HeadsUp Tech

#BuiltByGirls

What's More?

1 There are no existing solutions to this prevalent problem.

2 Star players often pressured to play despite impairment

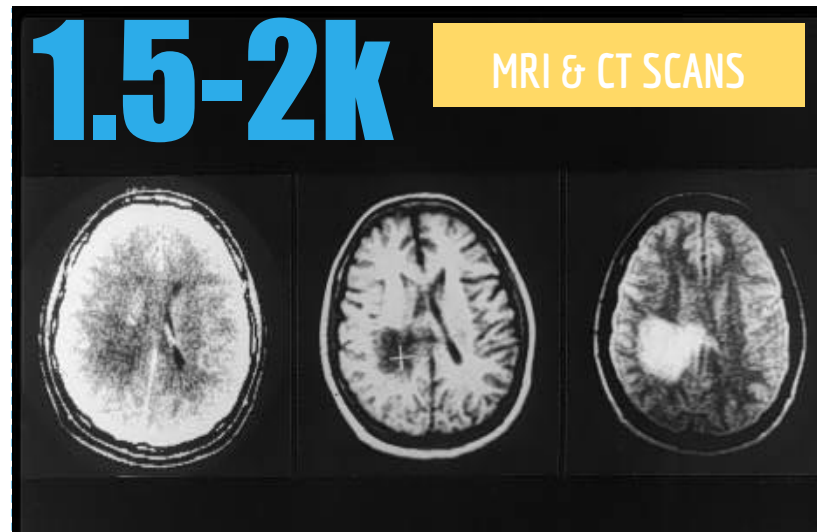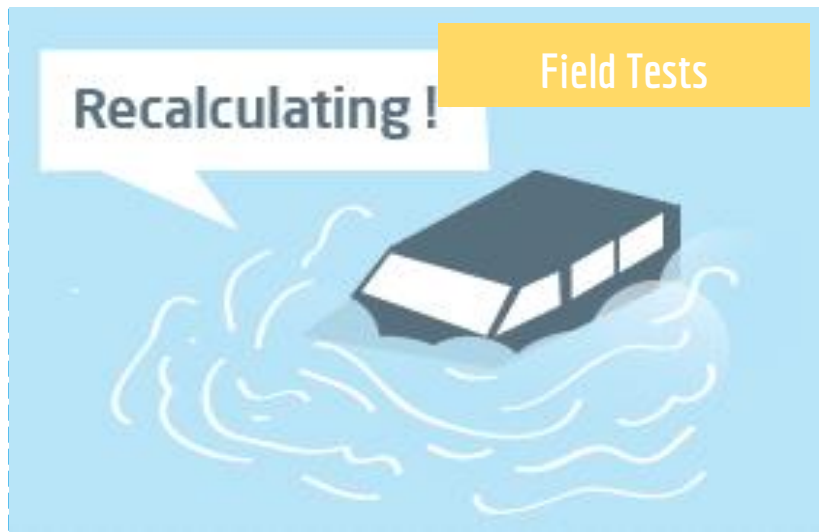**3** There is a lack of quantitative data basing the diagnosis

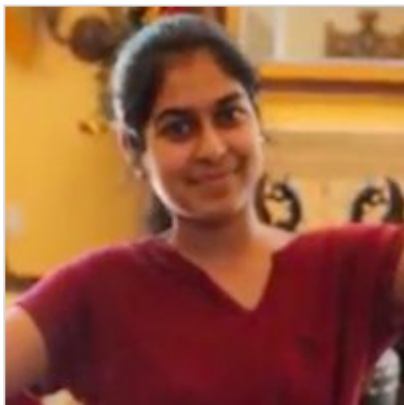**4** Delayed medical attention for a serious injury

Current Procedures

A Need For Change

Recalculating !

Field Tests

1.5-2k

MRI & CT SCANS

Our Team

Sowmya
Patapati

Shamini
Wadhwani
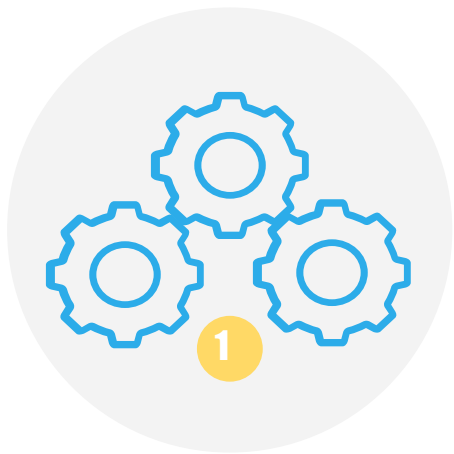
Amulya
Balakrishnan

Amira
Arora

Our Solution

Giving health professional access to more data, enabling the design of better future treatment plans

HeadsUp Tech

A Novel Concussion Diagnostic Device

How was it built?

1 Wireless Hardware

2 Software

3 Girl Power

How It Works

1. Device is attached to athlete's helmet

3. Accelerometer records speed at which impact occurs

5. Based on player's height and weight, a serious impact is detected

2. Force Sensitive Resistors detect all impacts to the head
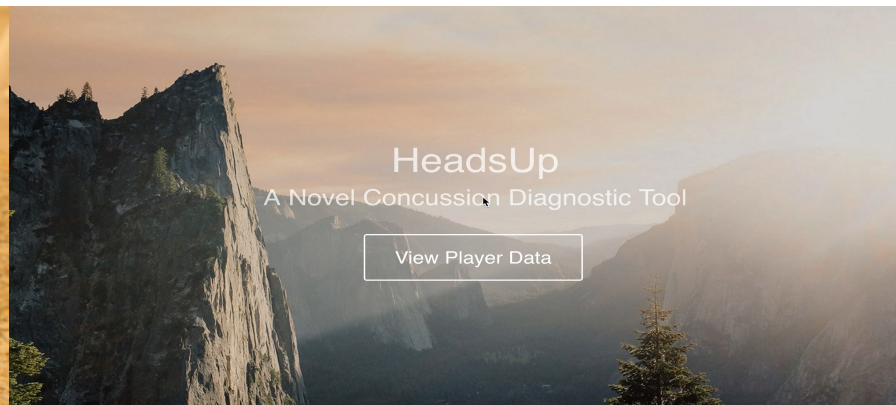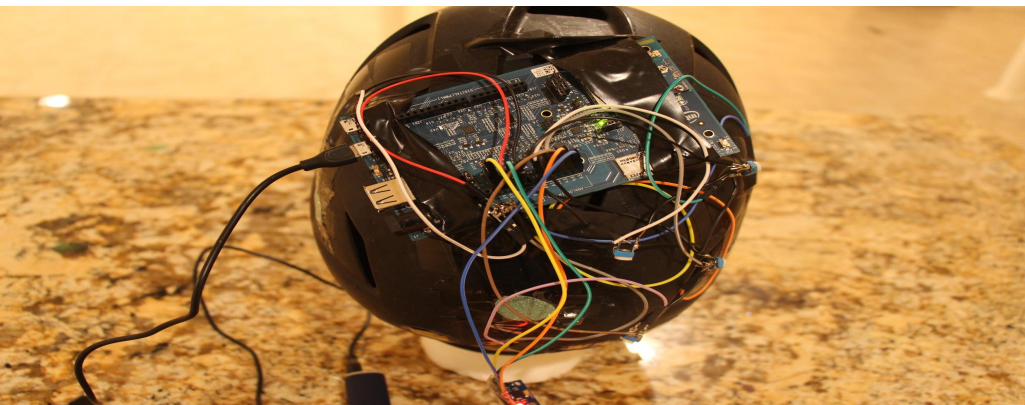
4. Data is transmitted and stored onto web application system in real time

6. Automatic message sent to local paramedics regarding impact and location of injury

💎 Final Product 💎
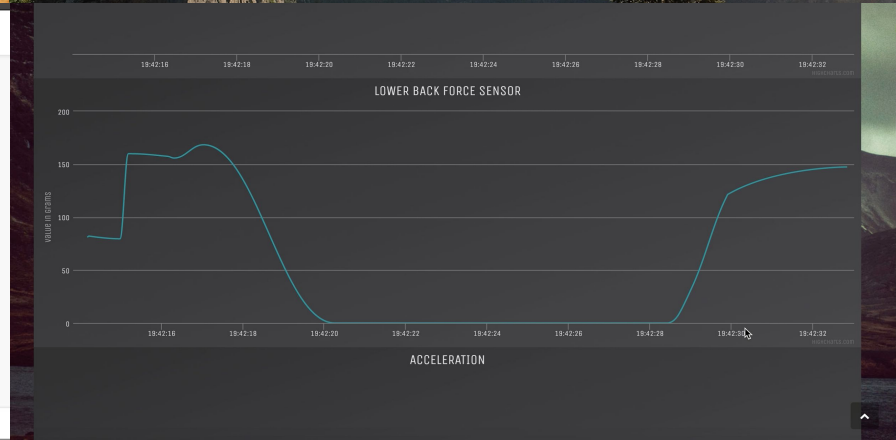
♦Our Device In Action♦

Market Size

1+ MILLION HS ATHLETES

15.5K+ COLLEGE ATHLETES

POTENTIAL TO EXPAND TO SPORTS THAT DON'T REQUIRE HELMET USAGE & OTHER INDUSTRIES

This is a big opportunity.

No way to lose it.

Competitive Analysis

Potential Competitors

Software Programs [Braincheck, ImPACT etc]

Physical Devices [Riddell, Shockbox etc]
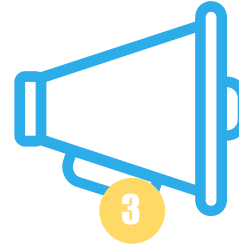
Lack Of Accuracy

Not Economical

Future Plans

★ ★ ★
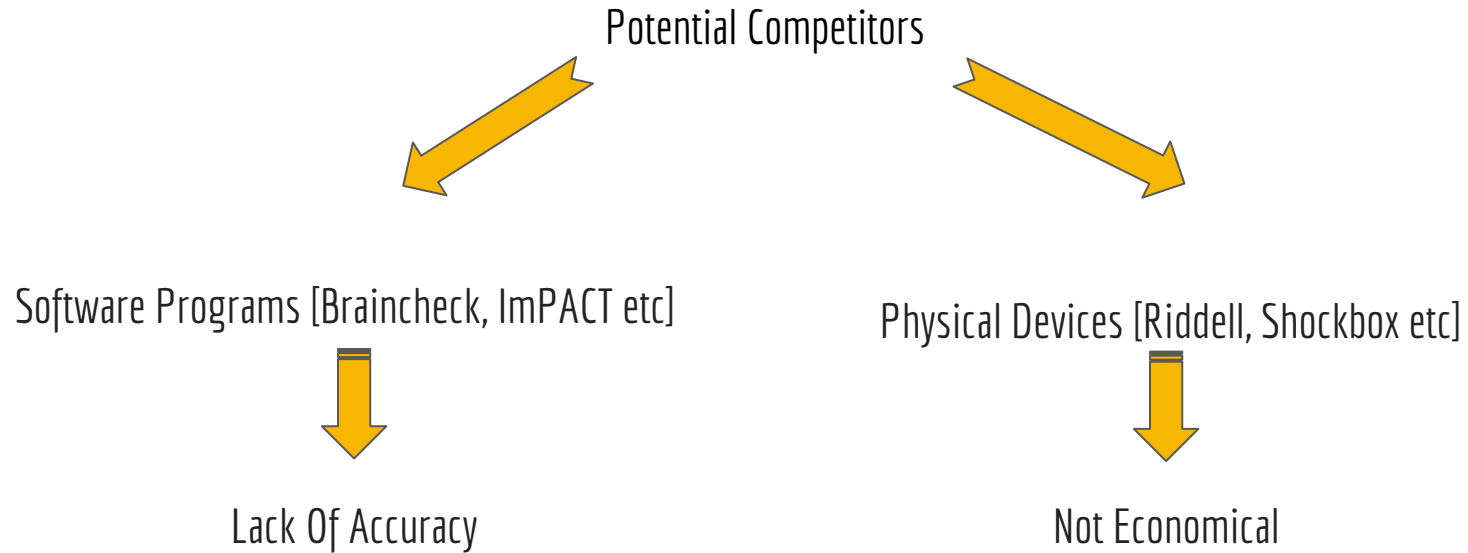
1 Streamline The Product

2 USPTO Patent Application & FDA Medical Device Registration
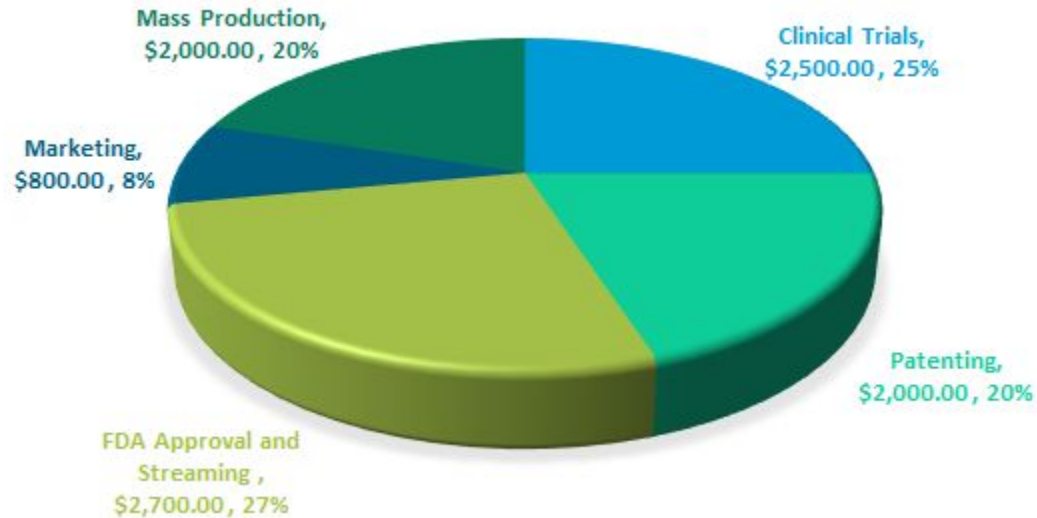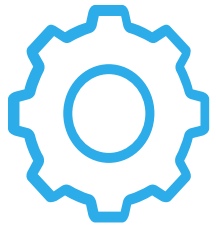
3 Form Partnerships & Conduct Testing
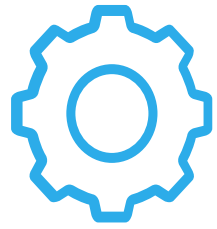
4 Commercialization & Marketing

What Will We Do With $10,000?

Mass Production, $2,000.00, 20%

Clinical Trials, $2,500.00, 25%

Marketing, $800.00, 8%

Patenting, $2,000.00, 20%

FDA Approval and Streaming, $2,700.00, 27%

Future Tech Improvements

1. Create a grid of FSRs on the helmet

   Allows helmet to detect impact with more accuracy and precision

2. Make device more compact

   - Clean up wiring and switch to microcontrollers instead of Intel Edison

3. Lithium polymer battery.

4. Update HeadsUp Tech web application in order to allow users to create accounts where

   they can track/view their history and improve UI/UX

5. Incorporation of GPS

6. Implementation of machine learning algorithms
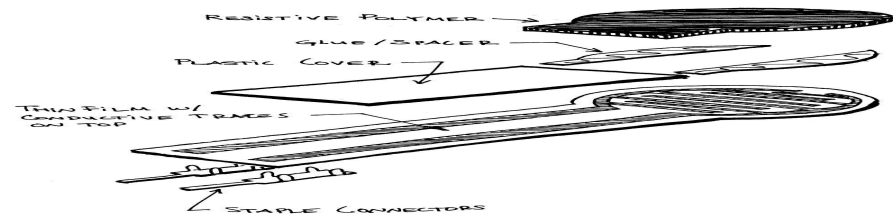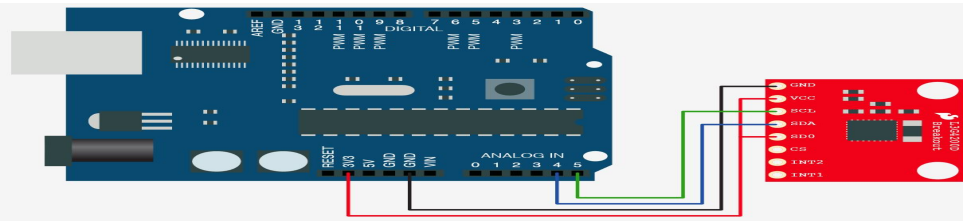
Text Feature Adjustments

⭐ **1**

Currently, the local paramedic number is uploaded to the device by the user.

⬇

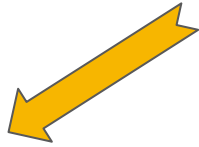Future Plans: Use APIs/public datasets to automatically upload this number

⭐ **2**

Currently, user cannot control whether or not a text message is sent.

⬇

Future Plans: Add feature where user can send a "false alarm" notification
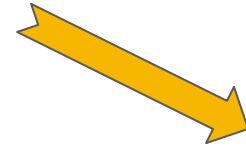
Approach To Sizing

Develop into low cost attachment

Helmet   Headbands   Other Head Gear

Size dependent on type of gear and athlete measurements.

FDA Medical Device Listing Process

Step I: Device Classification

Step II: Choose Correct Premarket Submission
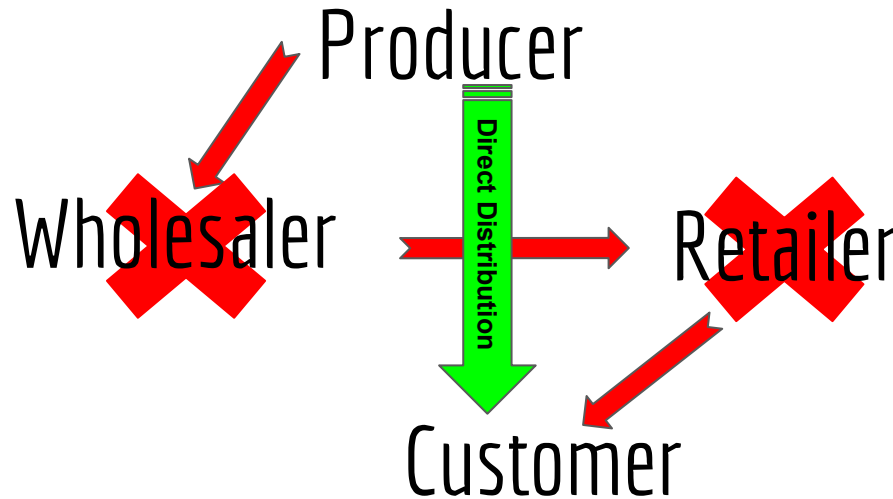
Step III: Prepare Premarket Submission

Step IV: Send Premarket Notification

Step V: Registration and Device Listing

Product Distribution

Pursuing direct distribution

More profitable than conventional method

Producer

Wholesaler

Direct Distribution

Retailer

Customer

[Targeting sports teams & individual players.]

Thank You

For Your Attention