Merging entertainment and healthcare to create lasting wellness
Pulse (Experiment 1)
The world’s coolest stethoscope

Pulse generates music from your heart beat. With several music genres to pick from, Pulse’s next update will include Celebrity music packs for ‘in-app’ purchase.
**THE EXPERIMENT WORKED!**

**Broad demographic profile points to a large market**

- 30% registered through Facebook
- average each session is 73.5 heartbeats long
- average heart rate: 66.69 bpm
- average session length: 65 seconds

<table>
<thead>
<tr>
<th>Gender</th>
<th>Sample data</th>
<th>Sessions logged</th>
<th>Average NN</th>
<th>SDNN</th>
<th>RMSSD</th>
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<tbody>
<tr>
<td>41%</td>
<td><img src="image1.png" alt="Sample data" /></td>
<td><img src="image2.png" alt="Sessions logged" /></td>
<td>0.872</td>
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<td>0.124</td>
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<td>59%</td>
<td><img src="image3.png" alt="Sample data" /></td>
<td><img src="image4.png" alt="Sessions logged" /></td>
<td>0.664</td>
<td>0.161</td>
<td>0.202</td>
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<td><img src="image5.png" alt="Sample data" /></td>
<td><img src="image6.png" alt="Sessions logged" /></td>
<td>0.663</td>
<td>0.120</td>
<td>0.190</td>
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<table>
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<tr>
<th>Countries</th>
<th>Sample data</th>
<th>Average</th>
<th>SDNN</th>
<th>RMSSD</th>
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<td>UK</td>
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<td>NETHERLANDS</td>
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<td>MEXICO</td>
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</table>
HRV in Pulse data from BioBeats Database.

15K users worldwide during World Echocardiology Summit
Obesity in the U.S.
World Heart Federation report

HRV in Pulse data from BioBeats Database.
15K users worldwide during World Echocardiology Summit
20% of Americans rate their levels of stress as extreme (8-10 out of 10)*

Work-related stress costs employers up to $300 billion a year but only 36% of employees receive sufficient support to manage stress*

*SOURCE: American Psychological Association
US consumers already spend $200 million annually on relaxation techniques.

US employers already spend over $2 billion annually on wellness programmes.

SOURCES: NIH, IBISWorld, Bloomberg Businessweek
Safety and efficacy – deep breathing

“The overall evidence from clinical trials and meta-analyses suggests that device-guided slow breathing can significantly lower BP. There are no known contraindications to the use of the device, and no adverse effects have been noted.”

(Brook et al, 2013)

“Cleared by the FDA for the adjunctive treatment of high blood pressure and the reduction of stress.”

www.resperate.com

“Breath focus is a simple yet powerful technique that can elicit the relaxation response for people of different backgrounds... [deep abdominal breathing] slows the heartbeat and can lower or stabilize blood pressure.”

A Harvard Medical School Special Health Report
Platform for evidence-based wellness

Engaging apps
- Demonstrated efficacy
- Addicting gameplay
- Music discovery

Training programs
- Guided courses
- Target specific niches
- Celebrity endorsement

Detailed feedback
- Measure performance
- Track progress

We have created a range of mobile and cloud-based building blocks

Photoplethysmograph
Patented algorithms to capture heart rate and waveform (CV data) using a mobile phone camera

Breathing Engine
Combination of custom algorithms, CV data and accelerometer readings to record user’s breathing patterns and pace

Movement Tracking
Technology to learn locations, types of movement (walking, driving, sitting) in order to connect to timing of alerts
Our hearts beat over 100,000 times a day
Merging entertainment and healthcare to create lasting wellness