BLOCKCHAIN-TRANSFORM MSME TREDS FROM SMALL TO HEALTHY: A REAL CASE OF INDIA.

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Abstract
Micro, Small and Medium Enterprises (MSME) plays an important role in the development of the Indian Economy. India, being an overpopulated country, has the main problem of unemployment. MSME solves the problem of Unemployment by providing job opportunities at large scale, but for this, it is required that MSME should have their financing in time, i.e. they should get their payments for their raised invoices in time. To facilitate their payments in time, RBI has opened TReDS (Trade Receivables Discounting System) where invoices are raised and are paid by the concerned buyers. To have more transparency in TReDS, RBI is introducing Blockchain. An attempt in this paper has been made to find out how the application of Blockchain in TReDS will further improve the payment system for the invoices raised by MSME.

Keywords: Blockchain, MSME, TReDS, India, Trade, Discounting System, RBI

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Although Nirav Modi scam has become the news of the last page of the newspaper yet its impact can still be felt in the banking system. Firms related to Nirav Modi and Gitanjali Group had obtained unauthorised letters of undertaking (LoUs), the bank guarantees, for their Foreign branches of Indian lenders and thereby cheated PNB with an amount of Rs. 20,000 crore (USD 3.8 Billion).

Under banking system, if an importer wants to avail a guarantee from a bank, the banker asks him for collateral security which may be in the form of property in his name or a fixed deposit, and then the bank sanctions a credit limit. However, in the case of Mr Nirav Modi, two employees of Punjab National Bank (PNB) had sent guarantees without collecting credit limits and collateral security. The scam of Rs. 20,000 crore (USD 3.8 Billion) plus by Nirav Modi has not only led to the collapse of PNB’s share value but also raised a big question on the accountability and regularity systems that govern Indian Public Sector Banks. Neither of this LoUs- Credit Guarantee was recorded on the bank’s internal software system but was instead transmitted through the SWIFT interbank messaging system, which avoided the early detection of this scam.

When Nirav Modi’s firm again approached a bank for LoUs, the bank officials requested them to provide 100% cash margin for LOU for raising buyer’s credit. The firm contested this,
replying that they never provided this in the past too and had availed this facility. The PNB people checked the branch records but did not get any such entry for any such facility granted to the firm. Even if in some cases where a corresponding entry was passed that was passed for lower amounts. Then it was found that its two employees had issued LOUs to Modi’s firm fraudulently without 100% cash margins. The LoUs told these other lenders; “Lend money to Nirav Modi firms so that they can pay for their imports. If they do not pay, we will make good these payments.”

On receipt of the guarantee by the foreign bank, it will give a loan to the importer. The loan is given either by depositing money in the supplier’s account who is selling goods to the importer or by depositing money in PNB’s a/c held with it. This money is to be used to settle borrower’s import’s bills. After the importer generates revenue by reselling the goods, he will settle his a/c with PNB. However, in this case, the money so borrowed was used to settle earlier loans. It was also found that the amount of firm’s total debtors was much higher than the total turnover of the companies involved in the fraud, which indicated, that goods were being sold to the related party and either over invoiced or not coming at all. In the above fraud, issuance of fake LoUs would not have taken place on blockchain as the smart contract would have been identified inconsistent based on automation, reconciliation with the core banking system and following the establishment limits it would have been restricted the payment initiation over the swift network.

The above fraud, of course, could not have been avoided entirely but could have been minimised by using Blockchain system in the banks. In the above fraud, issuance of fake LoUs would not have taken place on blockchain as the smart contract would have been identified inconsistent based on automation, reconciliation with the core banking system and following the establishment limits it would have been restricted the payment initiation over the swift network. Jesse Chenard, founder and CEO of MonetaGo says,” What happened at PNB was the result of numerous systematic failures to detect simple human malfeasance.

These failures would have been easily spotted and prevented on Blockchain. It is surprisingly common for the information settlement mechanism like SWIFT to be on a separate ledger from the payment settlement mechanism which is the system more likely to be scrutinised by the bank’s internal controls, as well as the various audits, including inspection by regulators. MSMEs currently exposed current market forecasts, create jobs opportunities and initiate productivity. Universal, MSMEs account for more than half of official jobs – not just in low-income states (78%), but similarly in high-income countries for contributing up to 66% of occupation. MSMEs is a vital foundation of income as well as employment for a rapidly growing labour force in emerging states such as Africa. Conferring to the IMF description, there is an urgent need to create employment opportunities to withstand the region’s increasing labour force. Insufficient employment opportunities could smother growth. Blockchain was a significant topic at Davos; a World Economic Forum survey recommended that ten out of a hundred of global GDP will be kept on blockchain by 2027 (World Economic Forum, September 2015).

Venture-capital backing for blockchain consistently raised and remained up to $1 billion in 2017 (Blockchain startups absorbed 5X more capital via ICOs than equity financings in 2017,” CB Insights, January 2018, cbinsights.com). Blockchain brings all the participants of the Banking system on the same page. Through this shared ledger, users have access to the details of
every transaction related to accounting entries. The general mechanism of Blockchain ensures the authenticity of the ledger. One does not need to shuffle through documents to look for suspicious transactions as financial irregularities can be easily detected under blockchain.

A Blockchain is a continuous ledger in which transactions are stored as Blocks and linked using cryptography. “Small is beautiful”- No doubt in this statement. However, small will remain beautiful for a long time only if it is appropriately nourished. However, some smalls are weak in front of Big shots. To some extent, ‘Big’ can use its force on small and sometimes small even does not get its good share. The same applies to ‘Micro Small and Medium Enterprises’ (MSMEs) in India also.

Agreeing to the statistics from Silicon State, blockchain startups raised $1.4 billion in 2016 and $1 million in 2017. The financial sector previously comprehended the aids of spending blockchain. Overall, the banks that use this know-how save $8–12 billion per annum. Being a country having the second largest population in the World, MSMEs have emerged as a highly vibrant and employment provider sector of the Indian Economy, over the last five decades.

India, being an agrarian country, there is a problem of rural unemployment during off seasons. MSME plays a significant role in promoting industrialisation of rural and backward areas, thereby reducing the regional socio-economic imbalance. MSME has played a crucial role in the economic and social development of the country by promoting entrepreneurship and generating most substantial employment opportunities at comparatively lower capital cost. With a contribution of as high as 45% towards the country’s GDP, MSME has a vital role to play in Indian Economy.

MSMEs are considered as complementary to large industries as ancillary units, and this sector contributes significantly in the inclusive industrial development of the country. However, these large industries always dominated the small in one way or the other; they never used to make MSMEs bills payments on time in the past. The small-scale industry in India has been sharing the same pain points since its beginning, and the primary source is the delay involved in its payments. Despite the critical role played by MSMEs in the fabric of the economy, with a contribution of 45% to GDP, proper attention is not being paid to flourish in this industry. It is indeed the need of the hour to pay attention to the concerns related to the financing of this segment. One of the problems being faced by MSMEs is inadequate to finance, especially, working capital.

Throughout the Global economy, only 10% SMEs are lucky to have the financial assistance which they require to expand their businesses. For rest, it is difficult for them to approach financial institutions for their financial requirements due to their irregular earnings and timing of earnings. As a result, the financial institutions are forced to charge higher collateral to safeguard their lending. The other alternative before them is to get their invoices realised at the earliest. However, these payments are also not made in time. In the past, inspire of efforts on multiple fronts, the MSME segment continues to be hit with the problem of late payments. The large and big Medium-sized corporate that these units supply tend to delay payments often inordinately. CRISIL’s analysis of 10,000 MSME’s shows their average trade receivables position at about 75 days. A need was felt for shortening of payment cycle and a regular flow of
liquidity through some platform which will ensure that MSMEs do not miss out on Business opportunities due to the shortage of funds.

To tackle this Pan-India issue, Reserve Bank of India brought out a scheme known as ‘Trade Receivable Discounting System’ (TReDS). It is a platform whose purpose is to facilitate smooth flow of liquidity in the system and make available finance to MSMEs at competitive rates. For most of the small businesses, the easiest way to obtain credit is through the financing of Bills Receivables. On these platforms, MSMEs can trade their invoices as collateral with financial institutions or banks on lower amounts than the receivables or in other words can discount their bills.

After the MSMEs raise the invoices and approved by sellers, generally banks or financiers (Non-Banking Financial Institutions and other Financial Institutions) can bid for them taking into account the risk factor of the corporate on this platform. MSMEs will receive discounted payments against their bills from the banks or financiers without waiting for the credit period agreed with large corporations. Moreover, on the due date of the invoice, Lender that is the bank or the financial institution will get back their money from the buyer corporate. The objective of the Reserve Bank of India for introducing TReDS was to enable financial inclusion of MSMEs by providing them with fast working capital finances to strengthen and make MSMEs more powerful.

TReDS Platform has brought MSMEs, banks, Corporate, PSUs on a common platform. It is a vital platform to encourage the growth of MSMEs in India. Through TReDS MSMEs can finance its working capital easily, at comparatively low discount rates. TReDS never wanted to broadcast any of the private information relating to its participants to a shared network, as participants never wanted to share their source of inputs. They were reluctant in uploading their invoices for the fear that their competitors will identify their MSMEs supplier which may lead to hike in input prices. Moreover, TReDS platforms were facing the problem of double invoice factoring, and as such, they were looking for a high digital technology to eliminate double invoice factoring and provide transparency and were also looking to have communication among them to share information without giving away the details.

In April 2018, RBI deployed the Blockchain system. MonetaGo, a US-based Blockchain Solution Company, has provided a private blockchain which does not rely on Cryptocurrencies but has been built on Hyperledger fabric to operate. The Reserve Bank of India licensed three entities to provide a more efficient platform to do this: RXIL, A.TReDS and MIXchange, which will use this MonetaGo blockchain solution to eliminate the frauds in the TReDS platform. By adopting a common blockchain platform with MonetaGo, the TReDS Exchanges will be able to reduce the possibility of double financing which would lead to competitive rates without sharing specific elements of any invoice or particulars of clients.

With the introduction of the blockchain, participants were able to work not only together but also to work with other exchanges to achieve their goals without sharing specific data. “Applying digital technologies like blockchain, artificial intelligence (AI) and robotic process computerization can decide inefficiencies in our present trade economics system and make the procedure well-organized at the bank’s, buyer’s, seller’s, and the MSME’s end,” renowned a fresh ASSOCHAM-DELOITTE JOINT study (Business Standard, March 2018).
This is a step further towards our Honorable P.M of making India a digital economy. On TReDS, fraud takes place when a firm applies the same receivable for financing on multiple exchanges. It is a common ill practice to offer the same invoice and borrow cash from multiple exchanges. The implementation of blockchain in the TReDS would be fruitful besides being efficient, secured and decentralised. Blockchain has the potential to streamline payments to MSMEs, which will benefit MSMEs. Here, Moneta Go’s solution will make the information transparent by sharing the information of a bill being financed over the blockchain. On receipt of the same information on all the three exchanges, others will verify if the new receivable which they are going to process has not been already financed so far. It will reduce the frauds on TReDS exchanges.

Under Hyperledger fabric, the details run with an algorithm, which produces fingerprints. It is registered on the blockchain which means no participants can go and reverse the data. It is not only an efficient way to identify assets, but it also maintains the privacy of the concerns. Moreover, this technology will enable participants to work together to achieve shared goals without sharing their other information such as the source of inputs.

Blockchain holds tremendous potential to transform MSMEs from small to healthy. It may be a recent technology, but it is likely that Blockchain will fundamentally alter the MSMEs funding procedure. With its distributed ledger and shared infrastructure, blockchain can help MSMEs streamline operation and ensure timely payments of Receivables. Blockchain can help MSMEs in improving banker’s trust and transparency. The technology allows suppliers and banks and other financial institutions to verify the invoice raised; there is no way to manipulate it. It also prevents fraudulent issuing of duplicate invoices. Blockchain technology will also guarantee a more transparent invoice with its buyers (corporate) having access to all information to determine the genuineness of invoices. Blockchain provides permanent, immutable, signed and time-stamped records of information. It is highly secured as the information provided here is tempering resistant.

MSMEs are exporting almost 60% of India’s exports. Under such situation, TReDS can play a significant role in discharging MSME’s export bills. The MSMEs are widening their domain across sectors of the economy, producing a diverse range of products and services to meet the demands of domestic as well as global markets. Digital systems also help in payments being made to NRIs. Blockchains makes known the real time of international remittance. Under it, the sender bank directly deals with the recipient bank for initiating a payment. The payment process is transparent over the time it takes to reach its destination.

Since, India has sufficient technology and also possess required infrastructure, as such entire paper-based transactions related to international trade requires to be moved onto technology based on Blockchain and Distributed Ledger Technology. The authenticity of the invoice can also be checked through “The GSTN” (GST) network. TReDS require digital storage of information for E-way bill which reports movement of transportation and confidentiality online. These ‘GSTN’ and E way bill require a tremendous amount of digital infrastructure which could be supported with the help of blockchain technology. Along with transparency, this technology enables all three exchanges to work together to achieve shared goals without sharing specific data.

“Trade financing is document-heavy and process-heavy. The blockchain solution allows this to happen in a digitised manner. Because of the network effect, where a buyer, the buyer’s bank, the seller and the seller’s bank are all on the platform, it creates a single source of truth.” In India, TReDS have made financing easy for MSMEs while implementation of Blockchain will make it more effective by providing transaction security and elimination of fraud by the elimination of double financing from different exchanges.

Blockchain, being implemented in TReDS is built on Hyperledger fabric and does not rely on Cryptocurrencies. Based on the above discussion MSME should have their financing on time like they should contract their expenses for their elevated statements in time. Secondly, to allow their overheads in time, RBI has released the TReDS (Trade Receivables Discounting System) where the demands are upraised and are remunerated by the alarmed buyers.

In India, Mr Arun Jaitley in his speech while presenting the Union Budget 2018-19 in Parliament, said, “The government will explore the use of Blockchain technology proactively for ushering in the digital economy”. However, this does not mean Reserve Bank of India is going to be soft on Cryptocurrencies, as it has imposed a ban on the use of Cryptocurrencies. The end of this month expects the verdict regarding ban by Honorable Supreme Court. The future of Blockchain is bright.

There is a need to bring awareness about Blockchain, providing adequate education and sufficient computer infrastructure, which will further promote blockchain in India. Recently, Nucleus Vision along with NITI Aayaog and Government of Telangana and Goa has hosted India’s first ever International Blockchain Congress in Hyderabad. In the last, what is stored for us in future, only time will tell.

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