BLOCKCHAIN

Will It Cause Disruption To The Accounting Profession?

While the Internet revolutionised the way information is exchanged, blockchain is transforming the way we exchange value. Traditional audit and assurance services will remain essential but blockchain business applications and new accounting technology will have a significant impact on the way auditors execute engagements

BUILDING BLOCKS OF A BLOCKCHAIN

- ➤ A blockchain is a growing list of records, called blocks that are linked using cryptography. It works by incentivizing parties to agree on any given transaction's authenticity. Transactions are organized and grouped together into "blocks" that are presented to the blockchain for authentication
- The creation of these blocks is called "mining," and miners are incentivized by a reward of native tokens. Once a block obtains enough confirmations, the transaction is considered to be validated and is placed on the blockchain as the next sequential block
- Once a block is created and validated by the blockchain, it can never be destroyed or altered unless 51% of the blockchain agrees and determines change is needed
- To exchange value digitally, such as currency or deeds, third parties are needed to establish trust. Blockchain removes this need for a middle man by providing a secure, distributed ledger of transactions in a network
- For tracing transactions and verifying information, blockchain can embed business logic into a transaction, using smart contracts

A PEEK INTO THE CHARACTERISTICS

- ➔ A distributed database, meaning each party on the blockchain has access to the entire database without an intermediary
- Peer-to-peer transmission without the need for a central authority
- Complete transparency for all that are authorized to participate in the blockchain
- Permanent, immutable, timestamped transactions

POTENTIAL IMPACT ON THE ACCOUNTING FRONT

* <u>Reducing Errors</u>

One of the biggest advantage of blockchain in accounting is its ability to make almost negligible errors. Once data is in the chain, smart contracts will make many accounting functions automatic, reducing human error.

* Increasing Efficiency

Blockchain is fast and powerful database. Using blockchain, getting data into and out of the system can be done more efficiently than interacting with legacy accounting software applications.

* <u>Reduces Cost</u>

Blockchain will lead to increased efficiency and reduction in errors which will eventually lead towards cost reduction. Following initial adoption cost, accounting firms can expect to see rapid cost savings over conventional accounting systems.

* <u>Reduced Fraud</u>

The immutable nature of blockchain makes it extremely difficult to perpetrate and difficult to manipulate. In order to modify a record, the same change would have to be made on all copies of the distributed ledger at the same time, which is highly infeasible.

* <u>Reduces Time</u>

One key feature of blockchain that accountants should be excited about is its ability to reduce audit time. With the use of smart contracts, many auditing functions can be automated which will reduce the time, an auditor needs to look after the records. The inherent traceability built into blockchain makes auditing fast and easy.

BASIS	REWARD TO ASSURANCE INDUSTRY	REWARD TO ACCOUNTING INDUSTRY
Real-Time Distribution of information	Ability to perform analytical procedures and examinations of data in real time	Greater confidence in data accuracy since information is available in real time
Verification of data by network members	Need for confirmations and verification reduced but is not eliminated	Less time spent on pursuing payment or resolving open items
Differentiated levels of access	Ability to join private Blockchain network to audit and examine information in near-real time	Ability to add different users without exposing all information to all parties.

- In a blockchain-enabled accounting environment, information is readily available and continually confirmed by all network participants. Instead of having to be confirmed manually and provided by third parties or internal colleagues, the information can be exported out of the blockchain environment because all members of the blockchain network have access to the data uploaded and verified by fellow members in real time, the need for periodic reconciliations is greatly.
- The real value that CAs can deliver is to bring businesses blockchain-enabled accounting, attest, and advisory services, Reconciliation & Establishing a single source of data internally. Blockchain network not only allows information to be distributed in real time, but since consensus protocols are established in advance, CAs can more consistently rely on the information generated by system reports.

POTENTIAL IMPACT ON THE ASSURANCE PRACTICE

* Frequency in Audit

At present, audit process is normally an annual exercise, mostly because of the time and effort invested in it. Blockchain technology may make it possible to conduct more frequent audits on a quarterly or even on monthly basis

* Shift In Focus Areas

Speeding up audit preparation activities could help reduce the lag between the transaction and verification dates enabling management and auditors to focus on providing increasingly complex assurance services in more agile business environments the focus changing from record tracing and verification to more complex analysis such as systemic evaluation, risk assessment, predictive audits, and fraud detection

* Improved Testing

Due to Blockchain functionality, the sample based substantive testing will soon be challenged, as auditors will use the blockchain technology to test the whole population of transactions within the period under observation. This extensive coverage will drastically improve the level of assurance gained in affected audit engagements

* <u>Reduced Risk</u>

The distributed ledger removes multiple, disjointed internal and external databases of records that need reconciling and should reduce the risk of inadvertently missing transactions through timing mismatches or booking errors

* <u>Digitalisation</u>

Management's accounting policies for digital assets and liabilities will fall within the purview of evaluation

* Data Integrity

In addition, for areas that become automated, they will also need to evaluate and test internal controls over the data integrity of all sources of relevant financial information.



- Surprisingly enough the blockchain network has an inbuilt audit system, which reconciles every transaction that happens in certain intervals and is immutable, which leaves many thinking about the role of professional accountants in future, once the organisations move to blockchain technology.
- The blockchain may give an assertion on the occurrence of the transaction, however, the auditor would still need to check for authorisation and legality of the transaction and ascertain whether the
- same is fraudulent in nature or are incorrectly classified

SUBSTANTIVE CYCLES	BLOCKCHAIN ENABLED	BENEFIT TO PROFESSIONALS
Revenue Recognition – Development of Performance Obligations	Revenue Payment and disbursement can be part of smart contracts enabled via blockchain	More Accurate revenue recognition and fewer correcting entries
Recharacterization and building of lease contracts	With operational and financial information available to counter parties there is less room for misinterpretation.	Increased ability to focus on advising how to navigate changing leasing standards.
Identification and classification of net assets	Increased automation of documentation reduces time and personnel spent on verifying asset categorisation	Less time spent communicating and interpreting documents, freeing up time for analysis and in turn resulting in better reporting.



INEVITABLE SMART CONTRACT

Smart contracts are contracts which provide an additional layer of protection for both parties in a transaction whose terms are programmed into a blockchain. Blockchain-



based smart contracts are computer programs operating on blockchains that autonomously verify, enforce, and execute the terms in contracts because the history of the blockchain is unchangeable, neither party can manipulate the terms of the contract.

For Example, a smart contract could hold the customer payment until the customer has received and verified the goods. Following this event, the smart contract could release payment to the vendor.

CONCLUSION

- The blockchain is a new database solution that has received considerable attention in the business community. It has already enabled the creation of multiple decentralized digital currency networks (e.g., Bitcoin, Ethereum), and the financial industry has begun to invest in the development of this technology for other purposes as discussed.
- It is definitely paving a way for itself and soon will emerge as a powerful tool in the creation of a better world that has accounting professionals equipped with the latest technological knowledge to ensure that a proper method is put into place for the purpose of accounting and assurance.
- Everything said and done, in the immediate future, blockchain technology is unlikely to replace financial reporting and financial statement auditing as financial statements reflect management assertions, including estimates, many of which cannot be easily summarized or calculated in a blockchain.