

Putting focus on usability in blockchain

Blockchain, the possible future of banking without banks has a problem, it is not very friendly from a usability perspective. As this technology is becoming more and more widely recognized as a solution to many problems, new issues arise. Unlike normal banks, with a blockchain bank, if you lose your login and access credentials you lose all your contents. This creates a challenge; how to ensure that even a novice user will not make mistakes and lose his contents. Until recently there was no real solution to this pickle, now however, it seems that an engineering student from Lund has created a new easy to use design ensuring that you will not lose the contents unless you spend them.

Natali Ljunggren, the student behind this project, said that the whole thing started when she read about all the people that lost cryptocurrency fortunes due to forgetting the password or losing their mobile device. In a standard physical bank, one would just go to the bank, show ID and get new login credentials. With cryptocurrencies there is no higher authority that can give you back your credentials. If you lose them, you lose the contents of your blockchain wallet and that is a big pickle. Well, it would have been unless you decided to use Natali's solution.

What Natali did was to investigate deeper why this happens. She realized that in the vast majority of the cases, such loss could have been avoided had the wallet been designed better and forced the user to perform certain actions. So, she decided to solve this problem in her Master's dissertation "Improving the usability of secure information storing within blockchain applications". Through the research two things became evident.

The first thing was that most people lose their wallets due to not making wallet backups. The problem is not necessarily that people do not know how to backup, it is more that wallet solutions do not force the users to make the backup. Now, a blockchain wallet for, say Ethereum or Bitcoin, does not necessarily require the user to copy the software. What it instead requires to successfully backup the wallet is, to copy a set of twenty or so words that are unique to this wallet – a so called seed. These words are the magical key and with their help anyone can access the wallet even if the computer or mobile containing the wallet is destroyed. None of the wallets today do that.

The second issue that became evident was that all wallets use different terms for the same activities. In many cases these terms did not even make sense. So, the question became obvious, how can a new blockchain token user get his head around all this.

Natali's solution is unique in the sense that it forces the user to back up the wallet already at the start - and it checks if you did it correctly. If your wallet containing device falls into a volcano – not to worry, you can recreate it with the seed. Her design also explains all the actions - a more pedagogical approach than all the other wallets. It ensures that the users do not need to be blockchain gurus to use it. In fact, even one's grandmother can use cryptocurrencies and not be afraid of it. This new easy to use design (a result of a human centred design process) ensures that blockchain solutions are easier to adapt by non-technical users – something that is still seen as a massive barrier to wider adaptation. The fact that it is very beautiful is just bonus, see figure 1.

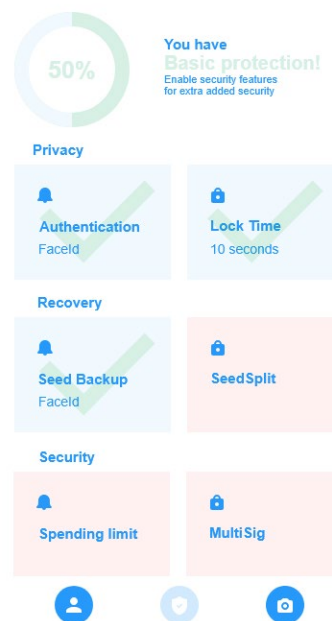


Figure 1. Wallet security overview page

When asked what she will do next Natali replied that there is a lot more to do with usability in blockchain and website. At the moment her wallet design is being implemented on iPhone and should be live within the next few months and she is already working on new blockchain usability projects.