

The Algebraix[®] Personal Secure Vault

The Monetization of Personal Data

It has become clear that blockchain technology will disrupt a great deal of the commercial world. One area, the one that Algebraix is focussing on, is advertising. To address this market, Algebraix will build a Personal Secure Vault (PSV) and an advertising platform. The PSV will be a data vault where individuals store, secure, control and monetize their personal data. The advertising platform will enable PSV owners to be rewarded for their attention and their voluntary use of adverts and promotions.

PSV activity will be supported by a decentralized blockchain that manages all transactions, recording them in a ledger. The Algebraix network will, using anonymized data, maintain a database that enables advertisers to identify legitimate target groups for their promotions. Targeted individuals will be presented with appropriate lists of promotions, and if they so choose, will engage with the advertising company and be rewarded accordingly (in ALX coin, the network's digital token).

The activity of both PSV owners and advertisers will be monitored by a reputation system to maximize the likelihood that when users respond to adverts they are genuinely interested and that the advertisements the network carries are not deceptive. Digital advertising will thus be far better targeted than it currently is and Internet users will be more receptive to digital advertising than they currently are.

The Business Opportunity Algebraix Is Pursuing

The personal data of Internet users is currently exploited in a variety of ways by many Internet companies, particularly giants like Google and Facebook, based on a "push advertising" model, where adverts are pushed at users without their permission, often in distracting and irritating ways. The push-back against this is evident in the prevalence of ad blocking software in browsers. Current figures suggest that approximately 11% of global Internet users block adverts, with the figure rising to about 25% for US Internet users.

Despite this, digital advertising is a tremendously successful business that is growing dramatically. In the Global Advertising Forecast report, published in December 2016, Magna estimated digital advertising revenues for 2016 to be over \$178 billion (36% of the total global advertising spend of \$493 billion). Approximately 54% of the revenue was shared between Google and Facebook. Magna predicts that the total global spend will rise to 50% of the total by 2021 (i.e., \$300 billion of an estimated \$600 billion).

Digital advertising revenues average \$89 per Internet user, and \$287 per US Internet user, and they are projected to grow at 11% per annum. Algebraix intends to disrupt this valuable market with a new and distinctly different approach to advertising. Advertisers will be attracted to it because it will be more effective in



Business Office / R&D Office

9601 Amberglen Boulevard

Austin, TX 78729

(858) 381-4800

www.algebraixdata.com

info@algebraixdata.com

Smarter decisions begin
with a smarter infrastructure





targeting consumers. Consumers will be attracted because they will be rewarded for their attention and their participation will be entirely voluntary. Algebraix will take a simple commission on each interaction.

A free market will be created where advertisers will compete to gain attention. The more they offer in ALX coin the more attention they will receive from individuals who accept their offer. In this marketplace individuals earn currency versus the Internet behemoths.

The Personal Secure Vault

The PSV, which stores an individual's personal data, will encrypt it and make it available only to its owner. The data it stores will comprise: credentials (proof of identity), holdings of digital currency, profile information (preferences for targeting purposes) and any other data the individual chooses to store (financial information, personal history, health information, etc.).

The Algebraix network will connect the PSV, which will be able to reside on any mobile device or PC, with blockchain technology that records and manages the PSV's activity, network nodes where data will be stored securely and a distributed database that enables advertisers to target groups of individuals.

Advertising will not be the only application. There is potential for many other useful interactions with other blockchain services. To cater for this, we will build an Inter Blockchain Communication Fabric that will enable such interactions. The currency of the network will be the ALX token which will be used both for payments and receipts. ALX tokens will be used by advertisers, by PSV owners and by those who run network nodes to support the network. There will be a fixed (non-inflating) supply of 100 billion ALX for these purposes.

The Role of Data Algebra

As the Algebraix network expands it will acquire millions of users, each of whom are likely to be storing a great deal of data and who will execute many millions of transactions each day responding to adverts or pursuing any other activities the network supports. Operating this network will require very efficient widely distributed software and highly effective data management. Algebraix will not only be building the software infrastructure but also some of the applications, and in doing so will employ data algebra, which has proved itself in its ability to define any data structure (as will be required by a distributed data directory) and in accelerating query performance (as will be required for retrieving data and accessing distributed databases).

Algebraix has registered a number of patents for the application of data algebra which relate to its capability in these areas. Nevertheless it will donate all the related software it produces to open source, so it can be leveraged by other blockchain projects.

The SAFT and Crowdfunding

Algebraix will conduct a Simple Agreement for Future Token (SAFT) to raise initial funding for these developments. It is scheduled for September, with a crowdfunding (or Token Sale) to follow. For more information on the SAFT, please email investors@algebraixdata.com.



A free market will be created where advertisers will compete to gain attention. The more they offer in ALX coin the more attention they will receive from individuals who accept their offer. In this marketplace individuals earn currency versus the Internet behemoths.