

Blockchain Summer School @ IT University of Copenhagen

Use Case

Organization:	NORDEA
Use Case Title:	Smart Letter of Credit
Background:	<p>Letter of Credit (LoC) is used in 11-15% of all global transactions and accounts for over a trillion USD per. anno.</p> <p>LoC is a document issued by a Bank (Issuer) on behalf of the Buyer (Applicant), assuring that a Seller (Beneficiary) will receive payment up to the amount of the letter of credit, as long as certain documentary delivery conditions have been met.</p> <p>Letters of Credit act as a guaranty for both the Buyer and Seller, and thus is a mean to mitigate risks associated with trading of e.g. goods. LoCs are used both in domestic and in cross-border trades, with the later having particular value as the parties might operate with different languages, laws and customs. Thus a bank acts to establish trust in the trade, on both parties' ends.</p> <p>An example of the value in using Letters of Credit is the following:</p> <p>In the event that the Buyer (Applicant) is unable to make payment on the purchase, the Seller (Beneficiary) may make a demand for payment to the issuing bank. The bank will examine the Seller's (Beneficiary) demand and if it complies with the terms of the letter of credit, will honour the demand. The bank will then locally resolve the yet unresolved amount due by the Buyer (Applicant)</p> <p>Using Blockchain/Smart LoC can enable auto-execution of the logic within the Letter of Credit (agreed upon by entities involved).</p>
Challenges:	<ul style="list-style-type: none">- Highly manual and time consuming process requiring the reconciliation between independent records on each entity involved – Buyer, Issuing Bank, Advising Bank, Seller.- Labour intensive gathering and verification of documents as well as undergoing Due Diligence- Process is manual, can be inaccurate (historical data/transactions/documents)- Lack of governance/auditability- Cumbersome processes

Working assumption/ potential impact of Blockchain:	<p>Digitalization of Documents (Reducing Paper)</p> <ul style="list-style-type: none"> - Create a digital “smart” LoC with basic parameters which can be reused for different scenarios. <p>Automatization and streamlining of the manual process</p> <ul style="list-style-type: none"> - Create logic that will self-execute depending on the stated conditions <p>Greater ability to audit and govern the process across different parties.</p>
Underlying hypotheses:	<ul style="list-style-type: none"> - Simulate the end-to-end process - Test different scenarios - Do the audit, post settlement
Assessment:	<p>Mission accomplished when:</p> <ul style="list-style-type: none"> - The contract can be (theoretically) re-used in other scenarios - The logic is self-auto-executable - Can trace the transparent end-to-end process where you have evidence in case of audit/dispute