ZAKATTECH & CRYPTO-PHILATHROPY: CAN BLOCKCHAIN MAKE ANY REAL DIFFERENCE IN ZAKAT MANAGEMENT?

MUFTI FARAZ ADAM

The proponents of blockchain technology project that it could account for as much as 10% of global GDP by 2025[1]. Whilst much of the focus for blockchain has been on payment systems for commercial use, clearance, settlement and securities trading, the potential benefits of blockchain for social finance and charitable giving is under-developed and limited.

Put simply, blockchain is a shared, distributed ledger that facilitates the process of recording transactions and tracking assets in a network. An asset can be tangible — a house, a car, cash, land — or intangible like intellectual property, such as patents, copyrights, or branding. Virtually anything of value can be tracked and traded on a blockchain network, potentially reducing risk and cutting costs for all involved. For a Zakat ecosystem, blockchain has potential benefits for all including the payers, beneficiaries and the Zakat institution.

In this article, we consider the potential benefits of using Distributed Ledger Technology (DLT) in managing Zakat payments.

1. Transactions at higher speed

Transaction speed refers to the rate at which transfer of data happens from one account to the other. DLT has the potential to improve transaction speeds because the technology cuts many of the unnecessary intermediaries out of the equation. The shorter the supply chain, the fewer unnecessary transactions there are. A Zakat system on a blockchain has the potential to exchange value at higher speeds. This can ensure that a Zakat payer's obligation is fulfilled faster than ever before. However, at present, scalability is an issue for blockchain technology and transaction speeds are not as optimal as some traditional platforms. VisaNet claims it can process 56,000 electronic transaction messages per second, something which blockchain based transactions are struggling to match[2].

2. Reduced operational costs

Due to the lack of intermediaries and lack of trusted third-party involvement, blockchain can potentially reduce costs.

As no intermediaries are required to mediate the transactions, in theory, operational costs are lower, and more money is available for the organisation to improve their structure and support those in need of assistance. This can help to significantly decrease the cost of annual reporting on the Zakat institution's budget and spending, while increasing its overall transparency. Further, automation of processes by use of smart contracts can reduce administrative costs for charities. Blockchain can dramatically improve how they manage, monitor and identify issues with budget allocation or find a project's inadequacy to tackle a problem and, consequently, improve their results.

3. Transparency in a Zakat ecosystem

Fraud in the charity sector costs British charities and charitable trusts approximately £1.65 billion per year, according to a new report released by the Centre for Counter Fraud Studies at the University of Portsmouth and accountancy firm BDO[3].

One of blockchain's most attractive features for Zakat is that Zakat movement around an ecosystem would be highly visible and traceable, allowing payers to track all their payments from the beginning to the end and verify where their funds went. A clear audit trail is developed manifesting exactly where every single penny is spent. Every Zakat transaction on the blockchain would be recorded in near real-time and would be visible to everyone on the network. Such transparency will increase the trust in Zakat institutions as well as monitoring the entire sequence of transactions, givers can easily find out whether their funds reached their intended target. Well-documented and tracked transactions enable givers to make better-informed decisions when choosing between various charitable organisations for their future donations.

4. Improving accounting and governance of Zakat institutions

The nature of a distributed ledger and the consensus model that governs it, ensures that all transactions are secure and accounted for. Since each transaction builds onto the blockchain, there is no way for it to be manipulated. Zakat payers can be rest assured their donations are being used for their intended purpose. Smart contracts can be created at the time of a Zakat payment, giving the Zakat payer peace of mind that their Zakat is used as intended. The contract is embedded in the digital code and stored in transparent, shared databases. This allows the giver to see where their money has gone from the moment they give, all the way through to the receiver. It also only allows the money to only be released for the cause it was originally intended for and only to approved suppliers of goods and services. This will enhance the overall governance of Zakat institutions.

5. Efficiency of Zakat operations

Blockchain has the potential to offer a secure, reliable, and efficient way to manage donations and allow for efficient workflow. With the use of smart contracts, organisations don't have to rely on intermediaries to confirm transactions and can proceed faster than they would in the traditional workflow model.

6. Better cyber security

DCMS' Cyber Security Breaches Survey 2018 found that 19 per cent of the 555 charities that responded had suffered a cyber breach or attack in the past year, compared to 43 percent of businesses[4].

An increasingly pertinent advantage of blockchain technology is to repel cyber-attacks and forced

outages. Hackers would not only need to hack into a specific block to alter existing information but would have to access all of the preceding blocks going back through the entire history of that blockchain, across every ledger in the network, simultaneously. And with no central organisation owning the system it is difficult to corrupt and everybody can use it and help run it. This feature would enhance the resilience of Zakat organisations and ensure that Zakat payers' obligation is fulfilled.

7. Reduced risk of identity fraud

Blockchain can ensure that Zakat payments are made to the right people deserving of Zakat. The UN's blockchain pilot program named Building Blocks was instrumental in displaying this. With a biometric scan, they can distribute electronic food vouchers to refugees in Jordan, eliminating the risk of identity fraud or data mismanagement[5].

8. Efficient identification of Zakat applicants

Further, where Zakat is distributed in more developed societies, Blockchain has the ability to eliminate the hurdles of time in identification and verification (ID&V) and KYC. A secure, distributed ledger can transform the speed of ID&V and help piece together the financial status and ID of a Zakat applicant.

Whilst blockchain has a lot of growth potential, the technology is still in its infancy and faces a number of real challenges. Deloitte have identified five challenges facing blockchain technology[6].
The principal challenge associated with blockchain is a lack of awareness of the technology, especially in sectors other than banking, and a widespread lack of understanding of how it works. This limits use and investment.

Another challenge for blockchain technology is the lack of cooperation among organisations. This defeats the purpose of distributed ledgers, fails to harness network effects and can be less efficient than current approaches. Blockchain creates most value for organisations when they work together on areas of shared pain or shared opportunity – especially problems particular to each industry sector.

The third challenge for blockchain is culture shift. A blockchain represents a total shift away from the traditional ways of doing things – even for industries that have already seen significant transformation from digital technologies. It places trust and authority in a decentralised network rather than in a powerful central institution. And for most, this loss of control can be deeply unsettling. Thus, Zakat institutions would need to embrace a complete culture shift for blockchain to thrive in Zakat management.

Another challenge for blockchain is the speed and effectiveness. The speed and effectiveness with which blockchain networks can execute peer-to-peer transactions comes at a high aggregate cost, which is greater for some types of blockchain than others. This inefficiency arises because each node performs the same tasks as every other node on its own copy of the data in an attempt to be the first to find a solution. A fifth challenge for blockchain technology is regulation and governance. The current governance infrastructure for charities would need to update regulatory systems to capture the advances in technology.

NZF Worldwide

OUR SERVICES

STRATEGY

We work with philanthropists, government agencies and charitable organizations that wish to build and deploy highly effective Zakat strategies. We build bespoke solutions for you.

ADVOCACY

We are increasingly building links with central banks to support Zakat bodies optimize their Zakat collection.

AUDIT & COMPLIANCES

We ensure all our members are providing effective services, through a strong audit and compliance function.

FOUNDATION FORMATION

We work with those high performance stakeholders who would like to adopt the NZF model, to establish and seed new National Zakat Foundations.

References

[1] World Economic Forum (2018), Building Block(chain)s For a Better Plane, available from: http://www3.weforum.org/docs/WEF_Building-Blockchains.pdf

[2] Strelenko, G. (2018), Blockchain and Transaction Speed: Why Does it Matter?, available from: https://medium.com/@s_o_s/blockchain-and-transaction-speed-why-does-it-matter-80bfd100fa89

Visa, VisaNet, available from: https://www.visa.co.uk/about-visa/visanet.html

[3] Markel Direct, UK Charities lose £1.65 billion annually due to fraud, available from: https://www.markeluk.com/articles/charities-lose-1.65bn-year-due-to-fraud

[4] Preston, R. (2018), Fifth of charities suffered cyber attacks last year, available from: https://www.civilsociety.co.uk/news/fifth-of-charities-suffered-cyber-attacks-last-year.html

[5] Barclays (2017), What does blockchain do?, Available from: https://www.barclayscorporate.com/insights/innovation/what-does-blockchain-do/

[6] Deloitte, Key Challenges, available from: https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/Innovation/deloitte-uk-blockchain-key-challenges.pdf