

Securing the Future of Blockchain Technology

July 1, 2016

Vision Statement

Airbitz aims to provide the Single Sign On security platform for Bitcoin and blockchain applications

The Problem

The blockchain and it's public/private key infrastructure have created a new paradigm in the way we interact with data and value. Users are now required to secure data that only THEY should have access to. Not even an IT department, manager, employer, or government should have access to individuals' private keys as it breaks the authenticity provided by the blockchain. This has presented problems for blockchain developers due to end users' inability to utilize encryption, backup, and device synchronization without a trusted 3rd party custodian. Securing private keys had been a major roadblock to bitcoin adoption and the general blockchain space is seeing similar issues.

The Solution

Airbitz Core (ABC) is a mobile friendly software toolkit (SDK) that provides client-side auto encryption, auto backup, device-to-device synchronization, and one-touch 2 factor with the familiar user experience of logging into a website. Developers can now secure their blockchain application in a few lines of code and focus on their unique application of blockchain technology. Airbitz has proven this model with its successful mobile bitcoin wallet and can now deliver this experience to other blockchain apps.

Our unique solution, secures data on individual users' devices first, with encryption that can only be unlocked with the user's credentials. Neither Airbitz nor any 3rd parties can access user data providing the necessary zero-knowledge, zero-trust model required to secure blockchain private keys. This "Edge Security" model significantly increases the effort to attack the system by decentralizing the data security to individual devices versus centralizing it with a custodian. Our SDK then applies auto-backup of the user data to peer-to-peer, highly redundant and scalable cloud servers, protecting the users from mishaps such as device loss, damage, or theft. Since we live in a multi-device connected world, the Airbitz SDK then auto-synchronizes user data across all devices and Airbitz Core apps with which the user authenticates, allowing them access to blockchain services and decentralized apps across their many devices.

Traction

Airbitz technology is currently being used to secure the mobile users of the 3 largest bitcoin ATM operators in the US and is generating approximately \$1 / active account / month.

Current partnerships also include the Ethereum based prediction market, Augur¹, which will be utilizing Airbitz to secure the private keys and data of users on their application. By the 1st quarter of 2017, Airbitz expects to generate \$1 / active account / month from users on the Augur platform, with an expected user base in the 100,000s of users.

In addition to Augur, the rapidly growing decentralized ridesharing app, Arcade City², already with more than 38,000 users, will use Airbitz for securing their users accounts when the app launches, and allow for secure transactions between their users.

Airbitz is also working with several unannounced blockchain projects looking to utilize the Airbitz Edge Security Platform. These projects include:

- KYC/Identity Management using the blockchain and public/private key authentication. This project is partnered with Tata Consulting to provide resources and a sandbox for deployment
- Decentralized ecommerce application
- Entertainment event crowdfunding using blockchain based tokens as tickets
- Decentralized platform for launching, managing, and participating in DAOs (Kickstarter for DAOs)

Airbitz Mobile App - The First App Utilizing Edge Security

Although the Airbitz SDK only recently launched, Airbitz Edge Security has been deployed for almost 2 years by powering the security of our bitcoin mobile wallet which has achieved numerous accolades and powers over 45,000 transactions per month and secures millions of USD worth of bitcoin. The app utilizes Edge Security for securing:

- Bitcoin Private Keys
- Transactional Metadata (ie. Payee, category, notes, date, fiat value)
- Login credentials (Access to in-app bitcoin buy/sell exchange services)
- Gift cards (Stored value to major retailers. Starbucks, Target, etc)

Beyond the Blockchain

The Airbitz Edge-Security model can apply to more than just blockchain applications and we believe this is where Airbitz has a tremendous opportunity for growth. Any application that secures user data can leverage Airbitz Core to drastically decrease their security risk at a fraction of the price of enterprise style security infrastructure. Instead of building a bigger castle with thicker walls to secure a trove of valuable data, app developers can enable a high powered vault in the pockets of each of their end-users. We project great usage in the fields of:

- Internet of Things (smart locks, home security cameras, smart thermostats)
- Financial Applications (Quicken, Quickbooks, TurboTax)
- Healthcare (Practice management applications, healthcare records.)
- Personal Info (Contacts, calendars, credit card & bank info, passports, SSNs, etc)
- Authentication credentials (usernames, passwords, 2FA tokens)
- Secure Messaging (PGP email, encrypted messaging)

Monetization

Airbitz will monetize by licensing the Airbitz technology stack allowing clients to leverage everything from the full mobile wallet all the way down to our Core SDK. At a very reasonable cost of \$1 per month per active account on our platform we have a Total Addressable Market of >\$4B based on the following types of applications:

- \$48MM per year: Consumer Password management (i.e. Lastpass) 3
- \$48MM per year: Enterprise Single Sign On (i.e. Okta) 4
- \$48MM per year: Financial Applications (i.e. Quicken/Quickbooks) 5
- \$480MM per year: Cloud storage (i.e. Dropbox/Stori/Sia) 6
- \$600MM per year: Remittance applications (i.e. Abra)
- \$1.2B Smart contract based sports betting (i.e Augur) 8
- \$1.8B Peer to peer marketplace (i.e. Ebay/OpenBazaar)
- 1. http://www.ibtimes.co.uk/ethereum-prediction-market-augur-teams-blockchain-security-experts-airbitz-1563842
- 2. https://cointelegraph.com/news/police-target-arcade-city-ceo-while-ridesharing-company-integrates-blockchain-bitcoin
- 3. https://chrome.google.com/webstore/detail/lastpass-free-password-ma/hdokiejnpimakedhajhdlcegeplioahd
- 4. https://www.okta.com/blog/2015/01/okta-2014-highlights-a-year-in-numbers/
- 5. https://www.quora.com/How-many-customers-does-Intuit-have-for-QuickBooks
- 6. https://techcrunch.com/2015/06/24/dropbox-hits-400-million-registered-users/ (assuming 10% of users are active / month)
- 7. http://www.coindesk.com/launch-bitcoin-remittance-abra/
- 8. http://espn.go.com/espn/magazine/archives/news/story?page=magazine-20030804-article23
- 9. http://expandedramblings.com/index.php/ebay-stats/

Fundraising

Airbitz has raised a total of \$350,000 in bootstrap funding, ~\$500,000 in founder loans, and a \$500k seed investment from the Plug and Play Tech Center, Bitcoin Fortress Ventures, and Block 26. This funding has carried the company through launch of the Airbitz mobile wallet on iPhone and Android, integration of bitcoin buy/sell capability in 21 countries, and development of the Airbitz Core SDK for iOS, Android, and Mac OSX.

Airbitz is seeking to complete a round of \$1,750,000, at a \$7,500,000 valuation, to sustain 20 months of additional development, client developer support, and marketing. In early stages of capital deployment, Airbitz will utilize engineering resources to add Airbitz Edge Security to various blockchain projects that may be preoccupied with their core offering.

By offering to deploy our technology in their apps, we quickly build an ecosystem of blockchain apps utilizing Airbitz. This creates a stickiness for users as they will be able to easily authenticate with their Airbitz credentials into any of the supported applications. We are enabling the next generation of the single-sign-on, OAuth experience but with the zero-knowledge security and privacy required for the blockchain ecosystem.

This funding will allow the company to show significant traction and adoption of Airbitz Core and achieve profitability by middle of 2017.

Management Team

CEO / Co-Founder – Paul Puey

Mr. Puey holds a degree in Electrical Engineering and Computer Science from the University of California at Berkeley. He has held lead engineering positions with Nvidia Corp and Chromatic Research. Mr. Puey most recently owned and operated several small businesses throughout California where he created solutions that streamline the intersection of consumers, merchants, and technology.

CTO / Co-Founder - Tim Horton

Mr. Horton holds a Masters of Science from Cal State University San Marcos. His development skills span a wide range including backend web servers, mobile UI on iOS and Android, low level C/C++, and the Bitcoin core protocol. He previously held a lead software developer position with Residential Mortgage Solutions and was co-founder of the EvoNexus incubated startup, Breadcrumbs Inc.

Chief Architect / Co-Founder - William Swanson

Mr. Swanson holds a degree in Electrical Engineering from the California Polytechnic University at San Luis Obispo. He is an engineer specializing in open source software development, hardware and software integration, and is well versed in many software computing languages as well as hardware implementation. He held previous positions as an Electrical Engineer with Radix Automation, as Co-Founder & Lead Engineer at MeasureBot3D, and as an embedded software engineer at Fuel7, Inc. Mr Swanson is a core developer of the Libbitcoin open source bitcoin library.

COO - Will Pangman

Mr. Pangman holds a degree in Psychology from Miami University. Since 2013, Mr. Pangman has worked on several technology startups as the team lead for business development and communications, including roles as Chief Marketing Officer at Pink Eye Group and Chief Operations Officer at Tapeke. Mr. Pangman is also a well-traveled public speaker who specializes in reaching new audiences of diverse professional backgrounds about online privacy, security, and blockchain technology. He excels at developing strategic partnerships, high quality deal-flow, and winning hearts and minds.