

IperLane

Trusted Identity & Authentication Management.

February 2015

IperLane – Vision

IperLane manages identities for enterprises, restoring customer privacy while eliminating the burden of safely storing PII and proper implementation of authentication



Behavioral authentication leveraging the device as an “identity token”



Identity tokens replace stored PII, sparing huge enterprise liability



Continuous monitoring & anomaly detection on hardened databases

Current Market Failures



Enterprises are typically inept at both maintaining secure databases and properly implementing strong authentication



Maintaining PII represents a massive enterprise liability, particularly in light of new regulations regarding data breaches



Consumer-facing firms ill-equipped to properly design security



Trend towards unified logins via social media (eg Facebook)



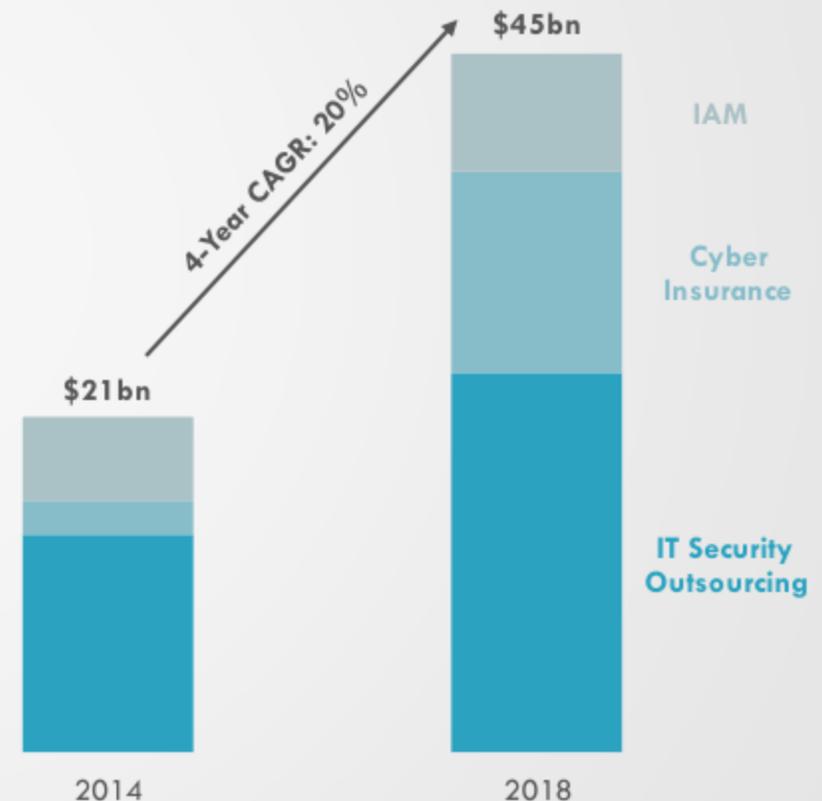
Consumers increasingly want control over their digital identities

Significant Market Opportunity

IperLane sits at the intersection of high-growth markets in security:

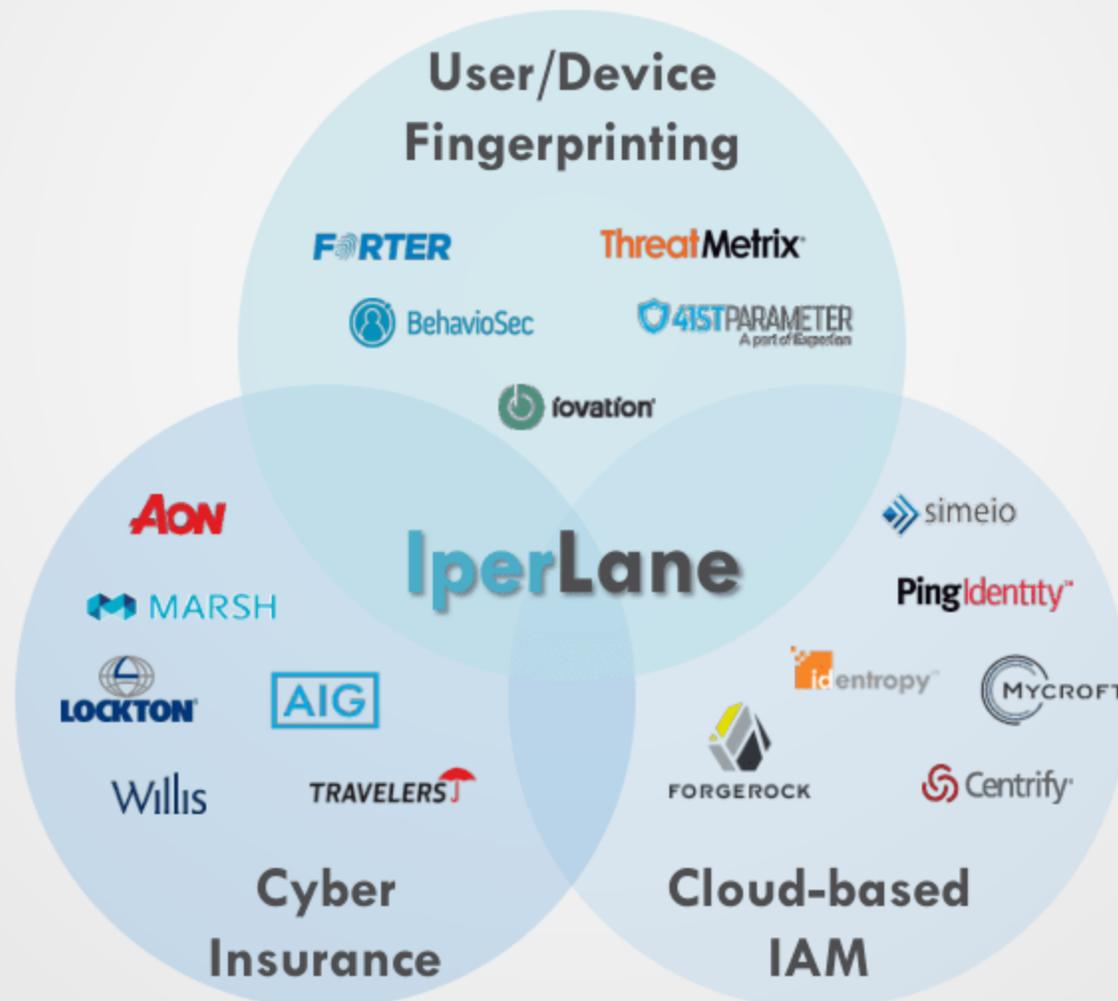
- ▲ **Identity & Access Management:** Driven by demand for Identity-as-a-Service as companies transition to cloud environments
- ▲ **IT Security Outsourcing:** Driven by the growing complexity and resource burden in IT security
- ▲ **Cyber Insurance:** High-profile data breaches fuel necessity of and demand for cyber risk coverage

Nearly \$45bn opportunity by 2018



Identity & Authentication Landscape

IperLane sits in the nexus of IAM and cyber risk transfer



Our Solution

SDK for mobile applications to manage user identities

- ▶ **Facilitate seamless authentication for users while managing security backend for the enterprise**
- ▶ **Provide enterprises with a secure channel to an optimized identity database allowing them to associate tokens with real identities**

Our Solution, continued

- ▶ **State-of-the-art encryption and tokenization**
- ▶ **Cutting-edge OS-level protection**
- ▶ **Behavioral anomaly detection to prevent data leaks**



Behavioral Authentication

Leverage smartphone sensors (e.g. accelerometers, gyroscopes) & regularly collect sensor data to:

- Authenticate users without the need of entering multiple passwords
- Detect device tampering or theft
- Correlate geolocation, address book & other data to verify consistency

Identity Tokenization

Decouple sensitive information to reduce risk:

- Maintain an encrypted database with PII
- Associate anonymized tokens to database records and only expose tokens to the customer
- Monitor database access behavior to spot potential attacks
- Augment database security with market-leading OS-level protection to prevent attackers from utilizing known malware against our system

Who We Are

Our team has extensive experience, technical understanding and a sizable professional network in information security

- ▶ **Experience in offensive security research grants unique insights**



Vincenzo Iozzo

- iOS Hacker's Handbook co-author
- Black Hat Conference Review Board member
- Recipient of DARPA Cyber Fast Track grant



Kelly Shortridge

- Co-lead of data security & analytics coverage at Teneo Capital
- NYU Poly Cyber Symposium advisory board member



Joi Ito

- Director, MIT Media Lab
- Board member of NYTimes & Sony
- Board advisor, Stellar
- Early investor in Flickr, Last.fm & Twitter

Capital Raise

Our seed round will grant us a runway of approx. 12 – 15 months

Goal

- Basic authentication & identity management SDK
- Hardened database based on a blend of proprietary technology and CockroachDB

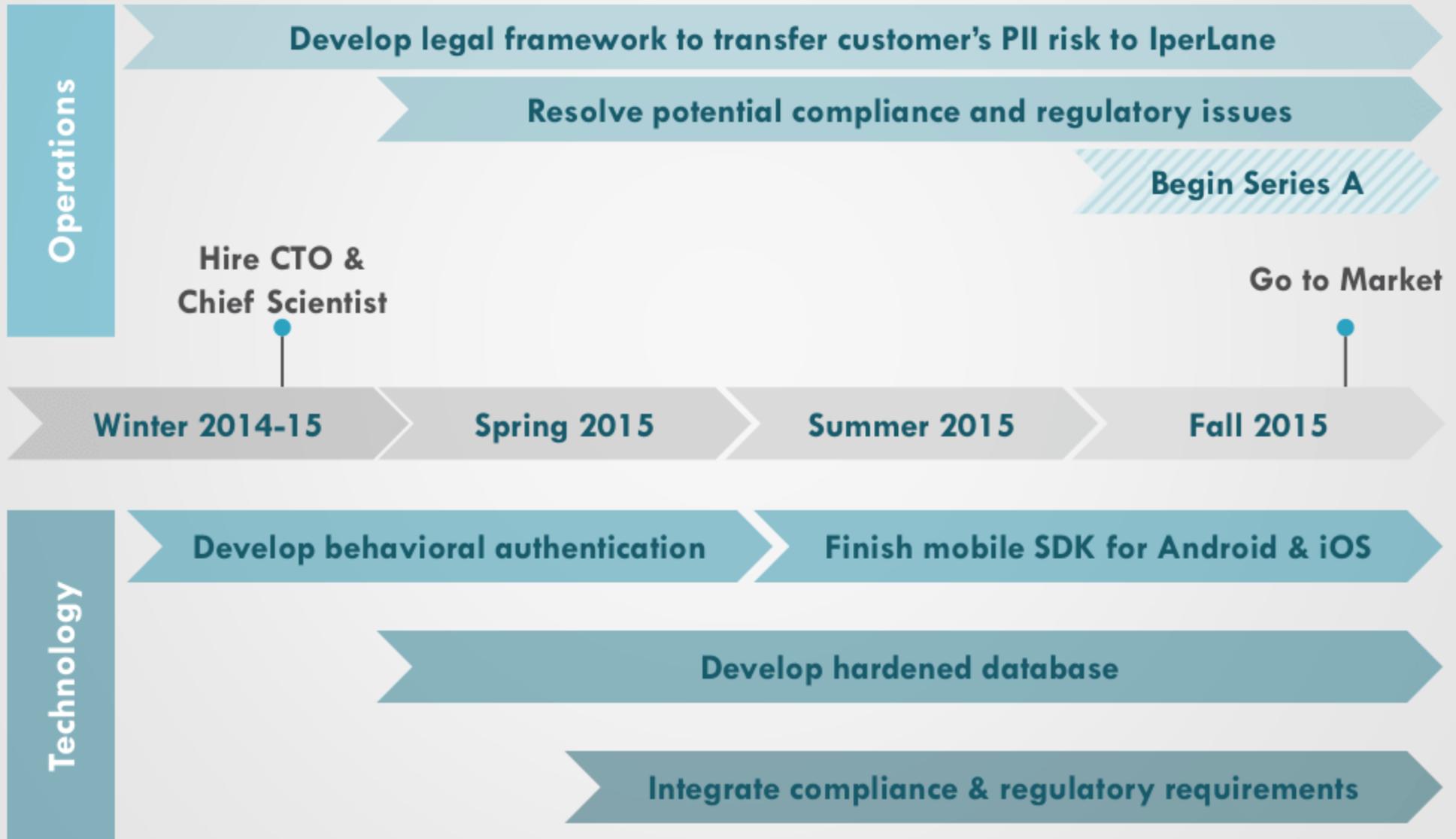
Key Hires

- Data Scientist / Chief Scientific Officer
- Technical Developer / CTO

Initial Partnerships

- Insurance providers to transfer data breach risk
- Potential high-growth SMB customers (e.g. Etsy)

The Next 12 - 15 Months



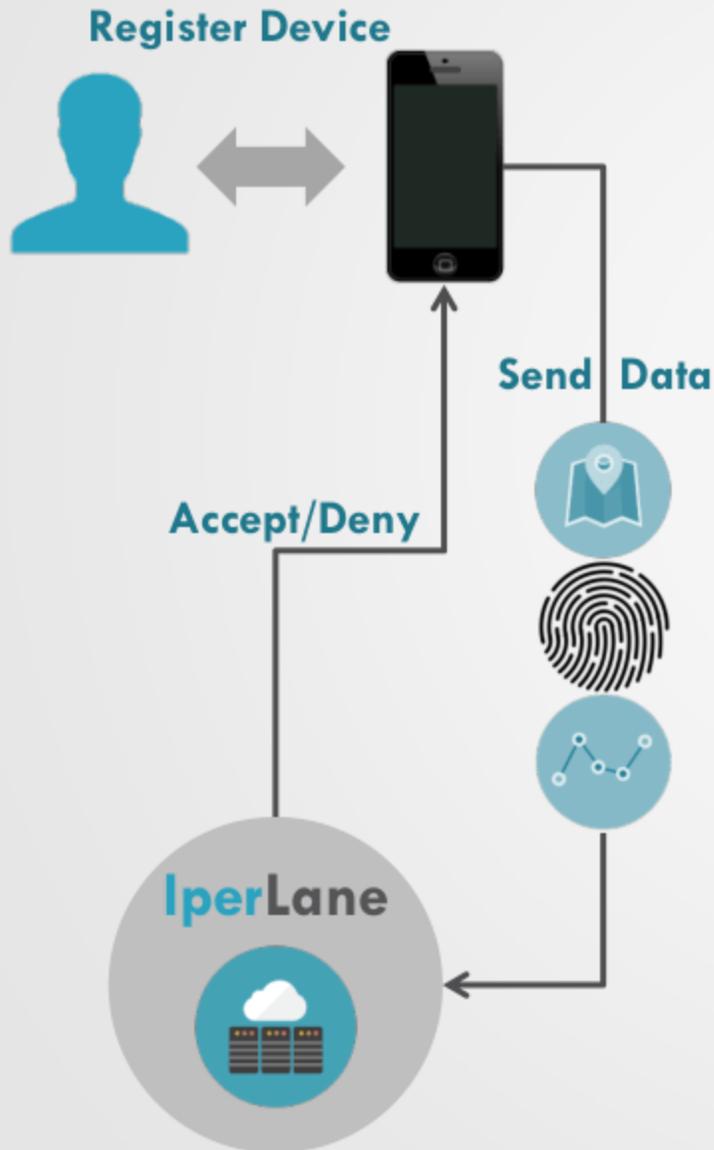
Summary

- ▶ **Trusted identity management for enterprises, restoring customer privacy while eliminating the burden of safely storing PII and proper security implementation**
- ▶ **Significant (\$45bn), high-growth market opportunity in outsourcing identity & access management**
- ▶ **Highly differentiated offering through industry-leading mobile security and authentication expertise**

IperLane

Trusted Identity & Authentication Management.

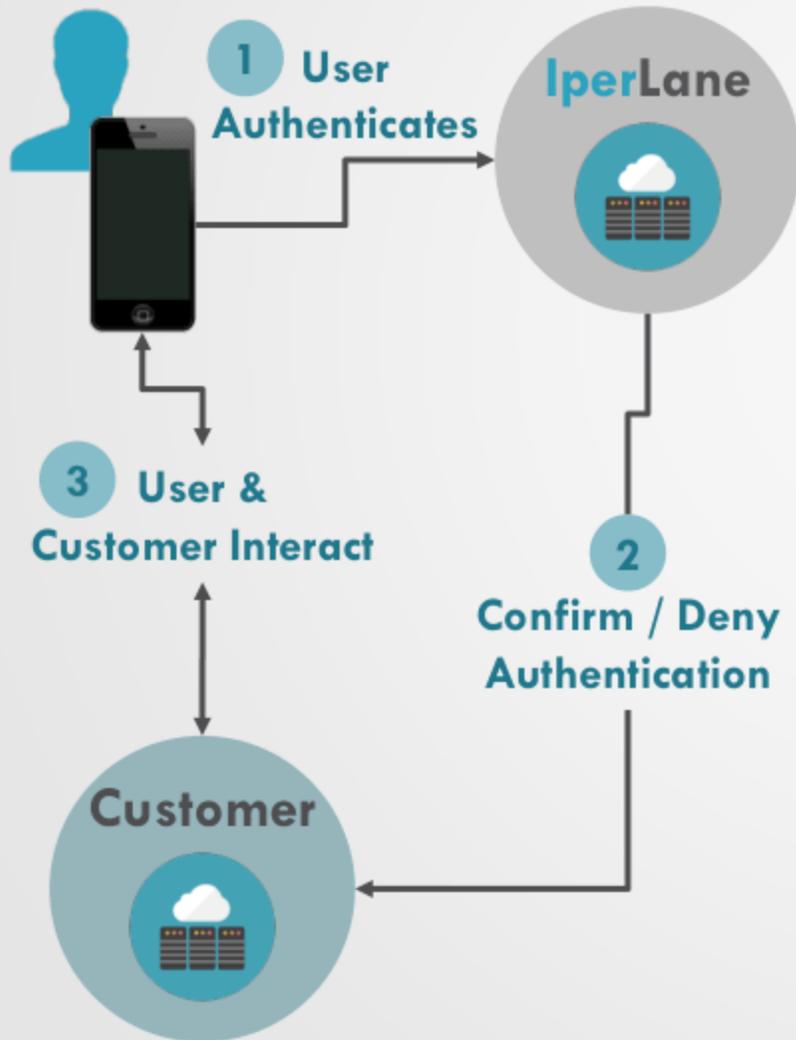
Appendix – Product Mechanics



- User registers, selects username and generates a temporary password
- IperLane begins to collect data to build a comprehensive user profile in less than 24 hours
- Every 2 to 4 hours, IperLane receives geolocation, accelerometer, gyroscopic and other data from the user's device
- IperLane acknowledges or denies authorization requests based on profile data received

Appendix – Product Implementation

Authentication SDK



Full Product Offering

