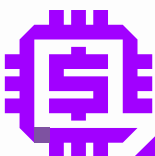
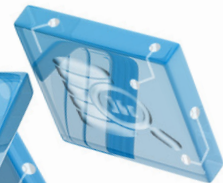


# BANKING ON TECHNOLOGY TO POWER UP TRADE FINANCE

A blueprint for banks to  
embrace innovation



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**Trade finance has long been of vital importance to the world economy. It has oiled the wheels of international transactions and, in the process, acted as a catalyst for investment, greater consumer choice and technological advancement. Over the last few decades, its role in globalization has also grown significantly.**

The trade landscape is constantly changing. The trade finance market is expected to grow at a compound annual growth rate (CAGR) of more than 3% over the next five years, from \$59.5 billion in 2019 to \$71 billion in 2024.<sup>1</sup> As a result, the industry faces a new set of challenges and risks. With the next wave of globalization, multinational companies are looking at the Indian market with keen interest, as a market and as a source of finished goods. Micro, small and medium enterprises (MSMEs) have seized this opportunity and are exploring overseas markets, leading to an increased demand for trade finance.

In the wake of growing availability and security of alternatives, what should financial institutions do to stay relevant? There may not be a catch-all solution to the different challenges facing the industry, but there are best-fit options for specific business needs. The key to competitive positioning will be adopting the right mix of technology and business innovation to offer higher value to customers.

**With big  
opportunities  
and money come  
big risks.**

Trade finance is not a bed of roses.  
Banks face several challenges to keep  
their trade finance business profitable.



# Major Challenges in Trade Finance

Trade activities require an average of 36 original documents, 240 copies, and the involvement of 27 entities, the fortune 500 companies spend over US\$ 81 billion annually on unnecessary working capital and supply chain costs. - JP Morgan Estimates

## Challenges

## Impact



### Paper-heavy Process

Processing financial and non-financial documents costs around US\$2 trillion a year. ~Arthur Vonchek, CEO of Bolero



### Labor-intensive

A highly labor-intensive process can lead to operational inefficiencies, process errors and longer turnaround time.



### Poorly Integrated IT System

Legacy systems are poorly integrated and information is manually fed, leading to process breakage and error in reconciliation.



### Strict Compliance

Basel III, Dodd Frank, Foreign Account Tax Compliance Act (FATCA) & AML require banks to invest heavily in systems and procedures to deter and detect money laundering.



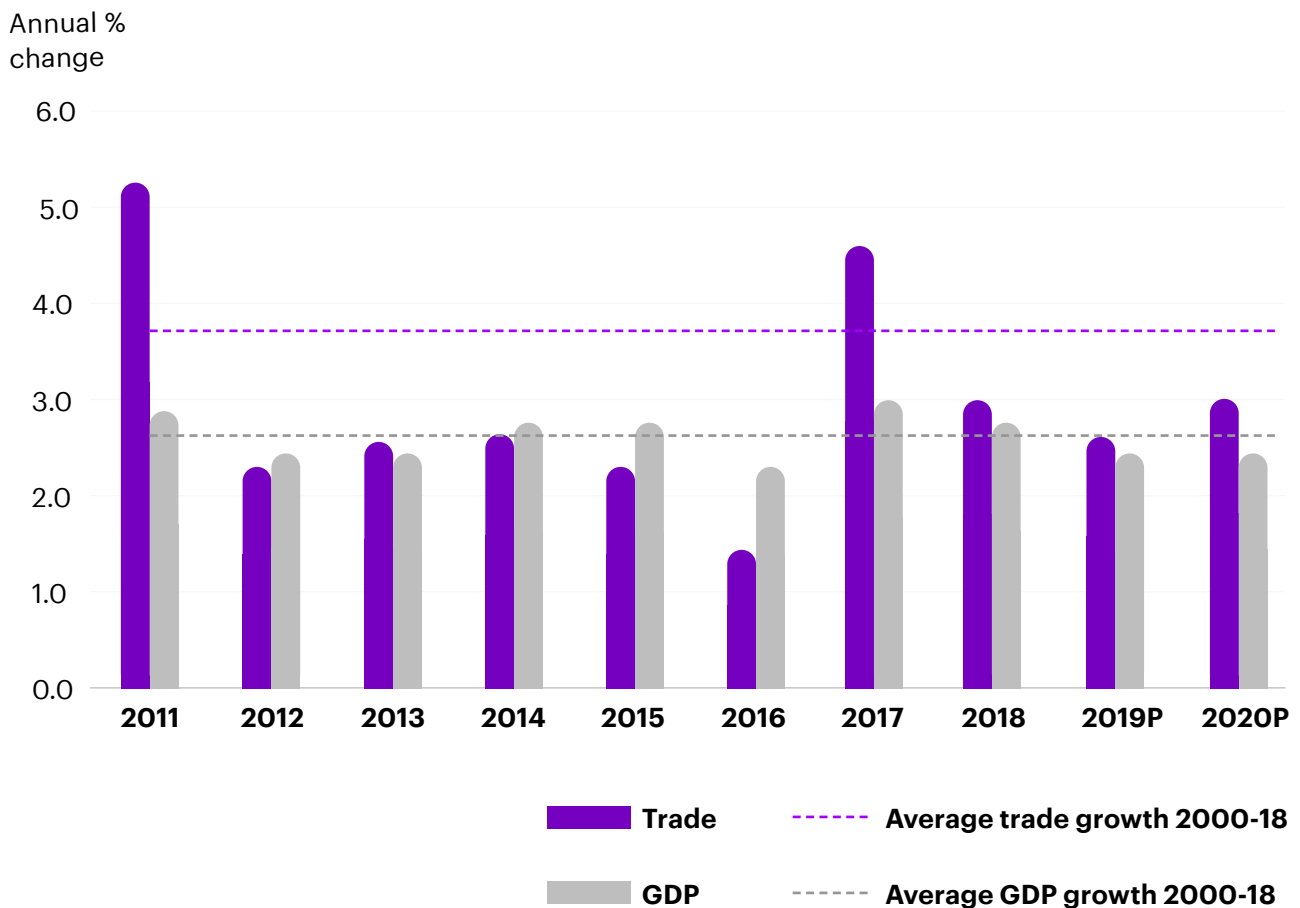
### Unknown Funding, Data Transparency and inflexible Business Models

No clarity on the counter party also increases the risk of delayed or no payment, limitations in growing the client base and expansion of products/services.

# THE FUTURE OF TRADE FINANCE

The trade finance market is expected to grow at a CAGR of more than 3% over the next five years, with global market size expected to reach \$71 billion in 2024, up from \$59.5 billion in 2019. The Middle East and European countries outside of the European Union grew fastest at 16% and 13%, respectively. This returns trade to its historic 2014 peak by 2019 and pushes global trade to a new record peak of \$24 trillion in 2026.

## World merchandise trade volume and real GDP growth, 2011-20<sup>2</sup>



Note: GDP is measured at market exchange rates. Data for 2019 and 2020 are projections  
 Source: WTP and UNCTAD for trade, consensus estimates for GDP.

# NEW TRENDS

The world is changing rapidly. Technological innovation in the form of digital channels and products, shifts in corporate behavior and expectations, regulatory changes and increasing market competition are fundamentally changing the trade finance market space.

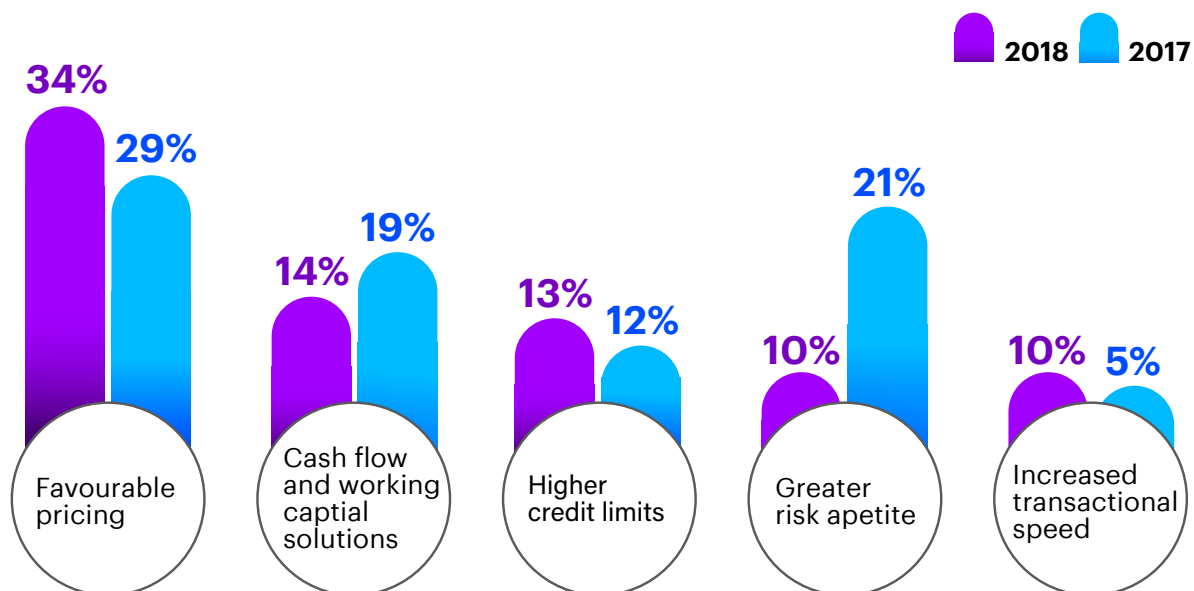


## SHIFTS IN CORPORATE BEHAVIOR AND EXPECTATIONS

According to the ICC survey, the most requested client services show the following trends in customer expectations:

- A total of 34% of respondents said the most valued aspect of quality service that clients request is favorable pricing. This is 5% higher than the previous year's survey.
- Increased risk appetite and greater market coverage were highlighted by only 10% of respondents.

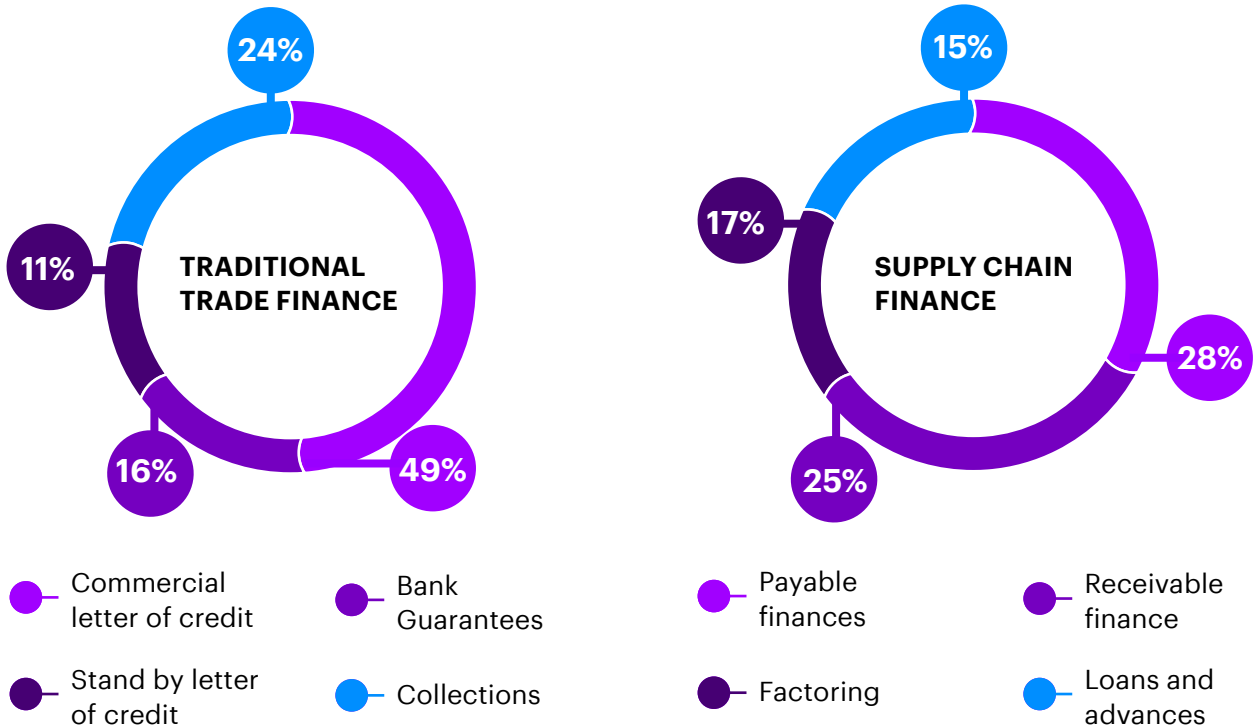
### Most requested client services



Source: ICC Global Survey, 2018<sup>3</sup>

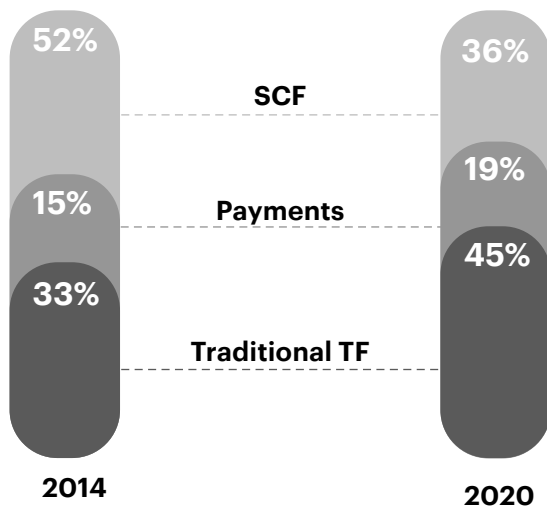


For banks, traditional trade finance still holds a larger portion of the business while supply chain financing is growing faster.



Source: Accenture, 2019<sup>4</sup>

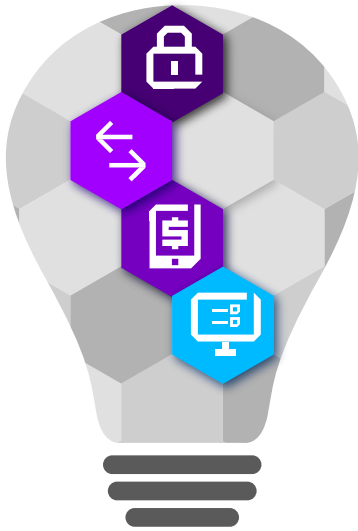
### Trade-related revenues for banks<sup>5</sup>



Many banks are focusing their trade finance business entirely on supply chain finance. Banks are carving out differentiated value propositions in supply chain finance, focusing on high-growth open account flows.

Source: CEB Tower Group analysis  
accenture estimates

The industry has experimented with several different approaches to transfer trade finance risks to non-bank investors. The approaches taken by financial institutes are a combination of business innovation and technology innovation.



# BUSINESS INNOVATION

Broadly, there are four different approaches taken by financial institutes across geographies.

## Securitization

Securitization has historically been the preserve of major trade banks. However, non-bank institutions have also entered the fray, with a \$150 million securitization last July.<sup>3</sup>

- Synthetic securitization is the most common practice. Outside investors take the first or second loss position against a bank's trade finance portfolio in exchange for a stream of payments from the bank.
- Outright securitization provides both liquidity and capital relief to the originating bank.<sup>6</sup>

## Open account trade

This is the most usual settlement mechanism. Banks are considering co-operating with credit insurers to develop solutions that meet the needs of corporate customers' shift toward open account trading.

- Lower cost
- Better risk assessment
- Faster transaction cycle
- Frees businesses from reliance on traditional finance instruments like letters of credit

## Digitization using bank payment obligation

Bank Payment Obligation (BPO) is another way of digitizing the process. Launched in 2013, BPO uses ISO 20022 data structures.

- Benefits the importer with better payment terms and conditions, mitigation of goods delivery risk, increased convenience and reduced cost
- Benefits exporter with the assurance of payment and access to pre and post-shipment finances
- Benefits banks with low-cost, high-accuracy solutions and value-added service opportunities.

## Digitization traditional trade finance products

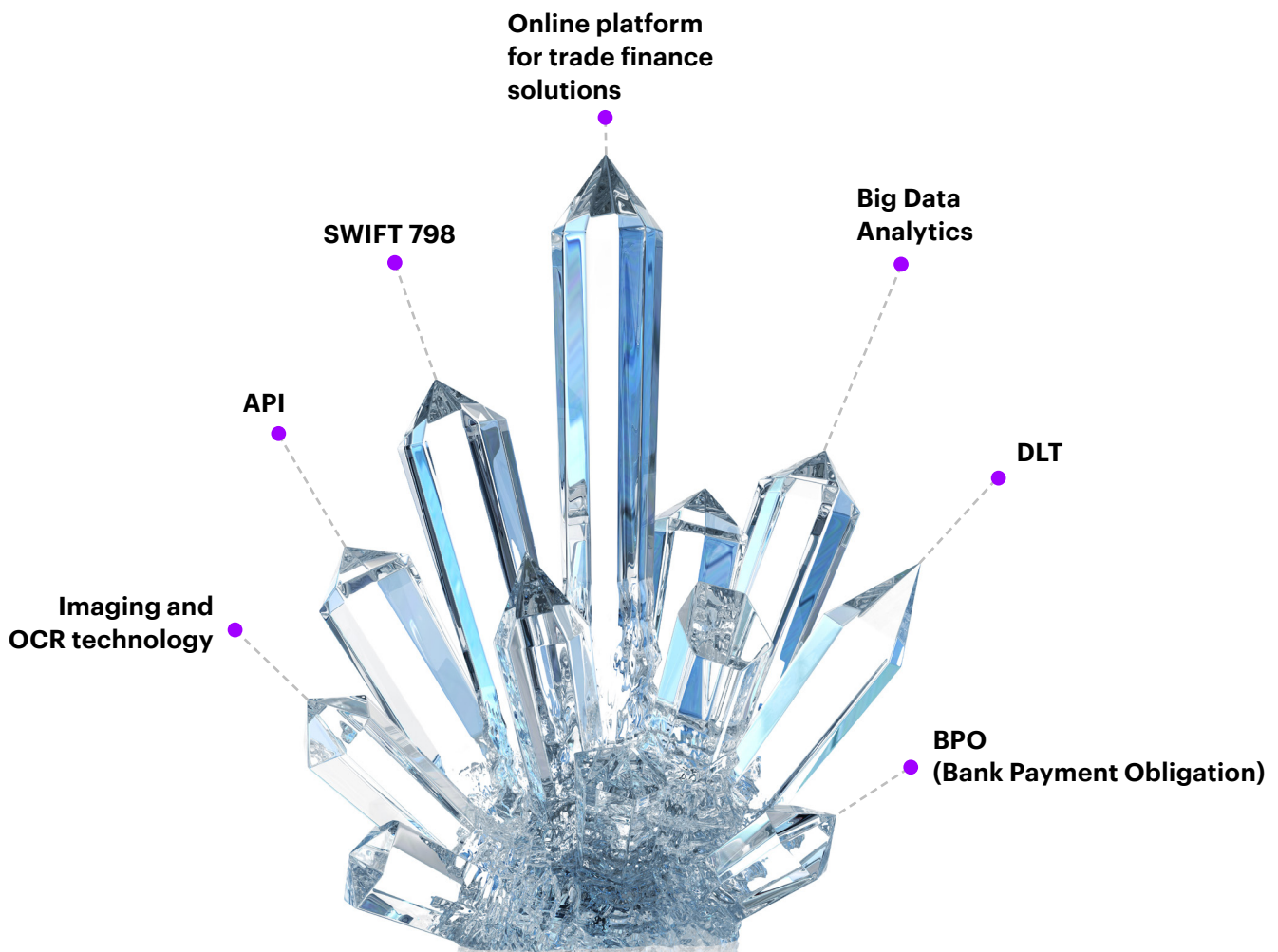
Corporates increasingly rely on electronic channels to interact with their banks. This is also the case for trade finance. Digital trade and trade financing are top-of-mind for leading practitioners. **The trade finance industry needs an e-Marketplace as the first step toward digitization. Pricing of trillions of assets should follow a more efficient process, and the only answer is to go digital.**

# THE POWER OF TECHNOLOGY IN TRADE FINANCE

## INNOVATION

Technologies such as blockchain, artificial intelligence (AI), Internet of Things (IoT) and machine learning (ML), hold promise for solving banking problems and reshaping trade financing.

### Instruments and solutions for trade finance digitization



ICC Global Trade Survey 2018: Instruments and solutions used to digitize trade finance<sup>3</sup>

In the pursuit of digital trade and, by extension, the digitization of trade financing, there are significant opportunities for banks to explore.



## 1. Online platform sophistication

**Collaboration with platform providers** helps banks address the clients' demands. It helps in better monitoring all trade transactions, reducing implementation time and cost, and promoting innovation. To offer faster turnaround time and lower costs, banks should look at adopting solutions that help to improve efficiency (e.g., Bolero and Traydstream).

## 2. Blockchain/e-Marketplace

An **e-marketplace** is a secured solution that seamlessly connects the trade finance businesses of all global banks. An independent e-marketplace can allow buyers and sellers worldwide to list assets for sale, bid for assets to buy, negotiate better pricing and exchange relevant information. While each bank pursues different technologies to enhance security, efficiency and profitability, a single bank cannot simulate the marketplace. It is also daunting to integrate application programming interfaces (APIs) and ensure security when testing how individual platforms speak to each other and aggregate deals.

Blockchain-based solutions provide enhanced security and stability by providing a distributed database where the data is secured. Major banks and fintech players are collaborating to develop DLT-enabled trade finance.

**The e-marketplace and blockchain-based solutions are already seeing a bit of traction in the Asian market.**

- **India Trade Connect** is using the Finacle trade connect solution for a consortium of seven banks. This is a domestic trade finance blockchain-based network, enabling automation and transparency, and improving risk mitigation in domestic trade and supply chain finance operations.
- **The Networked Trade Platform (NTP)<sup>7</sup>, Singapore**, is the foundation for Singapore to be the world's leading trade, supply chain and trade financing hub by being a:

- **One-stop trade information management system linked to other platforms**
- **Next-generation platform offering a wide range of trade-related services**
- **Open innovation platform allowing the development of insights and new services with cross-industry data**
- **Document hub for digitization at the source that enables data reuse to cut costs and streamline processes**



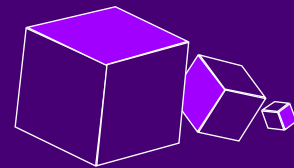
- **Marco Polo TradeIX solution network** provides access to a wide array of distributed platform with easier connectivity and allowing customers to build their own solutions. It provides solutions across the spectrum, be it Open Account or other structured Trade Finance solutions.

### 3. IoT/5G

IoT provides an integrated network of devices embedded with software and sensors that connect and exchange data. With the 5G network being standardized, a plethora of technologies will be used in the next generation of networking. The aggregate effect of 5G technology will be to allow wireless networks with far greater capability to support bandwidth-intensive content, large-scale sensor arrays and low-latency remote control applications.

The combination of IoT and blockchain can infuse trust in data exchange and analytics, which can be used for various trade finance processes. Distributed ledger technology, the underpinning technology of blockchain, improves transaction efficiency, providing security and proof about the exchange of information and value. Where IoT data triggers smart contracts on a blockchain, the authenticity of goods can be monitored. For example, buyers can prevent fraudulent invoices from illegally trafficked precious items like diamonds or commodities, thus reducing the risk of defaults during the funding process.

The current infrastructure and bandwidth capacity hinder the promise of secure, real-time data about goods in transit. 5G-enabled IoT devices are expected to increase this capability greatly. With a secure 5G/IoT network, supply chains can leverage the integrity of a blockchain's logs, which, if properly implemented, will be nearly impossible to alter.

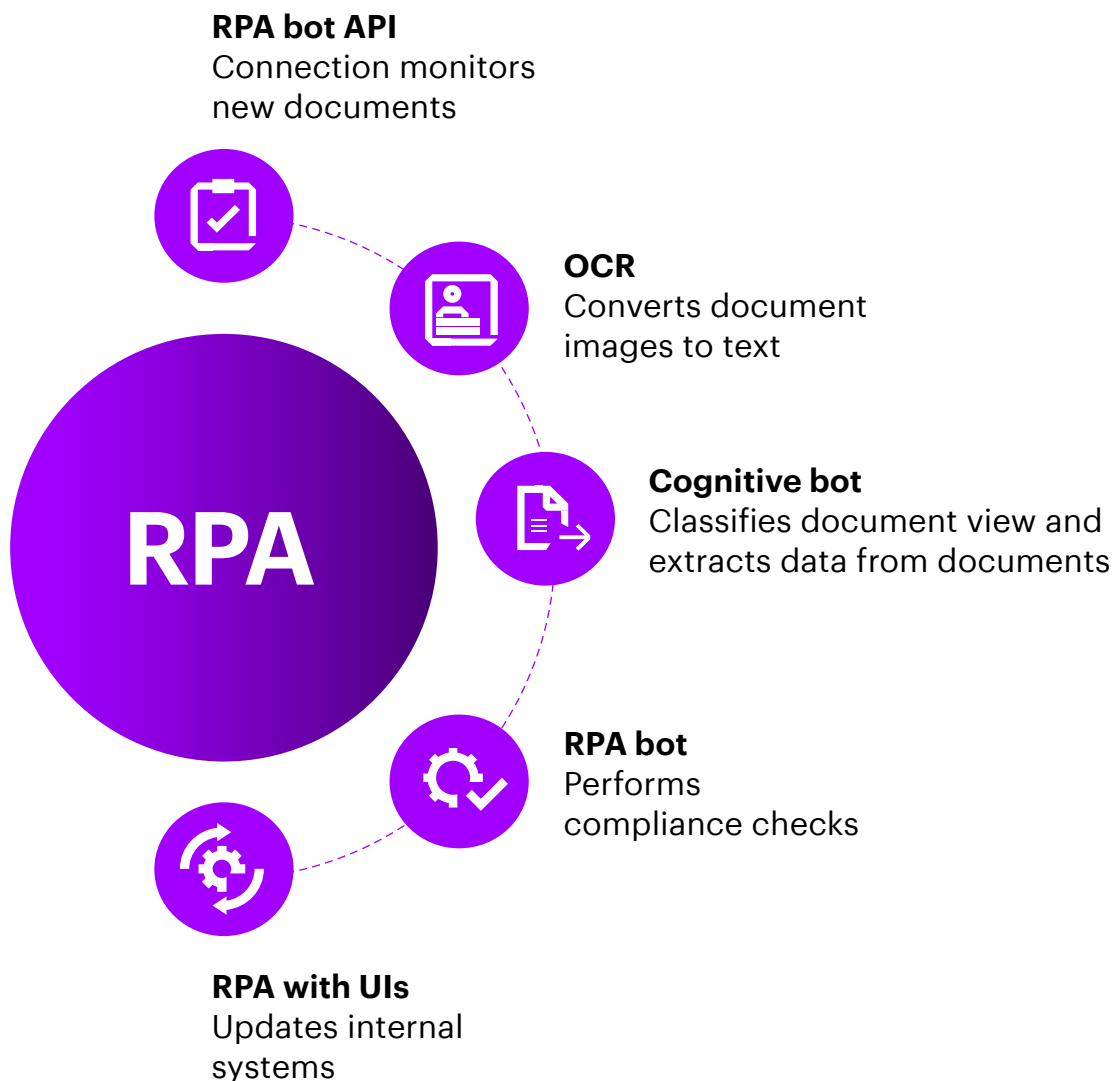


**Know Your Goods (KYG) is becoming the trend nowadays in the trade finance market. IoT can accelerate the monitoring of a good's condition as well as the temperature of the container used for shipping sensitive pharmaceutical goods. Alerts can be triggered if there is a chance of spoilage during the shipment process.**

**The usage of blockchain technology, enhanced with the power of 5G, will serve not only to save companies millions of dollars in operating costs but also potential legal fees arising out of disputes.**

## 4. Smart automation and cognitive RPA

With smart automation and cognitive robotics process automation (RPA), many leading trade finance practitioners see a lot of promise and progress in the technical capabilities of digital trading, including the use of optical character recognition and AI. Citibank speculates that these technologies could increase productivity in operationally intensive tasks by as much as 50%. They can also reduce operational and compliance risks that arise from paper-oriented tracking processes and manual interventions, where the risk of validation and compliance check errors are high. By leveraging AI, banks can realize improved accuracy of complex business processes, cost savings and higher customer satisfaction.



## 5. Data analytics

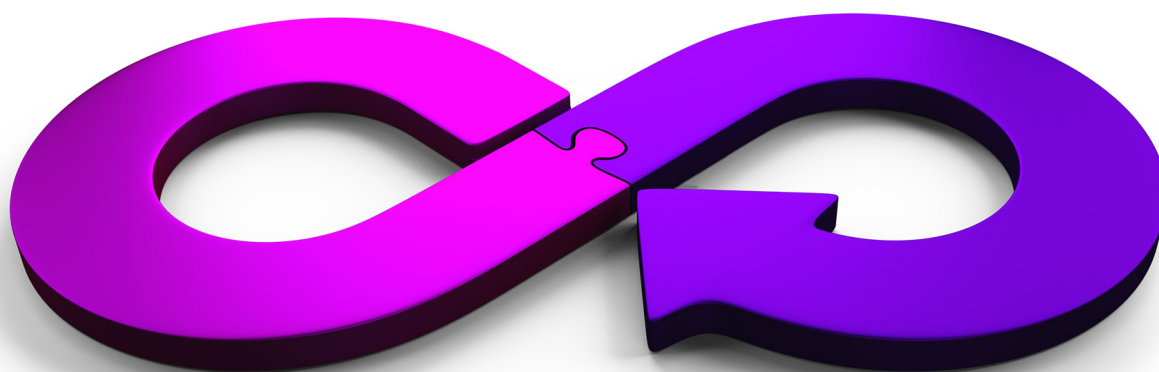
Data analytics can help banks effectively and efficiently monitor trade transactions. Stringent regulatory requirements are on the rise, as many industry specialists believe almost US\$1 trillion of financial crime is funneled through trade channels each year. A trade finance analytics dashboard could offer clients real-time insights and metrics related to charges, transaction failures, syndicated guarantees, account debtors, and more. Also, an integrated trade and payment command center can give users a holistic view of essential metrics.

### Benefits of an analytics dashboard

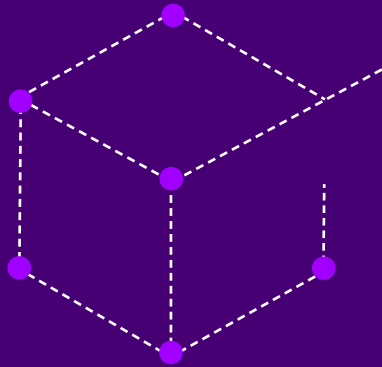
- A risk-based approach by performing in-depth analysis and risk scoring
- More in-depth insight by using adaptive analytics to understand customer activity
- Automation by combining analytic result and bank policy to escalate the highest risk terms for investigation and reducing delays in processing
- Trade surveillance to improve the accuracy and efficiency of transaction monitoring

## 6. Innovation with open APIs

Innovation with open APIs can help accelerate the benefits of digital transformation journeys by acting as plug-and-play interfaces between different systems and the embedded data. These interfaces allow users to access data in numerous systems and then send them to a single destination.







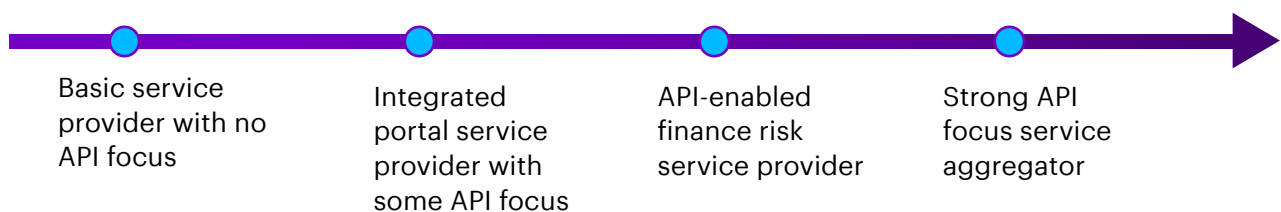
## Business benefits of open API

Innovation with APIs can help accelerate digital transformation and activate the ecosystem journey with lots of business benefits

- 1 **Reduce time to market**  
Accelerate launch of new products, services and offers through faster and easier integration enabled by APIs
- 2 **Cost reduction**  
Apply well-defined APIs to standardize and simplify the customer onboarding process for drastically lower cost and a more attractive value proposition
- 3 **Ease customer access**  
Enable omni-channel access for banking services customers can avail the benefits of more targeted offers for banking products enabled through secure sharing of data
- 4 **New revenue channels**  
Potential to generate up to 20% increase in revenue by embracing new business models like revenue sharing through API monetization
- 5 **Fast-track innovation**  
Build new propositions by exposing your assets and services as APIs to innovators, developers and out-of-the-box thinkers
- 6 **Customer intimacy**  
Increase customer trust through transparency and deliver personalized and connected smart services to customers, over intuitive and compelling digital interfaces.

By fully exploring these opportunities, banks will be able to spark digital innovation, clearing the path toward improved financing, payment execution and risk mitigation around their products and services. Trade finance business performances will depend on the openness of the bank's platform and also the move from a traditional to a collaborative model.

**In the near future, trade finance business performance will be tightly coupled with the openness of the bank's platform.**



# OUR INSIGHTS

One of the major risks to growth in global trade is the sustainability of global supply chains. Increasing regulations and shifts in demand for transactions linked to environmental impacts are forcing banks to provide sustainable solutions. Trade finance is going digital—and fast—so it should take a cue from the payment industry and face head-on the competition from providers, such as WeChat and Amazon.



Using a combination of technology and complementary business innovation, some of the pain points that the industry will need to address include:

Root Cause of Pain	Future State
<b>Unknown Funding</b>	Business innovation through open banking and open account trading can benefit growing companies and SMEs. However, innovation requires a high level of trust and strict regulations because while it may be beneficial for the buyer, it is risky for the seller.
<b>Trust Issues due to Data Transparency</b>	Innovative solutions using data analytics and cognitive RPA can help banks make better investment decisions. It just requires a high degree of data veracity, accuracy and precision—in other words, a great deal of trust. With better analytics, managers can personalize client experiences, especially when it comes to customer onboarding and rate negotiation.

Root Cause of Pain	Future State
<p><b>Heavy Document- and Paper-oriented Processes</b></p>	<p>Banking Payment Obligation (BPO) is a digitization process by the Society for Worldwide Interbank Financial Telecommunications (SWIFT) trade services utility that requires changes in the data structure (ISO20022). It is an automated, low-cost, high-accuracy solution that provides a new value-added service. Since all electronic transmissions must be done through the Trade Service Utility, traders get systems that can communicate specific message types, such as ISO20022-compliant messages, without the risk of data mismatches.</p>
<p><b>Legacy System</b></p>	<p>Platform modernization and open APIs require technology and infrastructure upgrades, particularly cloud-based. Although using APIs to integrate different legacy systems may seem like a daunting task to many banks, they offers value through new insights and services developed with cross-industry data. However, it is important to take stringent security measures and validate all compliance checks according to the terms of the EU's revised Payment Services Directive (PSD2) or the General Data Protection Regulation (GDPR).</p>
<p><b>Product Risk</b></p>	<p>Product risks apply to the condition of goods delivered and include concerns, such as how external factors during shipping could affect a product. Synthetic securitization and a blockchain e-marketplace require distributed ledger technology capabilities to provide proof about the exchange of information and value. With encrypted information and data protection, banks can view transactions and communicate with each other in a secured environment. It can also help avoid fraudulent invoices that might result in defaults during the funding process.</p>
<p><b>Goods Tracking</b></p>	<p>With the advent of IoT, there is an opportunity to continuously monitor the qualitative aspects of a trade, reducing the financial risks for banks and their counterparties, if something should go wrong, and eliminating disputes. IoT can also help risk and credit managers make more informed decisions when transporting goods, such as submitting and approving limits and facilities, especially for smaller businesses or those with less credit history. This data can also inform credit insurance decisions.</p>

# CONCLUSION

Trade finance is an attractive business for banks. With global trade on the rise, banks will play a crucial role in facilitating financing, payment execution and risk mitigation.

The emerging trends and technologies in trade finance offer several promising system solutions—many of which have already been successfully implemented across different countries and regions. What banks need to keep in mind is that their implementation plan must align with their long-term digital strategy. This plan is an opportunity to spark innovation for their products and services and build business value. The level of success will depend on rapidly changing market trends as well as on how agile banks can remain.

Banks also need to innovate their trade finance offerings to include supply chain solutions, apparent adverse economic bank payment obligation products and sophisticated online channels to access traditional and new products. Trade finance still relies heavily on a paper-oriented process, so investing in process efficiency and technology capabilities can help ensure offerings are competitive in terms of both price and quality. Competition from global and local players is becoming increasingly fierce, especially as non-banking institutions gain momentum in capturing market share. To stay ahead of the game and lower their risk, banks need to move fast and leverage the opportunities ahead of them.

**To lead in trade finance, banks must take a holistic view of business priorities and, accordingly, develop a strategy.**

**Organization culture needs to be changed using the following strategies:**



Innovation



Design thinking



Customer centricity



New IT



Workforce reskilling



Agile mindset

**External collaboration is required for better strategy:**



DLT consortium



Fintech partnership



Marketplace integration



App store and developer engagement



Regulatory and industry collaboration

# HOW ACCENTURE CAN HELP

**Accenture is a strategic consulting and technology services provider with subject matter expertise, an understanding of the banking landscape and industry-leading trade finance practices to support with excellence any global bank in trade finance strategy. Accenture helps banks transform their trade finance systems and operations to grow and win in the digital ecosystem.**



## **Our People: Skills and Experiences**

Accenture High-Performance Banking: Based on our industry and project experience, we have developed a repository of target models, including operating and process models that can be used as a starting point for banks.

Accenture has Certified Trade Finance Consultants across geographies who support in project proposals, capability development and thought leadership.

Accenture strategic alliance with TradeIX offers<sup>8</sup> deep skill and industry expertise.



## **Our Assets and Partnership**

Accenture has deep expertise in platform implementation. We partner with global leaders like Finastra and Finacle for trade finance transformation and product implementation.

Accenture's OPEN API offering is based on best practices and experiences in designing, building and executing engagements globally across leading API platforms (e.g., apigee, Mulesoft, Layer7, and more).

Key assets available across different areas

- API Business Catalogue
- Accenture API Sandbox

- API testing assets
- API architecture models

For blockchain, Accenture builds solutions on various blockchain platforms (e.g., Hyperledger, Corda, Ripple/ILP<sup>9</sup>, Digital asset or EEA) and offers them to enterprises as-a-service.



## Our Credentials

- Accenture has helped major banks define the approach for financial crime risk management in trade finance, also delivered multiple end to end transformation projects including process improvement, client journey, governance, etc.
- Accenture helped a European Bank in its platform modernization journey, using Finastra's trade innovation platform.
- Accenture developed Singapore's Networked Trade Platform (NTP).

# CONTACT OUR TEAM



**RAJEEV D. NAIR**

Managing Director – Banking  
Advanced Technology  
Center in India



**MAHENDRA KASULA**

Principal Director, ASEAN  
Corporate Banking and  
Innovation



**KOUSHIK GOSWAMI**

Manager, Financial  
Services – Banking  
Advanced Technology  
Center in India

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Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world’s largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With **505,000** people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at [www.accenture.com](http://www.accenture.com).

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