

BankChain - Product Vision

Chainable Technologies

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1 Introduction

The Distributed Software (DS) group at the Delft University of Technology has been developing a peer-to-peer application for many years (Delft University of Technology, 2017). Part of their project is a blockchain for trust. As a research project and proof of concept for the DS division, our product will create trust between two peers.

This document describes the product we are creating, BankChain, and the vision we have on it. It gives a view of the customer and its needs. A view of the current market is given together with a budget and timeframe of the project.

2 Target customer

The target customer is somebody with a phone, with the need for public keys of others and distributing his own. The need may come from, hearing the risks about communicating unsecured on the news or reading about in on the internet. The target customer is probably reasonably technical, because the awareness of the problem and the need to take action yourself is not really widespread.

3 Customer needs

The product will address mainly the need for digital security from the customer. The product will deliver a way to create a trust relation between customers. The customer has the need of being sure of a identities of someone else. When communicating the customer can, because of the trusted relation, be sure he is communicating with the right one. Distributing public keys it imported for achieving this. The product is a way for doing this. That is way the product addresses this problem of the customer.

4 Crucial product attributes

There are a few elements of our application that we cannot do without. In order for the Customer to successfully use the app it will have to be able to both validate IBAN accounts from other users and send proof of access for its own account. Which means that the user needs a GUI to input this data into the app (preferably in an intuitive and easy manner). Then the application has to be able to send bank transfers and read incoming one. This validated data then must be stored securely so the validator needs to have access to one which in our case would be a blockchain.

5 Existing Comparable Products

A comparable product would be signing a message containing your IBAN with your private key that has been verified in a web of trust.

Using private keys holding Bitcoin would also be a comparable product. This private key would of course not have any trust attached to it, but it would be a PoS (proof of stake). The Bitcoin ledger against the message are easily traceable by nature. Therefore this would make it possible to verify that the coins are unique and not used in thousands of other message signings recently, thus protecting against spammers or Sybil attacks.

Our product is unique however, in that it requires an IBAN account, which is very hard to obtain illegitimately. This does give the responsibility to protect against bots partially out of our hands and into the banking world, but since this sector has a lot of experience with this and strict laws to follow, we trust this sector to handle this problem with great care.

Using an additional proof of life is something that we have recently seen in the gaming community as well. The free online game "Dota 2" has implemented such a method (Orland, 2017). The players now need a verified phone number to enable in game trading with other players. This again prevents Sybil attacks and automated attacks against the in game economy.

6 Time frame and budget

The application has to be presented on the 30th of June (*Plan 2017*, 2017) So there are 8 weeks to create the final product. In these weeks we should have our first version by May 12th. We should finish our Product by June 9th in order to integrate our features with those from other projects. Finally the codebase will have to be completely finished on June 23rd For review purposes which means that no changes can be made to that codebase after the 23rd.

There is no real budget to create this app we do however have resources. These contain developers at approximately 24 hours a week each to work on the application. There is space available for meetings and hardware has been made available to test the application. Also there is some money available for small costs (e.g. transaction fees).

References

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