WESTERN SYDNEY
UNIVERSITY

Centre for
Smart Modern Construction

THE JOINING UP CONSTRUCTION CONVERSATION

DEVELOPING A DIGITALISED DISTRIBUTED LEDGER PLATFORM FOR CONSTRUCTION SUPPLY CHAINS

C4SMC TEAM

PhD Candidate – *Mr Samudaya Nanayakkara*

Supervisory Panel

- *Prof Srinath Perera*
- *Dr Sepani Senaratne*

THE STATUS QUO

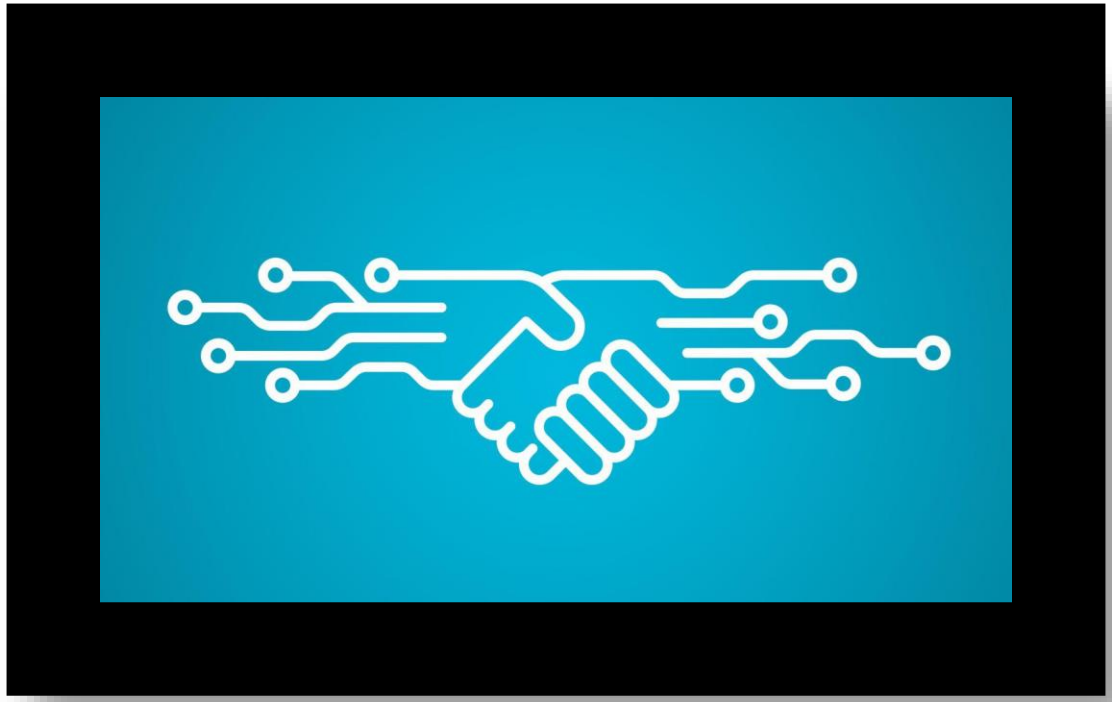
- Building a complex product
- Long supply chains
- Adversarial culture
- Payment delays
- Issues of trust
- Product compliance

FINTECH

- Digitalisation: Industry 4.0
- Internet: Intranet: Extranet
- Internet of Things (IoT)
- Fintech --- Internet of Value
- **Blockchain** is a decentralized, distributed and public digital ledger that is used to record transactions across many computers
  - Cannot be changed or immutable
  - Decentralised and permission-less ledger
  - Blockchains eliminates the middle man in transactions

SMART CONTRACTS

- Guiding rules and regulations
- A **smart contract** is a computer protocol intended to digitally facilitate, verify, or enforce the negotiation or performance of a **contract**.
- **Smart contracts** allow the performance of credible transactions without third parties. These transactions are trackable and irreversible.
- Self executing contracts without trusted intermediaries
- Blockchain is driven by algorithms
  - These are essentially rules
  - Laws are rules
- Smart contracts are driven by laws encoded in to algorithms

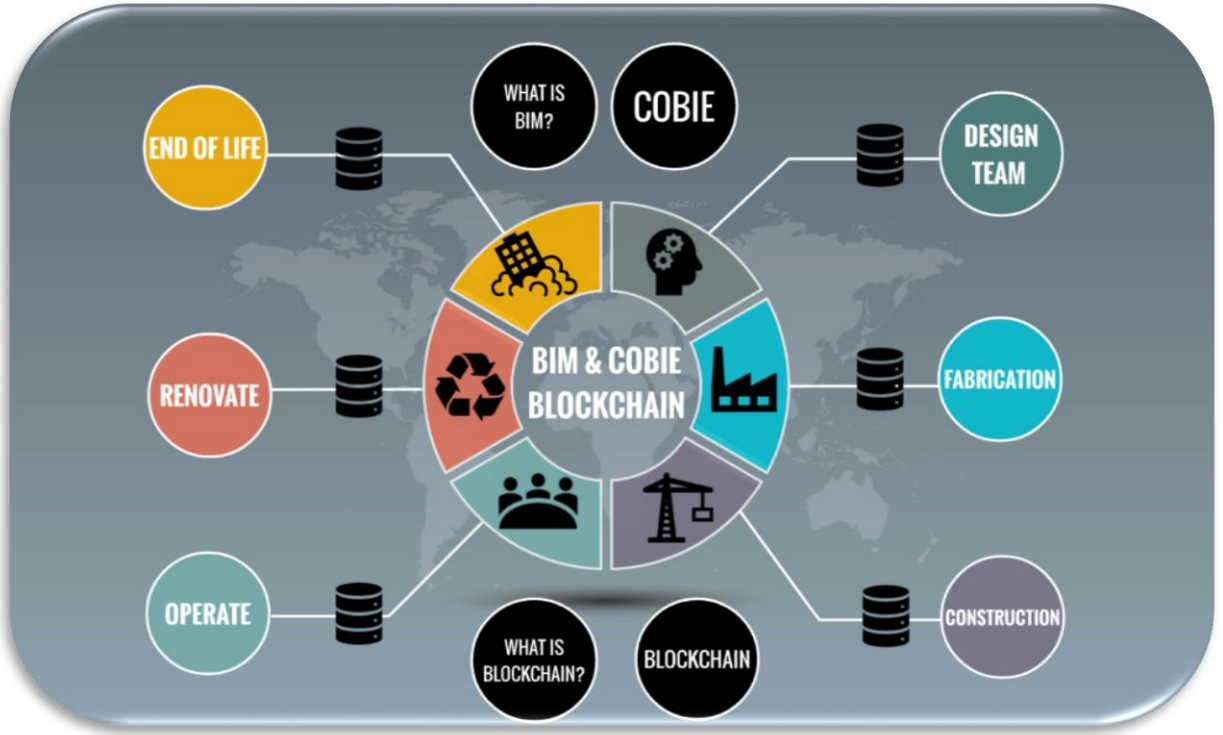


AIM

- This research aims to develop a methodology for greater integration of supply chains through the use of DDL technologies

WHAT WE WILL DELIVER

- A Blockchain platform for construction supply chains
- Test and validated system
- A Smart Contract for Construction
- We need your collaboration



Thank You

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