



Harness the Power of Blockchain to Skyrocket SCF



EXECUTIVE SUMMARY

Cash flow is the elixir of any business. Unhealthy cash flow can severely jeopardize the businesses – especially the small and medium enterprises that usually lead a hand to mouth existence. The enterprises render services or sell products only to wait 90 days or more to receive the proceeds while their obligations swallow the existing cash, sometimes pushing them to bankruptcy

The indispensability of trade finance to world trade and, by extension, to the world's economy, cannot be overstated. Eighty percent of the world trade relies on some form of credit, guarantee or insurance. However, the perception of low returns combined with the cost and complexity of compliance holds the banks and financial institutions back from financing the small and medium enterprises. Thus, for the small and medium enterprises, the access to finance remains a challenge and rejections are common. This puts a severe strain on their cash flow.

Eighty percent of the world trade happens on open account basis. The banks have recognized this shift and many global banks and financial institutions have started to offer innovative supply chain solutions to their clients.

In order to overcome the current challenges of supply chain finance, organization are investigating the use of Blockchain technology for supply chain financing. Blockchain can reduce processing time; eliminate the use of paper and save money while ensuring transparency, security and trust.



Introduction

Trade Finance Market Size

At the end of the year 2018, the global trade comprising merchandise and the commercial services reached USD 25.28T¹.

Some form of credit finances 80%² of this trade.

As per the WTO forecast, the trade is poised to grow at 2.6%¹ in 2019 and 3.0%¹ in 2020. Thus, the banks, financial institutions and the Fintech companies are looking at a loan book of not less than USD 22T.



Figure 1: WTO Global Trade Market Forecast

As the financers gear up to seize this opportunity, history shows that not all of USD 22T would be converted into business.

Demand Supply Gap - Trade Finance

The demand for trade finance overshot the supply by a good 1.5T USD in the year 2017³.

A good 1.1T USD of these rejections are the trade finance requests by the SMEs and midcaps. The reluctance to finance SMEs stems from the perception of low returns and the cost and complexity of due diligence and anti-financial crimes.

Market Bias - Open Account Trade

The ICC Global Survey on Trade Finance 2018, which shows that 80%⁴ of the world trade happens on Open Accounts. The survey says and I quote "The shift to open account and by extension to Supply Chain Finance-related solutions, is universal across geographic markets and client segments".

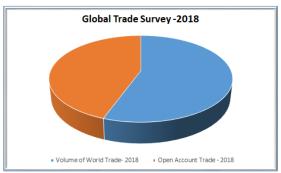


Figure 2: ICC Global Trade Survey -2018

To Summarize...

The world is shifting towards Open Accounts Trade and the banks world over are shifting their focus from traditional trade finance to supply chain finance.

The role of Small and Medium enterprises (SME) in the economic growth of any country cannot be overstated. SMEs continue to face difficulties in obtaining adequate finance at a competitive cost. This hampers their profitability and sustenance.

A platform for open account trade that democratizes the access to trade finance while keeping the costs low is the need of the hour. A platform that enables the businesses to gain access to multiple funding options and helps financers to fund at a lower operational cost while keeping the transactions secure and audits immaculate.



What Is Open Account Trade?

Open account trade runs on trust. The exporter ships the goods and expects the importer to pay on the due date, in effect, extending credit to the importer. Though it helps the exporter to clinch the deal due to payment term that favors the importer, the arrangement confers disproportionate benefits to the importer with respect to cash flow and risk mitigation.

Open account trade elongates the working capital cycle for the exporter. Cash flow is the elixir of any business. Unhealthy cash flow can severely jeopardize the businesses – especially the small and medium enterprises that usually lead a hand to mouth existence. The enterprises render services or sell products only to wait 90 days or more to receive the proceeds while their obligations swallow the existing cash, sometimes pushing them to bankruptcy.

The banks, financial institutions and Fintech see this as an opportunity to offer products like Factoring, Invoice Discounting and Approved Invoice Financing. These products address the cash flow problems for the exporters elongate the DPO for the importers and earn dollars for themselves.

Except for the nuances, the basic premise of these offerings is to extend advances to the exporter by accepting the receivables as collateral and convert a credit sale into a cash sale, with or without recourse.

Invoice Discounting, as the name suggests, refers to selling the unpaid invoices at a discount - typically, the exporter receives 80% of the invoice value. The invoice discounting is a short-term borrowing arrangement where the tenor is less than 90 days.



Figure 3: Invoice Discounting

Factoring is similar to Invoice Discounting except that in the factoring arrangement, the factor takes ownership of the sales ledger and debt collection whereas in case of Invoice Discounting the exporter retains control over administration of his sales ledger and debt collection.

Approved Invoice Financing, also called as Supply Chain Financing or Buyer Led Financing is a working capital management solution where the financers extend advances to the exporter based on the invoices that the buyer approves for financing. By leveraging their good financial standing, strong buyers may provide selected suppliers with attractive funding opportunities and other advantages.

By design, these product offerings are prone to the pain points like double financing, reconciliation, human intervention for verification and audit of invoices.

Challenges in SCF Today

Any communication is a two way process and the technological distance between the sender and the receiver is one of the barriers to effective communication.

A typical transaction on any Supply Chain Finance platform today consists of the following steps

- Invoice Upload/Entry
- 2. Verification of Invoices
- 3. Extension of Credit
- 4. Settlement
- 5. Reconciliation

Each of these steps is either complex, inefficient, error prone or has inherent risks. The buyer's



and the seller's bank run different databases and depend on SWIFT or mail messages for maintaining the status of the invoices and in turn their AP/AR.



Figure 4: Open Account Financing Pain Points

Invoice uploads are file based and include extraction of data from the ERP, transforming it and then arranging the data in the format expected by the invoice upload program. All or some of these steps are manual and error prone.

In case of businesses that do not have an ERP system and rely on paper invoices, the invoices are checked and data entered manually.

Verification of invoices, in case of Invoice Discounting and Factoring, happens manually – through either email or phone call to the account payable representative at the buyers.

In case of Approve Invoice Financing, the buyer uploads the invoices and approves the invoices for financing. The buyer's bank makes available to the seller an option for early payment at a discounted value and this process is manual as the seller may not be the bank's customer.

Extension of Credit by the financer is on the terms set by the financer. Since the invoice-discounting marketplace platforms are not widespread there is little option left for the seller than to accept the credit. The negotiation power of the seller is limited due to non-availability of a platform where he can put his invoices up for discounting and receive competitive quotes from the interested financers.

Settlement of funds can go wrong even after the financer takes all the necessary steps to ensure the genuineness of the invoices and credit worthiness of the buyer. Double financing is for real and getting the same invoice financed more

than once through multiple financers is a mechanism often used by fraudulent parties to make good with the funds leaving financers in the lurch.

Reconciliation of the bank's transactions with the AR/AP at the sellers/buyers is manual or requires complex integration with the ERP

Blockchain - The White Knight?

By now, we know that the world trade is moving towards open accounts and that there is a huge market for products that finance such a trade.

The conventional SCF platforms, though an option, are inefficient, dated and risk prone. They introduce unnecessary cost, time, complexity and risk in every step. This limits the returns on investment for the banks and prohibits them to offer the product to small businesses.

Thus, it makes sense to invest in technologies that not only gets over the inefficiencies and risks but also helps the banks and the bank's customers be future ready.

Thankfully, there are multiple options available today and Blockchain is one of the strong contenders.

It is no secret that Blockchain is immutable, secure, distributed, cost effective, and transparent. Transactions done on Blockchain have a low counterparty risk as no party can transfer the assets they do not own. Blockchain allows different parties that do not trust each other to share information without requiring a central administrator.

Having said that, though Blockchain has many advantages it might not be the best solution for every problem.



Blockchain is apt for situations that call for a shared database where multiple parties that do not trust each other can carry out transactions, the history of which is to be maintained for audits and the rules decided by consensus and do not change frequently.

- Real time information is shared between all participant of blockchain network
- Stream lines the process flow

- Ensure data validity Create a new trust system within the trade finance ecosystem
- Mitigate the risk of fraud or errors
- Provide easy tracking of transactions with the blockchain technology
- Automate execution of contract in real time
- Auto Disbursal and Auto Repayment using smart contract

Figure 5: Benefits of Blockchain

SCF, by nature, is document intensive and involves multiple parties that exchange information within the framework of accepted by all the parties. Thus, it meets all the criteria for a Blockchain based solution.

Banks and Financial institutions, world over, have formed consortiums to dabble in Blockchain and trade finance, more specifically SCF, remains one of the first few use cases under consideration.

Blockchain platforms today, bring together the buyer, seller and financers on a common platform. In some cases, it is only the seller and the financers.

Invoice uploads, largely a manual activity, makes way for API calls from the sellers ERP. It is impossible to tamper or alter the invoices, once uploaded, this eliminating the probability of fraud.

Buyers have the option to onboard the platform and in such cases, the buyers can verify the invoices. Out goes the time consuming, manual verification of invoices. The identity verification happens through KYC, the details of which are

available on the Blockchain. The buyer can verify only the invoices assigned to them. A smart contract encoded through consensus ensures the enforcement of the logic for assignment.

The invoices put up for funding are instantly visible to all the financers who can then quote their price while maintaining the security and privacy. This democratizes trade and the seller is empowered to choose the best quote.

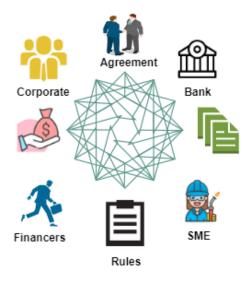


Figure 6: Blockchain - Supply Chain Finance

Modern Blockchain solutions recognize the need to provide easy integration to other Blockchain as the reality is that there exist multiple consortiums each on their own private Blockchain. The network of networks provides the Blockchain the capability to do away with problems like double financing as it is easy to identify and disallow funding for the invoices once funded. Not only that, the history of the invoices is available all the way to the first time it gets on to the Blockchain.



Conclusion:

Blockchain brings together the parties with conflicting interests, binds them with the glue of rules that are automatically enforced and then leverages the economies of scale to provide services at a cost that is a fraction of the cost incurred on the conventional SCF platforms

Tech Mahindra understands the magnitude of disruption that the Blockchain can bring to your SCF business and offers path breaking solutions to drive profitability and revenue.

Footnotes:

- 1- WTO- Press Release 2019
- 2- WTO Trade Finance Page
- 3- ADB Survey 2017
- 4- ICC Survey 2018

About The Authors



Amey Prabhu is a Principal Consultant with Tech Mahindra who leads the Trade Finance Domain Competency Practice. In this role, he is engaged in designing innovative solutions in the Trade Finance space leveraging internal capabilities as well as partnerships with FinTechs. Amey has extensive experience in consulting, business analysis, project management and product development with deep understanding of technology as well as the domain landscape. Amey brings with him 16+ years of rich experience in the Banking domain and has been part of trade finance initiatives at multiple domestic and international banks.

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