



Reimagining Trade Finance with Blockchain

Finacle Trade Connect

Trade Finance Business Today

Trade operates in an increasingly complex world

Trade remains a key engine of economic and social progress globally. Yet there is a huge unmet demand for trade finance, estimated at over USD 1.6 Trillion annually.

The Need for Digitization

Trade finance transactions are plagued by limited digitization, complex (mostly paper) documentation, lack of standardization and functional silos. According to the Organization for Economic Co-operation and Development (OECD), hidden costs arising from excessive documentation and manual processes constitute up to 15% of the value of traded goods. Delays, high costs, and fraud risk cost the industry billions of dollars in revenue annually. Another problem is that small business customers have difficulty securing credit. Hence there is a clear case for stakeholders – trading parties, financial institutions and logistics providers – to embrace digitization to bring agility, efficiency, consistency, security and transparency to trade finance processes.

Ecosystem-Driven Trade Finance Business Models

The traditional trade finance model characterized by bank and corporate silos, one-on-one relationships and central intermediation is quickly breaking down. Progressive corporate banks realize that the future is about building a blockchain-based platform business by engaging with diverse partner networks within a larger ecosystem that is independent of any central intermediaries.

The role of a bank is visibly shifting from manufacturer and distributor of proprietary products to aggregator of third-party financial and non-financial offerings. Its focus has changed from pushing messages and transferring funds to providing relevant, customized offerings and contextual experiences to corporate and business banking customers.

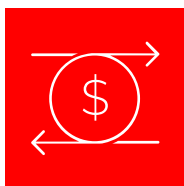
Growing Role of Blockchain in Accelerating Trade Finance Digitization

A distributed, yet trusted, shared network built on blockchain enables automation, increases visibility and manages risks efficiently in trade and supply chain finance operations.

Blockchain creates exponential value through various network effects and the expansion strategies adopted by banks and other network participants. The utility value of the network increases as more and more partners, customers and stakeholders come together to resolve pain points, create new business opportunities and enhance customer value.



A completely digital blockchain-based trade process is the answer to today's trade and supply chain process dynamics. It not only enables even unknown parties to trade with confidence but also helps banks to tap a variety of funding opportunities. Recognizing this, Infosys Finacle has developed Finacle Trade Connect, a blockchain-based solution for all trade finance needs.



Higher
transaction costs



Longer
settlement times



Lower
authenticity

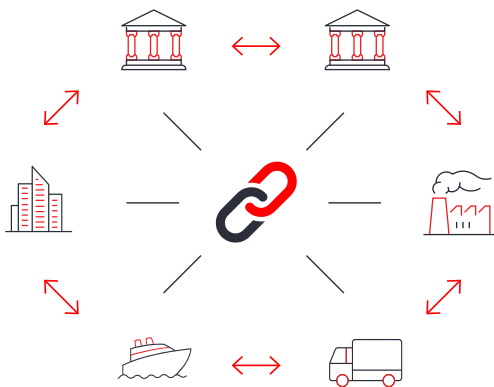


Lack of trade
movement
visibility

Blockchain-Enabling New Frontiers in Trade Finance

Enhanced proposition for banks,
customers and their trade partners

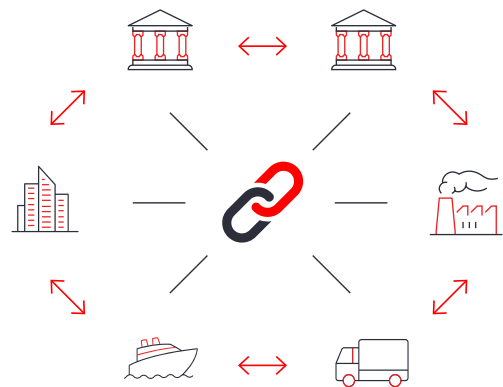
Typical Trade Finance Process



Current State of the Financial Services

- Point to point siloed connections
- Highly fragmented and increased risk
- Trade data stored locally by each party
- Transactions take days to confirm and validate
- Regulatory reporting is tedious and suffers from human error

Trade Finance Process on Blockchain



Envisioned Future State Powered by Blockchain

- Unified by one, interoperable ledger
- Reduced systemic, counterparty and security risk
- Simplified reconciliation and near real time validation
- Improved regulatory reporting = less regulatory capital
- Transform transaction processing between regulated financial institutions through drastic cost reduction and massive improvements in capital allocation

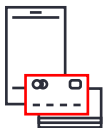
Benefits of Blockchain enabled Trade Finance



Meet customer expectations and attract new clients



Modernise IT systems



Reduced risk of non payment



Avoid disintermediation by third parties



Full transparency of entire value chain in real time



Upgraded reconciliation process



Reduce risk of duplicate invoice financing



Lower costs and error rates



Additional financing opportunities for SMEs



Enables new products for corporate clients



Free up resources to focus on core business



Improved liquidity and working capital

Finacle Trade Connect

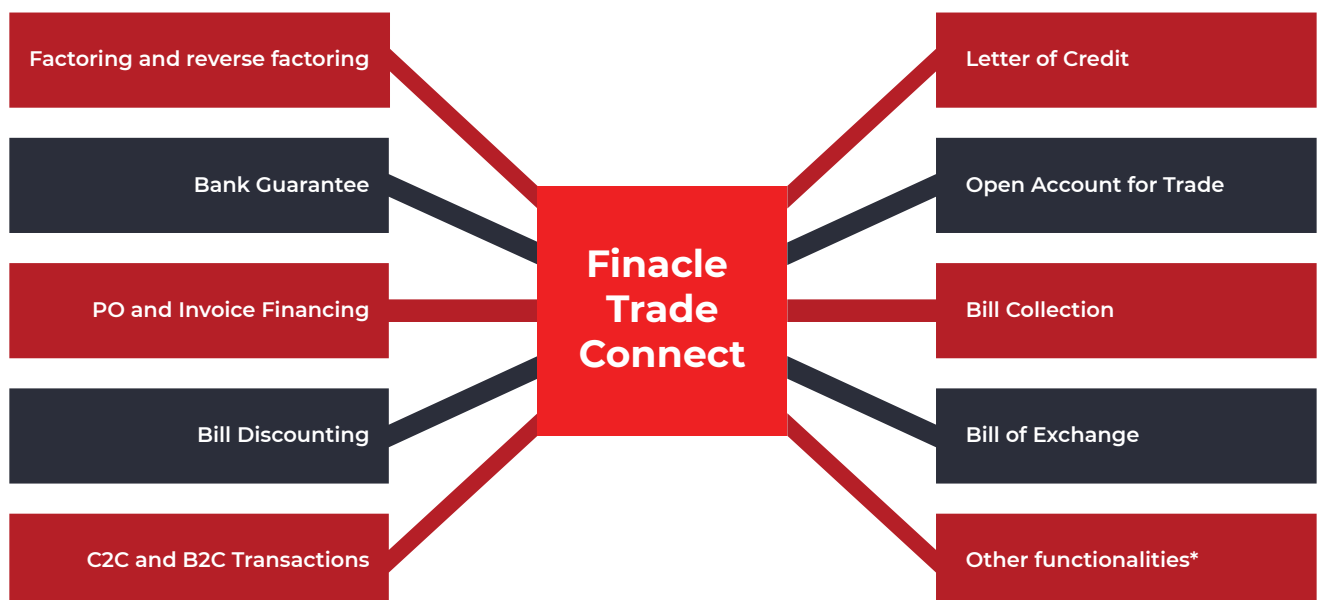
Accelerate your journey towards truly digital trade business with blockchain



Finacle Trade Connect is a blockchain-based solution developed specifically to address and simplify the trade finance process requirements of banks. The solution connects banks, corporates, and various trade partners, such as shipping companies, insurers, and customs agencies, on a unified distributed network enabling inter-organization automation of trade finance processes. It digitizes trade finance business processes, from ownership validation to document certification to payments execution, using a distributed, trusted and shared network. With this solution, banks can curate trade networks with their frequent trade partners, customers and other stakeholders to drive unprecedented efficiencies and customer value.

Finacle Trade Connect is available for a range of functions, including **Letter of Credit, Open Account for Trade, Bill Collection, Bill Exchange, C2C Transactions for Trade, B2C Transactions for Trade, PO Financing, Invoice Financing, Bank Guarantee and Factoring**.

End-to-end support for trade and supply chain finance



*Bid/Auction Marketplace, Internet daily mode, Branch and RM login

Benefits with Finacle Trade Connect

	Online Trade	Blockchain enabled Trade	Outcome
Transaction Channel	Unidimensional with only direct customers	Unpacked to create multidimensional view of not only direct customers, but all transaction participants	Better operational efficiency and customer service
Transparency and Visibility	Very low transparency to both clients and internal users	Complete, 360-degree transparency with single source of truth at "process", "data" and "instrument" levels	Better operational efficiency and customer service
Digitization	Partial digitization – only at end points	End-to-end digitization, from data capture to back-end processing	Better operational efficiency and customer service
Reconciliation	High recon because even as front-end captures digital data, back-end continues to be fragmented and messaging-oriented	Much lower recon as digitization is end-to-end and single source of truth is available at process, data and instrument level	Lower operational cost overall
Operational Efficiency	Low operational efficiency due to mostly manual processing	High digitization, automation and straight through processing increases efficiency	Less manual processing, more straight through processing
Automation	Low automation in back-end	Smart contract can enable automation in back-end	Possibility of new revenue lines through automation
Versatility	Different channels required for different kinds of inter-bank transactions	Single channel for all kinds of inter-bank transactions, such as trade finance , KYC, remittance and document exchange, among others	Lower maintenance cost
Risk	Risk of duplicate financing and fraud	Risk of duplicate financing and fraud is reduced substantially. Duplicate instruments are identified, and documents are shared in the business context. Physical documents can potentially be completely eliminated	Better risk and fraud management

Real value can be derived



New businesslines



Cost saving



Better operational efficiency



Risk Management & Fraud Prevention

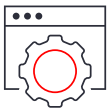
Built on Advanced Architecture

Empowering you to do more



Ledger-agnostic

Finacle is designed to provide flexibility and choice to banks in selecting distributed ledger platforms. The solution is ledger-agnostic and runs on a number of technology platforms, such as R3 Corda, Hyperledger and Ethereum and also offers a complete stack of open source technologies. This enables banks to future proof their technology investments.



Open APIs

Finacle Trade Connect solution is designed with API first strategy. The solution offers an extensive suite of Open APIs to empower banks to integrate with any backend host system (Finacle or non-Finacle) and co-innovate within their internal and external trade partner ecosystem.



Cloud-ready

Finacle's cloud-native applications support deployments and operation in cloud of your choice. Banks can go cloud-first with the Finacle Blockchain deployments on leading cloud platforms.



Permissioned

Finacle Trade Connect is built on the principle of permissioned blockchain in recognition of the needs of enterprises in a business network. Participants are explicitly admitted to the network and assigned specific roles and permissions. This ensures that an identified participant performs only those actions allowed by its assigned role.



Need-to-know privacy model

The solution is built on a need-to-know data privacy model where transaction data is shared with participants only on need basis.



Extensive security capabilities

Finacle Trade Connect has robust security features built at multiple levels, including network, DLT, application and hosting. For example, there is client-authenticated-SSL for internode communication at the network level and role-based access control at the application level.



Document support

The solution allows sharing of documents, including images and PDF files, along with business transactions in a secure and tamper-proof manner.



Smart contracts-ready

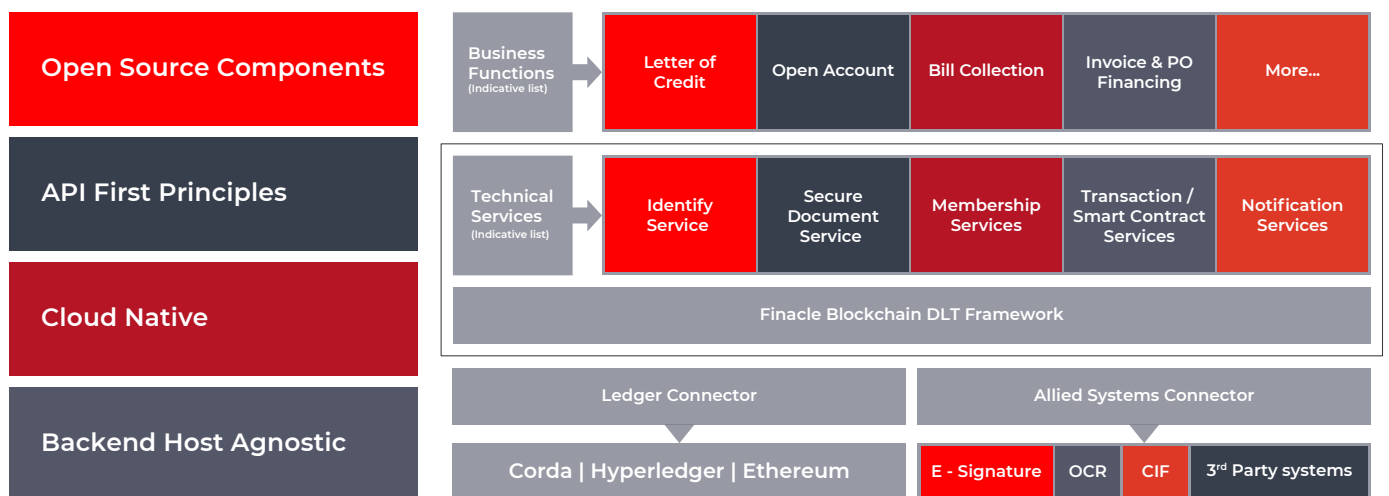
Smart contracts allow the performance of credible transactions without third-party intermediation. The solution leverages smart contracts to automate business processes across banks and trade processes to save time and minimize conflict.



Back-end host-agnostic

Finacle Trade Connect can work seamlessly with any back-end host system, Finacle or Non-Finacle. It comes with infrastructure and connectors that allow the distributed business application to interface with banks' existing infrastructure, including core banking and other allied systems.

An industry leading architectural framework supporting comprehensive trade finance business functions



Helping Banks Strategize Blockchain Journeys

Enabling agility in trade finance

Banks can leverage blockchain technology by adopting one of the following key strategies:

- **Build an intra-banking group network:**

A lot of banks operating in multiple countries are using this option for communicating and transacting with their international subsidiaries, entities and corporate clients to benefit by way of lower SWIFT costs, greater speed and shorter cycle times across business processes.

- **Curate an inter-banking network:**

Banks may also curate an inter-bank network by getting other banks in the global market to participate. This network may also include the banks' partners, customers and stakeholders. This model drives unprecedented efficiencies and customer value through synergies among network participants.

- **Offer trade-as-a-service:**

Banks can use Finacle Trade Connect to create a white-labeled trade network in strategic corridors and unlock new growth opportunities.

Helping banks across all strategy levers



Network between your international subsidiaries / entities and corporate clients



Network between your banking partners, customers and stakeholders



Network for Trade or Payment service offerings with banking partners, clients and other stakeholders



Indian Banks Blockchain Infrastructure Co Pvt Ltd (IBBIC)

IBBIC is a joint initiative of 18 Indian private, PSU and foreign banks for building and harnessing distributed ledger technology (DLT) for trade finance use cases.

This will handle over 85% of domestic trade. The consortium has come together to establish a network that will use blockchain technology for processing inland letters of credit (LCs).

The system will have an architecture, allowing onboarding of newer banks and ecosystem partners to engage and invest, resulting in substantial network effects offering the potential to transform the country's BFSI sector.



External Logos used are registered trademarks of the respective organizations

Client quotes

Anil Agarwal, EVP & Head – Transaction Banking, Axis Bank

“ Axis Bank believes in enhancing its customer experience by continuously innovating and leveraging new technologies. While there have been significant innovations in payments, Trade Finance is starting to pick up now. We are excited about the potential of the India Trade Connect initiative to digitize end-to-end trade finance operations and bring about a speedy, transparent and secure experience for our corporate clients. ”

V.G. Mathew, Managing Director & CEO, South Indian Bank

“ We are glad to be an active member of the India Trade Connect comprising select banks and Infosys Finacle. It is indeed a pleasure to note that we have been jointly awarded the Celent Model Bank Award for our collaborative efforts on blockchain. By being part of the India Trade Connect, our quest for innovation continues. We are confident that we can jointly develop a robust Trade Finance Platform powered by blockchain, which could revolutionize the current business models in this important area. ”





ICICI Bank Corporate Network

Corporate Trade Network between international subsidiaries /entities and corporate clients

ICICI Bank, a leading private sector bank in India has enabled inter-organization automation leveraging blockchain. The bank has got its international subsidiaries connected together on the blockchain network to drive operational efficiencies and create customer value. The bank has on-boarded more than 500 leading corporates for domestic / international trade finance transactions on the blockchain network.

Built on Finacle Trade Connect, the blockchain solution simplifies the paper-intensive trade finance process by bringing counterparties on the same platform and enabling decision-making in near real-time. The network participants can track documentation, authenticate ownership of assets digitally and execute a trade finance transaction through a series of encrypted and secure digital contracts. This has enabled faster and cost-effective processing and significantly improved operational efficiency across different corporate processes.

Banking group corporate communication network



500+ corporates on-boarded

ICICI Bank Trade as-a-service Network

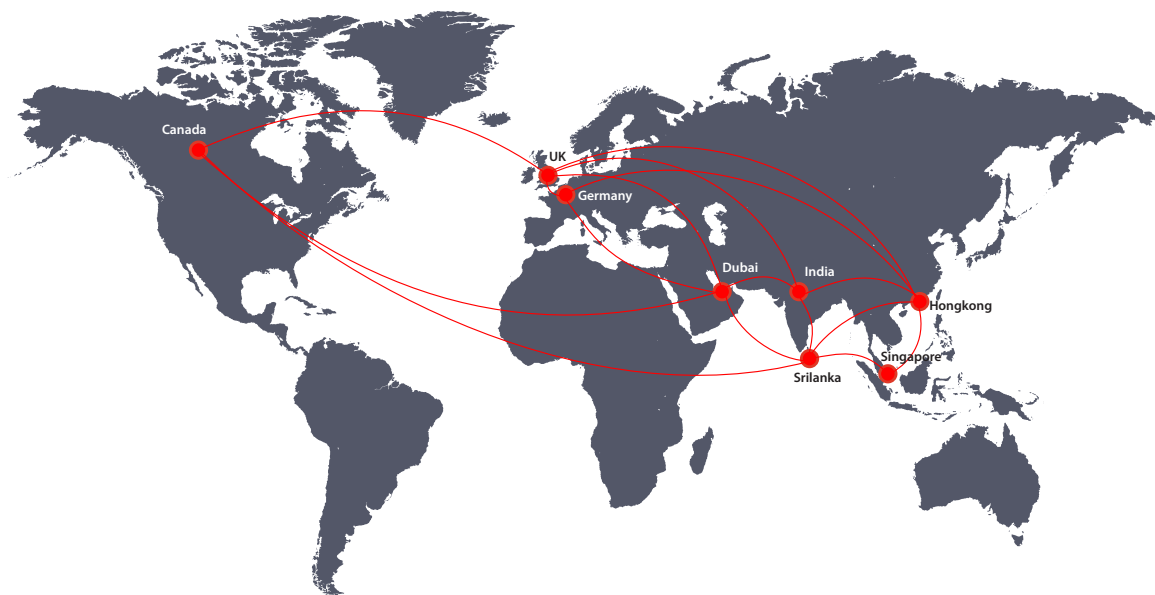
Network between bank, its international subsidiaries, partner banks and clients in global strategic corridors

ICICI Bank, a leading private sector bank in India, offers trade “as-a-service” to partner banks. The bank has set up captive networks with its subsidiaries and offers a “landing hub” to partner banks and exchange houses, enabling them to fulfill transactions even in countries where they do not have a presence. The landing hub receives trade and remittance requests from various partner banks – typically small institutions – and forwards them to the appropriate international office for further action. Partner banks need not invest in any hardware and can plug and play the services of the landing hub to facilitate trade transactions or send remittances to any location within the ICICI subsidiary network.

Reset your trade remittance indexes for the digital world

- Offer “trade and remittance as-a-service” to exchange houses and partner banks seeking to transfer funds to any geography where ICICI Bank operates
- Cost optimization
- New revenue generation opportunities
- Driving speed and agility.

ICICI Bank network between international subsidiaries and partner banks in strategic corridors



Experience that Speaks for Itself

We build winning partnerships with clients

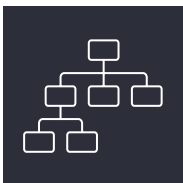
A global solution built on the experience of servicing 1.05 billion customers - esteemed to be nearly 16.5 percent of the world's adult banked population.



100
Countries



1.05 billion
Consumers



81,560
Branches



1.3 billion
Accounts

Industry recognition for our work



**Retail Banker International
Asia Trail blazer Awards**
ICICI Bank and Infosys Finacle



Sprint01: BankTech 2022
Infosys Finacle –Buyers Credit
Optimization category



20th Banking Technology Awards
- Best Use of Emerging or Innovative
Technology - Royal Bank of Scotland



**IBSi FinTech
Innovation Awards 2021**
ICICI Bank



IBS Fintech Innovation Awards
Royal Bank of Scotland



Juniper Research 2020
- Infosys Finacle







Join the Blockchain Network

Are you ready to start your journey?

Infosys Finacle has launched a blockchain-based network for banks with the goal of evaluating the Finacle Trade Connect solution. Multiple banks have partnered to be on the network already to transform their international Trade business. We invite you to collaborate with us and lay the foundations of the next-generation global trade ecosystem.

- Join our pilot network in just two days and conduct a 6-8 week pilot to evaluate Finacle Trade Connect.
- Take our functionally rich , enterprise grade solution to production today and transform and grow your international trade business

Join existing networks or create/own your own networks using our solution as an accelerator to enable speed and efficiency in your trade business, globally.

Get in touch with us at
contact@edgeverve.com to know more.

Why we exist

To inspire better banking so that billions of people and businesses can save, pay, borrow, and invest better.

How we do it

Our solutions and people help banks to engage, innovate, operate and transform better, so that they can improve their customers' financial lives, better.

What we offer

A comprehensive suite of industry-leading digital banking solutions and SaaS services that help banks engage, innovate, operate and transform better.



Inspiring Better Banking
www.finacle.com

For more information, contact finacle@edgeverve.com

© 2023 EdgeVerve Systems Limited, a wholly owned subsidiary of Infosys, Bangalore, India. All Rights Reserved. This documentation is the sole property of EdgeVerve Systems Limited ("EdgeVerve"). EdgeVerve believes the information in this document or page is accurate as of its publication date; such information is subject to change without notice. EdgeVerve acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. This document is not for general distribution and is meant for use solely by the person or entity that it has been specifically issued to and can be used for the sole purpose it is intended to be used for as communicated by EdgeVerve in writing. Except as expressly permitted by EdgeVerve in writing, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior written permission of EdgeVerve and/or any named intellectual property rights holders under this document.