# Connected Pool Monitor Business Plan

#### Tim Coyle



## **Company Purpose**

• To be the IoT gateway for consumers in their backyard connecting their outdoor lifestyle

#### Problem

- Maintaining a pool is expensive
  - Yearly maintence costs of a pool 10% of pool cost<sup>1</sup>
  - Average cost of above ground pool \$7500 USD and average cost of in-ground pool \$15,000 USD<sup>2</sup>
  - Homes with pools use 49% more electricity per year<sup>3</sup>
  - Pool service companies charge \$50 to \$120 month<sup>4</sup>
- Maintaining a pool takes time
- Knowing when to use pool chemicals is confusing
- Difficult to determine pool water quality

<sup>1.</sup> The Cheat Sheet

<sup>2.</sup> Underground vs Aboveground Pools: Costs and Comparisons, River Pools

<sup>3. &</sup>lt;u>https://blogs.oracle.com/utilities/homes-with-pools-use-49-more-electricity-but-its-not-just-because-of-the-pool</u>

<sup>4.</sup> http://www.nytimes.com/1981/04/02/garden/ban-on-city-water-for-outdoor-pools.html

## Solution

- Consumer installs Connected Pool Monitor to automatically monitor pool water quality
- Constantly measures and tracks pool water quality and provides alerts and recommendations to consumer
  - Consumer knows when to add pool chemicals to avoid wasting costly chemicals
  - Alerts consumer when to run filter system reducing electricity and water usage
  - Makes recommendations to consumer on benefits of pool cover usage, evaporation issues, potential water leaks
- Saves consumer 40% on yearly maintence costs
  - Reduces environmental impact by reducing electricity, water, and chemical usage

## **Opportunities**

- Additional pool servicing products can be developed
  - Automate pool skimming
  - Automate pool vacuuming (already industry players but very expensive solutions)
- Create complimentary products
  - Start with pool but move onto outdoor lighting, grills, home entertainment (audio/video), weather stations, wildlife monitors, home security, pet monitoring
- Create IoT gateway to consumer backyard
  - Provide cloud services for consumer data
- Could work with pool cleaning companies to license and sell pool monitoring system

#### Market Size

- Over 10 million residential pools in US<sup>1</sup>
- 25 million more potential pool owners in US<sup>2</sup>
- More than 50,000 pool cleaning companies in US<sup>3</sup>

<sup>1.</sup> The Association for Pool and SPA Professionals

<sup>2. &</sup>lt;u>http://aquamagazine.com/news/pkdata-report-25-million-new-pools.html#lightbox/4/</u>

<sup>3.</sup> https://www.ibisworld.com/industry-trends/specialized-market-research-reports/consumer-goods-services/personal/swimming-poolcleaning-services.html

#### Competition

- Several IoT pool monitoring systems at different product stages
  - Does not appear to be majority winner yet
- Existing pool monitor systems installed and maintained by pool service companies
  - Well established brands and marketing
- Competitive advantage is lower cost compared to established solutions and advanced water quality measuring compared to other IoT products in same space

## The Team

- Tim Coyle, CEO & Lead Engineer
  - 15+ years experience as engineer in Fortune 500 companies developing and launching embedded products

# **Key Issues**

- Near term
  - Develop and validate prototype
- Long term
  - Manufacturing of system
- Funding
  - Goal is to launch crowdfund campaign with prototype
  - Get prototype in hands of beta users
  - Build consumer base
  - Evaluate if funding is needed to go to next step