

Trade Tech – New Age for Trade Finance

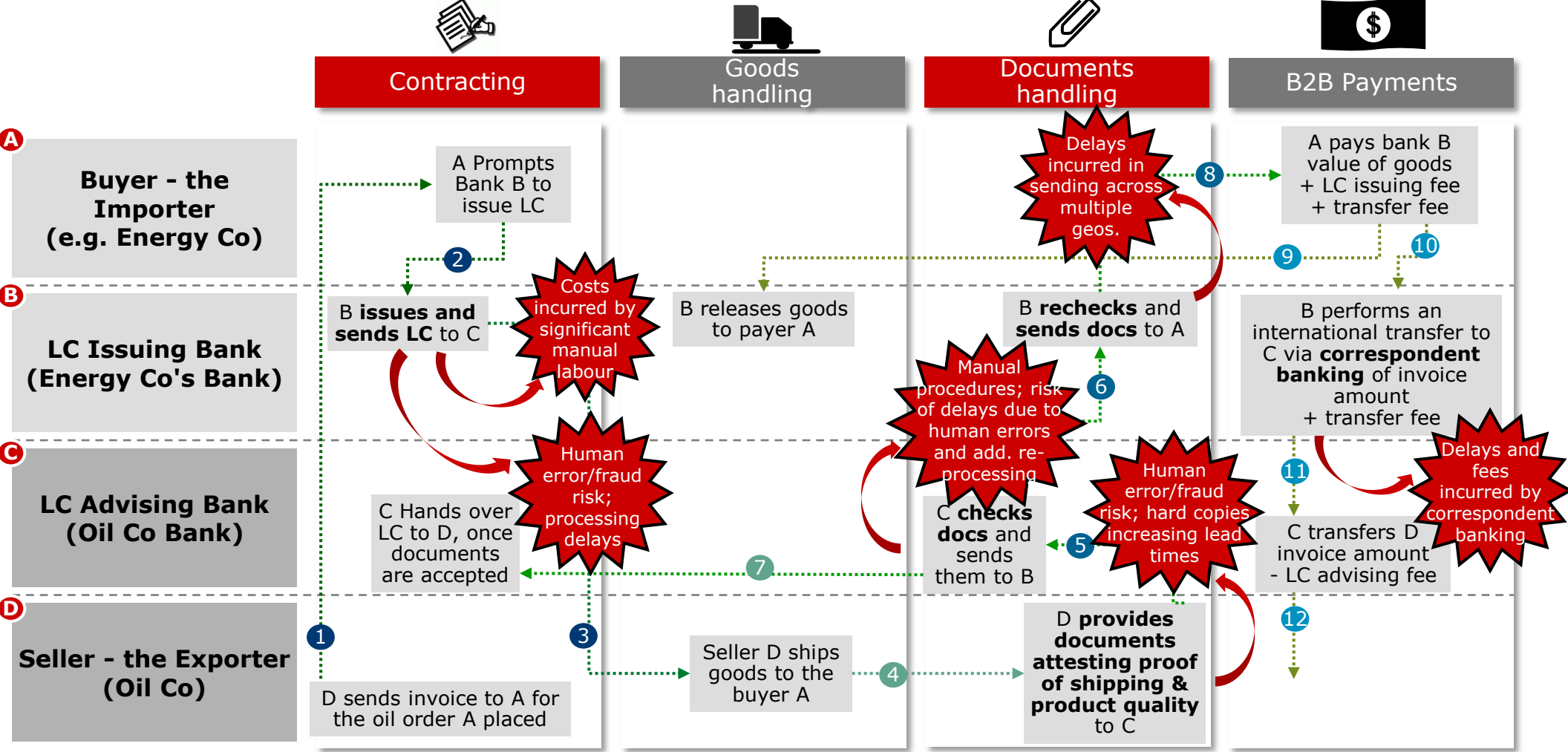
World Economic Forum in collaboration with Bain & Company

- Current trade finance value proposition
- Baseline trade growth
- Impediments to more growth
- Distributed ledger technology (DLT)

Current trade finance value proposition: Trade finance processes have multiple pain points, i.e., human error, delays, verification challenges

EXAMPLE: LETTER OF CREDIT

ILLUSTRATIVE



Country: Importer Exporter

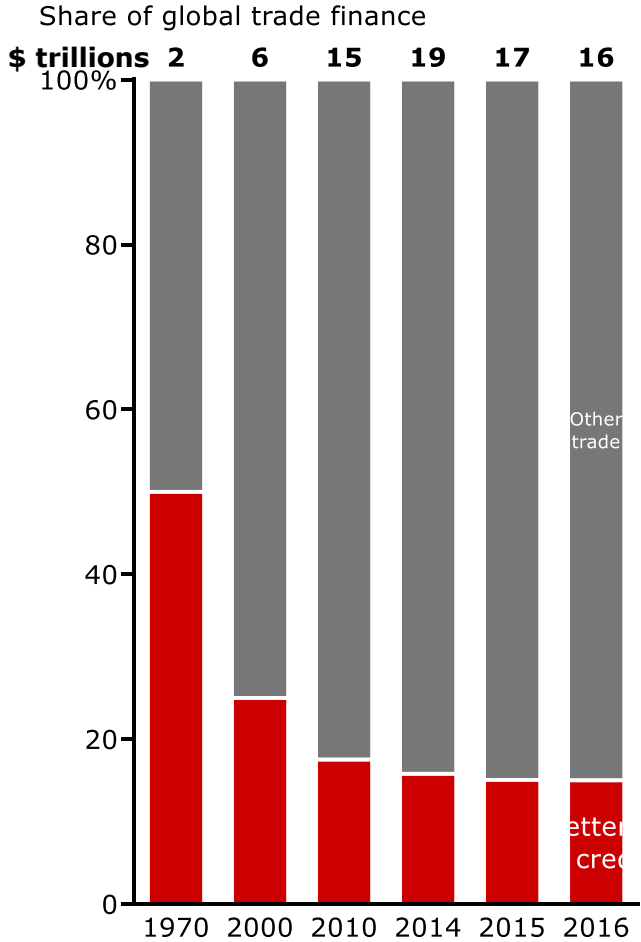
Pain points

Source: Bain FS Practice

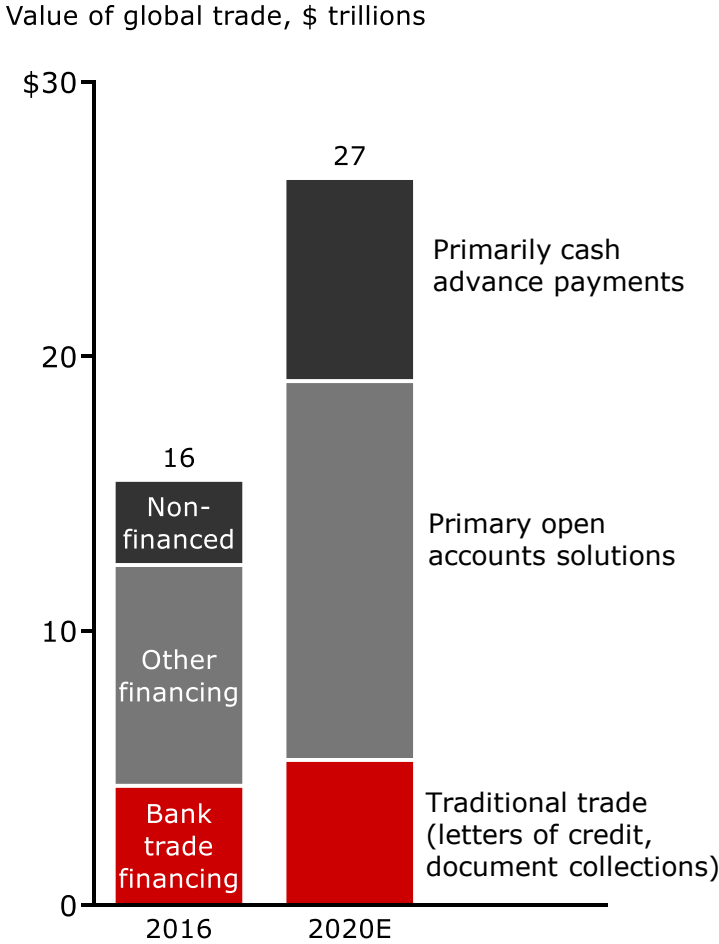
Current trade finance value proposition: Trade finance has been moving to open account solutions



LETTERS OF CREDIT ARE LOSING SHARE



WHILE OPEN ACCOUNT SOLUTIONS SURGE



CAUSES AND CONSEQUENCES

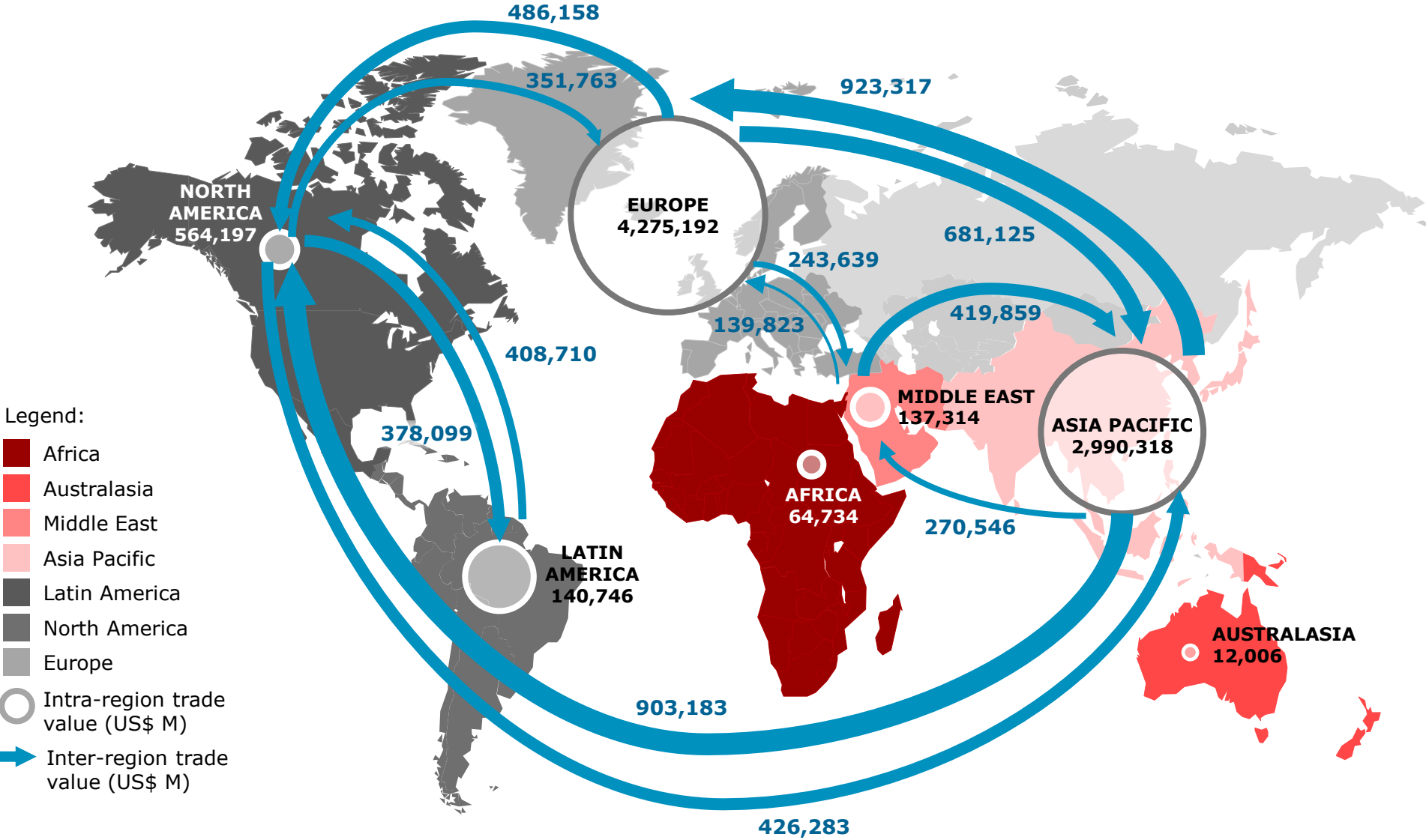
- Cost factor, along with rising trust in supply chains, has prompted some companies to shift from traditional trade to trade facilitation and working capital finance solutions through open account trading
- That increases risk for the exporter, who also needs more financing of working capital
- Letters of credit and guarantees are particularly unattractive for small-ticket transactions and SMEs

Source: World Bank; ICC Global Survey Rethinking Trade and Finance (annual reports 2010-2015); MISYS Financing Future Supply Chains

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Baseline trade growth: Global trade reached US\$16T in 2016 with largest contribution from Europe and Asia

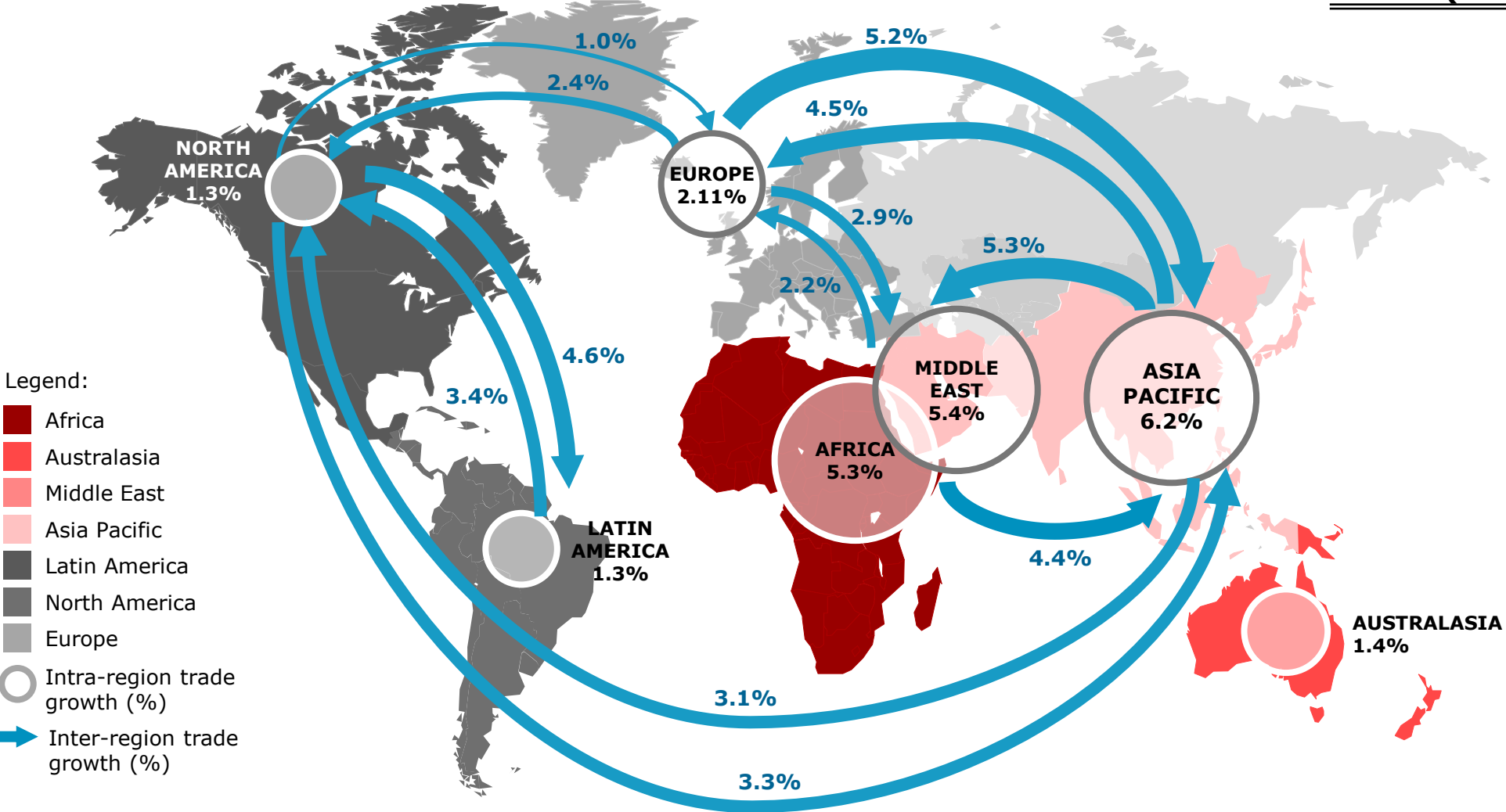
2016



Note: Only trade routes with highest value are shown (based on export merchandise)
 Source: WTO, IMF, World Economic Forum, Euromonitor

Baseline trade growth: APAC region will be the main growth driver for Global Trade

CAGR (16-26)

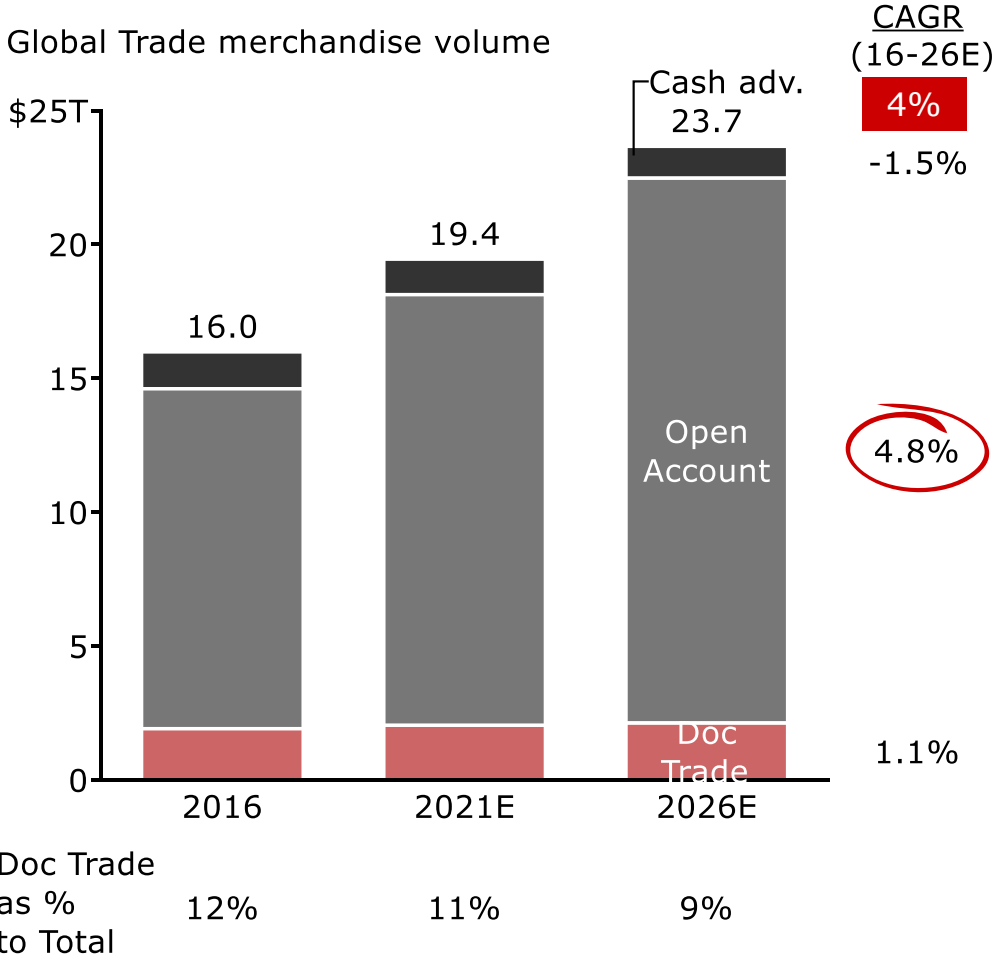


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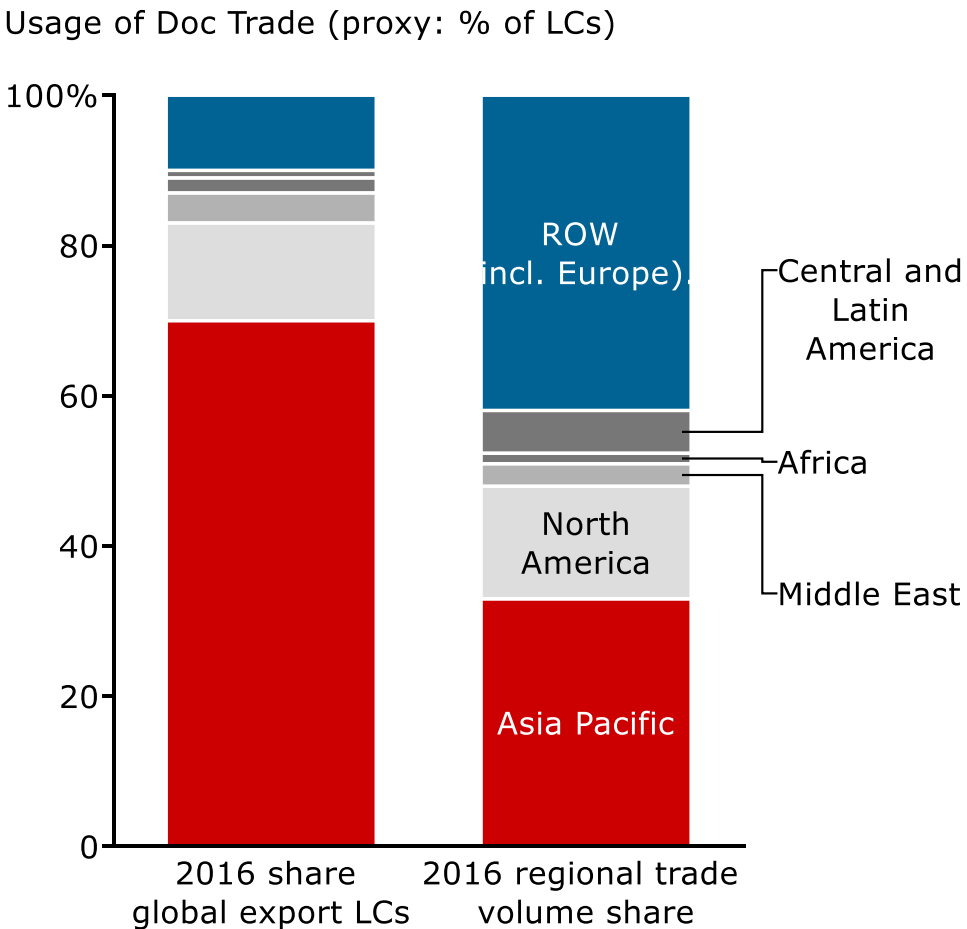
Baseline trade growth: Doc Trade expected to have ~9% market share in 2026

WITHOUT DLT

OPEN ACCOUNT WILL GROW FASTER; DOC TRADE WILL REMAIN SIGNIFICANT



DRIVEN BY ASIAN DEMAND FOR DOC TRADE PRODUCTS



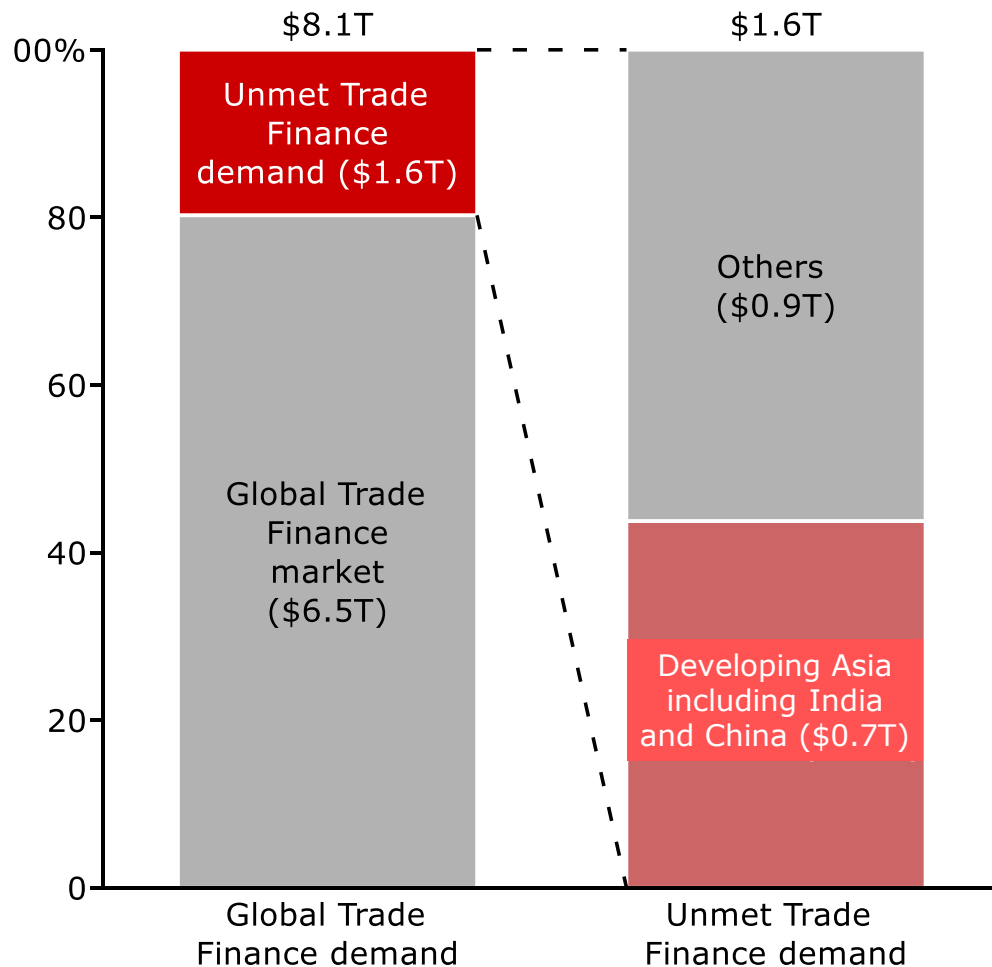
Source: Bain FS Practice Estimates. WTO, ICC, ADB

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Impediments to more growth: \$1.6T unmet trade finance gap currently; Access to financing is a major barrier to Global Trade

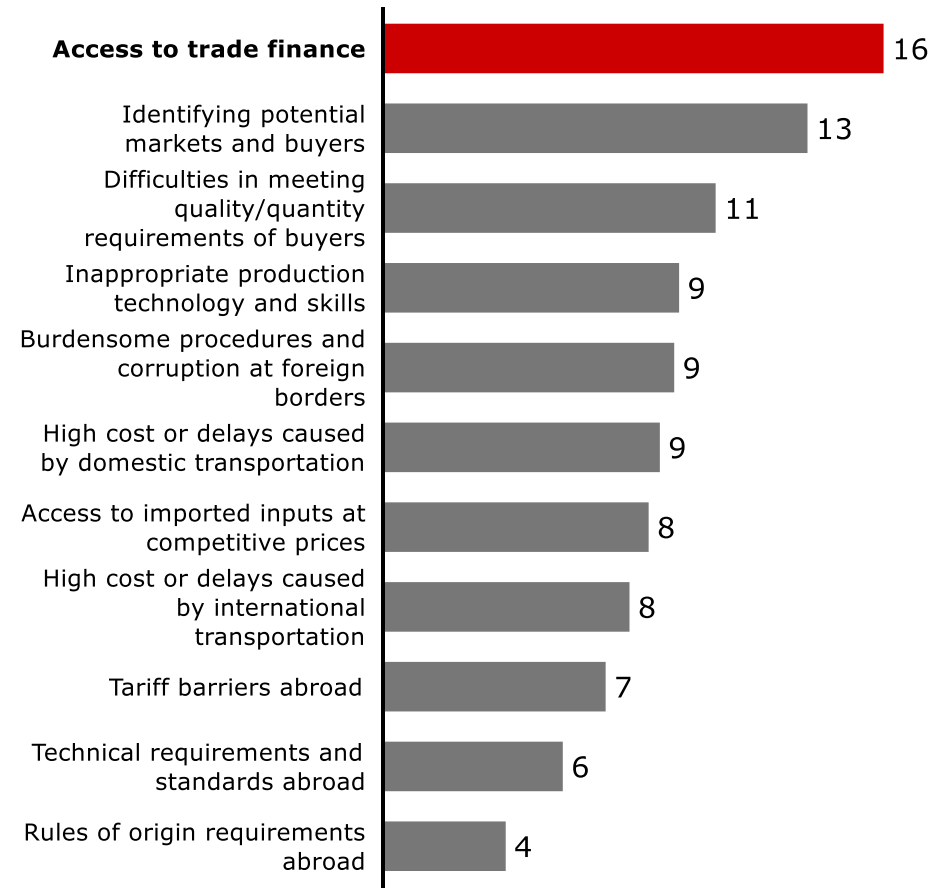
~\$1.6T UNMET TRADE FINANCE DEMAND TODAY; ~40% FROM DEV. ASIA

Global trade finance gap (2016)



ACCESS TO TRADE FINANCE IS A KEY BARRIER TO TRADE TODAY

Barriers to Export 2016 % of responses (Africa Example)

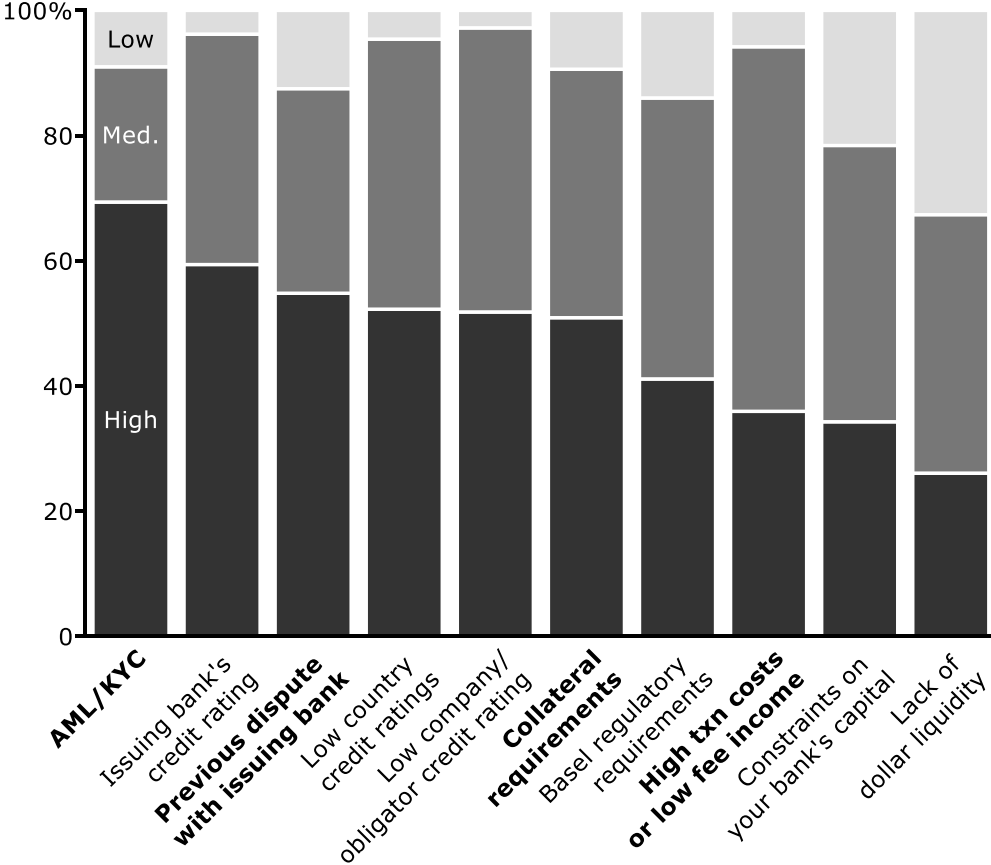


Source: ICC; WTO; ADB

Impediments to more growth: DLT can improve some of the pain points faced today in Doc Trade, especially for SMEs

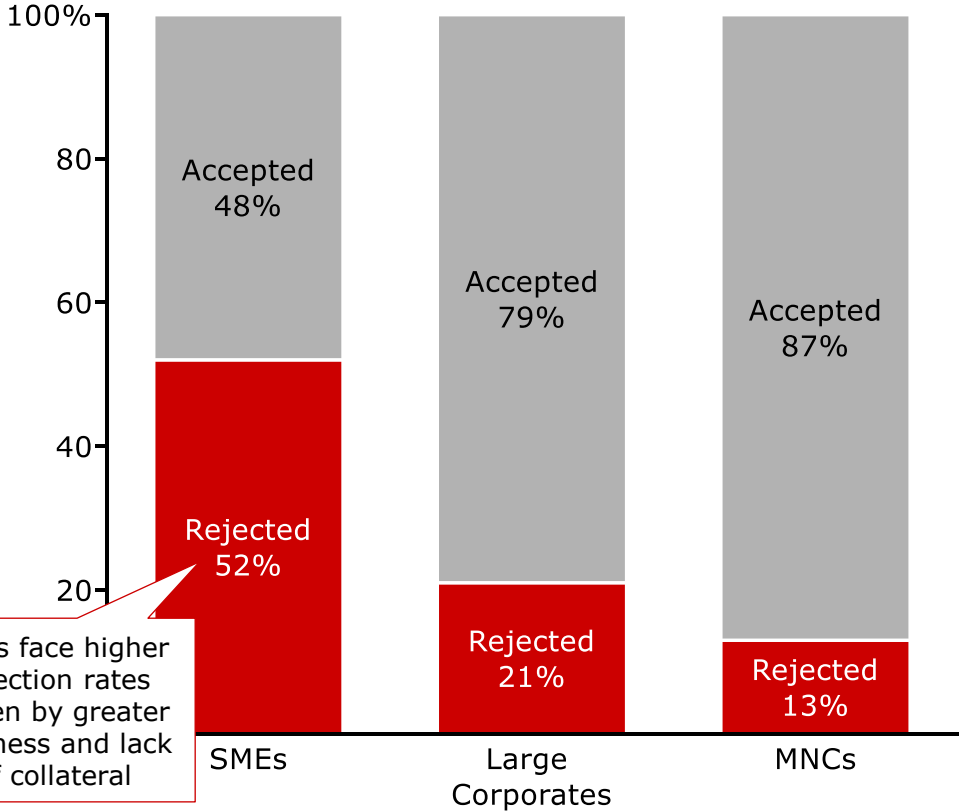
DLT COULD ADDRESS KEY BARRIERS E.G. KYC/AML, COLLATERAL REQ, TXN COSTS

Significance of barriers to TF according to respondent banks



SMEs LIKELY BENEFIT THE MOST FROM ADDRESSING THESE PAIN POINTS

TRADE FINANCE REJECTIONS BY SEGMENT



SMEs face higher rejection rates driven by greater riskiness and lack of collateral

Source: ICC; WTO; ADB

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DLT: New technologies enable the digitalization of trade

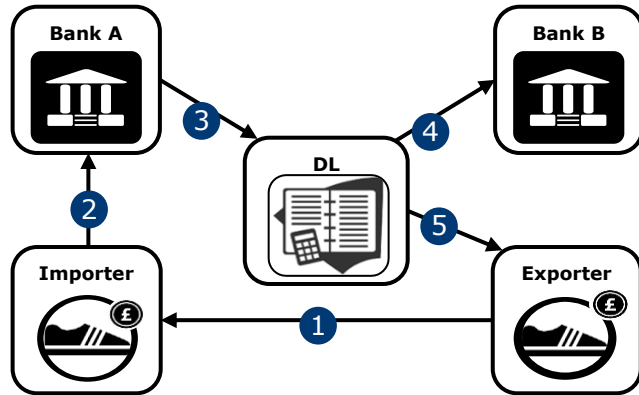
New technologies	Pre-transaction		Transaction processing			After transaction	
	Product selection	Data entry	Workflow management	Document check	Compliance check	Problem resolution	Client mgmt. information system
Optical character recognition (OCR)		Text recognition from trade documents to minimize data entry		Check for completeness of documents based on transaction/product type	Scrape documents for AML keyword hit		
Artificial intelligence (AI)	Intelligent and personalized marketing: Offer new product sales or client promotions based on insights on clients' needs and behaviors	Populate fields with text extracted from documents (integrate OCR with transaction process)		Validate/remediate data with cross-references, machine learning	Contextual filtering: Identify suspicious or unusual activity and block suspicious transactions based on predictive indicators	Intelligent problem resolution: Track individual error rates and flag users in need of remediation	
Advanced analytics (AA)		Enhanced KYC (e.g., web scrape)	Efficient process and productivity monitoring, and predictive analytics to detect patterns				
Robotic process automation (RPA)			Bridge data flow and communication: Integrate data from different systems into single interface				
Internet of things (IoT)			Ease of tracking goods and documents; dynamic pricing and financing triggered by shipment events; automated payments release based on "smart contracts"			Track document locations: Track goods (location, volume, quality)	
Distributed ledger technology (DLT)	Create smart letter of credit as smart contract on distributed ledger - auto notifications	Replace document-ation, checks, data entry, validation, with single digital record	Real time verification and reconciliation ; workflow executed as per smart contract conditions; replace payment and funds transfer with cryptocurrency				

Source: Bain & Company

DLT: Distributed-ledger-based letters of credit could yield cost savings and real-time document checking

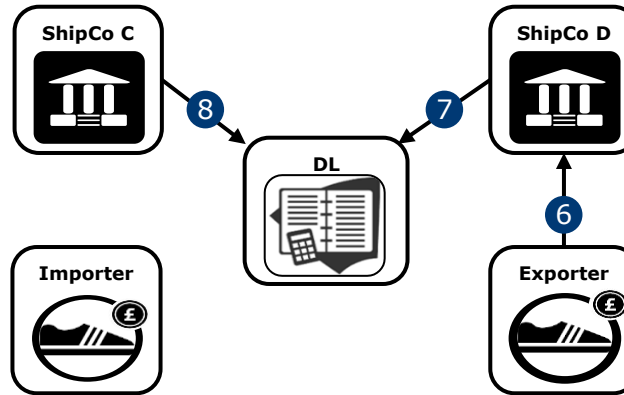
INITIATION

Letter of credit (LC) creation and transmission to all participants on the same day



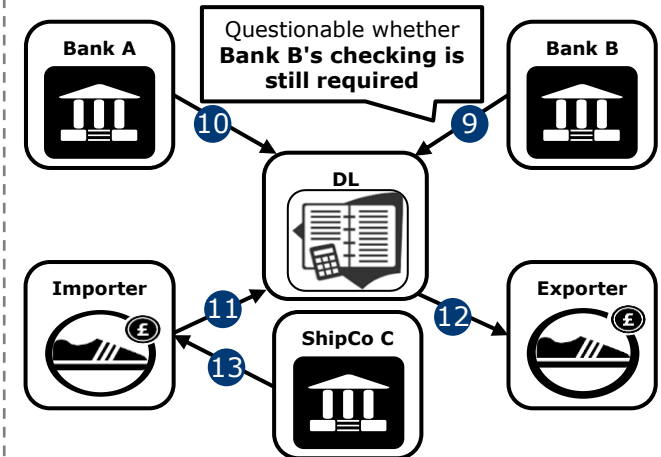
SHIPPING AND PROCESSING

Transmission of shipping proof to all participants in real time



SETTLEMENT

Simultaneous validation of shipping proofs and payment via distributed ledger platform



- 1 Exporter sends invoice and his account details to the importer
- 2 Importer prompts Bank A to issue LC, via an app or online (confirms with his DL password and exporter's account details)
- 3 Bank A checks importer's credit worthiness and creates an LC as a smart contract on the DL, linked to both the importer and exporter via their account details
- 4 Both exporter and Bank B are notified
- 5 when the LC is created on the DL

- 6 Exporter sends goods via ShipCo D, providing his account details
- 7 ShipCo D automatically updates LC on DL with validated proof of shipping, triggering execution of smart contract conditions (e.g., partial payment)
 - ShipCo C triggers DL status update
- 8 when goods arrive

- 9 Bank A and Bank B instantly receive shipping proof update from the DL, and LC's status is automatically updated based on smart contract conditions
- 10 shipping proof update from the DL, and LC's status is automatically updated based on smart contract conditions
- 11 Importer, confirms payment on app or online account via his DL password)
 - Seller gets notified that he has received the payment on his account
 - ShipCo C releases good to Importer, once status on DL states he has fulfilled all obligations (e.g., payments)
- 12 received the payment on his account
- 13 fulfilled all obligations (e.g., payments)

Note: Account details refer to DL user's public key and password refers to DL user's private key

Source: Bain & Company

WORLD
ECONOMIC
FORUM

The logo for the World Economic Forum, featuring the text "WORLD ECONOMIC FORUM" in a grey, sans-serif font. A blue arc is positioned behind the text, starting from the left side of the word "WORLD", curving around the "E" and "C" of "ECONOMIC", and ending at the bottom of the word "FORUM".