GITP White Paper

Shaping the Future of Trade Finance

By Riqueza Finolutions Ltd

July 15, 2021

Contents

Founder's Note

I always had a vision to create a transparent ecosystem to bring affordable and accessible trade finance to those in need, for business can only grow when liquidity is not a hindrance. We are excited to launch GITP, a decentralized trade finance platform to unlock the liquidity access in crypto world for acquiring real world assets in the form of receivables.

Traditionally receivables financing or export financing model has been prevalent for many centuries but it has never been easy for corporations to avail it due to various issues such as: minimum ticket size requirements, higher rejection rates, higher cost of funds, transparency, and so on. Our mission is to create a decentralized platform which will connect all parties, distribute information with greater flexibility, and lower the risks for all involved.

We are bringing along our expertise with over a decade of successfully running a trade finance advisory business in Asia and Middle East, named Riqueza Factex. Riqueza Factex has been in operations since 2014 and has helped fund businesses across Asia and the Middle East with over USD 500 million in trade finance across industries and sectors.

In 2018, the WTO reported that over 60% of trade finance requests by SMEs were rejected. As a result, trade finance is regularly listed as one of the top three obstacles to exporters. Indeed in many cases, if the request is not accepted by the financial institutions, the transaction will not take place.

We hope our newly launched platform, GITP, with the use of blockchain technology will make finance accessible to every corporation at affordable cost by removing intermediaries from the equation.

Kind regards,
Piyush Gupta
Founder of GITP

Chapter 1

Trade Finance

1.1 What is Trade Finance?

According to the World Trade Organization, nearly 80% to 90% of world trade is facilitated by trade finance[1]. Trade finance involves financial institutions providing short-term finance in the form of letters of credit or guarantees to facilitate the exchange of goods and services. It offers competitive payment terms to both buyers and sellers and reduces gaps in the payments cycle. Trade finance involves various stakeholders such as exporters, importers, financial institutions, and insurers, among others.

Trade finance provides financing for both domestic and international transactions. In the case of international trade, exporters want to get paid as soon as they ship the goods, while importers want to pay only after they receive the goods. With trade finance, exporters or sellers get timely payments as per the trade agreement, while importers or buyers get extended credit facilities. It is no surprise that as of 2019, short-term payment guarantees or credit made up for over $10 trillion in annual flows (as per the bank of international settlements)[2].

1.2 History and Evolution of Trade Finance

Trade finance originated thousands of years ago in Mesopotamia, a region in the Middle East that presently lies between Iraq and Syria. The oldest examples of trade finance instruments, such as promissory notes and letters of credits, can be found in Babylonian clay tablets dated around 3000 BC. In the Roman empire (27 BC to 476 AD), trade finance was widely used for importing and exporting.

---

[1]"Trade finance - WTO." https://www.wto.org/english/thewto_e/coher_e/tr_finance_

e.htm. Accessed 23 Feb. 2021.

[2]"Why exporters need to mind the trade finance gap | World Economic ...." 10 Feb. 2020, https://www.weforum.org/agenda/2020/02/exporters-mind-trade-finance-gap/. Accessed 23 Feb. 2021.

During the Middle Ages (5th century to 15th century), letters of credit were used to solve two problems: 1) lack of security while transporting precious items such as gold, and 2) lack of a common currency. Merchants preferred to exchange their cash with a letter of credit, which could subsequently be converted to cash at another bank.

In the 16th century, factoring was introduced by the merchants of Venice. A factor is a financial intermediary who purchases accounts receivables from a seller. In the 17th and 18th centuries, trade finance was commonly used to pro- vide short-term financing to facilitate trade between America and Europe.

In the 19th century, trade finance suffered a setback during the Great De-pression as many companies restricted trade flows. Until 1971-1973, when the Bretton Woods System (an international monetary system) collapsed, interna-tional payments were restricted due to government controls. However, in the 1970s and 1980, governments started removing capital controls, which revived international trade, and consequently, trade finance.

The supply of trade finance took another hit after the global financial crisis of 2007-08, which saw a decline in world trade. Post-2008, there has been a con-sensus among economists and analysts about the importance of a well-developed trade finance market in boosting world trade.

1.3 The Evolution of Trade Finance Instruments

Traditionally, a bill of exchange was the most commonly used instrument of trade finance. The bill of exchange typically involves three parties: 1) the drawer, 2) the payee, and 3) the drawee. The bill of exchange is a written order between the drawer and the drawee. The document binds the drawee to pay a certain sum on a specified date or on-demand to the payee.

For example, Company A sells some goods to Company B. Company A (which is eligible to receive a payment) draws a bill of exchange that binds the drawee (Company B) to pay the amount due within 60 days. At the end of 60 days, Company A will present the bill of exchange to Company B and ask for payment. In this case, Company A is both the payee and the drawer; company B is the drawee.

The 13th century saw the advent of the medieval bill of exchange. This involved the exporter, the importer, a banker in the exporter's country, and a corresponding bank in the importer's country. Here an exporter or seller from Country A would issue a bill of exchange and sell it to a banker in Country A. The bill ordered the importer or buyer to pay a correspondent (based in country B) of the banker on a specified date. The correspondent would then remit funds

to the banker (in Country A) who originally financed the transaction.

Here is how a typical transaction would look like:

1. An exporter from country A sold goods to an importer in country B;

2. The exporter issued a bill of exchange to its bank (in country A);

3. The bank purchased this bill of exchange and gave cash to the exporter;

4. The exporter shipped goods to the importer;

5. The banker (in country A) sent the bill of exchange to the corresponding bank (in country B);

6. The corresponding bank presented the bill to the importer upon reaching maturity;

7. The importer paid the amount due to the corresponding bank;

8. The corresponding bank paid the bank (in country A), and the trade was settled.

In the modern period, the bill of exchange evolved into a financial instrument. It featured the right to transfer the original creditor's claim to a third party. Between the 18th and 20th centuries, London became the hub of global trade finance, offering a huge market for bills of exchange. Bills of exchange due in London could be used to finance transactions across the world.

Here is how a typical transaction would look like:

1. An exporter from country A sold goods to an importer in country B

2. The importer would ask the exporter to draw a sterling bill on an acceptor in London (with whom the importer had a trade relationship)

3. The London acceptor signed on the bill for a fee. This served as a commitment to repay the exporter upon the bill's maturity

4. The exporter sold the signed bill to a payee in London and received cash

5. The exporter shipped the goods to the importer

6. The importer paid to the acceptor in London

7. Upon maturity of the bill, the payee in London would present the bill to the acceptor in London (who had signed on the bill). The acceptor paid the amount due to the payee, and the trade was settled.

At that time, London had financial institutions known as "acceptance houses" that guaranteed the debts of foreign borrowers who were willing to trade in the London bill market. These institutions screened potential borrowers all over the world who were willing to access the trade finance market in London. Post-WWII, London started facing competition from New York that emerged as a new center of trade finance. Subsequently, both New York and London had an equal share in the global trade finance market.

The 1970s and 80s saw the rise of letters of credit and documentary collections, presently two of the most commonly used trade finance instruments. In a letter of credit, the banks of both the importer and the exporter are involved.

Here is how the transaction will look like:

1. An exporter from country A sold goods to an importer in country B;

2. The importer applied for a letter of credit at a local bank (in country B);

3. The local bank sent the letter of credit to the exporter's bank (in country A);

4. The exporter's local bank confirmed the letter of credit and informed the exporter;

5. The exporter sold the letter of credit to its local bank and got cash in return;

6. The exporter shipped the goods to the importer;

7. The exporter's bank sent the documents to the importer's bank, confirming the sending of goods;

8. Upon maturity of the letter of credit, the importer paid the amount due to his local bank;

9. The importer's bank subsequently paid the exporter's bank, and the trade was settled.

While trade finance has evolved a lot over the years, there is still substantial room for improvement both in terms of servicing the number of trade finance requests and the processes involved.

1.4   The Gap in Trade Financing

Despite trade finance playing such a big role in world trade, there is a big gap between the supply and demand for short-term credit. As per the World Economic Forum (WEF), for 50% of the world countries, trade financing features as

the second-largest sector obstacle in growing exports[3].

In 2019, the Asian Development Bank (ADB) had published a report titled Trade Finance Gap, Growth, and Job Survey. The survey featured responses from banks, businesses, and export credit agencies all over the world. According to this survey, $1.5 trillion worth of trade finance requests are rejected globally every year[4]. 70% of surveyed banks saw a shortage in meeting the needs of global trade finance. Nearly 60% of participants in this survey expect a further increase in this gap over the coming years. According to WEF, this gap could widen to $2.5 trillion by 2025. To put some context to these numbers, the whole of the UK's GDP in 2019 was $2.83 trillion.

Similar findings were reported in "ICC Global Survey of Trade Finance", published in Feb 2020 by the International Chamber of Commerce (ICC). The survey featured the views of 346 respondents from 85 countries. 73% of survey respondents said there is a shortage in servicing the trade finance needs of the global market[5].

1.5 Current Market

1.5.1 Borrowers

Out of the total gap in trade financing, 50% gap is in Asian and African developing countries. In industrialized countries, the financial industry is more mature, and thus securing trade finance is relatively less challenging.

In the ICC survey, the largest percentage of survey respondents (81%) believed Asia Pacific faced a shortage in servicing trade finance requests. In Africa, the rejections for trade finance requests are more than 50%. The annual gap in trade finance in Africa is estimated to be over $100 billion, which is nearly 33% of its total trade value.

In particular, small and medium enterprises (SMEs) are the most affected by trade financing request rejections. Large firms dominate the market for trade finance, with SMEs accounting only for 37% of total trade finance requests. Out of these, banks reject over 45% of the applications.

---

[3]"Why exporters need to mind the trade finance gap | World Economic ...." 10 Feb. 2020, https://www.weforum.org/agenda/2020/02/exporters-mind-trade-finance-gap/. Accessed 23 Feb. 2021.

[4]"(PDF) Trade finance in Qatar: blockchain and economic diversification." 20 Nov. 2020, https://www.researchgate.net/publication/347077219_Trade_finance_in_Qatar_blockchain_and_economic_diversification. Accessed 23 Feb. 2021.

[5]"2020 ICC Global Survey on Trade Finance: Securing future growth " https://iccwbo.org/publication/global-survey/. Accessed 23 Feb. 2021.

In Asia, women-owned firms face greater difficulty in availing trade finance as opposed to men-owned firms. The rejection rate for trade finance requests was 44% for women-led firms as opposed to 38% for men-led firms.

The ICC survey had a question on growth expectations for trade finance over the next two years by region. Based on the response, the growth potential for trade finance is highest in Asia, with 86% of survey respondents expecting growth. This was followed by Africa (75% of respondents expect growth), followed by the Middle East (67%), Latin America, and the Caribbean (66%).

1.5.2 Lenders

In February 2019, Global Finance Magazine had announced the world's best trade finance providers for 2019[6].

Here is a summary of their rankings:

Category	Bank
Best Bank for Trade Finance	BNP Paribas
Most Innovative Bank for Trade Finance	China Construction Bank
Best Bank for Commodity Finance	Rabobank
Best Bank for Export Finance	Standard Chartered Bank
Best Bank for Structured Trade Finance	Rand Merchant Bank
Best Bank for Trade Finance in Emerging Markets	Société Générale
Best Bank for Trade Finance in Frontier Markets	Citi

Here are the winners by region:

North America	Citi
Latin America	Santander
Caribbean	Scotiabank
Western Europe	Commerzbank
Nordic Region	Nordea
Central and Eastern Europe	UniCredit
Asia-Pacific	Standard Chartered Bank
Middle East	Arab Bank
Africa	Société Générale

As can be seen, several large players have a leading position in the trade finance market. However, since the 2008-09 financial crisis, there has been a drop in the number of relationships between international banks and corresponding

---

[6]"World's Best Trade Finance Providers 2019: Getting The PaperOut." 1 Feb. 2019, https://www.gfmag.com/magazine/february-2019/ worlds-best-trade-finance-providers-2019-getting-paper-out. Accessed 23 Feb. 2021.

banks. Out of 1 million relationships earlier, 200,000 no longer exist. The problem is particularly acute in Africa, as international banks want to avoid regulatory fines and have stopped supporting cross-continent trade deals with banks and exporters from this continent.

1.6   Current Challenges Faced by Borrowers

Unfamiliarity with Trade Finance Instruments A major challenge faced by borrowers is the lack of knowledge in various trade finance instruments. The data from ADB suggests that 32% of lenders found it challenging to deal with the lack of familiarity with various trade financing products among borrowers. Another 26% said the bank staff's lack of familiarity with trade finance products limited such transactions.

Inability to Present Requests Appropriately A key reason for the rejec- tion of trade finance requests by SMEs is not presenting the information required by banks in an appropriate way. Trade finance has a lot of jargon, but there is a huge gap in trade finance training among SMEs. Borrowers do not know how certain products work, the risks associated with different products, etc. Also, every bank may have different requirements. This lack of standardization prevents borrowers from harnessing the full potential of trade finance products.

Lack of Collateral Borrowers who may not have the required collateral to access trade finance. In the ICC survey, 47% of survey respondents cited lack of collateral as a common reason for not being able to service a trade finance request. For example, in the Pacific, borrowers cannot use real estate as collateral, making it difficult for lenders to service their trade finance needs.

High Borrowing Costs By acting as an intermediary between the small busi-ness and large corporations, banks and financial institutions are able to charge fees to the small businesses which is disproportionately high to the underlying risk.

Painful processes Each financial institution has designed its own set of processes. This lack of standardization means that both small businesses and large corporations suffer from excessive documentation. International trade finance is largely paper-based with little digitization. There is a host of documentation such as bills of exchange, bills of lading, promissory notes, and certificates of origin, which are still physical in many markets. The dependence of banks on paper-based documentation was aggravated during the lockdowns caused by COVID-19. According to ICC, local regulations create a huge barrier to going paperless in trade finance.

High Transaction Costs The centralized and silo'd processes push the operational costs for lenders making them inaccessible to many small businesses. As per data from ADB, around 59% of lenders mentioned high transaction costs or low fee income as a factor that restricted borrower's access to trade finance. These concerns were echoed in the ICC survey, with 50% of respondents mentioning high transaction costs as an obstacle to trade finance.

Absence of Decentralized Credibility Benchmarks Today there is no global standard to define the credibility of any corporate or small businesses. That role is played by centralized institutions (Banks, Insurers) that don't share data for algorithmic deployment of these benchmarks. This then creates an artificial bridge between small investors and small businesses who want to borrow. Based on statistics from ADB, 52% of lenders found the low credit rating of the borrower's country as a challenge in trade finance. 51% of lenders struggled with the low credit ratings of intermediary banks in developing countries. And 43% of lenders said the credit rating of borrowing firms served as a barrier to trade finance.

1.7   Current Challenges Faced by Lenders

Regulation   The regulations to deal with money laundering and terror-financing have put limitations on the lending prowess of the financial system. More than 60% of banks mentioned anti-money laundering issues and KYC rules limit their ability to provide trade finance to borrowers. Compliance and regulations also increase the cost of banks, putting pressure on their margins. Similar findings were reported in the ICC survey. In this survey, 63% of participants said compliance and KYC constraints as a barrier to trade finance. 61% of participants were concerned about regulation related to counter-terrorism and international sanctions.

Quality of Applications In the ICC survey, participants were asked about the reasons for not supporting trade finance applications.   56% of respondents said they could not do so because of the low quality of applications. Another common reason is transactions being completely unsuitable and unreasonable to process.

Insufficient Margins   Profitability is another concern among lenders when it comes to trade finance. As per the ICC survey, 43% of respondents said they could have financed a transaction in terms of risk profile, but it was not profitable enough.   31% of respondents said they rejected trade finance requests as they were unprofitable.

High Transaction Costs   As per data from ADB, around 59% of lenders mentioned high transaction costs or low fee income as a factor that restricted

borrower's access to trade finance. These concerns were echoed in the ICC survey, with 50% of respondents mentioning high transaction costs as an obstacle to trade finance.

Low Credit Ratings Credit ratings play an important role in giving lenders the confidence to provide credit to borrowers. Based on statistics from ADB, 52% of lenders found the low credit rating of the borrower's country as a challenge in trade finance. 51% of lenders struggled with the low credit ratings of intermediary banks in developing countries. And 43% of lenders said the credit rating of borrowing firms served as a barrier to trade finance.

1.8   Other Challenges in Trade Finance

Paper-Based Processes International trade finance is largely paper-based with little digitization. There is a host of documentation such as bills of exchange, bills of lading, promissory notes, and certificates of origin, which are still physical in many markets. The dependence of banks on paper-based documentation was aggravated during the lockdowns caused by COVID-19. According to ICC, local regulations create a huge barrier to going paperless in trade finance.

Issues with Letters of Credit There are several problems with letters of credit, which is the most widely used instrument of trade finance. For example, there could be ambiguities in the contract, which could lead to payment dis- putes. Banks must adhere to strict compliance standards, and even the smallest discrepancy can lead to denial of payment. There could be data errors in the contract, which could lead to delays in payment. As per data from the ICC, 70% of documents presented for evaluation of LCs are rejected in the first instance.

Disconnected and Silo'd Processes While trade finance involves multiple stakeholders, there is not a single platform to connect all the parties. For exam- ple, as seen in the Punjab National Bank letter of undertaking scam in India, there was a lack of integration between two key systems (SWIFT and CBS) of the same bank. This led to the issuance of guarantees without adequate securities to back the transactions.

   All these challenges lead to the loss of valuable trade. Once the trade finance request is rejected, nearly 50% of traders give up on the transaction, leading to a lost opportunity for them and for their country.

1.9   The Way Forward

There is optimism that fintech and digital technologies have the potential to reduce the gap in trade finance, specifically for SMEs. As per data from ADB, more than 86% of banks are preparing to service SMEs through technology. More than 79% of banks agree that FinTech and digitization can make KYC easier

and cheaper. 46% of banks believe that technology can help in reducing rejections of trade finance requests from SMEs. However, the high cost of adopting technology is a deterrent to nearly 57% of banks. 38% of banks have insufficient knowledge about digital finance platforms.

In the ICC survey, 77% of banks said they were considering a transition to digital for their trade finance model. More than 50% of banks have rolled out digital solutions to deal with the disruption caused by COVID-19. Most banks (64%) expect a significant change in the value of trade finance provided through blockchain and digital ecosystems. Despite the shift by banks towards technology, banks have their limitations. According to statistics from the Asian Development Bank, more than 70% of banks said there is a lack of adequate financing to meet the global demand for trade finance. According to ICC's Director of Finance Development, the gap in trade finance is too huge to be filled by the banking industry alone[7]. This creates an opportunity for non-bank players to maximize the potential of blockchain technology and tap the unmet demand in trade finance.

---

[7]"Roundtable: Taking action together to close the trade finance gap ...." https://www.gtreview.com/news/global/taking-action-together-to-close-the-trade-finance-gap/. Accessed 23 Feb. 2021.

Chapter 2

Blockchain and Trade Finance

Earlier, we saw how trade financing faces various challenges despite being such an essential part of global trade. There are several areas of improvement in the way trade finance is operated. There is widespread consensus that blockchain technology can help solve various problems associated with trade finance. Our area of focus is a specific form of trade finance, known as receivables financing or factoring. Let us understand the role of blockchain technology in receivables financing in greater detail.

2.1 Overview of Blockchain Technology

For starters, blockchain is a type of database. A simple analogy of a database is a spreadsheet that stores information in a table format to access information easily. However, a spreadsheet can store a limited amount of information and is accessible either by an individual or by a limited number of users.

Similar to a regular database, blockchain is an organized collection of data. However, it is used for storing substantially large pieces of data. Unlike typical databases, data on blockchains is stored in groups or blocks. Once a block gets filled with data, it is chained onto the previous block. As a result, the data is chained chronologically. These chains of blocks lead to the name "blockchain".

A common application of blockchain has been as a ledger of transactions. This ledger is not controlled by a single individual or an organization but collectively by all users in the blockchain. For example, in the case of Bitcoin (a digital currency for which blockchains were invented), the blockchain is entirely decentralized, and no single entity has control over this database. This database has a record of every Bitcoin transaction ever made. Bitcoin requires a network of computers to store its blockchain. This network of several thousands or more computers, which hold the blockchain, is spread out to different geograph-

ical regions globally. The data is stored in an encrypted format, where older transaction history becomes exponentially more difficult to alter..   Apart from

transactions, blockchains can hold legal contracts, sensitive medical information, a company's product database, and more.

2.2 Overview of Receivables Financing or Factoring

Invoice factoring is the process of purchasing accounts receivables. Typically, it is applied to open account trade. In this method, goods are shipped to the buyer before receiving payments (typically due in 60, 90, or 120 days). While open account trade is good for importers, it creates liquidity issues for exporters. Invoice factoring eases the liquidity pressure of SMEs and provides much-needed cash flow.

According to FCI, a global body representing factoring, over the past 20 years, the factoring and receivables industry has grown at a healthy rate of 10% per annum. In 2019, the industry saw a growth of around 6.5%. By the end of 2018, the factoring industry was generating EUR 2.76 trillion in volume. That's a five-fold increase from EUR 500 billion in 1998. Europe accounts for the lion's share (66%) of this market, followed by Asia (25%) and the Americas (8%). Within Asia, North East Asia contributes to 20% of global volume. Africa accounts for less than 1% of worldwide volume, and there is a lot of scope in promoting factoring to various stakeholders.

Domestic factoring is much bigger than international factoring. Domestic factoring is 78% of total factoring volumes, and international factoring is 22% for a typical country. China is the world's largest factoring and receivables financing market, driven by high domestic demand.

As of 2019[1], 79% was distributed among the top ten countries when it came to total international factoring volume. Here is how the countries are ranked:

Rank	Country	% of International Factoring Vol
1	Italy	14%
2	Taiwan	13%
3	China	9%
4	Germany	8%
5	Netherlands	8%
6	Spain	8%
7	Austria	5%
8	Belgium	5%
9	Singapore	5%
10	France	4%
	Rest	21%

---

[1]"en/media/167/download - FCI." https://fci.nl/en/media/167/download. Accessed 23 Feb. 2021.

As of 2018, the estimated number of debtors stood at 17.6 million. SMEs largely drive the industry with an average turnover per client for a factoring company at EUR 4 million. Banks largely drive the supply of credit. Based on FCI figures, bank divisions constituted 44.8%, while bank-owned subsidiaries constituted 32.4% among the suppliers of credit.

The future of factoring, according to FCI, is linked to growth in emerging markets. In the future, local exporters from emerging countries are less likely to rely on methods like letters of credit to deal with importers from developed countries. In such countries, most of the trade is expected to happen on open account, leading to factoring's tremendous growth potential.

Here is how invoice factoring works:

1. An exporter sells goods to an importer;

2. Seller issues invoice to the buyer. The buyer is expected to make payment after 90 or 120 days;

3. Instead of waiting for 90-120 days, the exporter sells the invoice to a factoring company at a discount;

4. The factoring company verifies the invoice and does a background check on the seller;

5. Upon verification, the factoring company immediately provides the funds outstanding to the exporter after deducting financing charges;

6. On the due date of the invoice, the factoring company collects the funds outstanding from the importer.

2.3 Current Challenges in Factoring and Receivables Financing

Shortage of Funds As per FCI data, 47% of respondents agreed there is a shortfall of factoring to fund cross-border transactions. Capital constraints and access to liquidity are the major hindrances to the growth of the factoring market. According to data by FCI, 47% of respondents were concerned about capital constraints, and 38% of respondents were concerned about access to liquidity.

Banking Regulations Just like the broader trade finance industry, banking-related regulations limit the growth of factoring. As per survey respondents, adherence to anti-money laundering (AML) and know your customer (KYC) regulations are constraints to factoring. 41% of respondents were concerned about AML/KYC requirements. Another 50% were concerned about Basel regulations, which were designed to reduce international banking risk. Basel regulations require banks to maintain adequate capital reserves to withstand risk. This affects

lending to SMEs as they are assigned a high-risk weighting among borrowers' various categories.

Paper-Based Processes Even in today's digital age, factoring and receivables financing is mostly paper-based. There are numerous manual processes, which increase the risk of errors and fraud. Various documents such as purchase orders and invoices are matched manually, mostly in their physical form.

Fraud One of the biggest challenges in receivables financing is fraud. The factoring company finances an invoice but is not able to recover the dues from the importer. A common cause of fraud is the manual and paper-based processes in receivables financing. Ideally, financiers are supposed to perform extensive checks before financing an invoice. However, there are various problems in this process. For example, suppose the contract between the buyer and seller is not in writing. In that case, it can lead to a dispute when recovering funds from the seller. At times, contracts could miss certain key clauses. All of these challenges make the process susceptible to fraud. Fraud also happens due to duplicate financing as borrowers use the same contracts to get funds from multiple financiers.

Restrictions on Transaction Sizes Banks prefer to fund large organizations as they offer large deal sizes with lower risks. They tend to overlook SMEs due to the higher risks involved and the high cost of monitoring these transactions. This factor is a large contributor to a high number of rejections for SMEs' trade finance requests.

While there are many challenges in invoice factoring, blockchain holds much promise in solving these problems.

2.4 Role of Blockchain in Receivables Financing

Blockchain technology can help receivables financing in two main ways:

1. Distributed ledger technology for streamlining the process-related issues

2. Leveraging the potential of cryptocurrency for addressing issues related to the shortage of funds and the lack of liquidity

2.4.1 Distributed Ledger

A distributed ledger is a decentralized database that is accessible to multiple participants across geographies. Unlike a centralized database, a decentralized database is less vulnerable to financial fraud and cyber attacks. The underlying technology for distributed ledgers is the same as one used for blockchain.

In simple terms, a distributed ledger can be described as a ledger of transactions that is maintained in a decentralized form. Imagine if all the receivables financing transactions are stored in a decentralized way. All the stakeholders, such as exporters, importers, financiers, insurers, etc., can access it digitally, irrespective of their location. Importantly, the information is stored in an encrypted format and is safe from manipulation by any one party. Distributed ledgers operate 24/7.

One of the salient features of distributed ledgers is they leave an audit trail. Information flows easily, and any manipulation can be traced swiftly. Finally, distributed ledgers are entirely digital, reducing the use of paper and the inefficiencies related to paper-based transactions.

2.4.2   Smart Contracts

Smart contracts are similar to contracts in the real world. A key difference is that they are entirely digital. Smart contracts can be better understood through an example via Kickstarter, a global crowdfunding platform. Anybody with an idea can create a project on Kickstarter to raise funds. There are two parties involved: 1) Creator of a project and 2) Supporters of the project. Both these parties need to trust Kickstarter. The product teams trust Kickstarter to give them the money raised. At the same time, the supporters expect Kickstarters to provide the funds raised to the product teams. If the funding goals are not met for specific projects, they expect a refund. Here is how a smart contract works on Kickstarter:

1. Product teams or people with product ideas create a project on Kickstarter with a funding goal;

2. The supporters of a project can transfer their funds to a smart contract;

3. If the project meets the funding goals, the program automatically transfers money to the project's creator;

4. If it does not meet the funding goals, the supporters get a refund.

Smart contracts are immutable, meaning once created they cannot be changed. As a smart contract is stored inside a blockchain, it is decentralized and distributed. Everyone on the network validates the output, and no one party is in control of the money. If anyone attempts to force the contract to release the funds, other stakeholders can block the request.

Smart contracts can be applied in a similar way to receivables financing:

1. An exporter A sells products to importer B. The invoice is due after 90 days;

2. The exporter can register their invoice on a blockchain;

3. The crowdfunding process begins. If the process is successful with the invoice finding enough lenders, 80% (as an example) of funds are released to the borrower;

4. Once the importers pay the invoice, the financiers receive their money back;

5. The transaction is registered on the distributed ledger.

2.4.3 Ethereum

Ethereum is a distributed ledger protocol that has built-in support for smart contracts. It's a platform that allows users to interact directly with smart contracts. Multi-party smart contracts can be seamlessly deployed on Ethereum. However, Ethereum requires a lot of computing power, since no single party owns it, someone has to fund the computing power. The solution lies in ETH, which is the cryptocurrency of the Ethereum network.

ETH is the second-largest cryptocurrency by market cap after Bitcoin. Bitcoin's objective is to serve as an alternative to fiat currency and competes with fiat currencies like the US dollar or the British Pound. Bitcoins can be used to buy goods and services or for holding as an investment asset. ETH, on the other hand, is a utility token that can facilitate smart contract operations.

2.4.4 Matic Network

Back in 2017, Ethereum network was facing massive congestion issues, leading to a huge spike in gas fees. At that time, Layer 2 (L2) blockchain emerged as a solution for this challenge. Layer 2 blockchain helps achieve greater scalability, supporting a greater number of transactions at reduced costs.

The Matic Network provides Ethereum with L2 blockchain scalability solutions. In essence, an L2 solution offloads some of the work of Ethereum to another secondary layer. To put things into perspective, Ethereum can process nearly 15 transactions/second on Layer 1; whereas, L2 scaling can substantially increase the processing speed to up to 4,000 transactions per second. L2 can leverage the existing features of L1, such as smart contract support without any compromise on security.

2.5 Benefits of a Distributed Ledger in Receivables Financing

Preventing Fraud A distributed ledger prevents fraud much more effectively than traditional receivables financing. For example, the risk of duplicate financing is lowered since invoices already been financed will not be funded again. The smart contract is executed automatically, and it factors in events such as goods reaching the final destination.

Improving Liquidity Investors from all over the world can fund invoices with-out any geographical restrictions. All major cryptocurrencies can be used to fund receivables. As of January 2021, the market capitalization of Bitcoin alone is over $600 billion. Ethereum's market capitalization is around $91 billion. This shows the potential amount of liquidity that can be used for receivables financing.

Removing Inefficiencies A decentralized ledger helps in removing efficiencies related to paper-based transactions. In the current system, a lot of manual processing is needed before the funds are released to the exporter. However, with smart contract based solutions, the exporter can receive the funds within a day of an invoice getting approved.

Better Trade Visibility All the parties get visibility to the trade and related financial information. Investors can see the supplier's financial track record, their completed transactions, and the status of their transactions (e.g., what percentage of their goods were rejected). The buyers, sellers, financiers, and insurers can immediately see if there are any changes in the invoices.

No Limit on Transaction Size On blockchain, deals will be funded by crypto investors from all over the world. This will make things easier for SMEs as these investors will not have a preference for large deals only. They will be more open to smaller invoices as well, as long as they get adequate returns.

   With blockchain offering so much potential for receivables financing, the time is right to launch a platform that serves as a bridge between the physical world of trade finance and the digital world of blockchain.

Chapter 3

The GITP Platform

The GITP platform is a decentralized, blockchain-based platform that aims to transform receivables financing. It aims to connect buyers, sellers, insurers, and investors for a seamless receivables financing experience.

3.1 Platform Design

3.1.1 Key Components

1. **Porting Existing Infrastructure to L2 Blockchain Networks:**

   The first component in this platform is that of migrating existing trade finance ecosystem into an L2 blockchain network. L2 is critical as the business transactions need both speed and low cost of transaction. There are Ethereum compatible L2 networks today that are hugely customizable. This allows freedom to migrate systems from CeFi to DeFi while being connected to the main Ethereum network.

2. **Asset Evaluation:**

   One of the key challenges in trade finance is identifying the quality of the underlying asset. This would mean understanding the financial strength of the buyer using financial data points and other market checks. These data points and the history of payments will be maintained on-chain. The protocol will algorithmically decide the rating of each asset and that would weigh in the collateralization of the asset and interest rates against that asset.

3. **Borrower Evaluation:**

Similar to asset evaluation borrower evaluation standards will be defined by the protocol. While in normal trade transactions the risk is limited on

borrower but their activity on chain, profile building, submitting financial documents will lead to an algorithmic borrower rating. This rating will also be a factor in the interest rates at which they are able to borrow.

4. **Smart Products:**

   With both borrower and asset evaluation in place, a borrower can decrease their cost of borrowing by multiple means like giving additional collateral (BTC, ETH, Stable Coins), borrowing in TRADE Coins, providing validation services, and so on.

5. **Exposure Risk:**

   One of the key parts of risk management in trade finance is to not over expose the protocol to a single asset or single entity. This would again be algorithmically adjusted that when a certain % of lending is hit against a single entity or asset then a hard stop will be placed until the existing margins are liquidated. Similarly on the borrower side rules will be built that protocol is not exposed to single borrower risks.

3.1.2 Core Concepts

Supplying Assets Any user who has a collateral in the form of an underlying invoice can come to the platform as a supplier of the asset. These assets which are in CeFi will be tokenized with details of the asset and then made available to the liquidity pool.

Borrowing against Assets The supplier of the asset will have the ability to borrow against these tokenized assets. The interest rates will be a function of the asset quality, borrower track record, currency of borrowing.

Collateral Value Collateral Value will be pegged against a stablecoin after being tokenized. This ensures that there isn't a significant gap between the collateral value in fiat and crypto.

Interest Rate Model The borrowing interest rate model will be an algorithmically determined model and will depend upon the underlying asset rating, and borrower rating. The liquidity provider's interest rate model will be a function of borrowing rates, protocol costs and the liquidity in the pool.

Liquidity Pools Unlike P2P lending modules where borrowers are matched with lenders, here borrowers will be funded using the liquidity pool managed by the governance. These borrowers pay an interest fee for seeking liquidity against assets and lenders are rewarded for providing liquidity to the pool. The

cost incurred to borrowers is incentivized by liquidity providers allowing them to have incentive to provide constant liquidity.

Credit Delegation The protocol needs to have a very tight control on risk management. For that purpose the protocol will appoint validators who apart from the rating assigned by the protocol can further provide information about both the asset and the borrower. The validators would get a share from the borrowing costs as they provide necessary validation for an asset to be approved by the governance.

Proof of Reputation Contracts for Both Borrower and Asset As dis- cussed earlier the protocol will put data on-chain about both the borrower and the asset. It will also algorithmically assign a rating to both entities. Exter- nal validators can then use the same data and their own data points to further provide information about both borrower and assets.

Risk Management The protocol through its governance council will maintain limits of lending on each asset, aggregate limits on underlying asset providers and individual borrowers.

Governance On-chain governance model allows for reaching consensus among different network participants through a direct voting mechanism. The voting will use staked weighted mechanisms meaning that higher stakes get greater voting rights. The governance team will define rules on collateralization, interest rates, risk management, validator staking, protocol fees, etc.

3.1.3   Key Considerations

Seamless CeFi to DeFi Interface Our end users are small businesses who would have limited understanding of crypto ecosystem. Therefore a key consid- eration for our solution is to abstract out the DeFi part for the small business owner. For them the platform would complement their existing business flows. They submit assets in fiat and they are able to borrow in fiat or stablecoin backed by fiat.

Transaction Speed The protocol will focus significantly on being fast espe- cially on validators and ratings. If these are slow then its an opportunity cost for borrower and interest rate loss for liquidity providers.

Low Transaction Costs The transactions have to be low cost so that the borrowing costs for the end users is significantly lower than fiat. This would mean constantly exploring L2 solutions.

Blockchain interoperability We envisage that as trade finance gets digitized underlying assets would themselves be also start getting tokenized on various chains. A supplier of asset therefore should have the ability to move these assets from one chain to another.

Governance Since the defining function of governance is to manage risk and interest rates which are direct monetary functions. This means that the governance will be staking based.

3.2 How It Works

3.2.1 Harnessing Stablecoin Liquidity

The platform aims to harness a vast pool of stablecoin liquidity and make it available for SMEs in need of receivables financing. With the platform, borrowers will get faster and cheaper access to trade finance with fewer KYC compliance-related rules. Investors will get access to a unique investment opportunity that is largely available only to banks and financial institutions. The platform offers a high level of security to investors while allowing them to earn attractive returns.

As opposed to peer-to-peer lending, where investors funds are matched with individual invoices, the GITP platform aggregates the supply of funds from various investors. As investors supply their assets to the platform, funds get added to the combined liquidity pool. Once the validators approve an invoice, the invoice gets funded automatically. Investors don't have to worry about the nitty-gritty's of each invoice.

Investors get returns based on the time their assets are deployed towards funding invoices. They can withdraw their funds anytime irrespective of the maturity of the invoices funded. This approach results in greater liquidity compared to peer-to-peer lending. It also gives investors greater flexibility.

3.2.2 In-Built Reward System

The GITP platform aims to benefit both sellers (borrowers) and investors. The platform has an in-built reward system that uses TRADE coins to incentivize every successful transaction. Post a completed transaction, every stakeholder gets rewarded with TRADE coins. A set of rules, managed on a fully distributed ledger, govern the execution of transactions and the flow of funds. A panel of professional validators will verify all invoices. The platform will not release funds to the buyers unless the invoices are verified.

3.2.3 Smart Contracts

The platform will feature smart contracts running on the Ethereum blockchain. Smart contracts are self-executing contracts that automatically perform certain
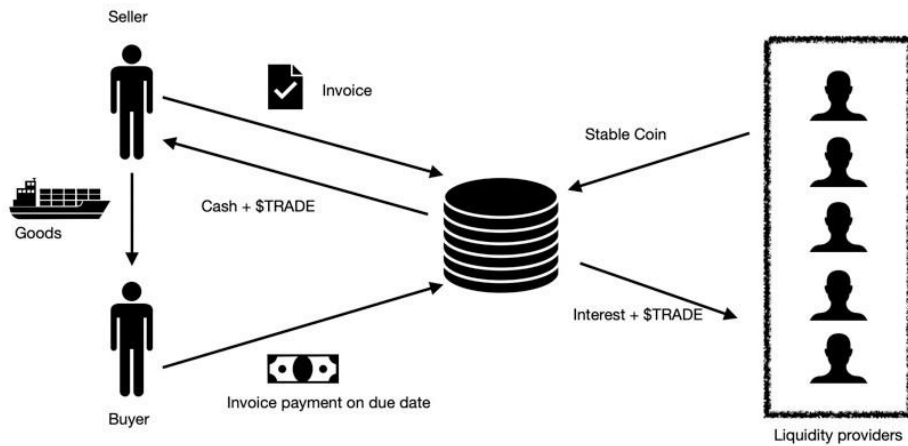
Figure 3.1: GITP Workflow Example

functions based on triggering events. These are linear contracts between all parties (buyers, sellers, investors), and no single party can alter the contract terms. Smart contracts will enable the flow of funds and invoice related information between investors, buyers, and sellers.

A key feature of smart contracts is that they facilitate the transparency of events along the entire supply chain. Upon the borrower entering the invoice-related information, the platform will deploy a customized smart contract. It will release funds automatically only after meeting conditions set in the smart contract. The platform will facilitate the feeding of all the invoice terms and conditions into the blockchain. Additional information such as invoice verification status, any advances made, and payments received will also be track on-chain. The information, being stored on a blockchain, is tamper-proof.

Example workflow:

1. A seller sells goods with invoice payment due after 90-120 days;

2. Seller uploads invoice and related documents on the platform;

3. Validators validate the invoice and supporting documents on the platform;

4. If invoice conditions are met, the platform releases the funds to the seller from the liquidity pool;

5. Once the payment is due, the buyer will make the payment on the platform;

6. The funds are restored to the liquidity pool;

7. If the transaction is a success, all stakeholders get rewarded with TRADE coins.

3.3   Advantages of the Platform

Automation and Ease of Use As compared to current manual processes, which are inefficient for all stakeholders, the platform automates receivables fi- nancing and provides unparalleled ease of use. For example, let us say the investor and the borrower have entered into a smart contract that 80% of the invoice amount will be released to the borrower once the validators approve an invoice. Once confirmation of validation is entered into the distributed ledger, the smart contract will automatically disburse the buyer.

Automated Notifications All parties involved can easily access any relevant information. They will automatically get notified by the platform for relevant events. For example, once an invoice is registered on the distributed ledger, the buyer will get a notification to confirm that it's due and payable. Once the validators have completed the validation process, investors will get a notification that the invoice is available for funding, and so on.

Updating Information in Real-Time Unlike paper-based invoices, which are static, authorized users can update digital invoices at any time.   For example, if the seller sells an invoice to an investor in the real world, the investor must write to the buyer and give their bank account details. This procedure helps in updating the buyer on the account to be used for paying the invoice amount. However, on a distributed ledger, the investors will automatically update their bank account details. This feature eliminates the step of physically informing the buyer about the transfer of ownership of the invoice.

Lowering the Risk of Manipulation and Fraud A critical risk of paper- based invoices is forging or manipulation by any individual party. However, once an invoice is placed in a smart contract, the information is decentralized and stored in a public ledger accessible by all stakeholders. If any individual tries to alter the invoice, others can see and reject this request. Investors can also be confident about an invoice's authenticity and that the buyer has not pledged it to other investors.   Even supporting documents will be automated and encrypted to prevent any manipulation of data.

Seamless Verification o f I nvoices In the physical world, the i nvoice verifi- cation process is cumbersome and is prone to errors. For example, an investor must manually request the buyer to verify the authenticity of the invoice. Buy- ers are usually required to sign documents acknowledging the receipt of goods. However, the GITP platform automates the verification of invoices and doc- uments. Investors do not have to   worry   about   verifying   the   invoice.   A team of professional validators will   validate   every   invoice   on   the platform. The buyer's acknowledgment of delivery will be recorded and stored on the digital ledger.

Confidentiality and Privacy Sellers will have complete control over the information related to any invoice. Only they can give access, either full or partial, to any information to any party on the platform. Moreover, personally identifiable information such as business name or business identification number is safely secured and not disclosed to unauthorized parties. The system identifies users through public keys. A public key is a cryptographic system that secures data through encryption and decryption. More than one public key will be issued to registered users to provide them with additional security.

Intelligent Search Feature Unlike the real world, where paper-based documents are spread across different locations, all relevant information is accessible on a distributed ledger. Authorized users can easily search for any information related to the transactions.

Settlement of Invoices Once the buyer makes the payment, the system will mark invoices as closed and settled on the GITP platform. The system will automatically calculate the amount due to each investor and transfer the amount accordingly. For example, let's say five investors have funded 80% (as an example) of an invoice of $100,000. Upon settlement, the system will automatically calculate the amount to be returned to each investor, including interest.

Better Dispute Resolution Due to decentralization and digitization of all invoices and related documents, reliable evidence can be made available to courts easily in case of any disputes. The information can be sourced from the ledger instantly, as opposed to a long information disclosure process. Also, many of the terms of the contract, such as penalties for delayed payments, can be enforced through the smart contract. This way, in case of disputes, sellers face fewer hassles and can focus on running their core business.

Digitizing Existing Invoices Existing paper-based invoices will be scanned and uploaded on the platform with a digital signature. The paper-based invoice will get registered on the distributed ledger. Any additional information will be added to the scanned invoice digitally. The data from new invoices can be entered digitally, eliminating the need for scanning paper-based invoices.

To conclude this chapter, the GITP platform can solve all major problems faced by stakeholders in the receivables financing ecosystem. Every stakeholder gains by doing trade on the platform. With superior access to liquidity, intelligent automation, robust security, and greater transparency, the platform has the potential to scale rapidly and capture a large share of the receivables finance market.

Chapter 4

TRADE Coins and Tokenomics

4.1 Introduction

As we have seen in the earlier chapters, trust plays a vital role in receivables financing. The seller needs to trust the buyer to pay the invoice amount after receiving the goods or services. The investors need to trust the seller to fulfill their commitments and the buyer to repay them.

TRADE coins are a mechanism to increase the trust between all parties involved in receivables financing. These tokens are the key payment instrument within the GITP platform. TRADE coins will be created on a public ledger and will serve two primary functions:

Provide Access to Sellers Sellers will be required to pay a specific amount of TRADE coins each year to access the GITP platform. The seller's financing limit will be determined in multiples of 100 of the value of TRADE coins held by them. For example, if a seller has TRADE coins worth $1,000, their financing limit will be $100,000. Paid access to the platform will serve as a check to ensure genuine sellers get registered on the platform.

Reward Usage and Good Behavior TRADE coins aim to reward all platform users - sellers, buyers, investors, validators, and financiers. The coins will help in boosting usage of the platform by incentivizing stakeholders to use the platform. The coins will also help in increasing the level of trust between different parties within the platform. For example, buyers who make timely payments will be rewarded with TRADE coins. Buyers with a higher number of reward coins will imply greater creditworthiness and help investors in their risk assessment.

Similarly, sellers will also be rewarded for successfully completing transactions. The number of TRADE coins for sellers would indicate their track record in fulfilling their part of the contract. Likewise, validators with a track record of superior quality checks will earn a higher number of TRADE coins.

Investors can see the number of tokens issued to each buyer and seller. The history of all tokens issued to each buyer and seller will be available to investors.

4.2 TRADE Token Coin Utility

TRADE token will be used for the following key functions:

1. **Governance:** TRADE token will enable users to play part in the protocol's governance. Governance rights are staking based which means that those who stake higher TRADE will have higher ability to control various governance decisions w.r.t. running the protocol;

2. **Protocol Incentivization:** TRADE will enable users to earn rewards from time to time and provide the community to further develop and strengthen the protocol;

3. **Staking Rewards:** TRADE token will enable liquidity providers to stake their TRADE tokens to earn rewards for securing the network;

4. **Settlement Instrument:** TRADE tokens will be used as a settlement instrument in the various bridges created to share the liquidity with other sidechains and mainnets.

4.3 Legal Aspects

TRADE coins will help build trust among the stakeholders and give investors confidence about dealing with credible buyers and sellers. Once there is enough traction and users, the coins can grow as an independent cryptocurrency with its own market.

Chapter 5

Riqueza History and Roadmap

5.1 Riqueza Capital History

- 2014: Riqueza Capital Incorporated in Hong Kong

- 2015: Arranged trade finance of USD 18 million

- 2016:
    - Riqueza Capital opened offices in Singapore and India
    - Arranged trade finance of USD 33 million

- 2017:
    - Riqueza Capital opened offices in UAE
    - Arranged trade finance of USD 76 million

- 2018: Arranged trade finance of USD 102 million

- 2019:
    - Launched our Digital Platform Riqueza Factex enabling end to end digital solutions
    - Arranged trade finance of USD 105 million

- 2020:
    - Onboarded more than 250 borrowers on Riqueza Factex
    - 2020: Arrange trade finance of USD 45 million

5.2 GITP Platform Roadmap

- 2021

- January: GITP Platform Idea Formulated

- February:

  * White Paper Drafted
- March - April:

  * Pre ICO Round (first)

  * Platform Development Phase 1
- May - July:

  * Pre ICO Round (second)

  * Platform Development Phase 2

  * Beta Testing for Platform (Mobile & Web)

  * Landed at Pcicoin.com

  * First Liquidity Pool to be Created

  * First Transaction Executed