



Blockchain Technology

Develop Your Fintech Strategy

2018
Unbank.Ventures



Unbank.Ventures is an education company focused on incubation and accelerator services in the financial industry. We are building a global platform to provide education, advisory and investor connections to startups, financial institutions & service providers.

Our flagship programs are:

Unbank.Incubate

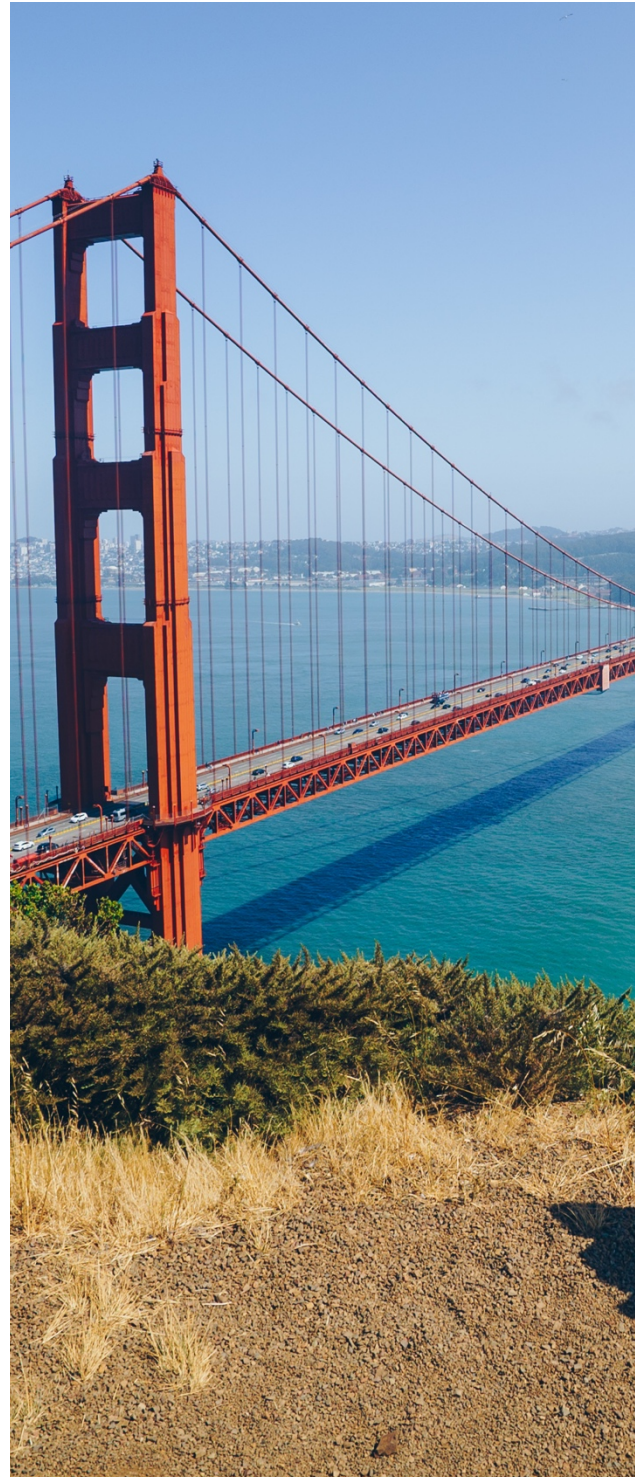
Unbank.Accelerator

Unchain.Ventures



Part 2

How can blockchain improve
trade finance?



1 Background and Motivation

Unbank.Ventures provides this paper, a guide into the world of Fintech. As an education company in the financial industry, we work with Fintech startups and financial institutions all over the world and experience the huge potential that the intersection between technology and financial services creates.

We believe new technologies can give your customers increased value, through simplifications and smarter solutions. In addition, technological innovations can reduce costs. Better services at lower costs will attract new customers and help your company grow.

In this paper we will focus on the new blockchain technology and discuss how the technology can be applied in trade finance. Trade finance includes financial activities like lending, the issuance of letters of credit, factoring, export credits, and insurance.

Blockchain is about to change the way people and companies work. In brief, blockchain is a digital, public ledger of transactions. The blockchain is continuously growing and new transactions are recorded, added to the chain, and linked to the previous block. This technology makes transactions more transparent and secure.

We believe blockchain has a huge potential in the industry, and the following pages give an introduction to the technology and its advantages in trade finance.

This is the second publication in our Fintech series ***Develop Your Fintech Strategy***. Last time, we focused on Innovation Strategy and discussed how the right culture and leadership can help companies grow through continuous innovation and technological adoptions.

For part 1, [click here](#).



2 What Is Blockchain Technology?

We have all heard that blockchain will be the next huge digital revolution after the internet. But how does it work and why is this particular technology so promising?

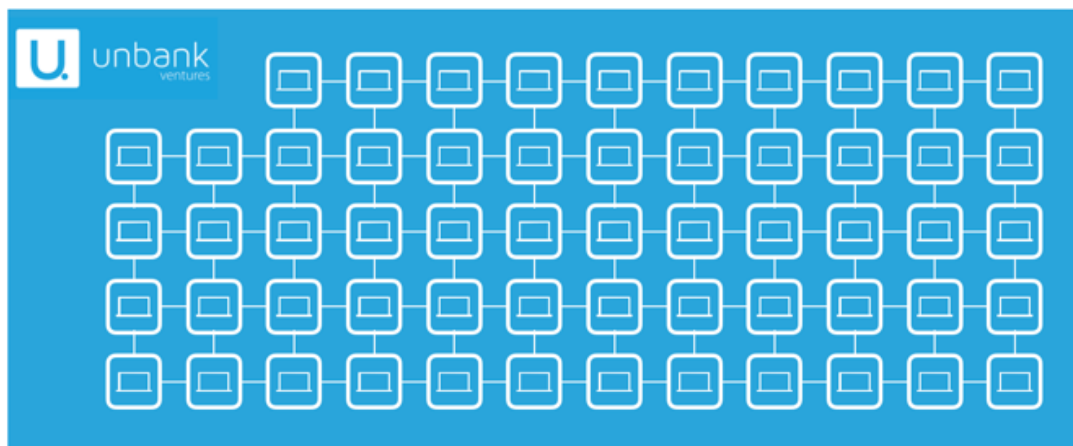
The blockchain technology records transactions in blocks of data and every block is added through cryptography and connected to the previous added block. The connection of blocks makes an irreversible chain of blocks and the way they are chained makes it almost impossible to change the data at a later time.

A blockchain can be connected to millions of nodes, which are personal computers connected to a network. All these nodes have a copy of the blockchain, which means the information is decentralized and widely distributed. To change anything in the chain the information in the entire network of nodes must be updated, which requires an enormous processing power. Consequently, it becomes very difficult to manipulate or corrupt data.

Blockchains can have different degree of transparency, depending their purpose. A blockchain that is permissionless is very open, while a permissioned blockchain has a higher degree of controlled access points. This makes it possible to control peoples access and give access permission only to people who need it.

In the financial industry blockchain can be perceived as an opportunity as well as a threat. On one hand, the technology can improve many financial services by making them more reliable, efficient, and secure. On the other hand, blockchain challenges the way today's banks operate and their current business model.

As you may know, the blockchain technology was originally developed for Bitcoin and was used to verify cryptocurrency transactions. Today we see a much wider potential for the technology. In the financial industry, blockchain can be applied in the field of insurance, stock exchange, smart contracts and so on. According to a report from the IBM Institute for Business Value, 91% of banks are investing in blockchain



technology. The high percentage indicates a common understanding of the potential this new technology has in the financial industry. But still, there are some banks sitting on the fence, which is remarkable when we observe the benefits and huge field of application.

This paper will focus on the use of blockchain in terms of trade finance.

3 Blockchain in trade finance

Manual processes within the field of trade finance can be both challenging to handle and time consuming. One single transaction could involve lending, insurance, issuing letter of credit, factoring and so on. There are clearly many parts involved and paper-based documentation must be sent from part to part in order to establish an agreement. Every time a change is made, all parts must be informed and get the chance to review and validate the documentation. As a result of the high number of documents and partners in different countries, the logistics become highly complicated. From exporter to importer, goods must be validated by multiple legal entities and if any unforeseen problems occur along way, transactions can take weeks to complete.

Banks deal with complex processes in terms of cross-border transactions, and the security of tracking of transactions can be problematic. To simplify the process, paper-based transaction records can be substituted with digital transaction records using blockchain technology. This change of

technology can lead to a number of process improvements.

First of all, the process in itself becomes more streamlined. Waste in form of waiting time will be markedly reduced and lead to a faster transaction process. Furthermore, the transaction also becomes more transparent since transaction partners are able to see the progress and track the flow from start to end. As initially described, blockchain comes with improved security and beside improved efficiency it results in less uncertainty and higher degree of trust in trade.

Transactions often require multiple signatures and contracts, which can be handled by integrating smart contracts in the blockchain.

3.1 Smart contracts

Smart contracts are contracts that are developed using digital code and stored on a blockchain. Since the smart contract is built on the blockchain technology, it is immutable and distributed. Immutable means that the smart contract cannot be changed when it is created and being distributed means it the contract is being validated and stored at a network of computers. This reduces the risk of manipulation and since the data is added through cryptography, only people with access are able to see and sign it.

A smart contract includes all the information you will find in a traditional contract, but it also includes computer code that will trigger an action if a particular condition is met. For

instance, if all parts agree on the terms and sign the contract, assets will be transferred automatically. In other words, there are a bunch of built in If-Else statements, which makes the contract process go much more seamless and without an intermediary.

When a part signs the smart contract, the blockchain will be updated and other persons with the right access point can immediately see the updated status of the contract.

As for blockchain, smart contracts have a wide field of application and it can be applied in most industries. In trade, smart contracts can be used in the agreement between the exporter and the importer, as well as their banks. The importers bank will be able to track the assets, review the contract, and submit obligations to pay the exporters bank. On the other hand, the exporters bank will provide payment obligation and create another smart contract. When the all the conditions are met, the payment will go through.

There are multiple exciting blockchain initiatives in terms of trade finance. In the next section I will briefly discuss some of the most promising platforms that are out there.

4 Blockchain Trade Finance Platforms

4.1 Wave

The first blockchain trade finance transaction was made by Barclays and Wave in 2016. The

Fintech startup company Wave was a part of Barclays Accelerator program in 2015, and a year later, Barclays and Wave executed the first a global blockchain transaction using their new Wave platform. This was the first time the paper-based process went digital using blockchain technology and Barclays claimed the platform gave substantial cost savings and reduced the transaction time from days to hours.

In November 2017 Wave announced they had successfully conducted a pilot using its application and hence taken another step towards a commercialized solution. The parties managed to execute an export letter of credit in four hours, a process that usually takes over a week to complete. At that time Wave worked with 57 banks and many more wanted to be a part of the next pilot project.

4.2 Batavia

Swiss bank UBS and IBM started working on a global trade platform based on blockchain in 2016. A year later BMO, CaixaBank, Commerzbank and Erste Group joined the team. Their platform is called Batavia and is developed in collaboration with exports from the transportation industry. Their object is to make a well functional blockchain trade platform that is designed to support more efficient, transparent and cost efficient transactions.

Batavia uses a combination of smart contracts and distributed ledger technology. Their platform makes it easy to manage and

track the process for all participants in a cross border transaction.

In June 2018 Batavia successfully executed its first live pilot transaction with corporate clients and took another step in the establishment of Batavia as an open system that is built on the IBM Blockchain Platform. The successful pilot transaction indicates that Batavia is a step closer to be a complete, fully functional blockchain solution.

4.3 Marco Polo

In collaboration with 13 global banks, blockchain startup R3 and the trade finance tech provider TradeIX are developing Marco Polo – a open-source trade finance platform. It is built with R3's distributed ledger technology, Corda and delivered over TradeIX's TIX platform.

Marco Polo is a pre- and post- shipment trade finance solution, and includes everything from purchase of orders, to invoicing, shipping and logistics information, to trade assets, financing activities and credit risk.

In late 2017 the group behind Marco Polo launched the project and the first proof of concept was successfully carried out early in 2018, when they launched the first pilot project. In May this year, the French bank Natixis also joined the initiative, which signalize there is an increasing understanding of the benefits these platforms can provide.

R3 is working with Microsoft and integrating Corda with Microsoft's Azure.

4.4 Voltron

Beside Marco Polo, R3 is also working on another interesting platform based on their distributed ledger technology, Corda. In collaboration with 12 banks R3 is developing the Voltron platform for improved efficiency in trade finance. Voltron will be a marketplace for exporters and importers. They can use the application for preparation and validation of shipment details, in addition to streamlining the letter of credit process.

Multiple pilot projects have been running and Valtron looks very promising. The time of paperwork can be significantly reduced using the platform.

4.5 We.Trade

Like R3, IBM also work on multiple platforms for trade finance. In 2017 IBM and eight banks began the development of We.Trade, a digital trade chain share platform using distributed ledger technology.

We.Trade can be used to manage, track, and secure cross-country trade transactions.

From February 2018 test clients were able to use the platform, and the commercialization were planned to take place in Q2 2018.

5 Conclusion

The second part of our series regarding development of Fintech strategy has focused on the blockchain technology in terms of trade finance. Blockchain records transactions in blocks of data and adds them through cryptography to a chain of blocks. The connection of blocks makes an irreversible chain of blocks and the way they are chained and stored makes it almost impossible to manipulate or corrupt data.

As we have seen, the blockchain technology can improve transaction processes in order to be faster, more secure and less complex. The landscape of blockchain trade finance applications is fast growing and several platforms will soon be commercialized. Wave, Batavia, Marco Polo, Valtron and We.Trade are participants in the trade finance blockchain race. It will be interesting to follow their journey and see how they revolutionize the industry.

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Specialties

Fintech, accelerator, incubator, and venture capital

Year founded

2016

Company type

Partnership

Company size

2-10 employees