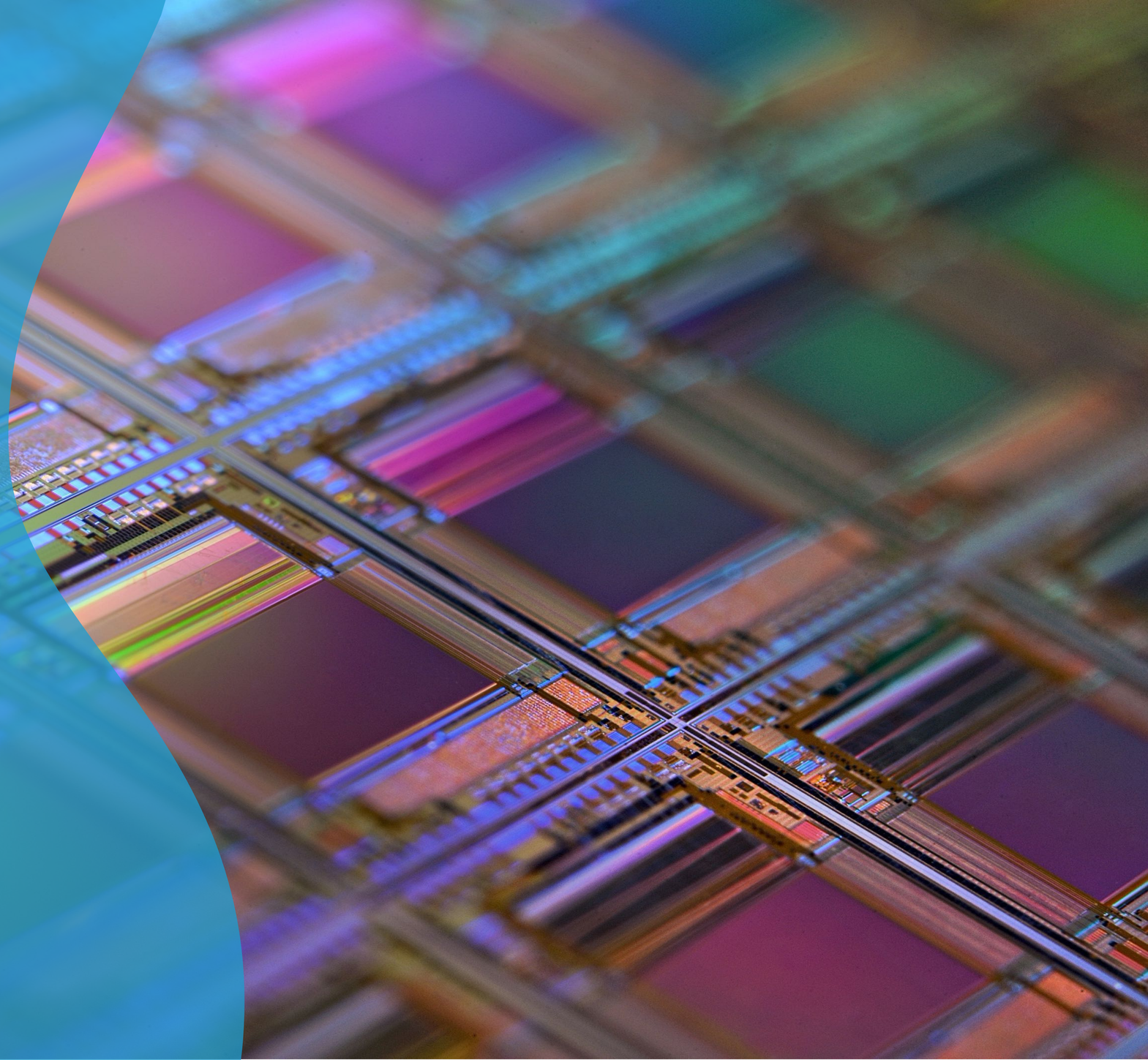
# Blockchain for Trade Finance




**Presenter:**

Dr. Ravi Chamria

Co-founder Sofocle Technologies

# agenda.

01. About Sofocle

Brief overview of Sofocle – an Enterprise Blockchain company

02. Trade Finance Challenges

Current challenges in Trade Finance domain

03. TradeReboot Platform

An innovative platform for Trade Finance using Blockchain and Smart Contracts

04. TradeReboot Infra Mx

A scalable deployment strategy and execution

# ABOUT SOFOCLE

An Enterprise Blockchain company

Sofocle is one of the leading Enterprise Blockchain companies in the world. With a strength of over 60 experts in emerging technologies like Blockchain and Cryptocurrencies, Sofocle has built various products and solutions for enterprises, Blockchain start-ups and governments.

## Technologies

- HyperLedger Suite of Products, Corda and Ethereum
- C/C++, Rust, Python, GoLang
- ReactNative, Flutter, WebApp Stack
- MongoDb, MySQL, ReThinkDb, Cassendra
- Apache Ignite, Apache Spark, ThingWorx
- Intel SGX

## Sofocle Team

- Led by seasoned IT entrepreneurs and professionals
- Team of 45+ Blockchain engineers and domain experts

### BFSI

- sofoCap - Supply Chain Finance
- TradeReboot – Trade Finance
- Insurra – Automated Claim Settlement
- sofoSafe – An Audit Layer

### SCM

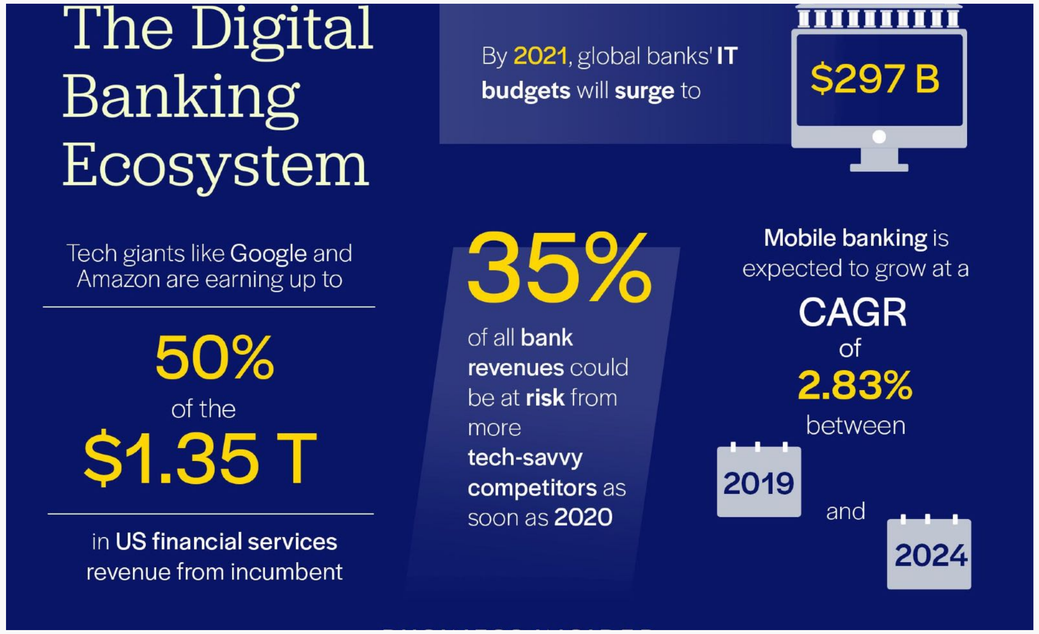
- Certum – Supply Chain Traceability
- Certiza – Digital Records Management
- sofoPay – Procure to Pay Management

### BaaS

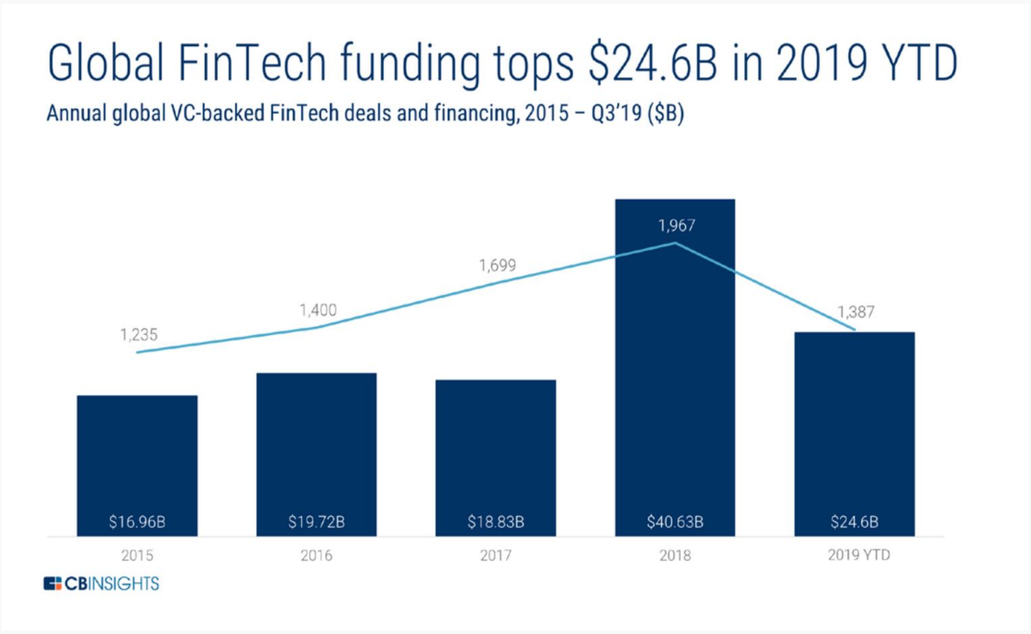
- Zeeve – A No-Code Blockchain Automation Platform

# DIGITAL TRANSFORMATION IN FINANCIAL SERVICES

IT investments in Banking and new gen Fintechs have brought the wave of Digital Transformation in Banking




IT Investment in Banking




Fintech Investments

# FALLING SHORT

The traditional technologies has little impact on underlying challenges – Reliance on 3rd Party Trust and Old Thinking

- Legacy Infrastructure
- Slow Processes
- Intermediaries
- Audits

# FALLING SHORT TRADE FINANCE

Taking digital initiatives in Trade Finance as Example

- A bank payment obligation, or BPO, is a digital alternative provided by Swift.
  BPO uses automated data checking of standardized data sets, rather than stacks of paper.
- MT 798 has been in place for eight years..
  An authenticated message service to exchange trade data between companies and member banks of Swift,.

## Limited Reach

as digitalized only a slice of the trade process

## Too Bank Focused

Banks mainly invested in digital trade channels and back-office systems

## Too many changes

Banks asked too many changes by companies to understand and accept a new risk playbook

# FALLING SHORT TRADE FINANCE

Current digitization masking the real challenges

**01**

## Trade Finance Gap

is estimated at about **$1.5 trillion** as per ADB. This could reach **$2.5 trillion** by 2025 according to the World Trade Organisation (WTO)

**02**

## Paper Based & Manual

From the 34 days of shipment, 10 days were due to waiting for documents – Maersk Test

**03**

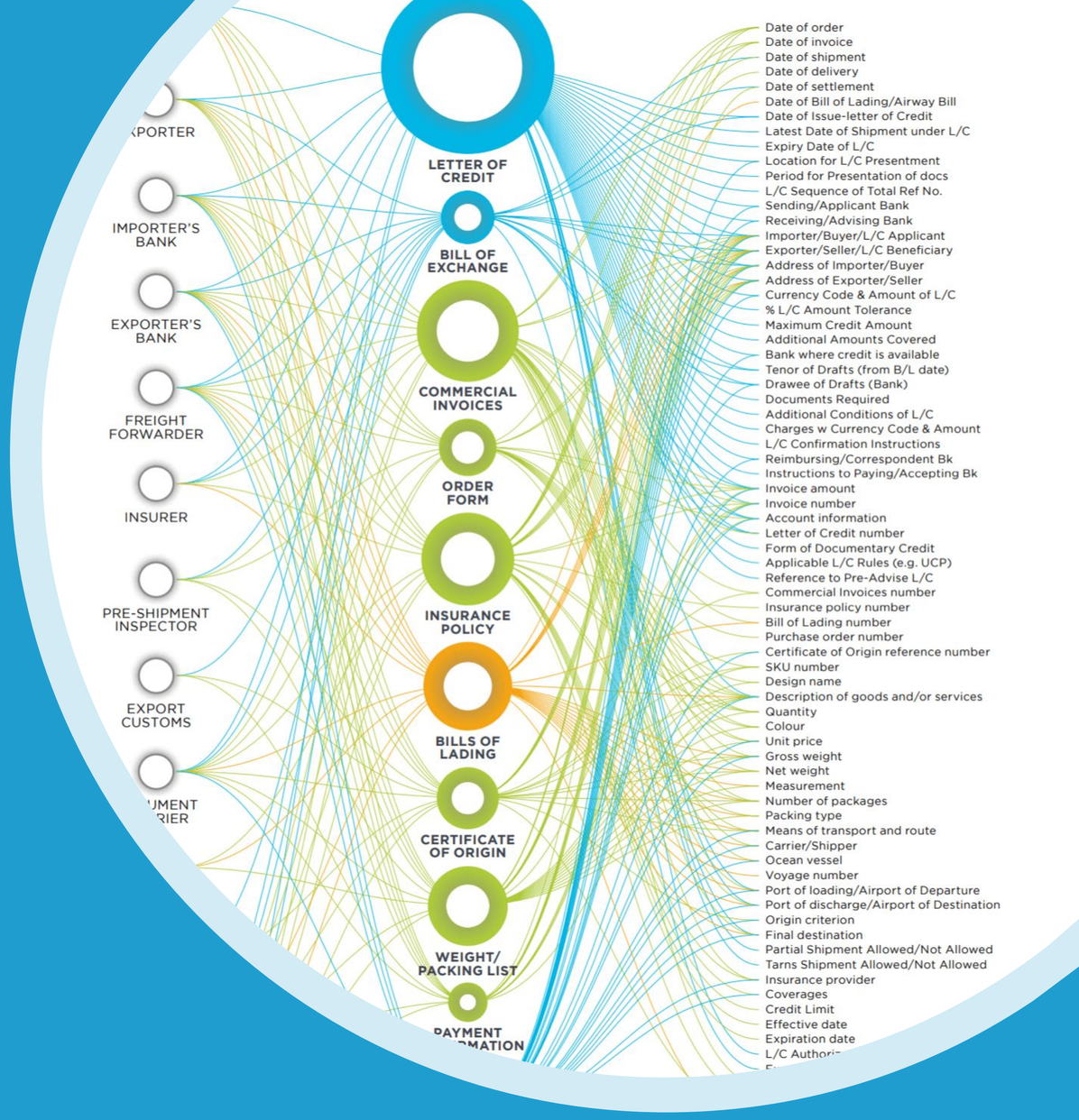
## Siloed & Disconnected Systems

There is not one platform where all the parties can connect among each other

**04**

## Highly Risky & Costly

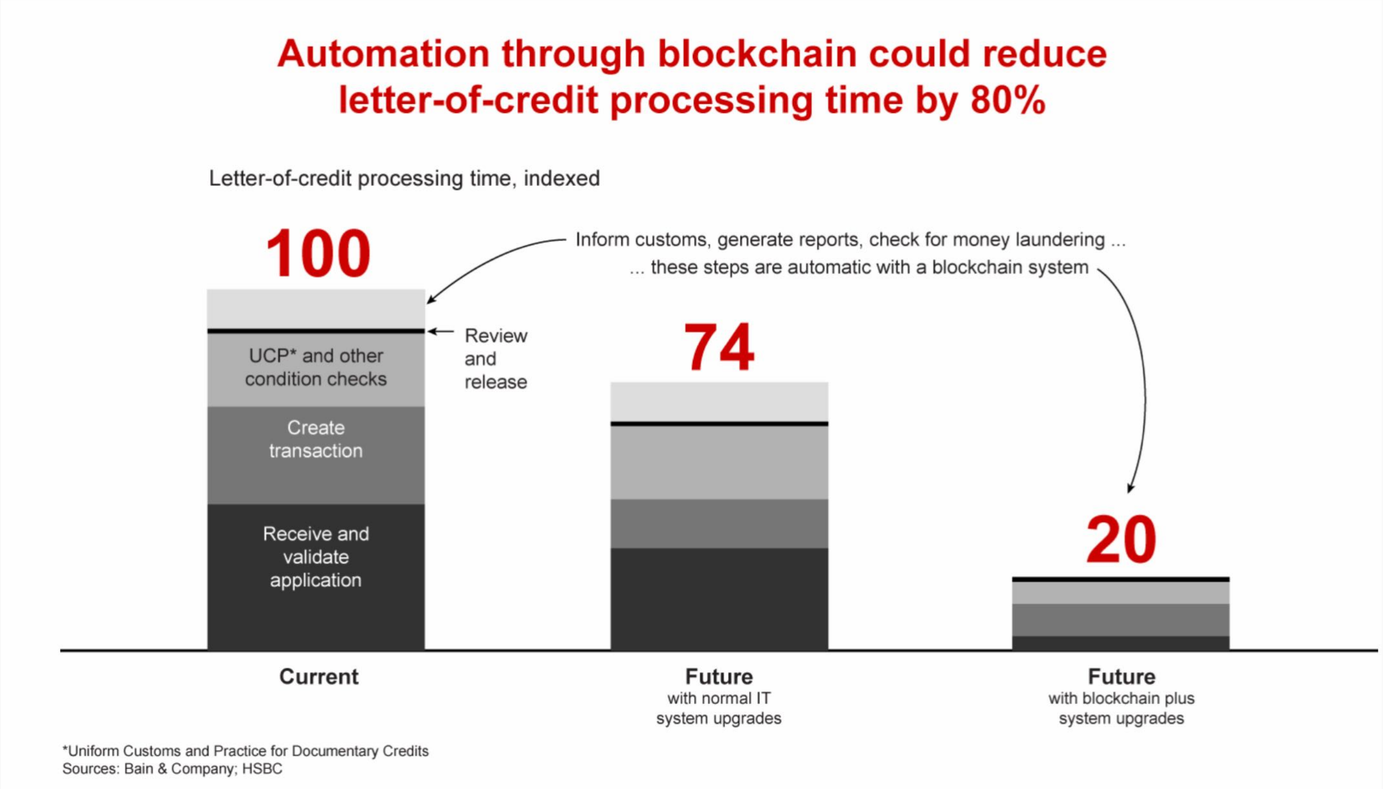
The absence of transparency results in a lack of trust and consequently a high-risk assessment and costs.




As per BCG report, the players create about 5000 data field transactions in a Single Transaction

# BLOCKCHAIN TO THE RESCUE

With Open, Decentralized, Secure and Trustless Network, Blockchain truly disrupts




- Faster turnaround times
- Lower processing costs
- More trade financing made available
- Faster financing decisions
- Faster supply chain decisions
- Transparency of steps and status
- Accurate representation of each record
- Freed-up working capital

# BLOCKCHAIN IN TRADE FINANCE?

Trade finance represents the financial instruments and products that are used by companies to facilitate international trade and commerce.

### Exporters

Quickly distributed sources rather in empowered.

### Importers

Quickly distributed sources rather in empowered.

### Participating Banks

Quickly distributed sources rather in empowered.

### Shipping and Logistics

Quickly distributed sources rather in empowered.

### Customs/Regulatory Bodies

Quickly distributed sources rather in empowered.

### Insurers

Quickly distributed sources rather in empowered.

# TRADEREBOOT FEATURES

A collaborative and trustless platform for Trade Finance powered by Blockchain and Smart Contracts

## Onboarding – KYC/AML

Digital Onboarding with KYC/AML checks and assignment of unique Digital Identity

## Consignment Tracking

Asset/Consignment Tracking using chain of custody as well as IoT based tracking.

## Smart Contracts

Smart Contracts for payments, financing decisions, SLA Management and Insurance cover

## E-LC Management

Ability to apply for, receive, manage, issue and accept Electronic LC

## Contract Dashboard

A single intuitive dashboard to manage all documents, messages, movements and notifications

## Connected Ecosystem

Connecting all stakeholders like Insurance, Shipping and Inspection agencies

## Document Management

Document Issuance/Upload with granular access controls and traceability

## AIA Report

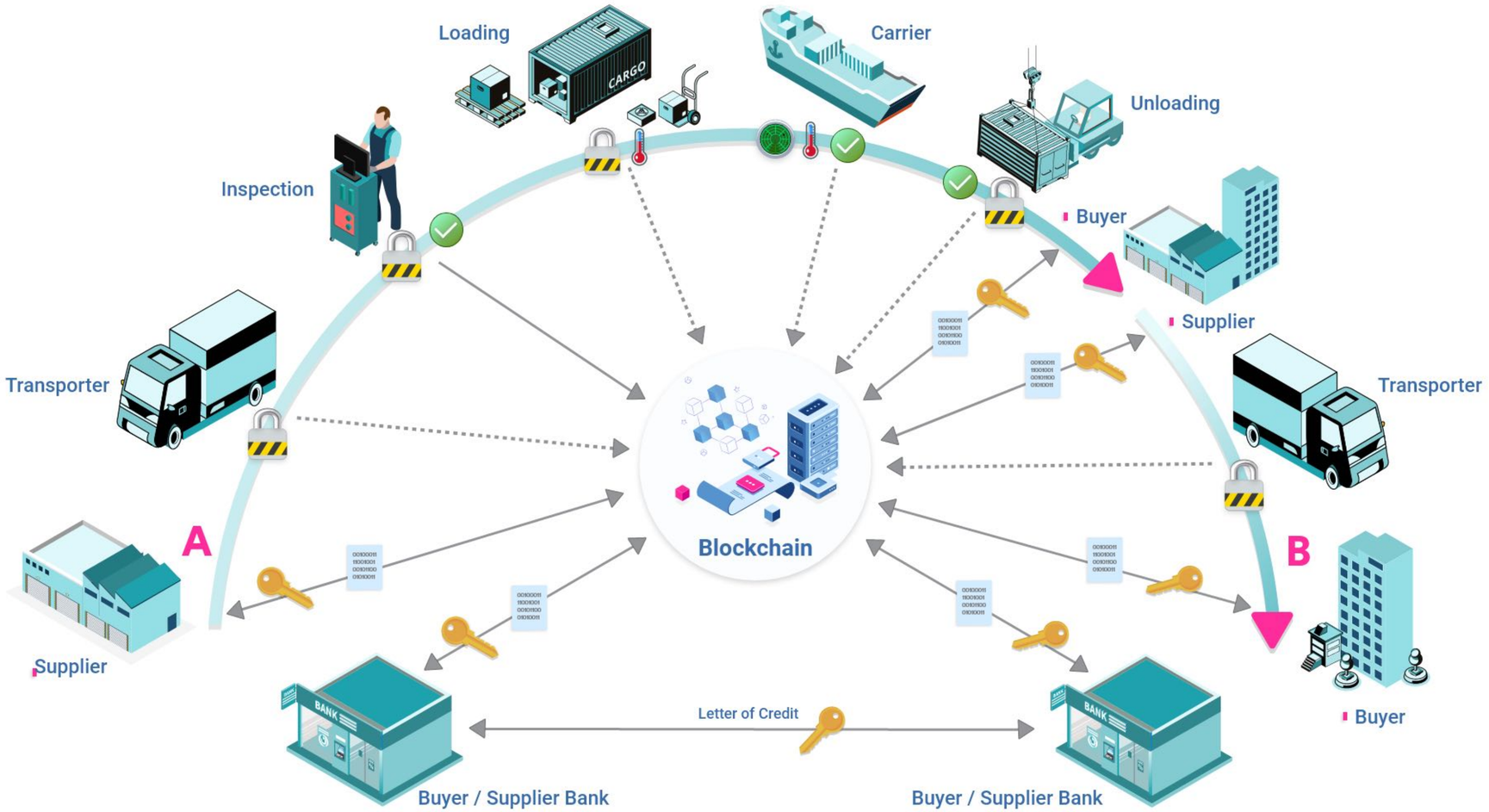
Based on deep learning and data analytics, a multi-parameter credit score for traders

## ICC & UCP Compliant

The platform is built on ICC guidelines with all contracts as per ICC compliance and payment processes as per eUCP compliance

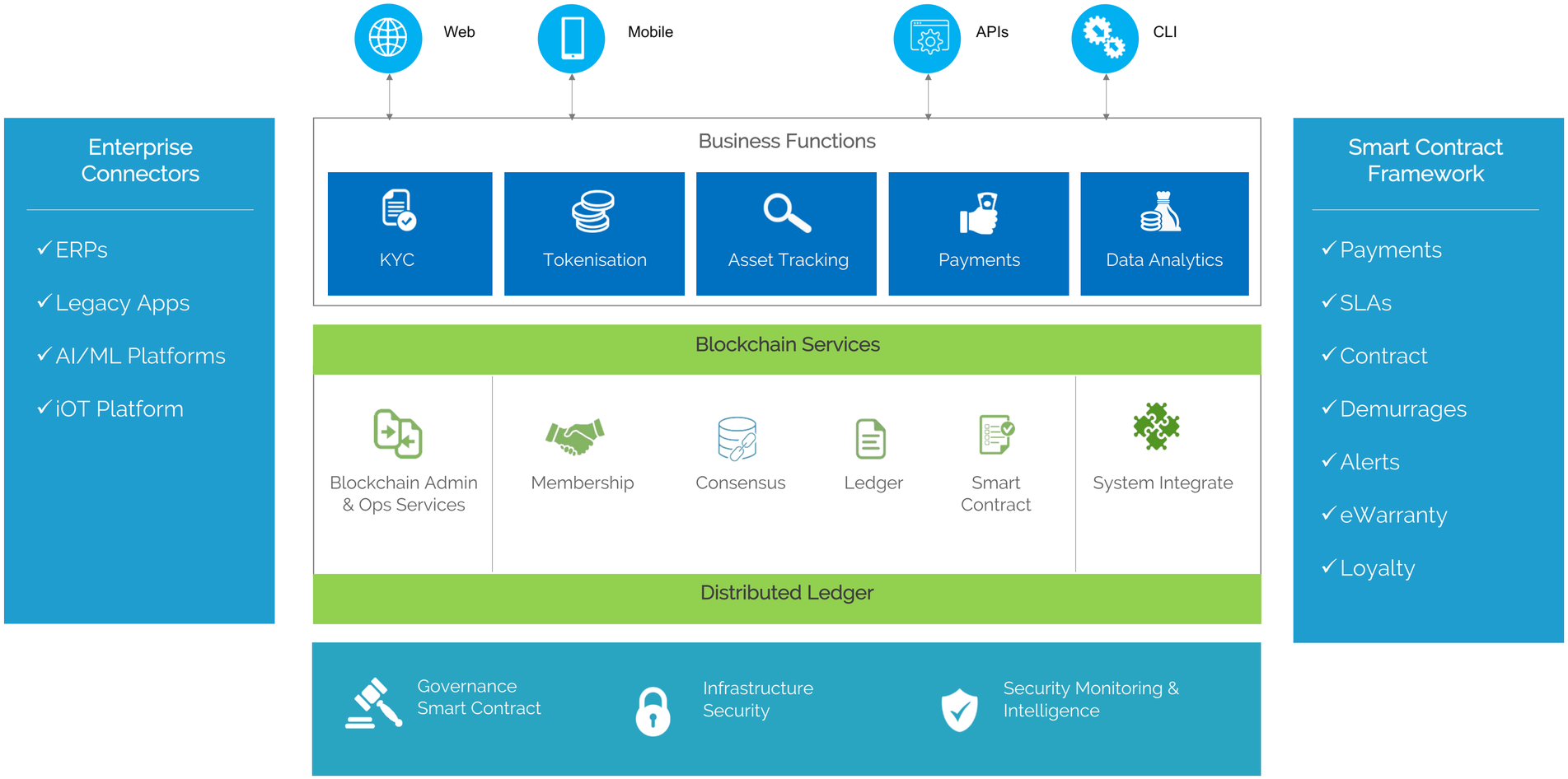
# TRADEREBOOT JOURNEY MAP

A collaborative and trustless platform for Trade Finance powered by Blockchain and Smart Contracts



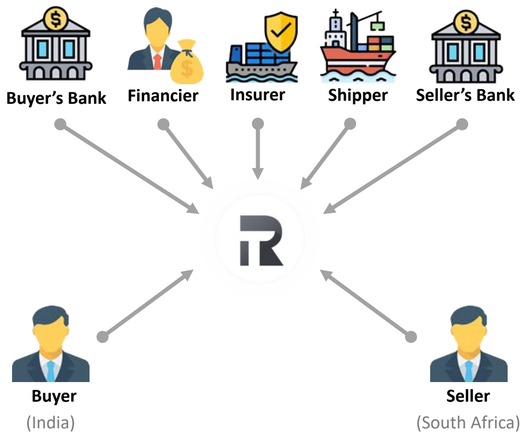
# TRADEREBOOT TECHNOLOGY OVERVIEW

A collaborative and trustless platform for Trade Finance powered by Blockchain and Smart Contracts



# TRADEREBOOT CASE STUDY

A collaborative and trustless platform for Trade Finance powered by Blockchain and Smart Contracts




| | |
|---|---|
| Commodity Bought | Coal Grade 6000 Kcal, USD 3 Millions |
| Payment Method | Sight LC |
| Type | FOB (free on Board) |

| Process | Earlier | Now |
|---|---|---|
| Application for LC Issue | 3-5 days | 0 day |
| LC Issue by bank | 1-2 days | 1-2 days |
| Time Saved LC Issue | 3-5 days | |
| Freight, Inspection, Loading | | |
| Issue BL | 1-2 days | 0 day |
| Sending documents to seller's bank | 1-2 days | 0 day |
| Seller's Bank check documents | 2-3 days | 0 day |
| Seller's Bank send Documents to issuing bank | 5-10 days | 0 day |
| Issuing Bank Check Documents | 2-3 days | 1 day |
| Payment | 1-2 days | 1-2 days |
| Time Saved LC Acceptance | 10-19 days | |

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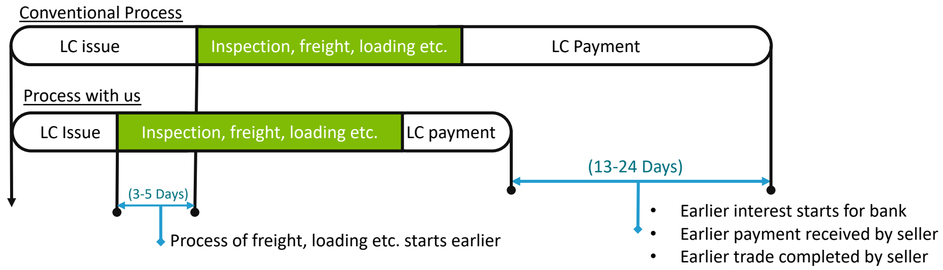
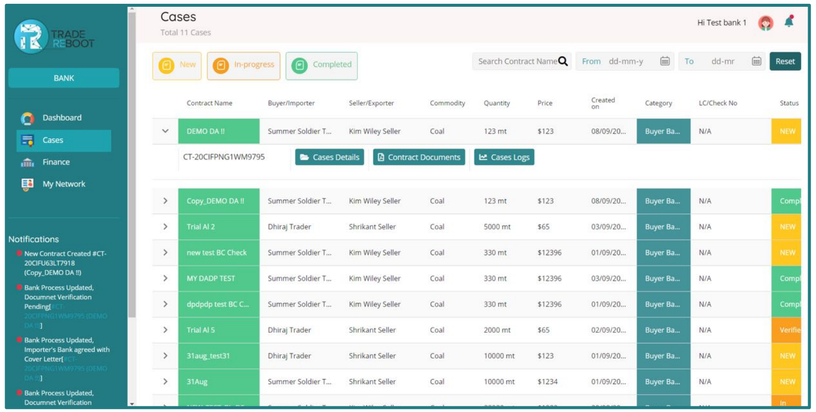
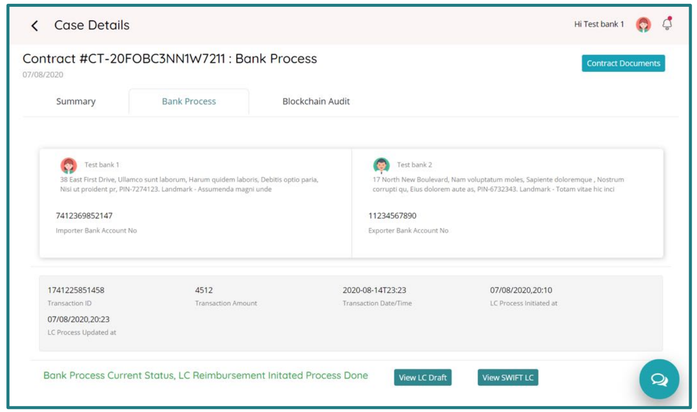


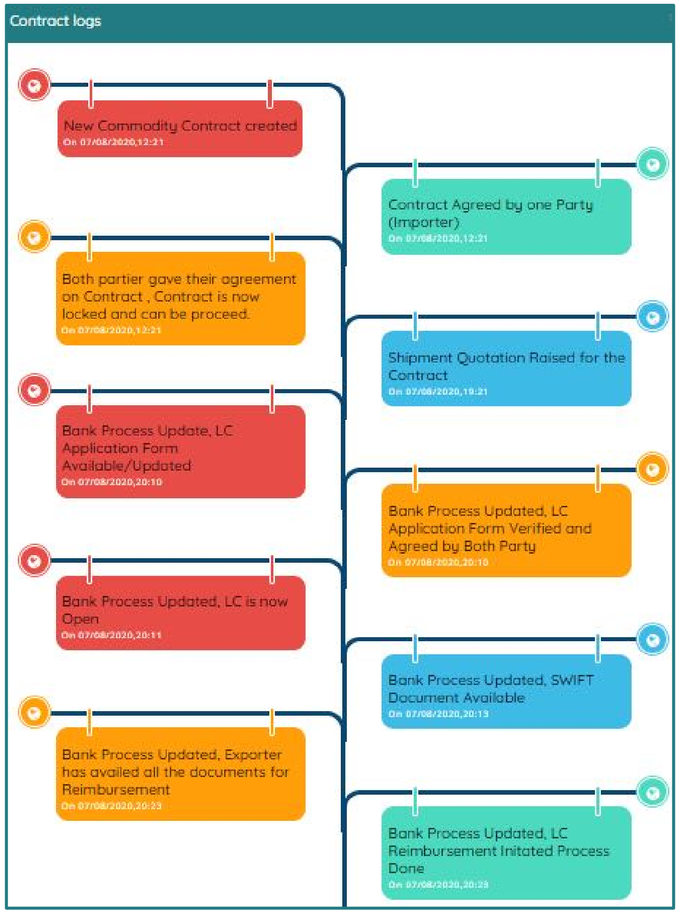

| Bank | Seller | Buyer |
|---|---|---|
| 3-5 days saved in LC Issuance | 3-5 days saved in LC issue, means process by seller can be started earlier, ergo trade can be completed earlier | 3-5 days saved in LC issue, means process can be start earlier and goods will be received earlier by 3-5 days |
| 10-19 days saved in LC Acceptance, combined with time saved during issuing, a total of **13-24 days extra interest** or earlier payback | 10-19 days saved in LC payment, so payment will be received earlier after sending goods | 10-19 days saved in LC payment, so credit line can be freed early |
| The whole process saves 13-24 days on a single transaction by buyer, thus same credit limit can be used a greater number of time | The combined process saves 13-24 days, considering IRR to be 1% pm a total **of 0.4-0.8 % additional returns** | The whole process save 13-24 days on a single trade, thus credit limit can be used a greater number of time |

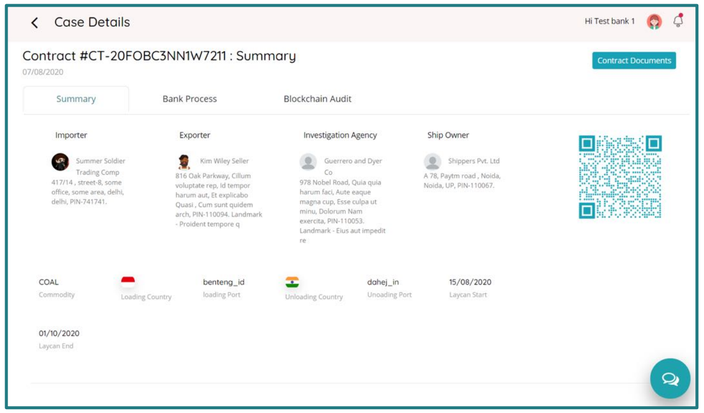
# TRADEREBOOT CONTRACT DASHBOARD

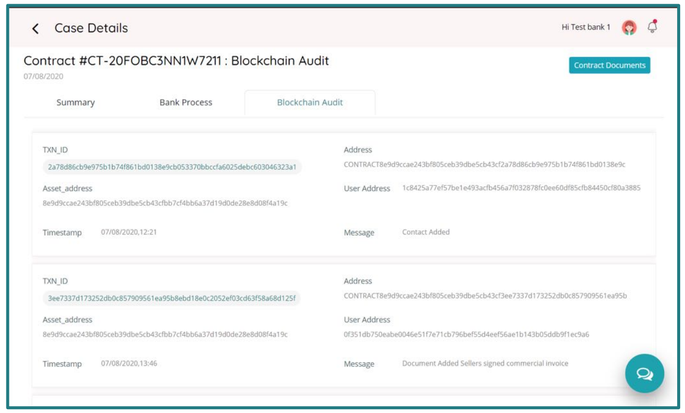
A collaborative and trustless platform for Trade Finance powered by Blockchain and Smart Contracts



# TRADEREBOOT DEPLOYMENT

A Scalable Deployment Architecture using Zeeve BaaS Platform

Reduction on Costs

>50%

>80%

Faster Time To Market

24/7

Real Time Monitoring

# Thank You

Blockchain Platform For The Most Efficient Trading Experience in Trade Finance domain