

Executive Statement For the Zillerium Project, by Trevor Oakley, June 2017

The blockchain sector has grown dramatically in the last six months with the price of ETHER as an example increasing in value against the dollar by more than 30 times. The level of interest has given rise to new opportunities. Zillerium is one such opportunity.

Problem

The long term problem to be solved by Zillerium is providing an architectural layer on top of Ethereum to manage supply chain based documents. This would need to solve some key issues as follows - i) searching documents, ii) global access, iii) storing documents.

These problems are partly solved but there is presently no solution to improve efficiency in the supply chain to the extent which could be achieved.

Solution & Storage

A number of storage systems exist which are suitable for blockchain use: they need to be scalable and global. Examples are storj and IPFS (BitTorrent principle), and Swarm (distributed hosting). Therefore we can store files, take a hash of the content and store the hash on the blockchain. This can solve the storage problem but there is no means to search the blockchain or storage.

We can implement Elasticsearch which is node and shard based and this requires a distributed CPU and storage solution to be implemented. ES already is distributed and for scalability we have to implement the structure using BitTorrent ideas and also CPU distribution (already solved by Golem).

Entry to the Market

The problems are large and complex; hence as a starting place we can solve a far simpler problem of storing compliance documents for construction. This requires a solution as described above but we can simplify the solution a lot and also the volume.

To implement this, we can perform an ETL type of task on documents and then make the data available. There are several projects already working on a Global Database, eg with Barilla, CISCO, IBM, Walmart. One interest is for a Food Database for traceability. This is called Farm to Fork. Hence the entire supply chain can be seen for an individual product.

Prototype

To get a basic system working we have to solve certain async problems using ReactJS and Javascript. These are partly solved at:

github.com/zillerium.

This would allow basic demo type of system to be created and used to raise money. Already a VC is interested but wants to see proof.

Project

It is possible for participants to work on the project in a hackathon type of setting to gain experience. This can be done at Google Campus on the lower ground floor. I think the prototype would need only 2 days to complete if a team of people worked on it with a high level of skill.

Skillset

ReactJS, Redux, Saga, Node, Ubuntu, JS, API access to IPFS, Storj, Web3, Geth, Ethereum, Truffle, API to Elasticsearch, Curl. Also some other skills are needed such as C++ and Java for more advanced functions.

To solve a prototype problem we do not need all these skills. The key skills are Node, ReactJS, Geth and working out the API calls.

The author has a working knowledge of Geth, Ethereum, Ubuntu, Truffle, Elasticsearch and is now getting more experienced in ReactJS. But the main skills shortage is in JS, Node, and ReactJS. The author can teach how the core skills to engineers qualified in related areas.

Opportunity

Today the market is emerging with many banks, finance companies, suppliers, investors, and accelerators all showing strong interests in the blockchain. The worst case scenario is that engineers would gain new skills which would be very valuable in the market. Many engineers in this sector have incomes of over a 100K a year.

If we all work well together we can also form a project and proceed to get VC finance and launch an ICO.

Next Steps

We would work at Google Campus for a few days and see how well we work together and how people feel about a larger project. This is free at Google and open 9am to 8pm week days. For a weekend session we need to find somewhere suitable with WiFi. If you have friends at

WeWorks we can get a free room there I think. They have an office in Moorgate. I know someone there who might help us get a free room.