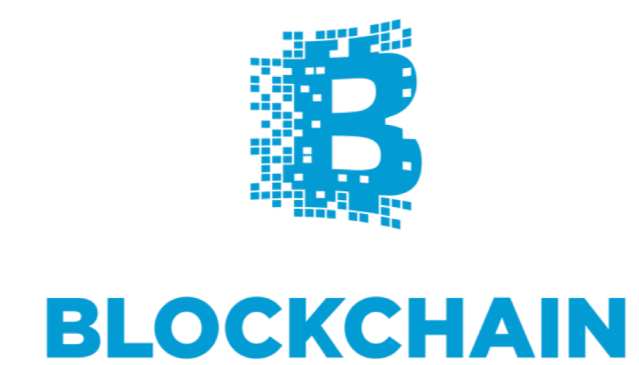
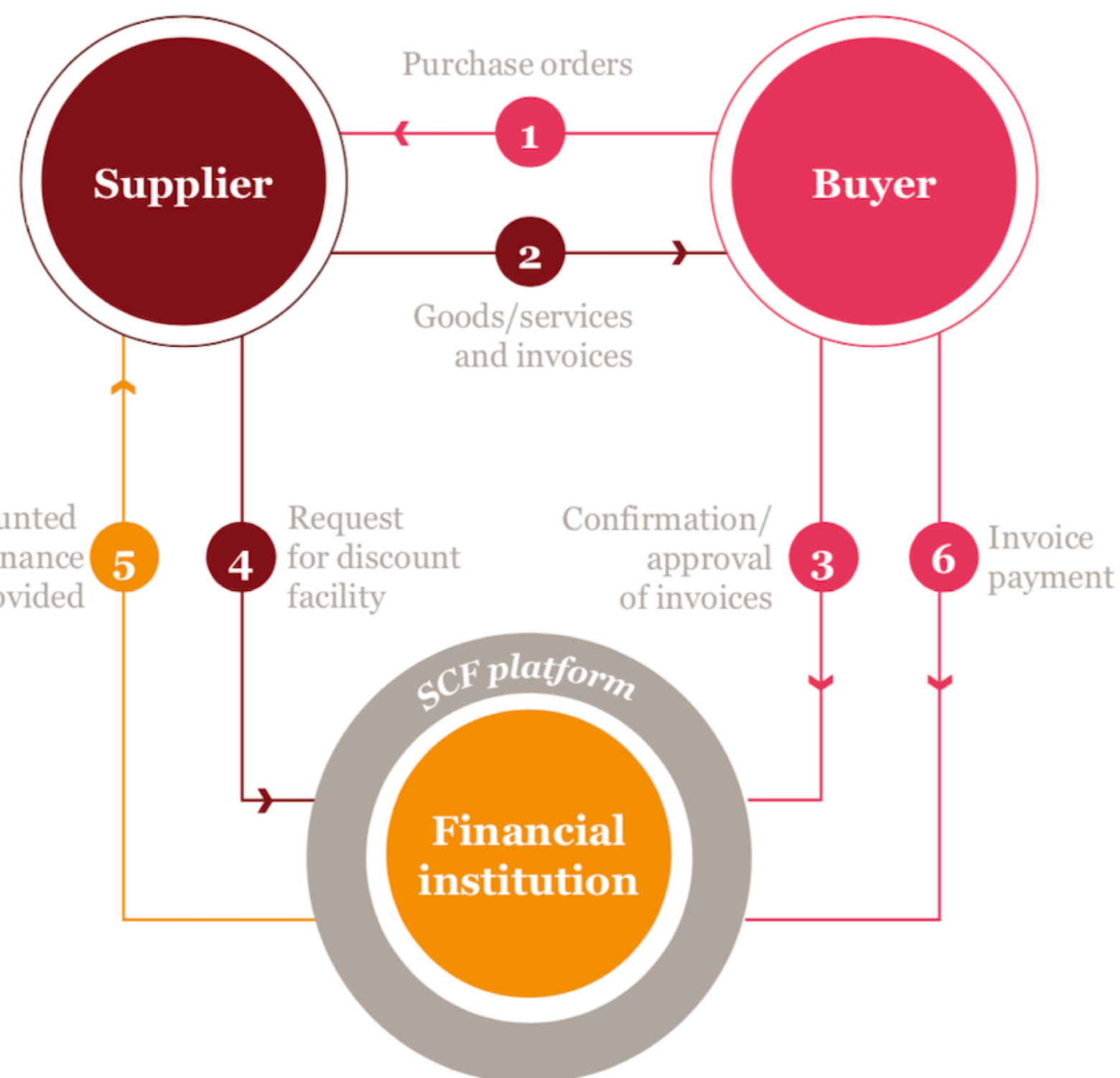


Blockchain in Supply Chain Financing

Motivation / Background

- **Supply Chain Finance (SCF)** is a financial solution offered by banks to optimize suppliers' and buyers' working capital, lower financing costs, and improve business efficiency.
- However, the current SCF process still much relies on paper documentation, inefficient processes, and costly operations.
- **Blockchain** is a shared, decentralized, and secured data structure that may transform supply chain finance landscape.

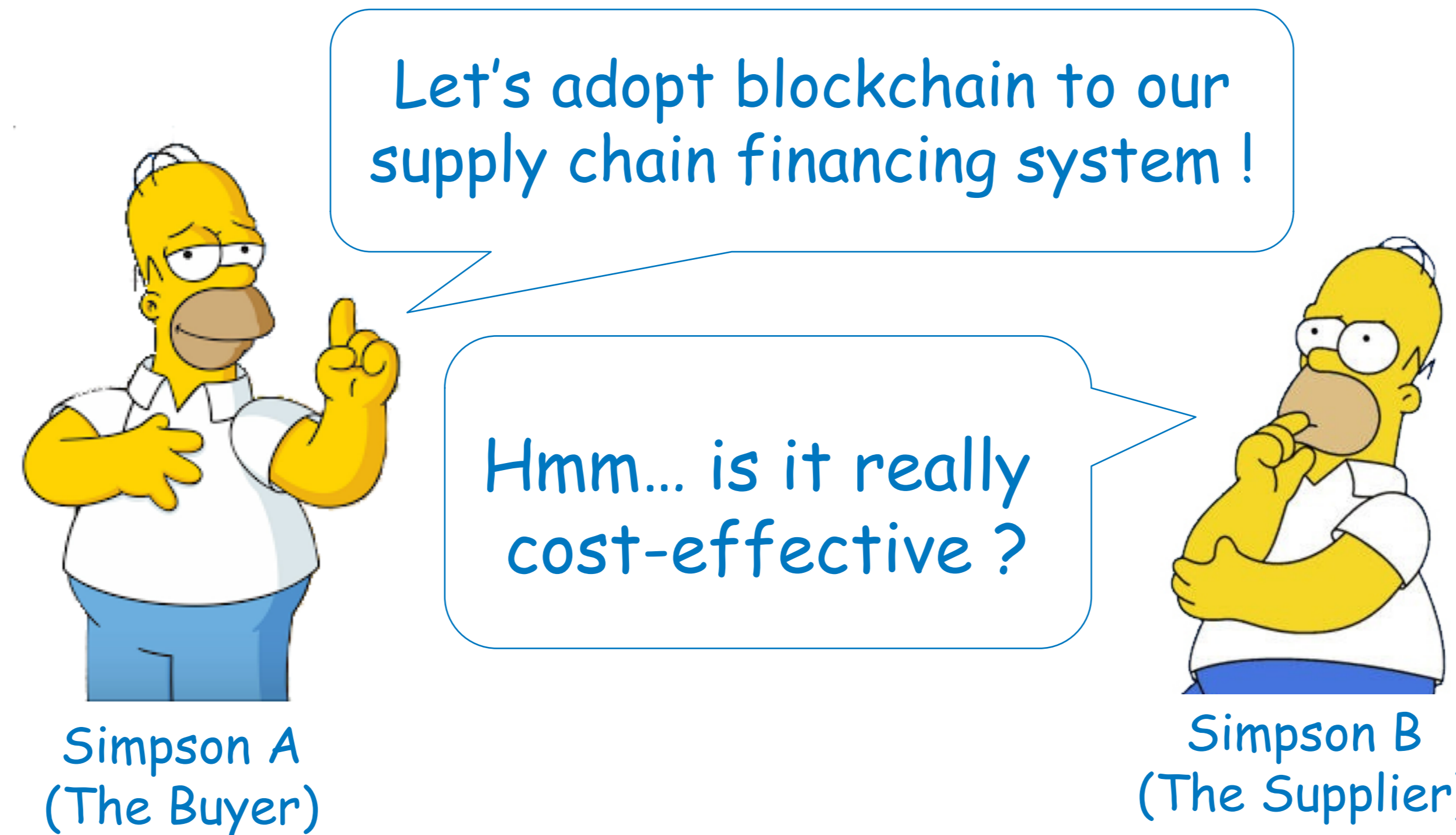
Supply Chain Finance + Blockchain



- ✓ Security
- ✓ Immutability
- ✓ Traceability
- ✓ Efficiency

Research question

What are net value of implementing blockchain-based SCF solution?



Methodology

- Literature review & Interview with practitioners
- Map out the SCF processes in 3 scenarios
- Develop 'Cost-benefit Model'

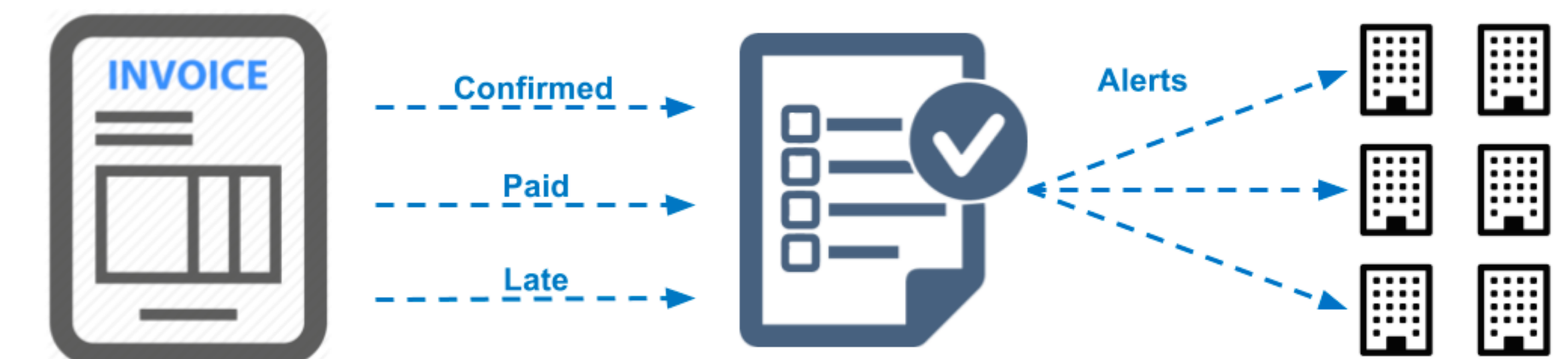
Four scenarios of blockchain adoption

1. Traditional SCF Solution
2. Blockchain-based SCF using smart contract
3. Blockchain-based SCF using IoT & Blockchain platform

Initial Results

Potential monetary benefits & cost savings of blockchain in Supply chain financing

- Unlock faster working capital for supplier
- Reduce administration costs
- Cut/reduce service fee by eliminating intermediaries
- Enable cheaper and efficient supplier onboarding process
- Reduce fraud/error/reconciliation costs
- Reduce human costs
- Reduce operating times/eliminate the bottleneck
- Etc.



Expected Contribution

- ✓ The first academic work to quantify cost and benefits of blockchain-based SCF solutions
- ✓ Provide quantitative insights for involved parties, such as suppliers, buyers, and banks, for making decision about adoption of blockchain-based SCF solution