

# What is Blockchain and why does it matter?



Kris Wielens  
Senior Consultant  
[Kris.wielens@orchardfinance.com](mailto:Kris.wielens@orchardfinance.com)  
06 – 53 98 72 17



For anyone interested in Blockchain it is easy to fill their days with reading articles about this new technology. Many of us have heard about Blockchain but do not necessarily know what it is or how it helps treasury. Kris Wielens, Senior consultant at Orchard Finance, reveals all in this explanatory article and considers the implications for notional pooling and zero balancing.

Blockchain can be defined as a distributed public ledger which is secured by mathematical algorithms. Basically it is a digital record of events that is shared between many different parties. It is a technology that enables an electronic transaction and records it securely on a distributed ledger. One of the most interesting, and disruptive, things about Blockchain in the area of finance is the ability to securely and efficiently exchange data and messages without a centralised third party. If you think about what Blockchain enables with Bitcoin, things get more clear. For Bitcoin, the Blockchain enables the exchange and record of value with no centralised trusted parties (like banks) or centralised secure network (like SWIFT). In order to process a Bitcoin transaction between two users, both users need a wallet (in other words a digital bank account) in order to send and receive funds. This wallet is accessible via the internet and funds can be sent from one wallet/bank account to another in a direct, fast and cheap way.

## Current cash management techniques

Corporates often have a large number of bank accounts and bank relationships, not rarely they have multiple bank accounts per entity, currency, country and/or continents. Banks provide cash management solutions in order to efficiently manage cash and liquidity. Next to banks there are also technology suppliers that provide platforms and solutions with the same objective in mind. Particularly when a corporate has multiple banks and bank accounts, different cash management techniques are in place, either provided by a bank or implemented in-house using a Treasury Management System. In general the idea is to 'consolidate' cash, to increase visibility, optimise the interest result and to increase general control over cash. Basically there are two main cash management structures that are being used; Notional Pooling and Zero Balancing.

With Notional Pooling each company/subsidiary participating in the pool maintains its own accounts. The bank then creates a notional position from all the participating accounts reflecting the consolidated cash position on which interest is paid or charged. The funds itself do not move to a master account and there is no physical co-mingling of funds, although some local tax authorities may have certain interpretation. Notional pooling is not allowed in all jurisdictions but is very common in the Netherlands. With Zero Balancing, each company/subsidiary maintains its own bank accounts. At the close of each business day, the balance in these accounts are swept to the master account. The movements of funds to and from divisional or subsidiary accounts are generally treated as

intercompany loans unless all movements take place within the same legal entity. Whether physical pooling takes place within a single country or cross border, key issues of concern next to tax and legal issues, are the cut-off times for transactions, the actual cost of the transaction and the ability of the company to handle and administer the intercompany loans associated with the pooling.

From a cash consolidation perspective, the result of both methods is comparable, however Notional Pooling is becoming less attractive and more difficult under new Basel III regulations.

A new development within cash management is the rise of virtual accounts, issued by banks. With virtual accounts, a corporate has one set of main accounts per required currency and for each subsidiary/company a virtual account is created in the required currency. The 'outside world' (suppliers, customers and their bank) use this virtual account to send and receive money to/from. The relationship between a virtual and physical account can be compared with a PO Box and a mail address. Funds hit the virtual account, but are transferred and directly re-routed to the main account once they are inside the company's bank. The re-routing mechanism greatly enhances the reconciliation possibilities of receivables in case the virtual account is dedicated for a client, company or other reconciliation criterion.

### **How Blockchain can be applied to cash management**

Now we understand the basics of how Blockchain works, it might already be clear how it can be of added value to cash management. Blockchain can facilitate the transfer of value of anything digital, for example a Bitcoin but also a 'mainstream' currency like EUR, GBP or USD, without using a bank and/or a network like SWIFT. Moving funds within a cash pool within a corporate is currently often performed using a banking infrastructure. Within a Blockchain ecosystem there would be no need to use the banking infrastructure that is expensive and slow. Within a Blockchain it is completely visible and trackable where funds are and who they belong to, hence funds can easily be allocated and administrated per subsidiary. In principle it is the same setup as with virtual accounts. The main differences are that you are not dependent on banks, that it might be cheaper than the old ways of doing cash management and that it might be faster as within a Blockchain structure there is no such thing as cut-off times. As an international corporate with global presence, you will not have to sweep funds based on the bank's capabilities and procedures, but at the moment that suits you best.

Several initiatives of Blockchain applications are currently being investigated, either by banks or by start-ups. Frequent initiatives involve FX transactions or Trade finance instruments. Next step in establishing a truly Blockchain ecosystem is to get (trusted) suppliers and clients on-board, sufficient confidence and contingency planning. Although savings in processing fees, time and operational effort might just be around the corner, the benefits can only be determined and quantified once the blockchain infrastructure is in a more mature stage and sufficient confidence is developed. Even though the block chain at present cannot fully replace current cash management techniques, it is certainly a development to follow.

*This article is written by Kris Wielens, he is Senior Consultant with Orchard Finance Consultants and based in the Netherlands. He has more than a decade experience in (corporate) payments and was formerly involved in building a Supply Chain Finance company. In case you are interested in knowing more about Blockchain Technology, please reach out via [kris.wielens@orchardfinance.com](mailto:kris.wielens@orchardfinance.com).*