AI BASED MOBILE ASSISTANT FOR FLU

Yusuf Yesil, M.D.
Yesil Science
PROBLEM

Influenza patients has:

- Unconscious antibiotic use
  - Increased antibiotic resistance
  - Antibiotic-associated diarrhea (probiotics)
- Unnecessary hospital admissions
  - Disruptions in health care
  - Disruptions in triage
  - Financial losses
What is pharyngitis?

Pharyngitis is inflammation of the pharynx, which is in the back of the throat. It's most often referred to simply as "sore throat." Pharyngitis can also cause scratchiness in the throat and difficulty swallowing.

According to the American Osteopathic Association (AOA), pharyngitis-induced sore throat is one of the most common reasons for doctor visits. More cases of pharyngitis occur during the colder months of the year. It's also one of the most common reasons why people stay home from work. In order to properly treat a sore throat, it's important to identify its cause. Pharyngitis may be caused by bacterial or viral infections.

Causes of pharyngitis

There are numerous viral and bacterial agents that can cause pharyngitis. They include:

- measles
- adenovirus, which is one of the causes of the common cold
- chickenpox
- group, which is a childhood illness distinguished by a barking cough
- whooping cough
- group A streptococcus

Viruses are the most common cause of sore throats. Pharyngitis is most commonly caused by viral infections such as the common cold, influenza, or mononucleosis. Viral infections don't respond to antibiotics, and treatment is only necessary to help relieve symptoms.
SOLUTION

AI Based mobile personal flu assistant offering personalized diagnostic treatment recommendations based on throat appearance and symptoms of patients with flu.
VALUE PROPOSITION

• **Technological Scope**
  Deep Learning based
  Complex algorithms for image and symptom analysis

• **Value Proposition**
  AI based personal suggestions
  Precision diagnose and treatment suggestions
  Fast and easy to use
  Accessible
**MARKET**

**Customer Segment:** Users of smartphone that are suffered from flu symptoms (+5 years)

**Market Size:** 6-7 million people suffered influenza at US 2018-2019

Every year across the globe, there are an estimated 1 billion cases, of which 3 to 5 million are severe cases, resulting in 290,000 to 650,000 influenza-related respiratory deaths.*
<table>
<thead>
<tr>
<th>Premium Membership</th>
<th>Q1 / 2020</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Number of Users</td>
<td>200K</td>
<td>500K</td>
<td>1M</td>
<td>3M</td>
</tr>
<tr>
<td>Estimated Number of Costumer Purchasing Premium</td>
<td>4K</td>
<td>10K</td>
<td>20K</td>
<td>60K</td>
</tr>
<tr>
<td>Estimated Number of Costumer Purchasing One Analysis</td>
<td>5K</td>
<td>20K</td>
<td>40K</td>
<td>120K</td>
</tr>
<tr>
<td>Estimated Average Product Price For Premium</td>
<td>$4 / Month</td>
<td>$4 / Month</td>
<td>$7 / Month</td>
<td>$10 / Month</td>
</tr>
<tr>
<td>Estimated Average Product Price For One Analysis</td>
<td>$1 / Month</td>
<td>$1 / Month</td>
<td>$2 / Month</td>
<td>$3 / Month</td>
</tr>
<tr>
<td>Estimated Add Annual Revenue</td>
<td>$ 120K</td>
<td>$ 540K</td>
<td>$ 1M</td>
<td>$ 3.5M</td>
</tr>
<tr>
<td>Estimated Total Annual Revenue</td>
<td>$ 370K</td>
<td>$ 1.25M</td>
<td>$ 3.6M</td>
<td>$ 15M</td>
</tr>
<tr>
<td>Estimated Cost</td>
<td>$ 50K</td>
<td>$ 150K</td>
<td>$ 500K</td>
<td>$ 3M</td>
</tr>
</tbody>
</table>
BUSINESS MODEL

B2C

Target Customer
Flu patients
(>16 years old)

Product
Mobile Application

Price
$3/Mo/User

Revenue Model
Premium + Ads
**TIMELINE**

**2019**
- Prototype
- Go live

**2020**
- Reach to 500K user
- Add 3 different disease module

**2021**
- Personal general health AI assistant
- Integration with augmented reality (AR)
## COMPETITIVE ANALYSIS

<table>
<thead>
<tr>
<th></th>
<th>FluAI</th>
<th>Common Cold</th>
<th>Flu Near You</th>
<th>Cold or Flu ?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Symptom Review</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Solution Suggestion</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td><strong>Customized Suggestions</strong></td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>AI Based</strong></td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Mobile</strong></td>
<td>✓</td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Continuous Tracking</strong></td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
TEAM

Yusuf Yesil
M.D., Founder

Ceren Yuksel
Team Leader

Hakan Hakyemez
Full Stack Developer

Omer Ozgur
AI Developer
 ADVISOR BOARD

Melih Bulut
MD
Pediatric Surgeon

Afsar Akal
Ex-Director
IBM Watson

Bulent Bingul
General Manager
Medibook

Aykut Ibrisim
Co-founder
Kodluyoruz
Candidate at:

«Best AI/ML Startups» Category
«Best Newcomer Turkey» Category
Thank you...

fluai@yesilscience.com