Apparently, the world is holding its breath on the unloading of a few bales of cotton, which "could change trade forever".

In Qingdao sometime in early November, 88 bales of cotton will be unloaded and ownership of the bales will be transferred and payments made. With the magic of distributed ledgers (the most well known is Blockchain) and smart contracts, a new dawn will apparently rise and banking transactions will never be the same again.

Don't know what a smart contract is? Don't worry, every time you drive your car through a tollgate on a motorway you trigger a smart contract, with money being automatically being deducted from your account and paid to the toll operator. This happens millions of times every rush hour.

Smart contracts are everywhere, just think about all of the direct debits in Australia, some 3.4 million per day according to the Australian Payments Clearing Association .

So, if smart contracts are not new what is it about this particular transaction that's causing so much hyperventilation? It's because it's claimed to be one of the first uses of Blockchain technology in commercial trade. Some firms have invested a lot in the concept and are desperate for a win, however small.

International export/import transactions, such as buying bales of cotton, are usually executed using what is called a Letter of Credit. This is where a seller will go to a bank and ask them to guarantee payment for goods that are to be sold to a buyer, often in another country.

The bank will then issue a Letter of Credit to the seller stating that all of the necessary documentation is completed and complied with, then the seller will be credited with the sale price, minus a tidy fee for the risk that the bank is taking. Note it's not the goods that the bank is guaranteeing but the documents that describe the goods and the mechanisms for checking delivery.

The Letter of Credit has been around a long time, since at least the 12th century. The process was described in the 17th century as:

A merchant doth send his friend or servant to buy some commodities or take up money for some purpose and doth deliver unto him an open letter, directed to another merchant, requiring him that if his friend … the bearer of that letter have occasion to buy commodities or take up monies that he will procure him the same and he will provide him the money or pay him by exchange.

As with many complex business processes, processing of these letters is today highly automated. The SWIFT organisation , best known for handling the huge foreign currency payments between banks, has also provided facilities for banks to issue and exchange so-called Documentary Credits, including Letters of Credit.

SWIFT is owned by a consortium of banks and handles some 26 million transactions per day, with some 30 million documentary credit messages in 2015.

The new Blockchain transaction will reinvent the Letter of Credit but only in small part and without the supporting standardisation that is pervasive in international trade finance. It's a one-off.

What does Blockchain bring to the party?

Instead of a description being exchanged between banks (for example via SWIFT) it's stored on a shared distributed ledger, that is in one place that can be accessed by the parties involved. Alongside the record is the so-called "smart contract" that eventually moves money between parties. This is normally provided by systems in the corresponding banks.

The use of a shared distributed ledger is supposed to increase trust between parties, since neither party can change the common record on their own. But messages from the companies who handle the existing transactions are also trusted, if not more. This is because they are

recorded and in the unlikely event of a dispute, can be retrieved to verify authenticity.

Stepping back for a moment, the banks in this experimental transaction in China are the Commonwealth Bank of Australia (CBA) and Wells Fargo. Despite the woes currently besetting them both, these companies have a myriad of banking relationships between one another, most of which will involve much more value than a typical Letter of Credit amount. Trust is implicit (but nonetheless closely monitored) in all of the dealings between major banks.

In order for the CBA experiment to change trade forever, the proponents are going to have to work out the standards, and legal underpinnings, built up over decades by SWIFT. Then they need to build an infrastructure as reliable, fast as secure as the existing.

The underlying Blockchain technology continues to be mired in controversy and performance issues.

It has often been said that Blockchain is a solution looking for a problem and it will undoubtedly be a useful technology when it finds the right problem. But Adi Shamir, a co-inventor of the ground-breaking RSA cryptographic algorithm used by modern computers to encrypt and decrypt messages, elegantly tweeted:

“Yet to see a use-case for Blockchain that can’t be solved with an existing simpler technology.”

The question is why would a bank such as CBA bother?

Firms have to innovate and part of innovation is experimenting with new technologies. There can be no problem with CBA spending some money on innovation, but maybe they should also consider spending some of that money on the customers who have been duded with useless insurance contracts
or
dodgy investment advice
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Pat McConnell, Honorary Fellow, Macquarie University Applied Finance Centre, Macquarie University

Read more: https://theconversation.com/blockchain-reinventing-the-squeaky-wheel-67557