## Think out of the blocks...

Why can't traditional BLOCKCHAIN Platforms/Solutions scale? and the Solution to it...

# Introduction

Ronald Aai, CTO of SQ2 Fintech and the Chief Architect for the AURA Platform Project (aurae.io)

## First it was pure ...

O Bitcoin had a simple concept, "TRUST-LESS", "TRANSPARENT", "ANYONE CAN JOIN OR LEAVE AS THEY LIKE ... WHEN THEY LIKE".

#### Then it all started ....

why not i just start my own COIN, since BITCOIN is too expensive for people to buy anyway.

#### The First Band-Aid

Vitalik Buterin, co-creator and inventor of Ethereum wanted a "decentralised mining network and software development platform rolled into one"

BITCOIN	ETHEREUM
Bitcoin was doing like 7tp/s (transaction per second)	Ethereum about 20tp/s
Bitcoin had IOmin blocktime,	Ethereum about 14-15secs
Bitcoin can't really store anything other then TEXTs	Ethereum stores code.

#### More band-aids after that ....

- The emergence of non-POW consensus
  - O POS
  - O dPOS
  - O dBFT
  - O POSnT

#### More SNAKE-OIL Merchants with more band-aids after that ....

But there was a problem with DAG solutions, it would lose the "TRUSTLESS" feature as you would need to have "ALWAYS-ON MASTER or DELEGATED" nodes on the network or else your data will not be available.

BITCOIN + ALTCoins	Tangle	Ethereum, QTUM, NEO, EOS
Decentralized, Slow, Tries to add in bigger blocksize but in-reality it will still be slower.	Fast, but only transactions can't store objects or execute apps. Requires Master-Nodes to be ALWAYS-ON	Decentralzied, slow, ultimate expandability due to it's nature of having a VM in the chain.

### Where did we go wrong?

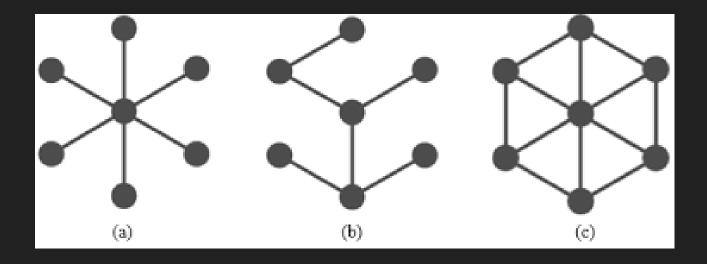
You don't have to re-invent the wheel to get a wheel-burrow to go faster, but you do need a new set of materials to build the TIRES to get it to go really FAST and carry HEAVIER LOADS.

#### The decade old DLT....

The problem lies in the Distributed Ledger Technology/Technique. As all Computer Science students knows, two can't write to the same file at the same time. File Systems are created to be MANY READ, ONE WRITE. That also coincidentally works with PROOF-OF-WORK, where the FASTEST NODE that solved the POW equation gets to WRITE to the DLT and asking the rest to update theirs. So how can this be fast?

## How to make it go really fast...

Distributed Processing.
Combine the power of multiple devices to function as 1 single unit.

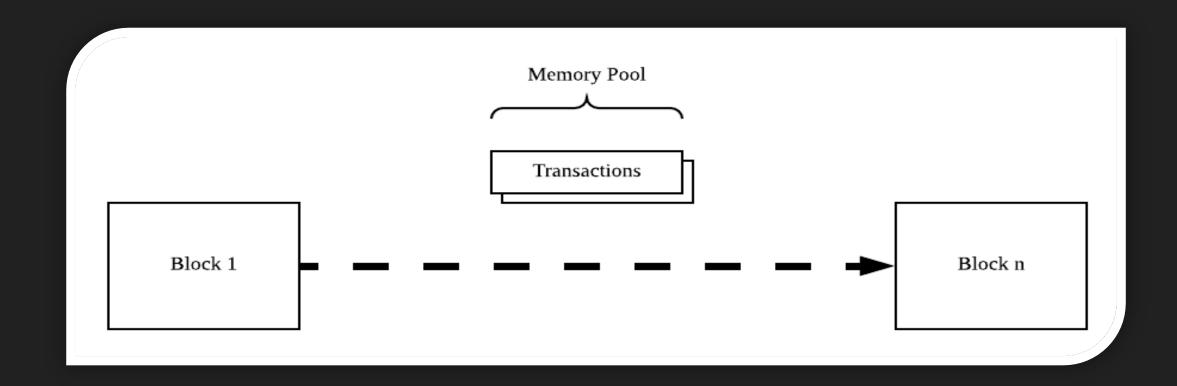


Centralized

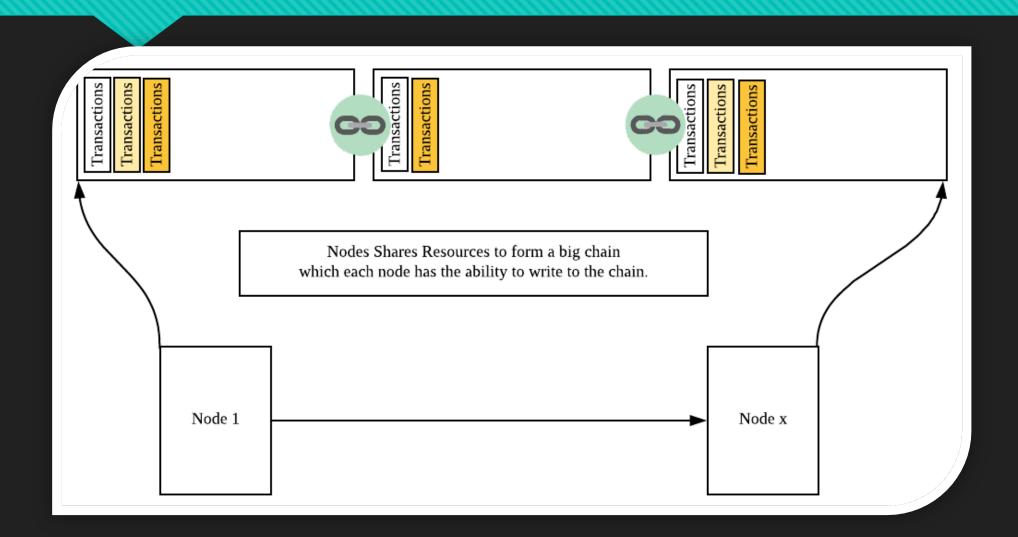
Decentralized

Distributed

#### Blockchain UNI-Direction Growth



#### Blockchain MULTI-Directional Growth



#### Research Demo

O We show you the result of our research

# Thank you

Ronald Aai, CTO SQ2 Fintech Pte. Ltd. Ronald.aai@aurae.io