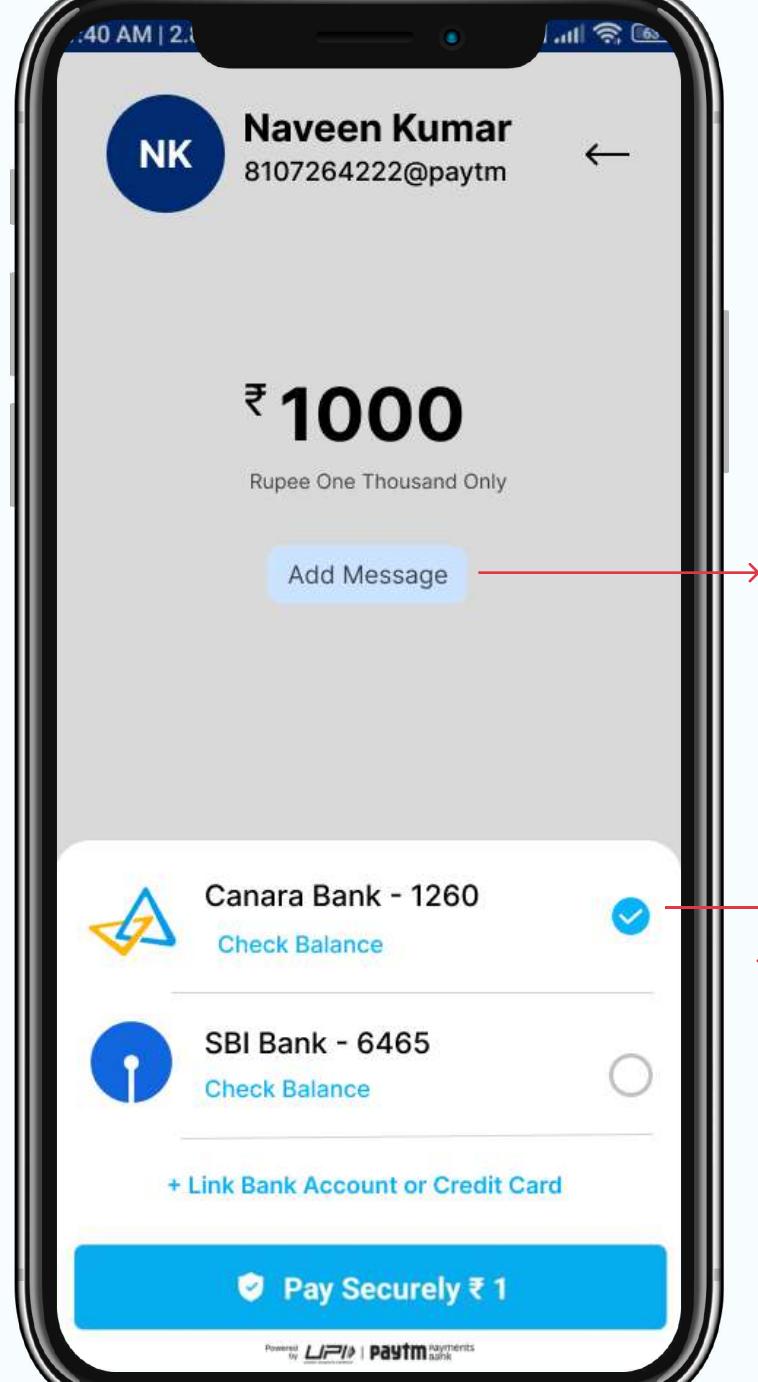
Improved Scanner



Visible
Torch icon

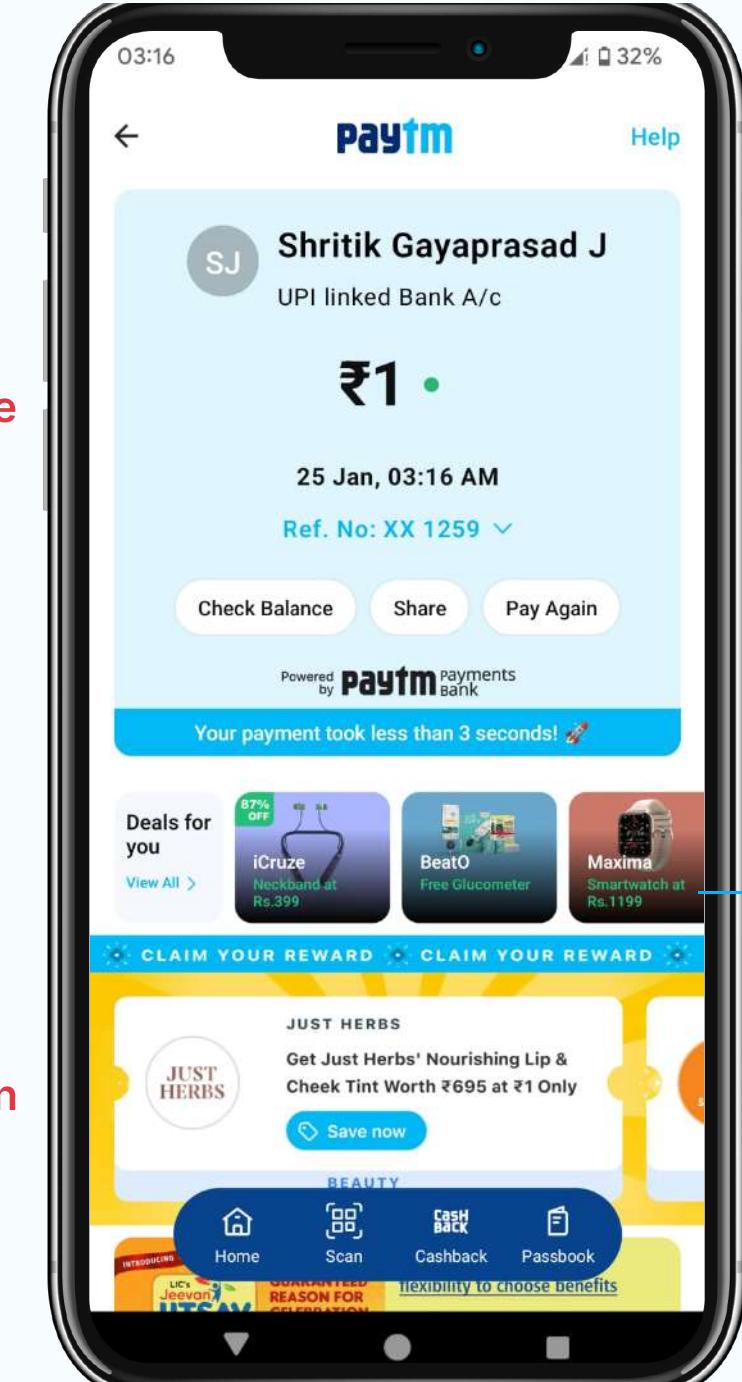
More visible
upload
from Gallery
section

Original Payment Details



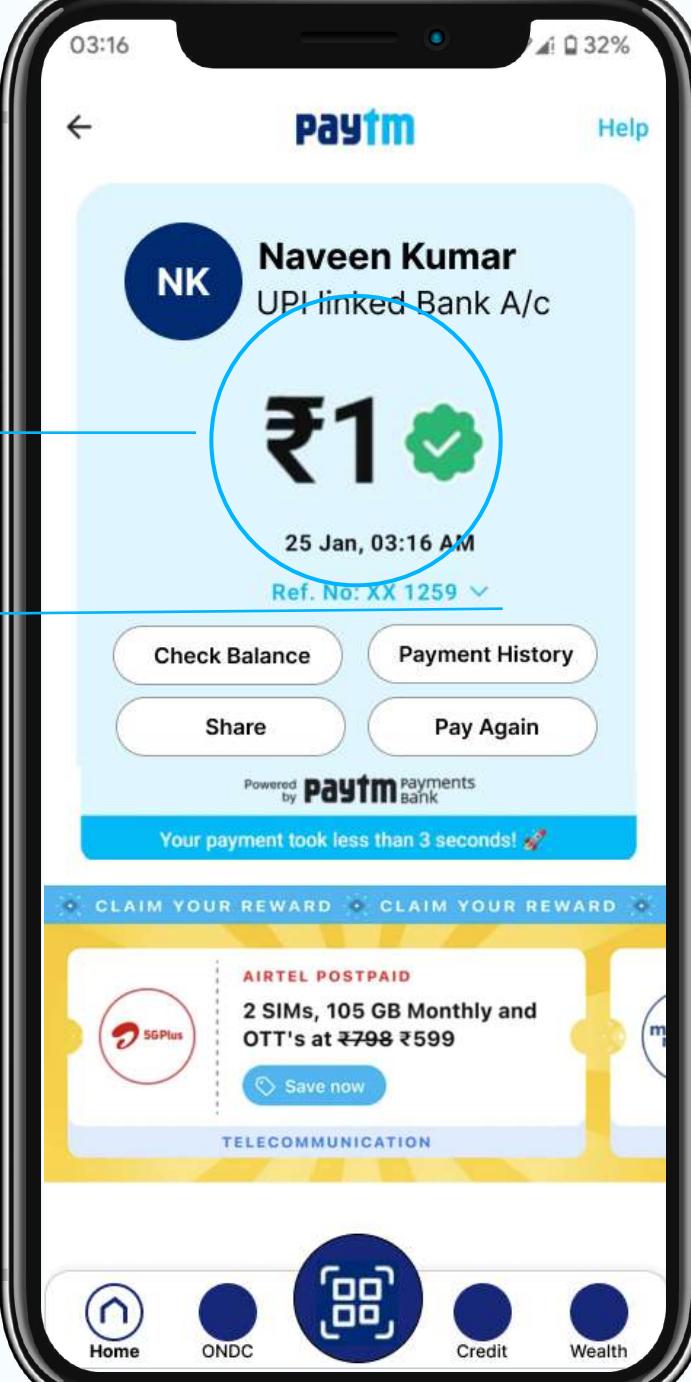
- Add Message not available for QR Payments in current version
- Improved alignment of this section

Original Transaction Success



- Bigger Text & icon
- Payment History
- To check if Payment is done, or to view payment history with receiver
- Better personalization suggested

Improved Transaction Success



FEATURE PRIORITIZATION

Features	Improved Scan page	Add Message	Bigger Icons	Payment History
Reach	8	10	7	9
Impact	7	9	6	8
Confidence	8	9	6	8
Effort	9	9	7	7
Score	49.7	90	36	82.28
Rank	#3	#1	#4	#2



Funnel Analysis

Acquisition

Activation

Retention

Revenue

Referral

Payment

Impact

- Enhanced user-friendliness of the home page is likely to increase app attractiveness.

Metrics

- App Download Rate.
- New User Sign-Ups.
- Traffic Source Conversion.

Transaction

Impact

- Enhanced QR scan process attracts users prioritizing ease of use.

Metrics

- New user sign-ups using QR scan.
- First transaction completion rates via QR scan.

- Better navigation aids and highlighted features enhance the first transaction experience.

- First Transaction Completion.
- Engagement with User Guide.

- Improved QR scan functionality enhances first-time user experience.

- Higher completion rate of QR transactions by new users.
- QR scan drop-off rates.

- Personalization and improved navigation foster repeat usage.

- Frequency of Transactions.
- User Retention Rate.

- Transaction history on the payment screen encourages repeat use.

- Increased transaction frequency per user.
- User interaction with transaction history.

- Streamlined features encourage more frequent transactions.

- Average Transaction Value.
- Total Transactions.
- Revenue from Fees.

- Clearer payment confirmations potentially lead to more frequent transactions.

- Growth in total transactions.
- Average transaction value.

- A user-friendly interface and personalization can boost referrals.

- Use of Referral Codes.
- Growth in User Base from Referrals.
- Social Media Mentions and Reviews.

- Usability improvements foster user recommendations.

- Rise in referrals.
- Positive social media feedback.



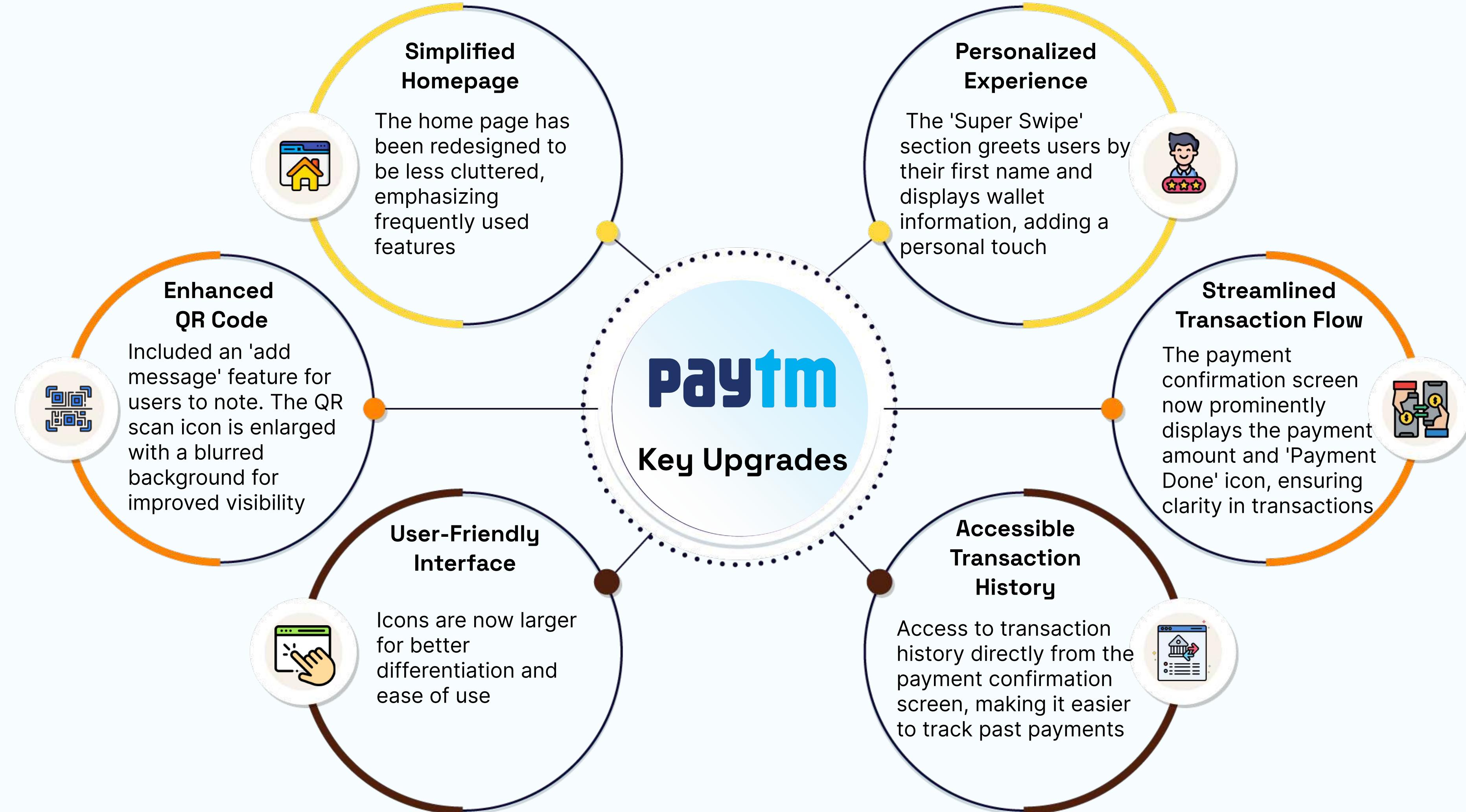
Paytm Announces Major Upgrades to Enhance User Experience in Payment and Transaction Flow

Impact on Users

These updates represent a leap forward in paytm's relentless pursuit of providing an unparalleled digital payment experience.

"By making the app more intuitive and user-friendly, Paytm is not just simplifying digital transactions; it will also foster trust and loyalty among its diverse user base."

Key Upgrades



A Call to Users

We invite users to explore these new features by updating their Paytm app today. Experience the difference in speed, ease, and convenience, as we continue to transform the way India transacts.



Primary Objective:

To propose a mentorship feature, where-in users can connect with mentors and seek knowledge and mentorship

Problem Relevance/Opportunity:

- 94% of engineering grads are not fit for hiring.
- There are many platforms which are doing this. But, the problem they face is shortage of the right mentor and its reach among graduates.
- LinkedIn has the second largest user base as Indians(76M+)

Background:

- LinkedIn is the world's largest professional network on the internet.
- Students in tier 1 colleges have good network of seniors as mentors so they usually excel.
- Students from tier 2 or 3 colleges need mentorship to excel in their career. Due to poor network of seniors, they lack right guidance and so very few are able to progress in their career.
- To help them, some professionals want to guide them in their career but they fail to find the dedicated and passionate students who really want to work hard to build their career.

Assumptions:

- Target geography: India
- Target user base: Tier 2/3 college students- mentees, experienced professionals- mentors

User persona



User type : Mentee

BIO

Peter is a 3rd year engineering college student. He is a product enthusiast. Wants to explore this field, its learning and its career opportunities.

He is a hardworking student, but often requires guidance, when he gets stuck with something. He is quite active on LinkedIn, looks for learning opportunities on LinkedIn and likes to share his knowledge with others on LinkedIn through posts.

Goals

- Wants to explore career opportunities on LinkedIn
- Wants a structured way of learning.
- Wants a mentor, to guide him to achieve what he wants.
- Wants a referral

Pain points

- Unable to find a good mentor
- Gets overwhelmed by immense knowledge on internet.



User type :- Mentor

BIO

John Scott is a Product Manager at Google. He has an experience of 5years in this field. He is a hardworking professional.

John has an immense knowledge in his field. He loves to share his knowledge with others. He shares 2 to 3 posts daily on LinkedIn. He wants to come under LinkedIn top voices. He likes to build community and to share his experience with others.



Goals

- Build an active community of learners
- Get huge engagement on his posts
- Want to train/mentor dedicated students in the field
- Make money using his follower base

Pain points

- Difficulty in finding the dedicated mentees whom he can train and better their career
- Difficult to gain engagement on his posts
- Less monetisation opportunities on LinkedIn



Hardwork Points

- Each and every user is assigned a Hardwork point based on his/her activity on LinkedIn
- Hardwork points is calculated by :-

 - # of posts shared on LinkedIn (no spam posts) :- user losses hardwork points on spam posts.
 - Engagement on his posts (likes, comments, views etc.)
 - # of webinars attended on LinkedIn.
 - # of internships done by student
 - # of certifications done on LinkedIn

66,884 followers · 500+ connections · 2080

Popularity Points -5040 private to you

Popularity Points

- Each and every mentor is assigned popularity points based on his/her activity on LinkedIn.
- Popularity points is used to make “Leaderboard of mentors”
- Popularity points is calculated by :-

 - # of sessions taken by mentor using **LinkedIn webinar feature**
 - # of mentees (if any) under his/her mentorship.
 - Experience years in the domain
 - # of followers on LinkedIn
 - # of posts shared on LinkedIn
 - Engagement on his/her posts (likes, comments, views etc.)
 - Popularity points is only visible to the mentor

Assumptions

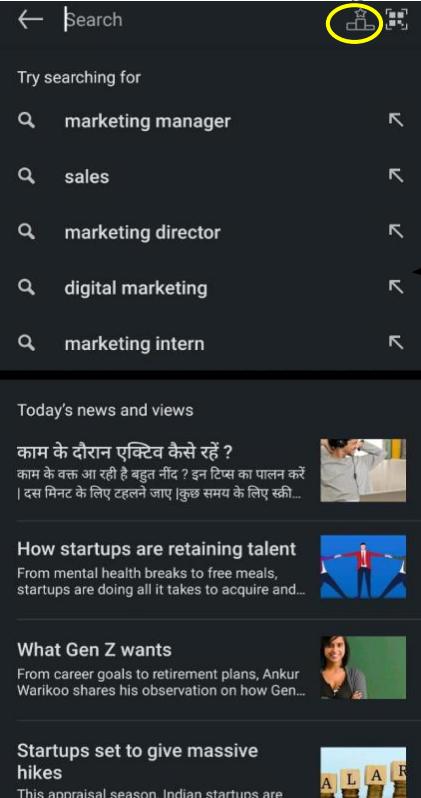
Hardwork points = $0.1 * (\# \text{ Of posts}) + \text{Engagement points} + 1 * (\# \text{ Of webinars attended}) + 5 * (\# \text{ Of internships}) + 1 * (\# \text{ Of certifications})$

Engagement points =
 $0.01 * (\# \text{ of Likes}) + 0.1 * (\# \text{ of Comments}) + 0.0001 * (\# \text{ of views})$

Popularity points = $1 * (\# \text{ Of sessions taken}) + 5 * (\# \text{ Of mentees}) + 2 * (\text{Experience years}) + 0.001 * (\# \text{ Of followers}) + 0.1 * (\# \text{ Of posts shared}) + \text{Engagement points}$

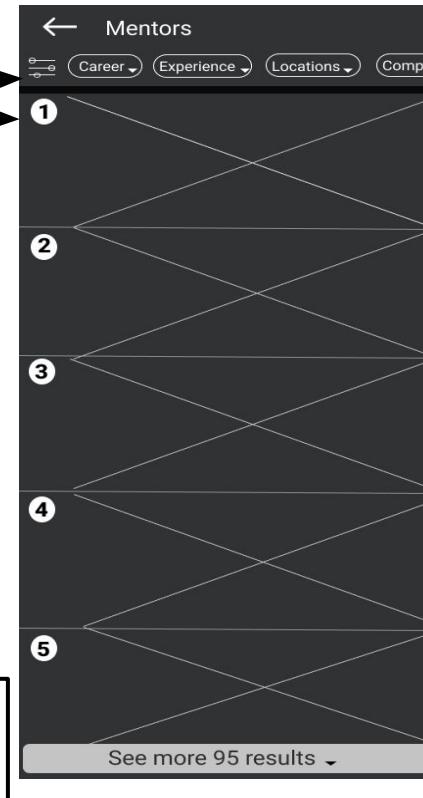
Search bar

Mentor's leaderboard

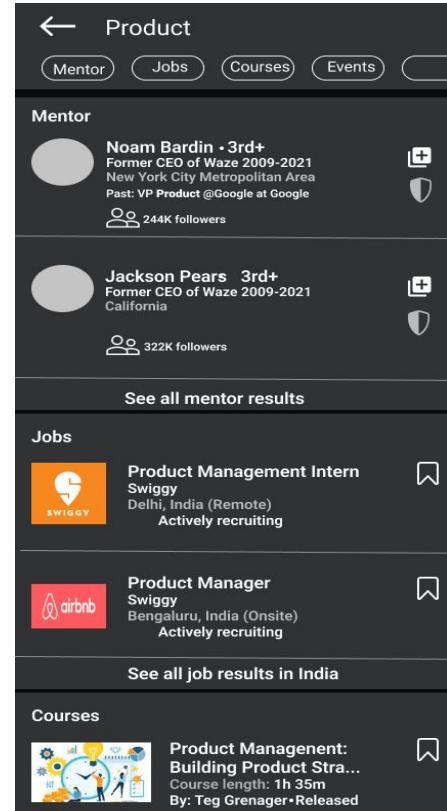


- By clicking on “Mentor’s leaderboard” icon, user will be directed to the leaderboard of Top 100 mentors across the globe.
- Search option
- User can search anything on the search bar, for eg:- if user searches “Product” in the search bar, user will be directed to a page which had results of mentors in product, results of jobs in product etc..

Mentees can filter leaderboard based on the career, experience location, companies etc, to get the leaderboard of mentors of their interest



Search bar results



Be a mentor

Resources

Private to you

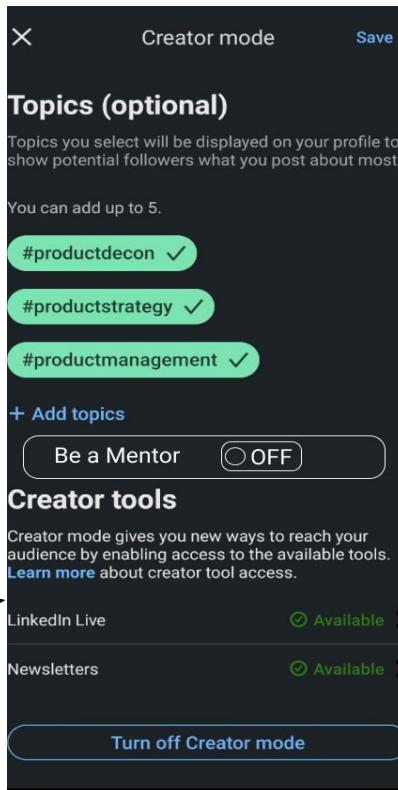
 **Creator mode** On

Get discovered, showcase content on your profile, and get access to creator tools

My network

See and manage your connections and interests.

- User can become a mentor by going to **Creator mode** option in his/her profile.
- User needs to switch on the “**Be a Mentor**”



The screenshot shows the 'Mentor Mode' settings. At the top, it says 'Popularity Points: -5040 private to you'. Below are five statistics:

- Number of sessions: 12
- Number of mentees: 8
- Number of years of experience: 7
- Number of followers: 12k
- Number of posts you have shared: 79

A large 'Turn off Mentor Mode' button is at the bottom.

On clicking mentor mode user can see his/her popularity points, no. of sessions taken etc.



- Shield appears on the profile when user switches on the mentor mode. This makes it easier for mentees to find mentors.
- On clicking this shield mentees can send mentorship request to mentors.

Mentors can any time turn off the mentor mode.

Mentor's Chat

Two ways of sending mentorship requests to mentors

1

New message

To: Aarhant Aaryan

Type: Mentorship Request

Mentor's Profile Headline

Write a message...

- Students applying for mentorship should choose the **Type of message:** Mentorship request or General message.
- By default, the message type will be General message.
- Students will get 5 credits per week through which they can send 5 Mentorship requests. **LinkedIn can include this in premium plan for monetization for sending x # of mentorship requests.**

Mentors can share post if they are open for mentorship. A form will be shared as shown just like they share for job opening.



Anurag Modi

Anyone

What do you want to talk about?

Add a photo

Take a video

Share that you're hiring

Find an expert

Create a poll

Create an event

Mentorship Form

2

Mentorship Form

Apply for Mentorship

Mentors Name (LinkedIn Profile)

Page 1 of 4

Contact info

Mentee Profile Headline

Profile Photo

Email address*

Phone country code*

India (+91)

Mobile phone number*

Note: Hardwork Metric will be captured in the form automatically

Submitting this application won't change your LinkedIn profile.

Application powered by LinkedIn | [Help Center](#)

Next

Mentor's Chat

Yogesh tiwari
Mobile

Mentor's Profile Headline

JUN 8, 2021

Anurag Modi • 2:09 PM

TEXT MSG

DECLINE ACCEPT

Success Metric: # of mentorship requests received per mentor



- Mentors can accept or decline the mentorship request by analysing students **Hardwork Metric** or by viewing their profile.
- If mentor Declines the request, student will not be able to further message the mentor.
- Mentor will not respond to Mentorship requests in General Chat section as # of mentees is counted only when mentor accepts the Mentorship request and **# of mentees form one part of Popularity metric.**

Messaging

Search messages

Mentors Chat

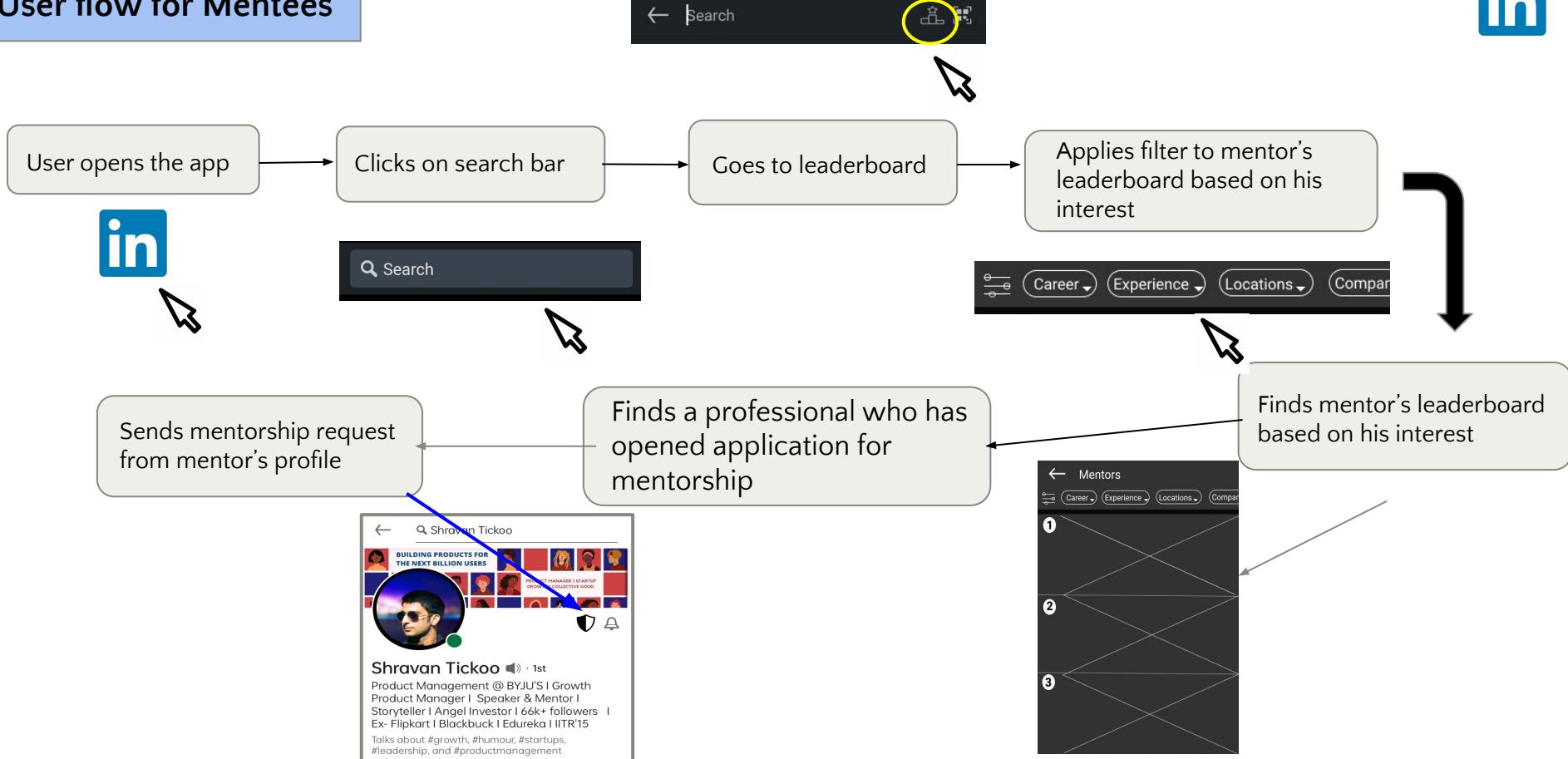
Lalit Potey 12:08 PM
You: Check out this job at Auditzy™:
<https://www.linkedin.com/jobs/view/293...>

ANIKET AGARWAL Mon
You: <https://www.linkedin.com/in/arushagupta...>

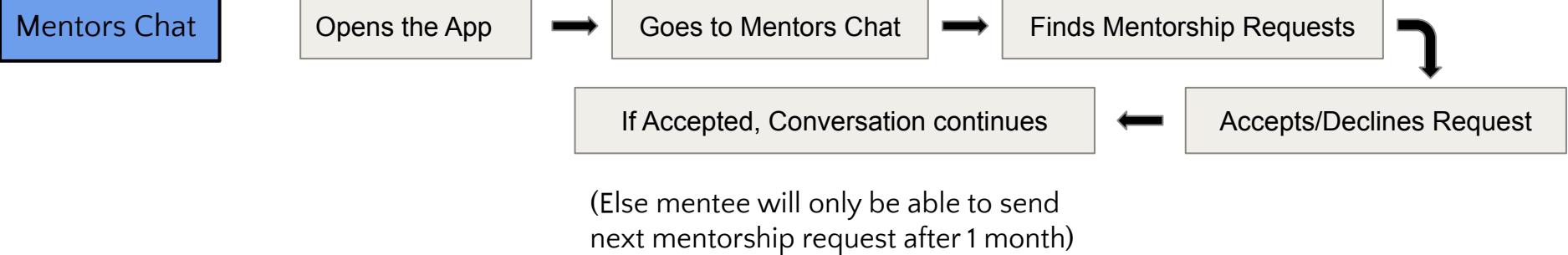
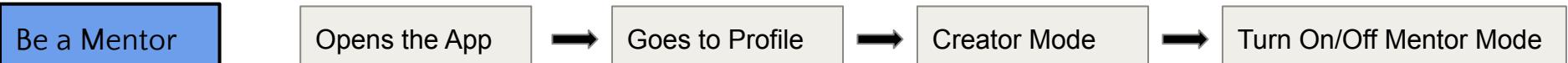
Click for switching to General Chat

Mentors Chat:
Here, the mentor will receive all mentorship requests from students or professionals.

User flow for Mentees



User Flow for Mentors



Metrics Dashboard



North Star Metric

of mentorship accepts

X 100

—————
of mentorship request on Mentor's chat

Important Metrics:

of creators switching to mentor mode

X 100

Number of creators

of clicks on Mentor's leaderboard

X 100

—————
of users going to search bar

Other Metrics:

- # of times “mentor” has been searched
- # of mentees per mentor

- Average # of mentors profile viewed by mentee



GTM Strategy

Announcing the feature

- Personalized emails to creators on LinkedIn
- Promoted messages to each user on LinkedIn
- Promoted posts on LinkedIn, announcing the launch of the feature.
- Guided tutorial to user, displaying all the Mentorship features.

The launch plan for the feature will involve generating awareness and getting traction over the new feature after it goes live.

Go-To-Market Strategy

Marketing the launch

- Push notifications & emails to grab the attention of the users.
- Partnerships with LinkedIn top voices of the year, to promote “Mentorship” feature.

Keeping users in the loop

- Mentors will be given extra popularity points for promoting LinkedIn's new “Mentorship” feature with the help of webinars or posts.
- Mentees will be given reward hardwork points for promoting LinkedIn's new “Mentorship” feature with the help of posts
- Challenges/ Streaks can be announced for promoting the feature and rewarding the winners

EMA APM Program Skill Alignment and Onboarding Specialist Persona (SOAS)

THE ECONOMIC TIMES | Careers

ET Online • Last Updated: Jun 15, 2024, 10:59:00 AM IST

What's stopping TCS from filling 80,000 open positions?

Based on the recent article about huge number of vacant positions in TCS due to skill gap , I came up with an idea to leverage EMA SOAS to enhance talent management and onboarding at TCS . EMA can be used to streamline onboarding process for freshers efficiently.

Harshaa Reddy Godlaveeti
harshaareddyuk@gmail.com

Ema APM Program - Case Prompt

Ema is a universal AI employee, with multiple personas across roles and industries to revolutionize how people work. As a PM at Ema, you will regularly encounter deep, impactful enterprise problems where one of Ema's personas can work collaboratively with existing employees to multiply their productivity. Identify one such gap in existing businesses and propose an Ema persona to provide outsized gains to the team she would be a part of. Address the following prompts:

- Why did you choose this problem? What is the potential impact of solving it?
- How will your persona use GenAI to solve the problem? What does the end to end user journey of working with this persona look like?
- How will you test your persona and validate your hypotheses quickly?

Demonstrate the feasibility of your use case via sample prompts and responses on synthetic data.

- How do you measure the success of your solution?
- What are some potential pitfalls of your solution?

Why did I Choose this Problem ?

Context:

The problem faced by TCS, as highlighted in the Economic Times article, TCS faces a significant skills gap, with 80,000 unfilled positions due to mismatched employee skills and project needs, leading to reliance on costly contractors.

Onboarding delays for over 10,000 freshers further exacerbate the issue. These problems result in increased operational costs, reduced productivity, low employee morale, and decreased client satisfaction, putting TCS at a competitive disadvantage. Addressing these issues is crucial for optimizing workforce utilization, reducing costs, and improving overall business performance.

Alignment with Ema's Capabilities:

Given Ema's strengths as a Universal AI employee, equipped with a Generative Workflow Engine™ and EmaFusion™ model, addressing the talent management and onboarding issues at TCS aligns perfectly with Ema's core competencies. Ema can be used to automate skill gap identification and upskilling plans. Integrate seamlessly with existing systems. Ensure precise upskilling recommendations and onboarding. Ema is 40-60x cheaper, making it viable for large-scale implementation. Quick deployment (2 days to get started). Robust security measures protect employee data. Observable and explainable AI outcomes reduce risks. High ROI through improved efficiency and reduced operational costs. Resolves 80% of CX issues autonomously, enhancing productivity.

By choosing this problem, we leverage Ema's strengths to address a critical issue faced by TCS, ensuring substantial improvements in productivity, cost efficiency, and overall business performance.

The Impact

Solving the skills gap and onboarding delays at TCS will significantly enhance operational efficiency by reducing the time to fill positions and streamlining internal processes. This will result in substantial cost savings by lowering reliance on expensive contractors and optimizing training investments. Increased productivity will be achieved through faster project initiation and better resource utilization. Employee satisfaction and retention will improve due to clear development paths and efficient onboarding, leading to lower turnover rates. Enhanced client satisfaction from timely, high-quality project delivery will strengthen client relationships. Ultimately, these improvements will give TCS a competitive advantage, allowing it to respond swiftly to market changes and maintain its reputation for excellence.

In short the impact can be seen in

Operational Efficiency , Cost Savings , Increased Productivity , Employee Satisfaction and Retention , Client Satisfaction and Competitive Advantage

How EMA SOAS uses GenAI to solve the problem



Ema SAOS (Skills Alignment and Onboarding Specialist) utilizes Generative AI to automate and optimize complex workflows related to skill assessment, training, and onboarding. Here's how Ema SAOS leverages GenAI capabilities .

EMA SOAS uses natural language processing (NLP) to analyze employee profiles, resumes, project requirements, and job descriptions. It identifies skill gaps by comparing current employee skills against required skills for open positions.

Generates tailored training and development plans based on individual skill gaps. Recommends courses, certifications, and learning resources from various platforms.

Creates and assigns training modules to new hires before their official start date. Monitors the progress and readiness of freshers to ensure they are job-ready.

Uses predictive analytics to match employees and contractors to projects based on their skills and ongoing training. Adjusts resource allocation dynamically as employees complete training.

Continuously tracks training progress and provides feedback to employees. Adjusts training plans based on employee progress and evolving project requirements.

End-to-End User Journey with Ema SAOS



INITIAL ENGAGEMENT:

HR and RMG Onboarding:
HR and the Resource Management Group (RMG) set up Ema SAOS, integrating it with existing HR systems and databases.

STEP SKILL GAP ANALYSIS:

HR provides employee profiles, project requirements, and job descriptions. Ema SAOS uses NLP to analyze the data and identify skill gaps. A detailed report on skill gaps and training needs is generated.

PERSONALIZED UPSKILLING:

Ema SAOS creates personalized upskilling plans for employees. Employees receive recommended courses and resources. Ema tracks employee progress and provides regular updates.

ONBOARDING FRESHERS:

Ema assigns pre-joining training modules to new hires. Freshers' progress is tracked to ensure they are job-ready by their start date.

RESOURCE ALLOCATION:

Ema matches employees and contractors to projects based on skills and training progress. Resource allocations are adjusted in real-time as training is completed.

CONTINUOUS IMPROVEMENT:

Ema collects feedback from employees and managers to refine training programs. Training plans are adapted based on feedback and new project requirements.

Testing Ema SAOS and Validating Hypotheses

To quickly test Ema SAOS and validate its hypotheses, we will start with a pilot program focusing on a small, manageable group within TCS. Here's the step-by-step approach:

1. **Select a Pilot Group:** Identify a department or project team with a known skills gap and onboarding delays.
2. **Data Collection:** Gather relevant data on employee profiles, job descriptions, current skillsets, and project requirements.
3. **Baseline Metrics:** Establish baseline metrics for time-to-fill positions, training effectiveness, onboarding duration, employee satisfaction, and project delivery timelines.
4. **Deploy Ema SAOS:** Integrate Ema SAOS with the department's HR systems and start the GenAI-driven processes for skill gap analysis, personalized upskilling, and onboarding management.
5. **Monitor and Measure:** Track the performance of Ema SAOS against the baseline metrics, focusing on the speed and accuracy of skill gap identification, training completion rates, onboarding times, and overall productivity.
6. **Feedback Collection:** Collect feedback from employees, HR, and managers on the effectiveness and ease of use of Ema SAOS.



Sample Prompts and Responses

User Prompt: "Ema, analyze the skill gaps for the data science team."

Ema SAOS Response: "Analyzing the profiles of the data science team... The following skill gaps have been identified:

1. Advanced Machine Learning: 60% of the team lacks this skill.
2. Data Visualization Tools: 40% of the team needs upskilling in this area.
3. Python Programming: 30% of the team requires intermediate to advanced training."

User Prompt: "Ema, create personalized upskilling plans for the data science team."

Ema SAOS Response: "Generating personalized upskilling plans... Here are the recommendations:

1. John Doe: Advanced Machine Learning course on Coursera, Data Visualization with Tableau on Udemy.
2. Jane Smith: Intermediate Python Programming on edX, Advanced Data Visualization on Udacity.
3. Mark Johnson: Python for Data Science on Khan Academy, Advanced Machine Learning on Coursera."

User Prompt: "Ema, assign pre-joining training modules to the new hires for the upcoming project."

Ema SAOS Response: "Assigning pre-joining training modules... The following modules have been assigned:

1. Alice Brown: Introduction to Data Science on Coursera, Python Basics on Khan Academy.
2. Bob Green: Data Analysis with Python on edX, Machine Learning Fundamentals on Udacity. Progress will be tracked and reported weekly."

User Prompt: "Ema, allocate resources for the new AI project based on current skills and training progress."

Ema SAOS Response: "Allocating resources... The following team members have been matched to the AI project:

1. John Doe - Lead Data Scientist
2. Jane Smith - Data Analyst
3. Mark Johnson - Python Developer Adjustments will be made dynamically as training progresses."

Feasibility Demonstration

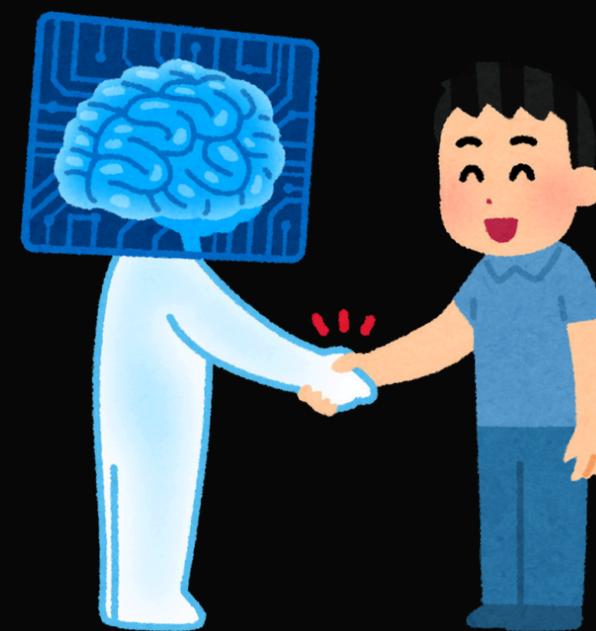
These synthetic interactions (prompts) show how Ema SAOS can effectively analyze skill gaps, create tailored training plans, manage onboarding processes, and allocate resources based on real-time data. The quick and accurate responses indicate the potential for significant improvements in efficiency and productivity.

Success Metrics (KPI)

- **Time-to-Fill Positions:**
 - Metric: Average time taken to fill open positions before and after implementing Ema SAOS.
 - Success Indicator: Reduction in the average time-to-fill positions by a significant percentage (e.g., 30-50%).
- **Training Effectiveness:**
 - Metric: Completion rates of recommended training programs and improvements in employee skill levels.
 - Success Indicator: High completion rates (e.g., above 80%) and measurable skill improvements (e.g., scores on post-training assessments).
- **Onboarding Duration:**
 - Metric: Average time taken to onboard new hires.
 - Success Indicator: Reduction in onboarding duration by a significant margin (e.g., 40-60%).
- **Employee Satisfaction and Retention:**
 - Metric: Employee satisfaction scores from surveys and retention rates.
 - Success Indicator: Improvement in satisfaction scores (e.g., 20% increase) and reduction in turnover rates.
- **Project Delivery Timeliness:**
 - Metric: Percentage of projects delivered on time and within budget.
 - Success Indicator: Increase in the percentage of on-time project deliveries (e.g., 25% increase).
- **Cost Savings:**
 - Metric: Reduction in costs related to hiring contractors and training expenses.
 - Success Indicator: Significant cost savings (e.g., 30-50% reduction in related expenses).
- **Client Satisfaction:**
 - Metric: Client feedback and satisfaction scores regarding project delivery and quality.
 - Success Indicator: Improvement in client satisfaction scores (e.g., 20% increase).

Success Examples

- **Time-to-Fill Reduction:**
 - Before: Average time to fill positions was 60 days.
 - After: Reduced to 30 days with Ema SAOS.
- **Training Completion:**
 - Before: 50% completion rate for training programs.
 - After: 85% completion rate with personalized upskilling plans.
- **Onboarding Efficiency:**
 - Before: Onboarding took an average of 45 days.
 - After: Reduced to 20 days with pre-joining training modules.
- **Employee Satisfaction:**
 - Before: Satisfaction score of 60%.
 - After: Increased to 80% with clear development paths and efficient onboarding.
- **Project Delivery:**
 - Before: 70% of projects delivered on time.
 - After: Increased to 90% with better resource allocation and skill alignment.



Potential Pitfalls

1. **Data Privacy and Security:**
 - Risk: Handling sensitive employee data raises concerns about privacy and security.
 - Mitigation: Implement robust security measures and comply with data protection regulations.
2. **Algorithm Bias:**
 - Risk: AI algorithms may perpetuate biases in skill assessments and recommendations.
 - Mitigation: Regularly audit AI models, diversify training data, and ensure transparency.
3. **User Adoption and Resistance:**
 - Risk: Employees and managers may resist adopting AI-driven processes due to change aversion.
 - Mitigation: Provide thorough training, demonstrate clear benefits, and gather user feedback.
4. **Scalability Issues:**
 - Risk: System performance may degrade as data volume and organizational size increase.
 - Mitigation: Design for scalability, conduct stress testing, and ensure infrastructure readiness.
5. **Accuracy of AI Predictions:**
 - Risk: Inaccurate AI predictions could lead to inefficient resource allocation.
 - Mitigation: Continuously refine AI models, validate predictions, and incorporate human oversight.
6. **Integration Complexity:**
 - Risk: Challenges in integrating Ema SAOS with existing HR and IT systems.
 - Mitigation: Ensure compatibility, provide API integration, and offer technical support.

THAILAND
Thank you



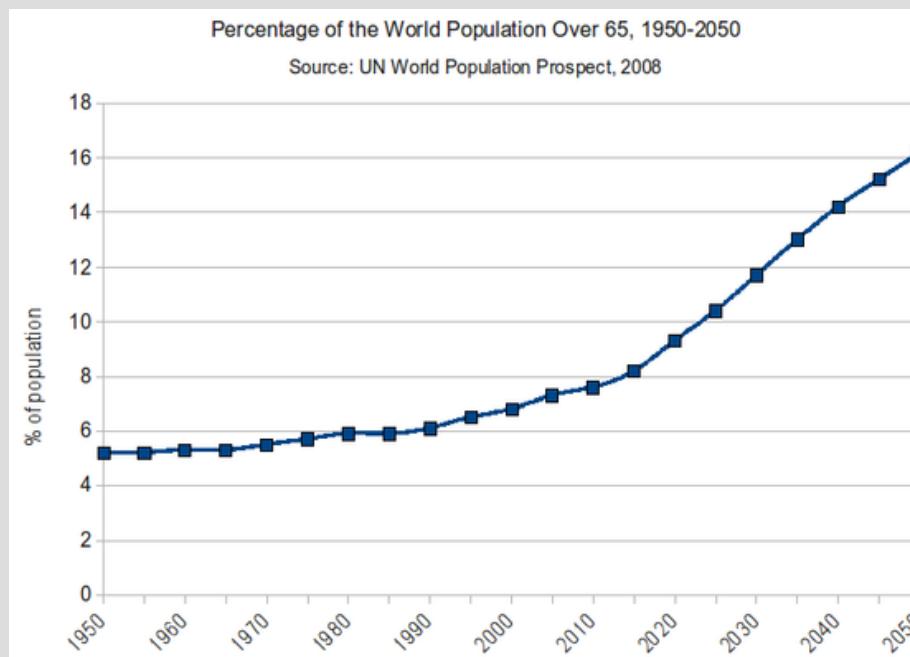
Presentation By:
Harshaa Reddy G

- What do you think will be a 2030 problem and why do you think so?
- Who will you solve for first and why?
- What part of the problem will you solve for first and how will you solve it using the tech of tomorrow?
- Comment on the feasibility of your solution by 2030.
- How will you measure the success of your product and what are the potential pitfalls in your solution?

Problem: Increased Long-term Care Demand Due To Global Rise In Population Of Older Adults

1. Global rise in population of older adults

- World population aged 65+ (older adults) is projected to increase from 9% to 12% between 2023 to 2030 [\[1\]](#)



2. What is long-term care and why is it needed?

- Long-term care is provided to patients, especially older adults as they require ongoing support and assistance with day to day activities due to their deteriorating health conditions
- About 70% older adults require long-term care [\[2\]](#)

3. Implications of rising long-term care demand

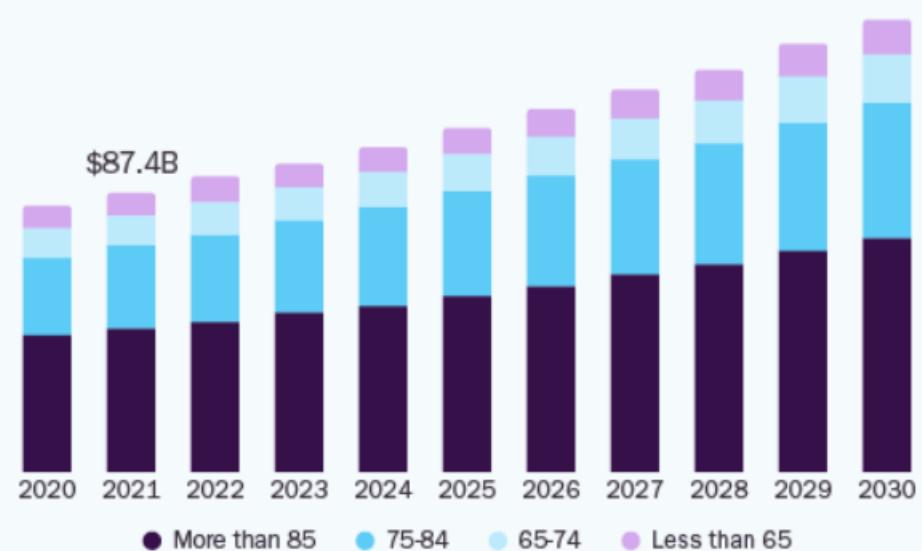
- Shortage of long-term care professionals
- Rising costs of long-term care services [\[3\]](#)

4. Why is this a 2030 problem?

- By 2030, more than 60% older adults are projected to manage more than 1 chronic condition [\[4\]](#) which means more people would need long-term care
- The assisted living facility market is expected to grow at a CAGR of 5.5% [\[5\]](#) as shown below

U.S. Assisted Living Facility Market

size, by age, 2020 - 2030 (USD Billion)



5. Current solutions for long-term care

Majorly companies working in the long-term care domain are focusing towards nursing homes and assisted living facilities. Their services include

- Managing Electronic Health Records (EHRs) of patients such as demographics, medical history
- Medication management that include services like medicine dispensing, medication adherence and medication reviews

ORACLE **Cerner**
MCKESSON

Omnicare
a CVS Health company

6. Target Addressable Market (TAM) in 2030

$$\text{TAM} = \frac{\text{65+ aged population in 2030}}{\text{[6]}} \times \frac{\% \text{ population needing long-term care}}{\text{[7]}} \times \frac{\text{avg spending on long-term care}}{\text{[8]}}$$

$$\text{TAM} = (850 \text{ Crores} \times 12\%) \times (70\%) \times (\text{INR } 20,000 \text{ per month} \times 12 \times (1.05)^7)$$

$$\text{TAM} \sim \text{INR } 240 \text{ lakh crores}$$

Assumptions:

- Population above 65+ years of age would only require long-term care
- Average spending on long-term care is taken as the average amount households spend on attendants in tier 2 cities of India with 5% annual inflation rate

Why enter this market?

- Large market size of INR 240 lakh crores
- Long-term care at homes is an under-served segment

User Personas

1. User personas



George
Male, 78

Profile: Retired scientist, suffering from stage 3 Parkinson's disease

Goals: Maintain independence and quality of life as much as possible

Pain Points: Social isolation, can't communicate health concerns



Derek
Male, 53

Profile: Works remotely as Tech Lead at Meta and lives with his father George

Goals: Provide high quality care, balance work along with care giving

Pain Points: Unable to attend father 24x7 due to work, finds it tough to afford healthcare due to rising costs



Jennifer
Female, 36

Profile: Nurse, takes care of older patients at a nursing home

Goals: Take good care of all patients and ensure their well-being

Pain Points: Unable to efficiently take care of all patients due to shortage of staff at nursing home

4. What part of the problem should we solve?

Long-term care

Safety, prevention, detection

Activities of daily life

Communication and cognition

Social interaction and Recreation

2. Who should we solve for?

Solving for **Derek** instead of Jennifer would have the largest impact because:

- He represents a larger class of users as only **6.5%** older adults avail assisted living facilities and nursing homes^[9]
- He has to manage his work along with his father's healthcare needs which makes his problems more severe

3. Service Available Market (SAM) in 2030

$\text{SAM} = \text{TAM} \times \% \text{ older adults living at home} \times \% \text{ belonging to upper and middle class in 2030}$ ^[10]

$\text{SAM} = \text{INR } 240 \text{ lakh crore} \times (100 - 6.5\%) \times 85\%$

$\text{SAM} \sim \text{INR } 190 \text{ lakh crore}$

Assumptions:

- Our product would cater to **upper and middle class** population only
- Our product would cater to patients living at home rather than those living in nursing homes or assisted living facilities

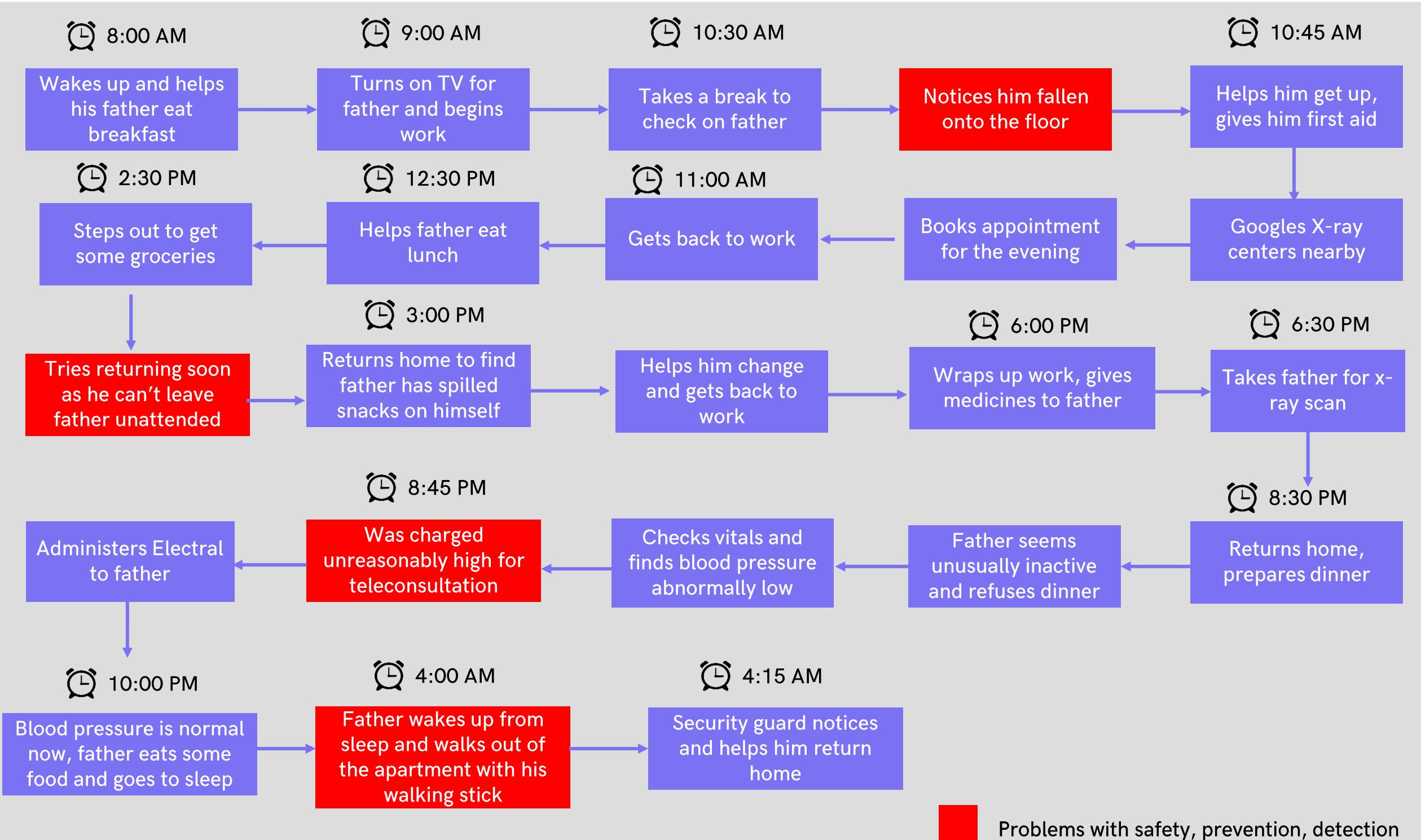
Safety, prevention and detection here refers to measures taken to protect older adults from injuries, health hazards and identifying health problems early on

We prioritize **Safety, prevention, detection** segment due to its significant impact on well-being and quality of life of older adults. This is evident by the following facts:

- **30 lakh** older adults^[11] are treated in emergency departments in the US every year due to accidental injuries such as falls
- **70%** older adults^[12] suffering from Dementia go missing at least once
- Early detection of health concerns helps in avoiding complications in the future

Derek's User Journey

1. A day in Derek's life



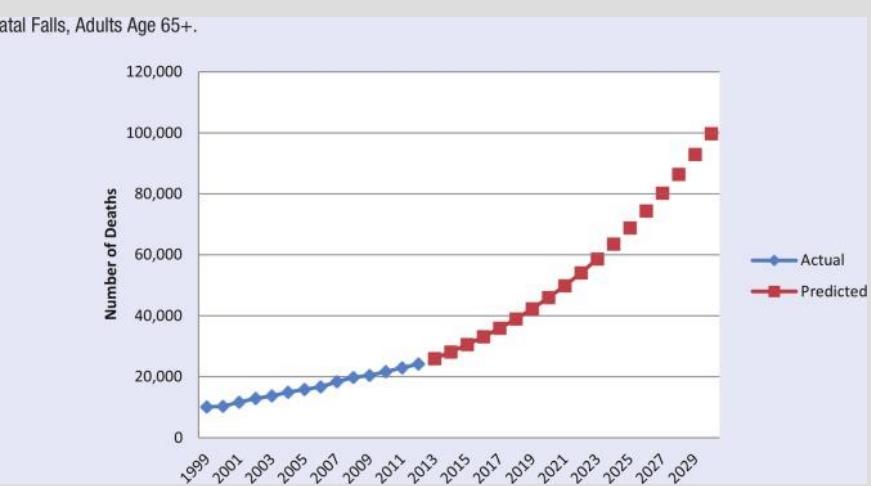
2. What comes under safety, prevention, detection?

In context of the user journey:

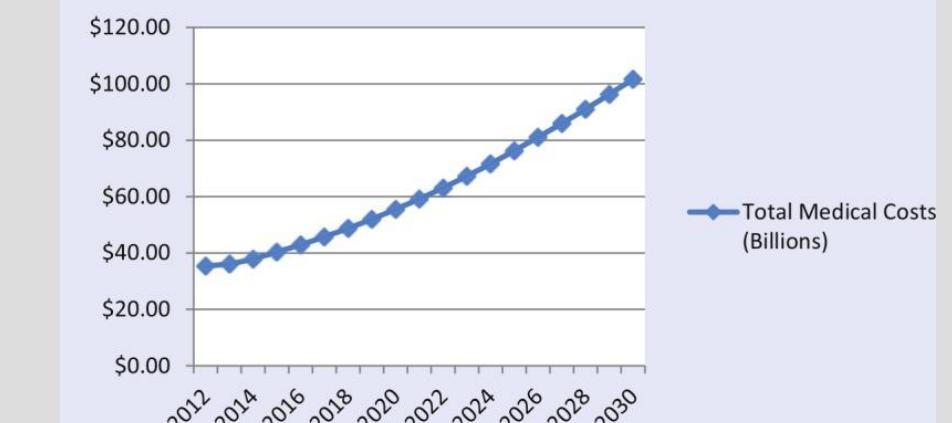
- Safety refers to preventing patient from wandering
- Spilling snacks could have been prevented had there been a caregiver with the patient
- Detection refers to consulting doctor to detect any underlying health issues

3. Are accidental falls, medical costs expected to increase by 2030?

Yes, falls and medical costs are expected to keep increasing^[13]

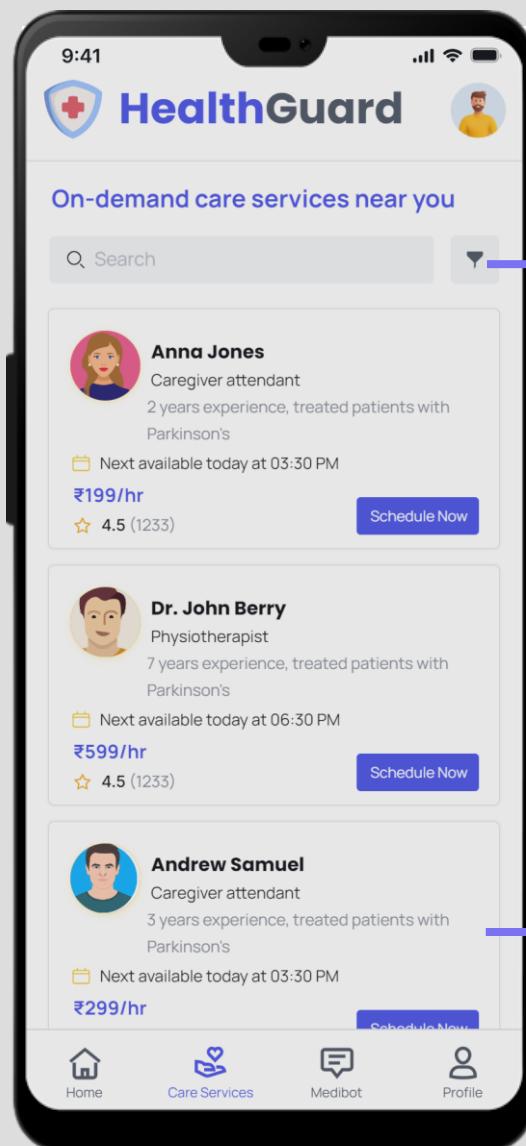


Total Medical Costs.



The Solution: HealthGuard

Solution A: On-Demand Care Services



Care Services Page

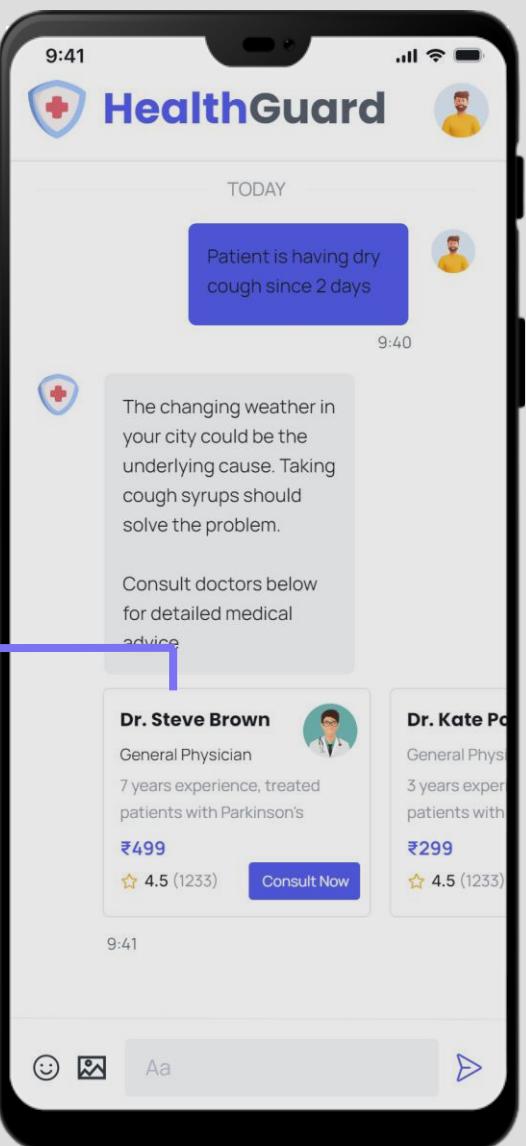
How does it work?

- Optimizes demand and supply by listing caregivers based on availability, proximity and relevant experience

Why is it needed?

- Shortage of caregiver professionals due to increased demand
- Expensive to afford full-time caregiver

Solution B: AI Assistant - Medibot



Medibot

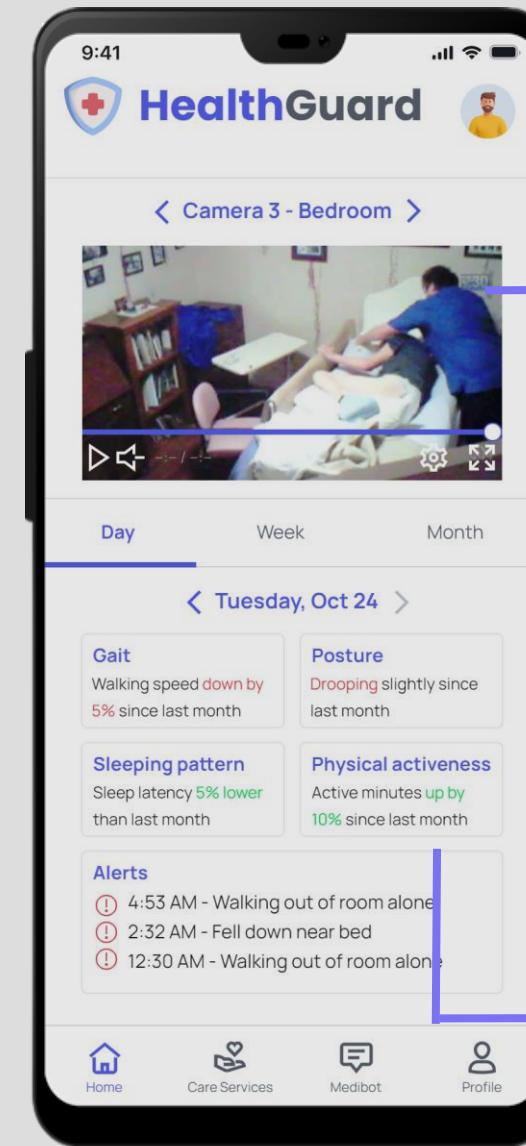
How does it work?

- Articles related to medical science are used to train GPT model
- Deep learning algorithms are used to recommend doctors based on query and patient's medical history

Why is it needed?

- Affording a doctor consultation for minor ailments is quite expensive
- Results on search engines often don't take patient's medical history into consideration

Solution C: Remote Patient Monitoring Through AI



Home Page

4

Sync CCTV:
Connect home CCTV to view footage and analytics

5

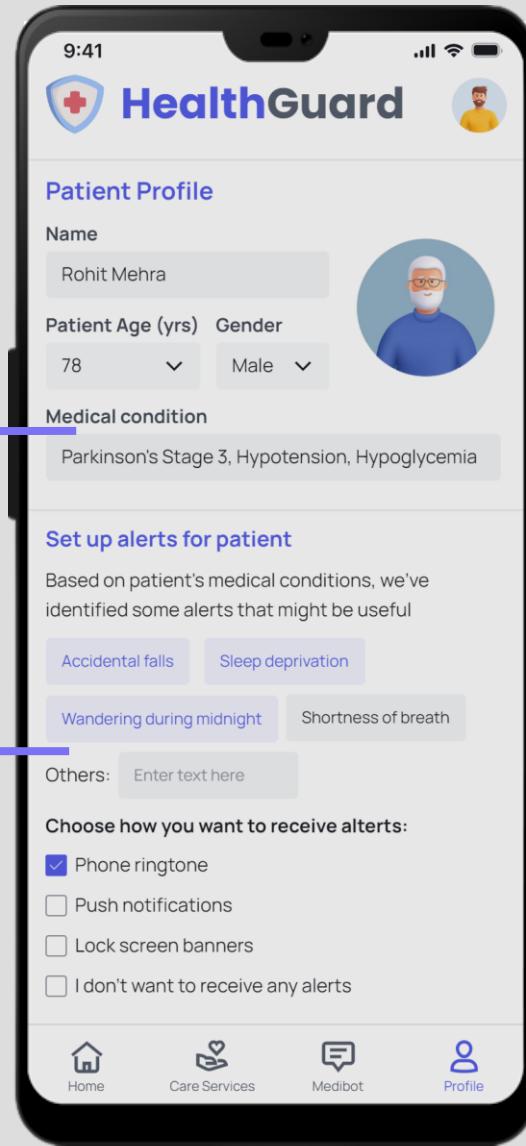
Patient details:
Enter patient details to set up alerts

6

Alerts:
Choose AI-based video analytics alerts for notifications

7

Health insights:
Predict health concerns based on gait, posture, sleep and activity



Profile Page

How does it work?

- Deep learning algorithms are used to recognize objects and events in CCTV footage

Why is it needed?

- Provide alerts when family members are away from patient
- Comparing patient's activeness and well-being with previous months/years is difficult

Solution Prioritization

Parameter/ Solution	On-demand care services (A)	AI assistant - Medibot (B)	Remote patient monitoring (C)
Reach	80 Crore	7 Crore	25 Crore
Impact	2	1	3
Confidence (feasibility by 2030)	100%	80%	50%
Effort	1	2	3
Net result	160 (MVP)	2.8 (Phase 2)	12.5 (Phase 1)

Qualitative analysis for RICE framework used in prioritization:

SAM comprises of ~80 Cr patients

1. Reach: A = People requiring long-term care; B = reach of A x % using teleconsultation; C = reach of A x % having CCTV at home
Therefore, A ~ 80 Cr; B = 80 Cr x 8.4%^[14] ~ 7 Cr; C = 80 Cr x 32%^[15] ~ 25 Cr
2. Impact: A - provides trained professionals for a specified duration; B - provides medical advice through teleconsultation; C - provides alerts in emergency cases (C>A>B)
3. Confidence: A is achievable; B is difficult but achievable; C is difficult to achieve (training the model to deliver high accuracy will be challenging) (A>B>C)
4. Effort: A is a simple tech flow; B requires training GPT model; C requires training deep learning model to recognize objects and events (C>B>A)
5. Net result is calculated as (Reach x Impact x Confidence)/Effort

Metrics

Parameter/ Solution	On-demand care services (A)	AI assistant - Medibot (B)	Remote patient monitoring (C)
North Star Metric: Unique users who have used at least one of the three services at least once (Goal: Acquisition because we are launching a new product)			
Activation	<ul style="list-style-type: none"> Unique users with at least one care service booking 	<ul style="list-style-type: none"> Unique users entering at least one query Unique availing teleconsultation at least once 	<ul style="list-style-type: none"> No. of users connecting HealthGuard app with home CCTV No. of users setting up alerts
Engagement	<ul style="list-style-type: none"> No. of services booked Vs completed Average rating per caregiver 	<ul style="list-style-type: none"> No. of queries answered No. of teleconsultation calls booked Vs completed 	<ul style="list-style-type: none"> DAU, MAU Average no. of alerts sent per user
Retention	<ul style="list-style-type: none"> Unique users with more than one query Unique users availing teleconsultation more than once DAU/MAU 	<ul style="list-style-type: none"> Unique users with more than one care service booking DAU/MAU 	<ul style="list-style-type: none"> DAU/MAU Churn rate
Revenue	<ul style="list-style-type: none"> Average revenue per user 	<ul style="list-style-type: none"> Average revenue per user 	<ul style="list-style-type: none"> No. of subscriptions sold (users would subscribe to access this feature)

Pitfalls And Mitigation

Possible Pitfalls	How To Mitigate Them?
Privacy and regulatory concerns	<ul style="list-style-type: none">Implement robust data encryption and communication protocols to protect patient dataClearly communicate to users that their data is being used for their benefit and is encryptedEnsure compliance with all regulations and stay informed about regulatory changes across all geographies we operate in
Technical challenges: <ul style="list-style-type: none">False positive and negative alertsIncorrect information provided via AI assistant	<ul style="list-style-type: none">Develop feedback loop that allows users to report false positives and negatives to help improve the deep learning algorithmsReview information provided through AI assistant by healthcare professionals
Trust and safety while availing on-demand care services: Caregivers may mistreat the patient or not perform as per expectation	<ul style="list-style-type: none">Ensure proper verification and training while onboarding to ensure good user experienceOffer easily accessible customer support for dispute resolutionClearly outline terms of service to both patient and caregiver
Caregiver and patients may approach each other off-platform to avoid paying overhead charges	<ul style="list-style-type: none">Implement strict policies and clearly state penalties for violating platform's policies such as fines, suspension

Case Summary

Problem:

With the rapidly growing population of older adults, providing long-term care to them will be challenging in 2030 due to increasing demand and shortage of caregivers

Target audience:

Older adults requiring long-term care, family members of older adults

What part of the problem did we solve?

We solved for safety, prevention and detection in long-term care due to its high impact on patient's well-being and quality of life

Solution:

Our solution, HealthGuard provides support in taking care of safety, prevention and detection aspect of long-term care in the following ways:

- On-demand care services by building a market place of professional caregivers such as attendants, physiotherapists
- AI assistant-Medibot that diagnoses issues using AI and recommends doctors for teleconsultation
- Remote patient monitoring through AI powered video analysis

Impact:

HealthGuard reduces the burden of patient's family members by providing access to on-demand quality healthcare services and leverages AI to provide critical alerts

North Star Metric:

Unique users who have used at least one of the three services at least once (Goal: Acquisition)

Ema APM Program - TTD Temple Guide Persona



తిరుమల తిరుపతి దేవస్థానములు
Tirumala Tirupati Devasthanams



Ema - A TTD AI employee to assist pilgrims , provide real time information about various aspects like booking process , accommodation , sevas and about more information which cannot be easily found on the internet , like the real time information

Harsha Reddy Godlaveeti
harshaareddyuk@gmail.com



Ema APM Program - Case Prompt

Ema is a universal AI employee, with multiple personas across roles and industries to revolutionize how people work. As a PM at Ema, you will regularly encounter deep, impactful enterprise problems where one of Ema's personas can work collaboratively with existing employees to multiply their productivity. Identify one such gap in existing businesses and propose an Ema persona to provide outsized gains to the team she would be a part of. Address the following prompts:

- Why did you choose this problem? What is the potential impact of solving it?
- How will your persona use GenAI to solve the problem? What does the end to end user journey of working with this persona look like?
- How will you test your persona and validate your hypotheses quickly?
 - Demonstrate the feasibility of your use case via sample prompts and responses on synthetic data.
- How do you measure the success of your solution?
- What are some potential pitfalls of your solution?

The Problem

- Tirumala Tirupathi , the second richest temple in the world and the only temple that gets maximum number of devotees every single day . During important days and special occasions the count reaches to 100,000 devotees visiting in a single day . This puts a huge pressure on the administration .
- Tirumala Tirupathi trip is a dream for many people in the states of Andhra , Telangana , Maharashtra , Karnataka and Tamil Nadu . Most of the families try to visit this temple at least once a year. People save money every month to visit this temple. For most of the middle class families this trip is everything .
- This trip is not an easy one to do , you will have to plan like months ahead to get the bookings done.
- With large number of people visiting the holy town , the need for efficient guide is lacking .
- Though the information is available online , most people find it hard to understand in the local languages and also there is no clear information that answers the doubts of the pilgrims
- For example i can find the details of online bookings , but there is no details on how to book rooms offline or about the current rush at the temple or the bus timings , routes , and real time information such as current rush in the temple queue , waiting period ,etc .
- Pilgrims are getting trapped into scams due to lack of awareness and knowledge during this process .
- Despite the information is made online , there is a widespread confusion that i had noticed and people are basically lost and require help and support desperately
- The TTD's helpline numbers are most of the time busy

Potential Impact of Solving it

- Definitely there is a significant impact in helping the pilgrims get access to key information regarding the pilgrimage . Pilgrims can ask wide variety of questions
- Reduces the burden on the help line numbers
- Most pilgrims keep asking the same questions repeatedly , so with Ema , we can solve most of the cases
- Cost effective
- The current helpline number is active only on weekdays (9 AM to 5 PM) . Pilgrim influx is mostly 24/7 .So with introduction of EMA , it can solve this issue
- Helps in reducing potential scams and black market traders
- Can also help the pilgrims during emergencies and unprecedented situations
- Overall the pilgrim might feel satisfied

How will this persona use GenAI

Real-Time Information Delivery:

- **Queue Updates:** The tickets scanned can give the information about the rush in the queues ..
- **Accommodation:** Integrate with TTD's booking systems to provide real-time room availability and booking options.
- **Sevas and Events:** Pull data from TTD's event schedules and seva offerings to provide up-to-date information which is exclusively known at the point .
- **Transport Information:** Connect with transportation networks to give real-time bus timings and route information including private services.

Multilingual Support:

- **Natural Language Processing (NLP):** Enable understanding and response in multiple languages, both text and voice, ensuring accessibility for a diverse user base.
- **Local Dialects:** Adapt to local dialects and slang for better user interaction and understanding.

Personalized Assistance:

- **User Profiles:** Create profiles based on user preferences, past interactions, and specific needs.
- **Custom Itineraries:** Generate personalized itineraries using GenAI algorithms that consider user preferences and schedules.
- **Notification Alerts:** Use AI to predict important updates and send timely notifications to users.

Scam Prevention and Verification:

- **Information Verification:** Ensure that all information provided is sourced from verified TTD databases to prevent misinformation.
- **Educational Content:** Use GenAI to generate educational content and alerts about common scams and how to avoid them.

24/7 Availability:

- **Always-On Service:** Utilize AI to provide continuous support, ensuring that help is available anytime, especially during peak times.
- **Emergency Response:** Automate emergency response protocols to guide users to the nearest help or emergency services.



End-to-End User Journey with EMA

Pilgrim accesses EMA via a mobile app, website, or kiosk at the pilgrimage site. EMA greets the user and asks for their preferred language. User inputs their query either by typing or speaking. Uses NLP to understand the query and provides an immediate, accurate response using real-time data integration. EMA offers to set up a profile for the user to provide personalized assistance. Based on user preferences, it generates a custom itinerary including darshan times, sevas, accommodation, and transport options. EMA sends alerts about important updates, such as queue status, special events, or any changes in schedules. Provides tips and alerts about common scams and how to avoid them. In case of an emergency, users can immediately contact EMA, which will guide them to the nearest help or provide emergency contact information. After their visit, EMA prompts users to provide feedback on their experience. EMA uses this feedback to improve its algorithms and provide better assistance in the future.

How will you test your persona and validate your hypotheses quickly?

To test the EMA persona and validate the hypotheses quickly, we can use a combination of rapid prototyping, synthetic data generation, and user feedback loops. Here's a step-by-step plan to achieve this.

Rapid Prototyping

Develop a basic prototype of EMA with core functionalities:

- Real-time information delivery
- Multilingual support
- Personalized assistance
- Scam prevention and verification
- 24/7 availability

Synthetic Data Generation



Create synthetic data that simulates real-world scenarios and user interactions. This data will help test EMA's responses and ensure it can handle various queries accurately.

User Feedback Loop

Deploy the prototype to a small group of users (beta testers) to gather initial feedback and iterate on the design based on their inputs.

Sample Prompts and Responses

Scenario 1: Real-Time Queue Status

User Prompt: "What is the current waiting time for darshan?" **EMA Response:** "The current waiting time for darshan is approximately 2 hours. The queue is moving steadily. Would you like to receive updates as the waiting time changes?"

Scenario 2: Accommodation Booking

User Prompt: "How can I book a room for tonight?" **EMA Response:** "You can book a room online through the TTD website or at the TTD accommodation office on-site. Currently, there are 50 rooms available. Would you like assistance with the online booking process?"

Scenario 3: Sevas and Events

User Prompt: "What sevas are available tomorrow?" **EMA Response:** "Tomorrow, the following sevas are available: Suprabhatam at 3:00 AM, Thomala Seva at 3:45 AM, Archana at 4:00 AM, and Kalyanotsavam at 10:00 AM. Would you like more details or to book a seva?"

Testing and Validation Process

1. Internal Testing:

- Use synthetic data to simulate various user interactions.
- Ensure EMA handles edge cases and provides accurate, helpful responses.

2. Beta Testing:

- Deploy EMA to a select group of real users (e.g., TTD staff, volunteers, or frequent pilgrims).
- Collect feedback on functionality, accuracy, and user satisfaction.

3. Feedback Analysis:

- Analyze feedback to identify common issues and areas for improvement.
- Adjust EMA's algorithms and data sources based on user input.

4. Iterative Improvement:

- Continuously update and refine EMA based on ongoing feedback and new data.
- Expand testing to a larger user base as confidence in the system grows.

5. Full Deployment:

- Once validated through rigorous testing, roll out EMA to the general public.
- Monitor performance and continue to gather user feedback for ongoing improvements.



Example User Interaction Flow

Initial Query:

User: "What are the available accommodation options for tonight?"

EMA: "Currently, we have standard rooms, deluxe rooms, and dormitories available. Would you like to know the prices and booking procedures?"

Follow-Up Query:

User: "Yes, please provide the prices."

EMA: "Standard rooms are ₹500 per night, deluxe rooms are ₹1000 per night, and dormitories are ₹200 per night. You can book online or at the TTD office on-site. Would you like to proceed with an online booking?"

Booking Assistance:

User: "Yes, help me book a standard room online."

EMA: "Sure, please visit the TTD website, select 'Accommodation', choose 'Standard Room', and enter your details. I will stay with you to answer any questions you may have during the process."

This approach allows us to quickly test and validate EMA, ensuring it meets the needs of pilgrims and provides reliable, helpful service.

Measuring the Success of EMA

To measure the success of EMA, we can use a combination of quantitative and qualitative metrics.



Here are the key performance indicators (KPIs) and methods to evaluate EMA's effectiveness:

1. User Engagement Metrics:

- **Active Users:** Track the number of unique users interacting with EMA.
- **Session Duration:** Measure the average time users spend interacting with EMA.
- **Interaction Frequency:** Count the number of interactions per user session.

2. Response Accuracy and Effectiveness:

- **Accuracy Rate:** Calculate the percentage of correct and helpful responses provided by EMA.
- **Resolution Rate:** Measure the percentage of queries resolved successfully without needing human intervention.
- **Follow-Up Queries:** Track the number of follow-up questions, which can indicate areas where the initial response was unclear or insufficient.

3. User Satisfaction:

- **Feedback Scores:** Collect user ratings and feedback after each interaction.
- **Net Promoter Score (NPS):** Measure users' willingness to recommend EMA to others.
- **Surveys and Polls:** Conduct periodic surveys to gauge overall user satisfaction and gather suggestions for improvement.

4. Operational Efficiency:

- **Call Deflection Rate:** Measure the reduction in calls to TTD helplines as a result of EMA's assistance.
- **Cost Savings:** Calculate the reduction in operational costs due to decreased dependency on human staff for handling common queries.

5. Scam Reduction:

- **Reported Incidents:** Track the number of reported scam incidents before and after EMA's implementation.
- **User Awareness:** Measure the increase in user awareness about scams through periodic quizzes or feedback.

Potential Pitfalls of EMA and Mitigation Strategies



1. Inaccurate or Outdated Information:

- **Pitfall:** EMA may provide incorrect or outdated information if the data sources are not updated regularly.
- **Mitigation:** Ensure real-time data integration with TTD's systems and establish a protocol for regular updates and audits of the information database.

2. Language and Cultural Nuances:

- **Pitfall:** Misunderstandings due to language barriers or cultural nuances in communication.
- **Mitigation:** Employ advanced NLP techniques and include a diverse set of language models that account for regional dialects and cultural context.

3. Technical Glitches and Downtime:

- **Pitfall:** Technical issues could lead to downtime or reduced functionality, impacting user trust.
- **Mitigation:** Implement robust infrastructure with redundancy and failover mechanisms. Monitor system performance continuously and have a dedicated technical support team to address issues promptly.

4. User Resistance to AI:

- **Pitfall:** Some users may be hesitant to trust or use an AI-based assistant.
- **Mitigation:** Educate users about the benefits and reliability of EMA. Provide an option for users to connect with human support if needed, to build trust gradually.

5. Privacy and Security Concerns:

- **Pitfall:** Handling sensitive user data may raise privacy and security concerns.
- **Mitigation:** Adhere to strict data privacy regulations and implement robust security measures to protect user data. Clearly communicate the privacy policy to users.

6. Scalability Issues:

- **Pitfall:** As the number of users grows, the system might face scalability challenges.
- **Mitigation:** Design EMA with scalability in mind, using cloud infrastructure that can handle increased load. Perform regular stress testing to ensure system robustness.

Continuous Improvement Cycle

1. Monitor and Analyze:

- Regularly monitor the KPIs and user feedback.
- Use analytics tools to identify patterns and areas for improvement.

2. Iterate and Update:

- Based on the analysis, make iterative updates to EMA's algorithms and data sources.
- Implement new features and improvements based on user feedback and emerging needs.

3. Engage with Users:

- Maintain an open feedback loop with users to understand their evolving needs.
- Conduct regular user engagement activities, such as Q&A sessions, webinars, or focus groups.

4. Benchmark and Compare:

- Benchmark EMA's performance against other similar solutions.
- Continuously compare user satisfaction and operational efficiency metrics to industry standards.

By systematically measuring the success of EMA and proactively addressing potential pitfalls, we can ensure that EMA remains a reliable, efficient, and user-friendly assistant for pilgrims visiting Tirumala Tirupati.