Bumble: Breaking down Business Outcomes into Product Outcomes

Bumble App

An **online dating** and a **social networking app**, **Bumble** allows people to **find potential partners** (**Bumble Date**), **friends** (**Bumble BFF**), or **professional network** (**Bumble Bizz**)

Create Profile → Match → Chat

Users create a profile, swipe through profiles of other potential matches, and start a conversation with their match.

Users can access **premium features** to **maximize the chance of developing meaningful connections**

Mission

Create a world where all relationships are **Healthy** and **Equitable**, **through Kind Connections**

Value Proposition

Women make the first move on **Bumble** by initiating a chat in case of heterosexual matches

Business Model

Bumble is a **Freemium Model**
- **Basic feature**s are **free** for everyone
- **Premium features** can be **subscribed** or **purchased in-app**.

Both subscribers and non-subscribing users, can access additional features through in-app purchases.

Problem Statement Increase the ARPU for Bumble

Problem Breakdown: Why is increasing the ARPU important for Bumble?

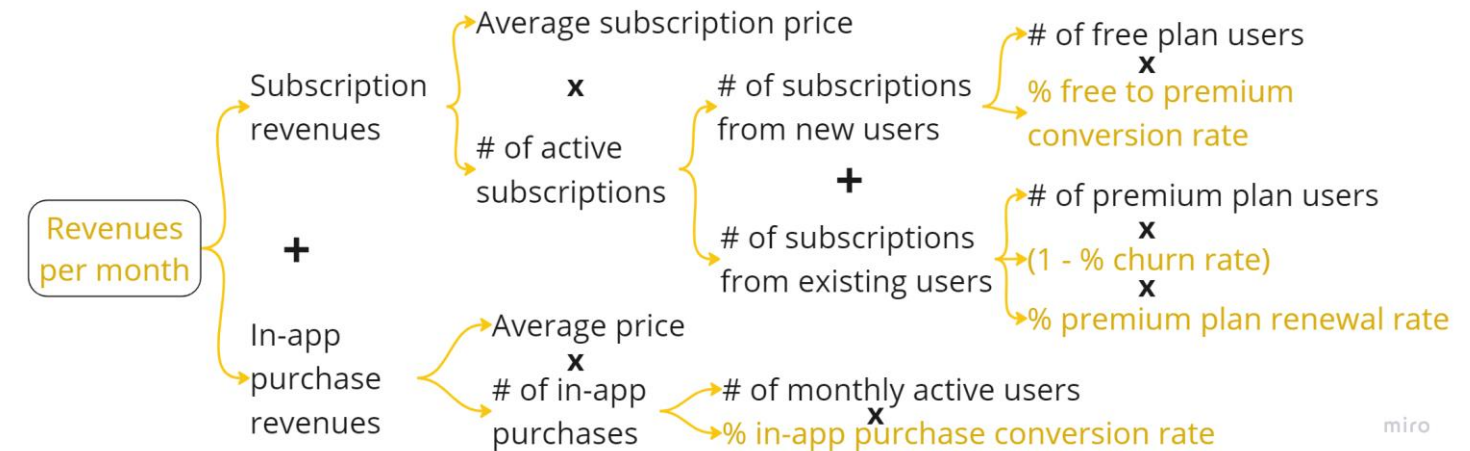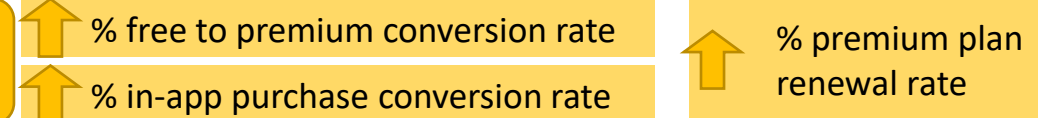|	
Increased Revenues	Increasing the ARPU directly contributes to the growth in the company's revenues
Scalability	If APRU is less than Customer Acquisition Cost, it directly impacts the company's business viability and ability to scale
Competition	APRU is the most common metric to compare against competitors. Increased ARPU can give an edge over competition

Mapping Business Outcomes to Product Outcomes

Revenues per month = Subscription revenues + In-app purchase revenues

Subscription revenues: Average subscription price × # of active subscriptions

# of active subscriptions: # of subscriptions from new users + # of subscriptions from existing users

# of subscriptions from new users: # of free plan users × % free to premium conversion rate

# of subscriptions from existing users: # of premium plan users × (1 - % churn rate) × % premium plan renewal rate

In-app purchase revenues: Average price × # of in-app purchases

# of in-app purchases: # of monthly active users × % in-app purchase conversion rate

miro

Business Outcome ↑ ARPU per month *Translates to* ⇒ ↑ Revenues per month

Product Outcomes ↑ % free to premium conversion rate ↑ % in-app purchase conversion rate ↑ % premium plan renewal rate
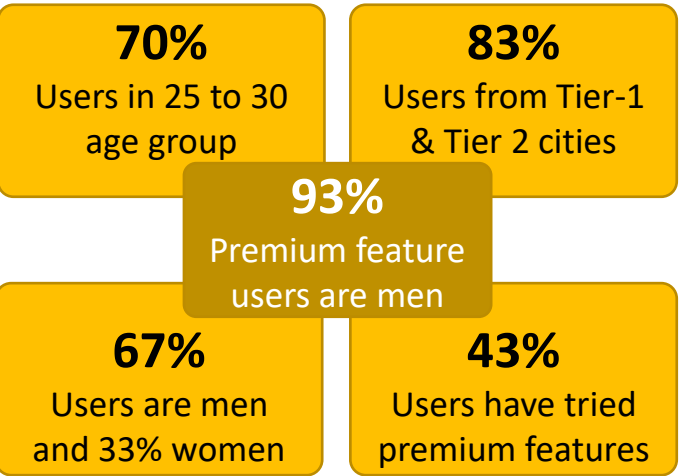
ARPU = (Monthly Revenues/MAU); I am focusing only on increasing revenues (i.e., numerator)
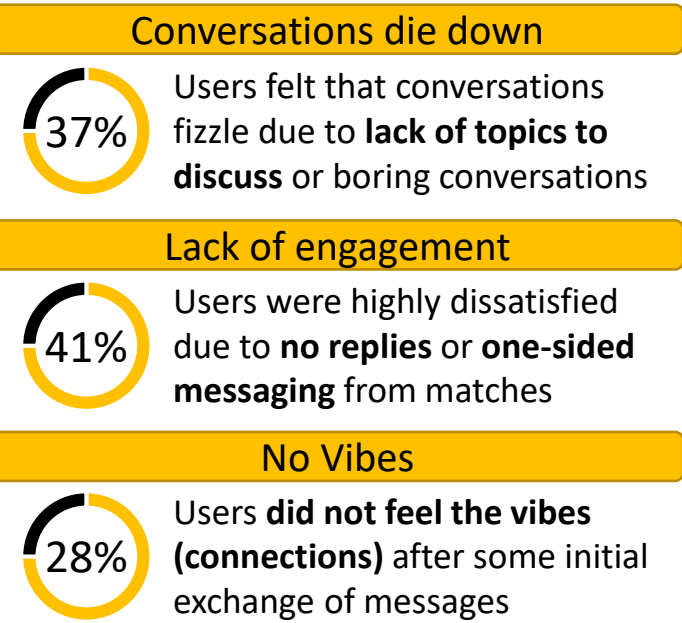*For product outcomes, I am focusing on improving conversion & renewal rates (ignoring churn)*

Identifying User Needs and Pain Points through User Survey and Interviews
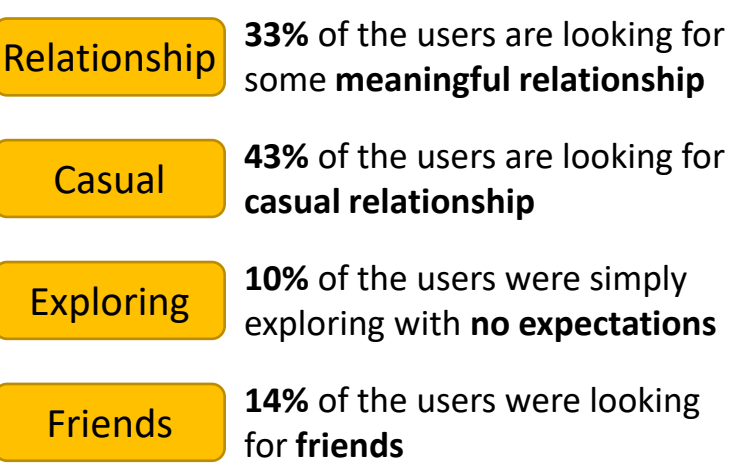
Bumble User Demographics

70%
Users in 25 to 30 age group

83%
Users from Tier-1 & Tier 2 cities

93%
Premium feature users are men

67%
Users are men and 33% women

43%
Users have tried premium features

Why do users use Bumble?

Relationship — **33%** of the users are looking for some **meaningful relationship**

Casual — **43%** of the users are looking for **casual relationship**

Exploring — **10%** of the users were simply exploring with **no expectations**

Friends — **14%** of the users were looking for **friends**

Why did users pay for premium features?

More Matches — **65%** of the users wanted more matches so that they have **more partners to choose from**

Unlimited Likes — **55%** of the male users wanted to **increase the chance of getting matched** by females

Profile Boost — **30%** of the male users wanted a profile boost to **increase their visibility** among females

Unlimited Rematch — **35%** of the male users wanted to **rematch** with **profiles which expired** due to no replies

Key pain points faced by users

Conversations die down
37% — Users felt that conversations fizzle due to **lack of topics to discuss** or boring conversations

Lack of engagement
41% — Users were highly dissatisfied due to **no replies** or **one-sided messaging** from matches

No Vibes
28% — Users **did not feel the vibes (connections)** after some initial exchange of messages
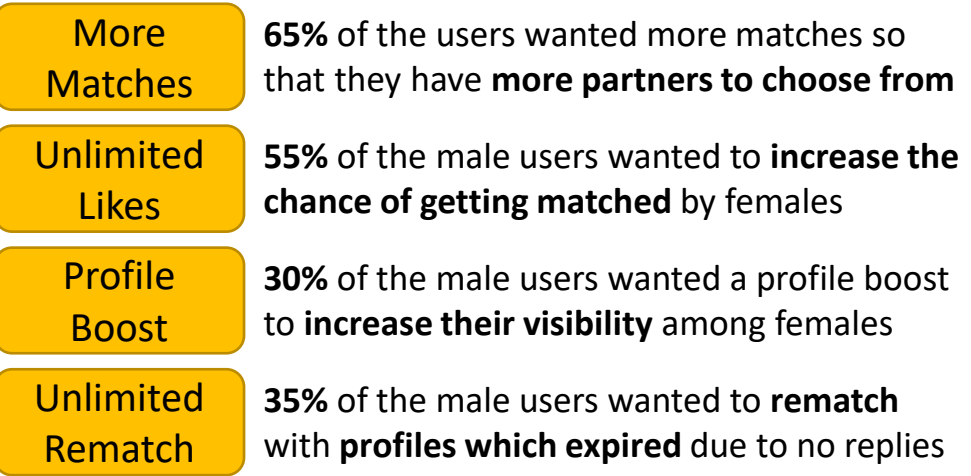
Insights from User Interviews

*"I have been on Bumble for a few weeks now. I have matched with a few women, but **they never message me back**."* – Pratik (27, M)

*"Most of the time, **girls just don't reply or give me one-word answers**. It's really frustrating because I'm trying to meet someone and it's hard when no one is willing to talk"* – Mayur (30, M)

*"Bumble is a great app for meeting new people, but the conversations can be hit or miss. I've had some really good conversations with girls who I've ended up meeting up with, but I've also **had some really boring conversations with girls** who I never want to talk to again"* – Rajiv (28, M)

Reviews (recurring pain points) from App Store

David Fish ★ May 7, 2023
Great concept, but it doesn't work. Most women on this app assuming if they're even real, don't actually want the power to make the first move. They put in the bare minimum when it comes to starting conversations, which is pretty 1 sided when they won't accept the same from men anywhere else. This app is such a waste of time and I'm deleting it.

Garet Curry ★ March 30, 2023
Of all the dating apps I've tried so far, this one is the worst. Somehow Tinder (also terrible) is slightly better because I actually had (weak) conversations with people. Hinge has been the best experience so far. I'm not going to use an app that never results in any actual conversation with matches. Edit: Response to Bumble: For $3.99 a minute, you can receive 1 phone call from me a week. How does it feeeeeeeeeel?

- Male users complained that even if **women messaged first**, it was just a **bare minimum effort**
- **Male users** had to **put in a lot of effort** for the conversation with female users even if it were one-sided

Source: Bumble User Survey (**30** Respondents); User Interview (**5** Interviews)

Problem Breakdown: Identification of the "True Problem" & why it should be solved

Root Cause Analysis

Problem	**Men** are **unable to form a meaningful connection** with women, whom they matched on Bumble.
Why?	**Women do not respond** after the first message or after exchanging a couple of messages.
Why?	**Women** have significantly more matches than men, so they are **picky to whom to respond**. Women **expect men to lead conversation** and make it interesting else the conversation fizzles out
Why?	Men find it **difficult to come up with ideas** and topics to keep the conversation interesting and engaging

What is the **True Problem**?

How might we assist men to form a meaningful connection with their matched partners, **so that** they can effortlessly chat in an engaging and interesting conversation with their matches leading to a date?

How do we know it is a real problem? (Survey results)

37%	Users felt that **conversations fizzle** due to **lack of topics** to discuss or **boring conversations**
41%	Users were **highly dissatisfied** due to lack of engagement (**no replies, one-sided messaging**) from matches
67%	Users felt that **meaningful** and **frequent conversations lead to a date**

Why should we solve this problem now?

Intense Competition	• The online **dating industry** in **India** is **highly competitive** • Top players are **constantly innovating** and expanding solution offerings to attract users.
Growing User Base for Dating Apps	• Over the last five years, the **user base** of Tinder (15 mil), **Bumble (10 mil)**, and Hinge (3 mil) has **grown by** 20%, **30%**, and 50% respectively. • The increasing **acceptance of online dating** and the increasing **urbanization of young population** have contributed to the growth of dating apps in India.

Bumble could lose their user base of potential paying users

• New users can prefer to join, and existing users can **switch at zero cost to Bumble's competitors**, who address users' current problems.
• Bumble may be **losing the opportunity to capitalize on the growing user** base of young dating population

What is the value generated by solving this problem?

For the Users	• Engage frequently in **interesting conversations** with matches • Experience **fun talks** without feeling forced conversations • Form a **meaningful connection** with the match **leading to a date**
For the Business	• **1% increase** in the number of paying users and **1% increase** in the ARPU will approximately **increase the revenues by 2%**. So, the company should focus on increasing ARPU

Problem Breakdown: Who are the target users affected by the True Problem

User Persona (**Male dating app users**)

Bio
28-year-old Rahul is an **engineer** and lives with his flat mates in **Pune**. He is occupied with work on weekdays. He gets time for personal activities and to **socialize** only on **weekends**

Needs
- Looking for a **relationship**
- Use **dating apps to meet women** since he is unable to meet them through his social circle
- A seamless and **interesting conversation with women matche**d on dating apps

Pain Point
- **Lack of experience** in using dating apps
- **Difficulty in conversing** with matched partners
- Hard to come up with **conversation topics**
- **Lack of response** from the other side

Jobs To Be Done
- **When** I want to message my matched partner
- **But** I am unable to come with topics to discuss
- **Please help** me engage in a meaningful and frequent conversations
- **So that** these conversations lead to a date
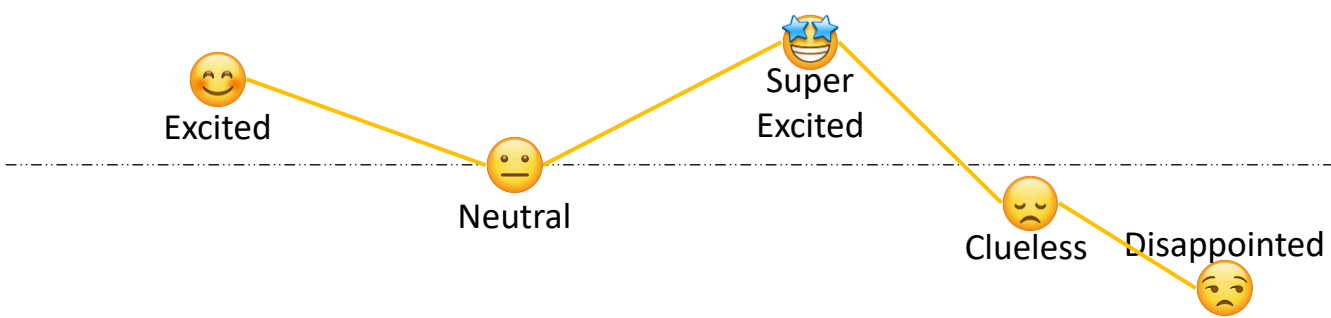
Customer Journey Map

User:
Rahul has been a Bumble user for 6 months now

Scenario:
Rahul has matched with a potential partner

Expectations:
Have an interesting and engaging conversation leading to a date

Stages	Create Profile	Swipe & Match	Message matches
Actions	Add photo/ video, write bio, prompts, & interests, add Insta/Spotify	Swipe profiles, superswipe or send compliment, and get a match	Send messages via text, audio, video, question game
Thoughts	I can create a detailed profile & provide all the required information	I don't have much choice, so I right swipe everyone. I will read bio after a match.	There are so many ways to message still no one wants to respond
Feelings	Excited 😊	Neutral 😐 / Super Excited 🤩	Clueless 😔 / Disappointed 😒
Pain Points	Writing a unique & eye-catching bio	No information about compatibility match	Engage matches in a conversation
Opportunities	"Bio Recommender" which takes your inputs and converts them into a fun & unique bio	Compatibility Meter that calculates compatibility score; Superswipe with an add-on audio/ video message	Chat Assist to engage in meaningful conversation; Fun trivia game based on mutual interest

About   Research   Problem   Target User   Ideation   Prioritization   Solution   Metrics   Pitfalls

Ideating and exploring potential solutions

Solutions	What is the solution?	How does it work?	How does it solve the problem?
BeeChat	• **BeeChat** is an **AI recommendation solution** • Assists users to **break the ice** or **engage in back-and-forth conversation** with the matched partners • Available as an **in-app purchase** feature	• Solution scans the entire profile of the user and the matched partner and produces a set of prompts to break the ice. The user can select the most appropriate prompt . • Solution interprets the partner's response and suggests open-ended questions or prompts	• Men can send thoughtful messages to women and make them interested in continuing the conversation. • For women, the solution can craft an opening message to send to the matches before 24-hour expiry window
SuperBee	• **SuperBee** is an **add-on feature to the existing SuperSwipe** feature • When a user superswipes on a profile, they can **supplement** the **superswipe with an audio or video message**. • Available within premium **subscription** pack or as a standalone **in-app purchase**	• When users superswipes on potential partners, they get a prompt to add a 15 seconds audio or video recording to make their case stronger on why they superswiped • The users will also get a message that "60% superswipes with audio/video recording get a match" to nudge them to buy the feature	• The user can convey why he is interested in the partner so that his superswipe does not go to waste. • There are high chances of a subsequent meaningful conversation if the partner right swipes since the superswipe intent was clear.
BeeQuiz	• **BeeQuiz** is a **trivia game** designed with the intent to enable the **matched users know each other in a fun way**. • User can initiate a trivia in the chat window and the matched user responds • Available within premium **subscription** pack or as a standalone **in-app purchase**	• Solution creates a trivia quiz based on users' profiles and dating-appropriate topics. • Solution analyses each question's response for both the partners and provides feedback to users in the form of compatibility scores and comments on points of common interest • Users are rewarded for participating in the trivia	• Based on the compatibility feedback, both users get to know a little bit more about each other after a round of trivia • Men can send thoughtful messages to women after the trivia and make them interested in continuing the conversation

Evaluating the potential solutions and prioritizing one of the solution

	Adoption of the Solution (A)	Impact on the ARPU or Revenues (I)	Confidence in solving the problem (C)	Operational Effort (E)	Score = (A*I*C)/E
BeeChat	**Medium** (Since most of the users complain about lack of engagement, one-sided conversation, and no response, the adoption could be high. However, users can ignore the recommendation and go their own way)	**High** (Whether the users are proficient at conversing or not, this feature will assist users to send the right messages to matched partners increasing the chances of buying the solution)	**High** (It addresses the core problem of lack of conversations among matched partners)	**Medium** (The system needs to be trained with questions and possible responses. They solution needs to be thoroughly tested since users will be willing to pay for good recommendations)	9
SuperBee	**Medium** (This is quick fix solution which increases the chances of getting a match but need not guarantee a further conversation)	**Medium** (Superswipes are already a part of subscription and in-app purchase. This feature could marginally increase revenues)	**Low** (SuperBee can get a match, but the user still need to be engaged in conversations after that)	**Medium** (The solution needs to integrate a video/audio message attachment to an already existing Superswipe feature)	2
BeeQuiz	**High** (The matched partners can participate in the trivia since the questions are fun and entertaining. The compatibility score and feedback will help partners know each other and promote conversations)	**High** (Since this solution has a fun factor, users would be willing to purchase the solution and play with partners.)	**High** (This solution solves the core problem of the lack of conversations; The fun factor associated with trivia can promote conversations)	**Medium** (Bumble already has a Question Game within chat. The system needs to be trained to produce the right set of trivia questions and responses based on mutual interests)	13.5

All scores are given on a low to high scale: **1 = Low**   **2 = Medium**   **3 = High**   ; *Operational Effort is considered for calculation although the tech bandwidth is infinite*

Introducing **BeeQuiz** (Engage in meaningful conversations through fun trivia)
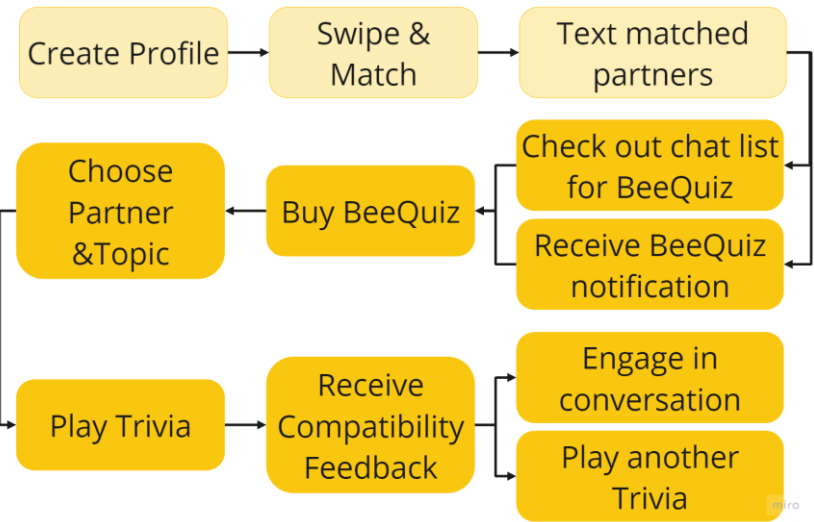
Benefits of the Solution

Through **BeeQuiz**, users can play fun & entertaining trivia games with matched partners, increasing the chances of engaging in a meaningful conversations

Key Features of the Solution

Select the Trivia Topic	Based on the users' profiles and common areas of interest, users receive suggestions for trivia topics
Compatibility Score & Feedback	After both users complete the trivia, compatibility score and feedback on their shared interests is displayed
Rewards	Users get rewarded for frequently playing the trivia games

User Flow

Create Profile → Swipe & Match → Text matched partners

Check out chat list for BeeQuiz ← Receive BeeQuiz notification

Buy BeeQuiz ← Check out chat list for BeeQuiz

Choose Partner &Topic ← Buy BeeQuiz

Play Trivia → Receive Compatibility Feedback → Engage in conversation / Play another Trivia
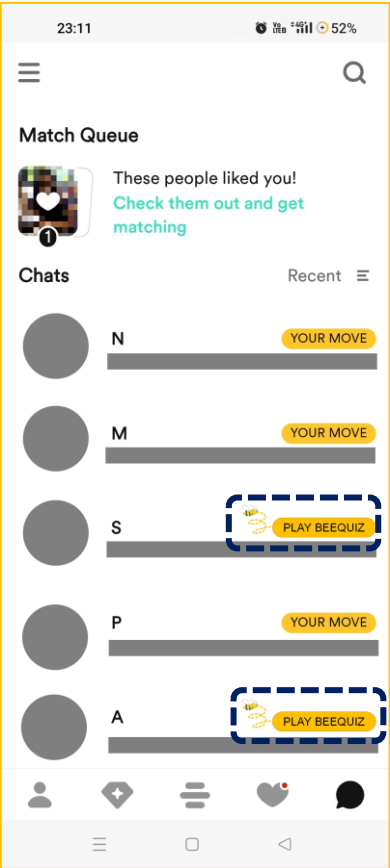
How does the Solution work?

Notification

User gets a notification if matches are not responding
(external trigger)

Bumble Chat List

User can choose to play trivia with matches who are not responding
(internal trigger)

Buy BeeQuiz

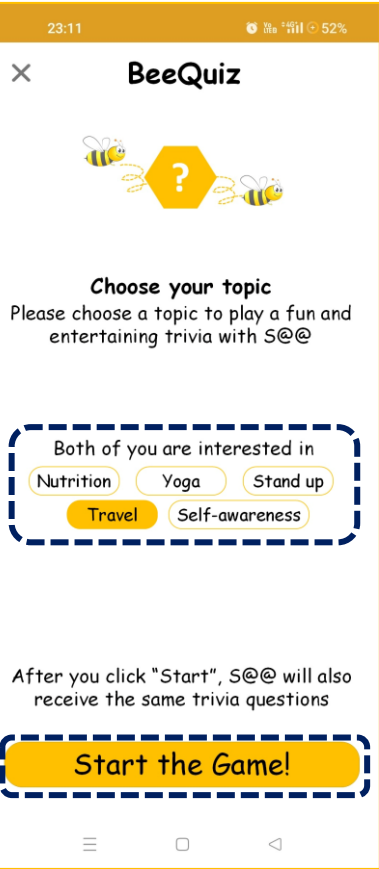User can choose from multiple available pricing options as per their budget

Choose Partner

User chooses and confirms a matched partner to play the trivia with

Introducing **BeeQuiz** (Engage in meaningful conversations through fun trivia)
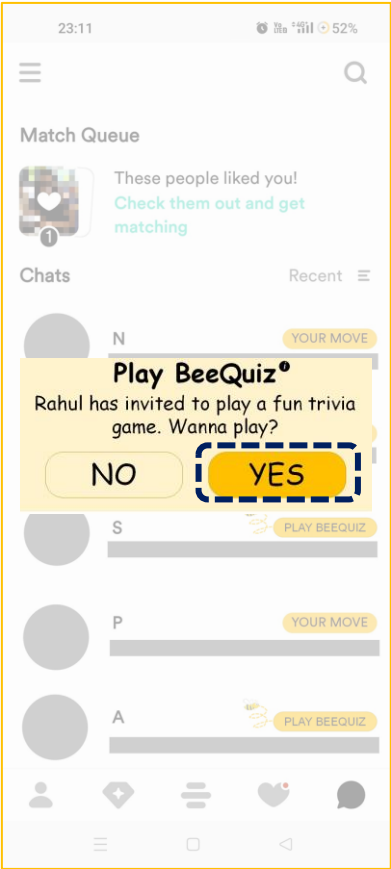
How does the solution work?

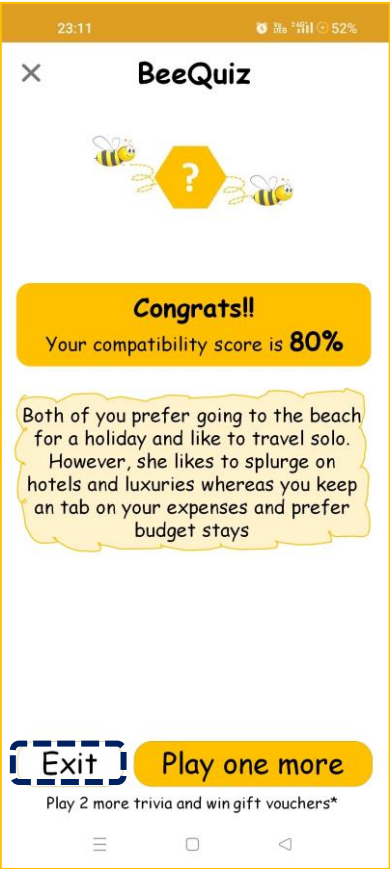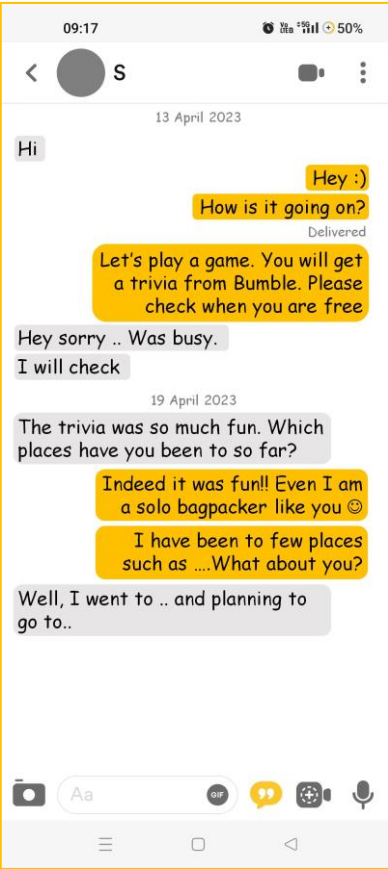| Choose Topic	Play Trivia	Play Trivia	Reveal Answers	Compatibility Score	Conversations
User can choose a topic based on suggestions from Bumble and start the game	User gets a set of five multiple choice questions to be answered honestly	Partner also receives the same trivia through notification which she can accept or deny	Only after both the users complete the trivia, they can view and compare responses	Compatibility score and detailed feedback on common area of interest is displayed	Users can continue to play another trivia or continue conversations in the chat window

Screen 1 — Choose Topic
BeeQuiz

Choose your topic
Please choose a topic to play a fun and entertaining trivia with S@@

Both of you are interested in
Nutrition | Yoga | Stand up
Travel | Self-awareness

After you click "Start", S@@ will also receive the same trivia questions

Start the Game!

Screen 2 — Play Trivia
BeeQuiz

Question 5
My preferred style of traveling is

Always a Solo Backpacker
Can't travel without Family or Friends
Travel solo and make new friends

Submit

Screen 3 — Play Trivia
Match Queue

These people liked you!
Check them out and get matching

Chats   Recent

N   YOUR MOVE

Play BeeQuiz°
Rahul has invited to play a fun trivia game. Wanna play?

NO   YES

S   PLAY BEEQUIZ
P   YOUR MOVE
A   PLAY BEEQUIZ

Screen 4 — Reveal Answers
BeeQuiz

Hurray!!
Both of you have completed the trivia

Reveal Answers

Screen 5 — Compatibility Score
BeeQuiz

Congrats!!
Your compatibility score is **80%**

Both of you prefer going to the beach for a holiday and like to travel solo. However, she likes to splurge on hotels and luxuries whereas you keep an tab on your expenses and prefer budget stays

Exit   Play one more
Play 2 more trivia and win gift vouchers*

Screen 6 — Conversations
S

13 April 2023

Hi

Hey :)
How is it going on?
Delivered

Let's play a game. You will get a trivia from Bumble. Please check when you are free

Hey sorry .. Was busy. I will check

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The trivia was so much fun. Which places have you been to so far?

Indeed it was fun!! Even I am a solo bagpacker like you ☺

I have been to few places such as ….What about you?

Well, I went to .. and planning to go to..

Metrics, Pitfalls & Mitigation Strategies, and Second Order Thinking for the solution

Metrics to measure success of **BeeQuiz (BQ)** solution

Metric Type	Metrics	Rationale
North Star Metric	# of BQ trivia played by each unique pair of matched users per month	BQ works only when both the paired users complete the trivia
Adoption/ Usage Metrics	• Click through rate (CTR) for the BQ feature • # of clicks on Play BQ requests per user • (# of clicks on "Yes" after receiving BQ invite) / (# of users who received BQ request)	Users who send and who accept the BQ request would be actively engaged in adoption of the feature
Engagement Metrics	• # of BQ played per week • # of BQ played per user per week • # of active users playing BQ per week	Users who play BQ frequently will find the feature useful, impacting them in positive way
Retention Metrics	• # of repeat BQ purchases per user per month • # of messages exchanged between matched users after playing the trivia	Users who find value through meaningful conversation with partners will be repeat users
User Satisfaction Metrics	• Customer Satisfaction Score for BQ • # of 5-star ratings through ratings prompt to BQ users who played the trivia	Users who are satisfied with the BQ (more conversations, dates) are more likely to give ratings
Monetization Metrics	• Average revenue from BQ per month • Average # of BQ purchased per month • ARPU from BQ per month • % increase in average revenues m-o-m • % increase in ARPU m-o-m	Measure the contribution of revenue and ARPU from the BeeQuiz feature to the overall revenues and ARPU

Pitfalls & Mitigation Strategies

Pitfall: Lack of engagement with trivia

Users may not engage in trivia because the **trivia topics don't match their interests**. For the buyer, the trivia in which the matched partner does not participate, is a waste of money and **could stop buying this feature**.

Mitigation Strategies	The **topic for the trivia could be prioritized based on partner's interest** (rather than the user who buys the trivia). The system could **override buying user's topic with partner's preference** and allow the partner to play first.

Pitfalls: Notifications received at wrong time

Users may get notifications to play trivia at wrong times (e.g. working hours). Since **users could be busy**, they could **ignore the notification** and **may forget to play the trivia**. However, may interpret that user ignored their request and hence, won't buy the feature again

Mitigation Strategies	**Notifications** for the trivia request **should be timed correctly** so that users get notifications **after working hours** or **on weekends** when their chances of engagement are high

Second Order Thinking

Potential backlash from female users	Since male users are likely to be potential buyers, female users could get bombarded with lot of trivia requests. They could completely ignore the requests or selectively accept a few. Worst case, they could unmatch male users	Enhanced data & actionable insights	As more users respond to trivia, we can learn more about the topics of interest that are preferred by different user profiles. Hence, the system can even recommend trivia topics for users whose profile is incomplete.