

PERSPECTIVES ON BLOCKCHAIN

WCO TI 2017

accenture

ABOUT BLOCKCHAIN

WHAT BLOCKCHAIN AND TESLA HAVE IN COMMON

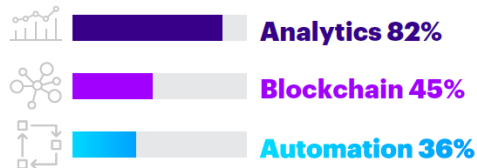
How many times have you heard the term “blockchain” being mentioned during keynotes and roundtables so far?

- Between 0 and 50 times
- Between 50 and 100 times
- > 100 times



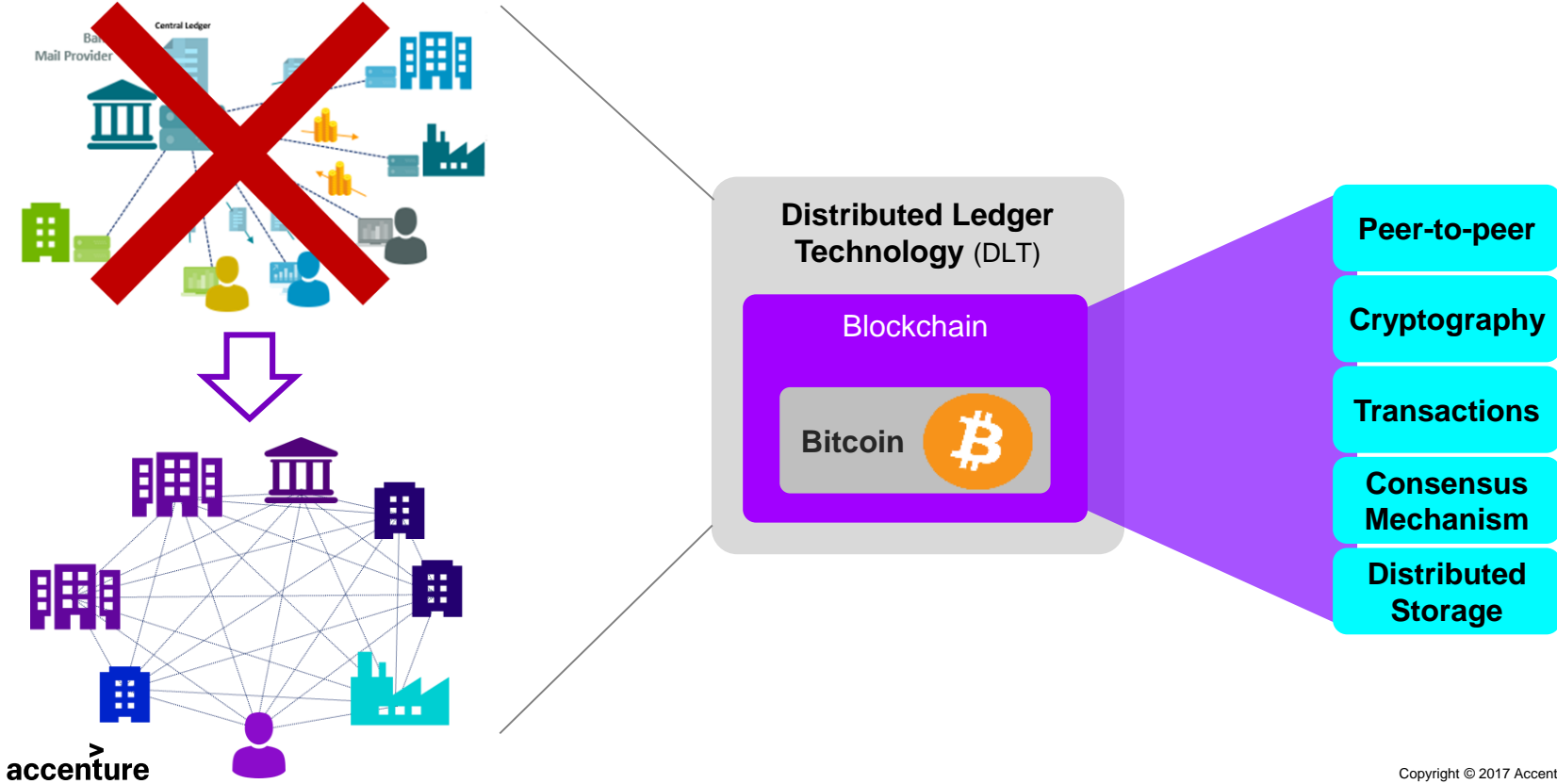
Attendees at the inaugural **International Summit on Borders** (June 2017 – Washington DC) selected the following **emerging technologies** as the top 3 with the greatest potential **to speed trade and collections**:

TOP 3 EMERGING TECHNOLOGIES WITH THE GREATEST POTENTIAL TO SPEED TRADE AND COLLECTIONS:



ABOUT BLOCKCHAIN

BITCOIN ≠ BLOCKCHAIN – BITCOIN IS ONE BLOCKCHAIN EXAMPLE



BURNING PLATFORM

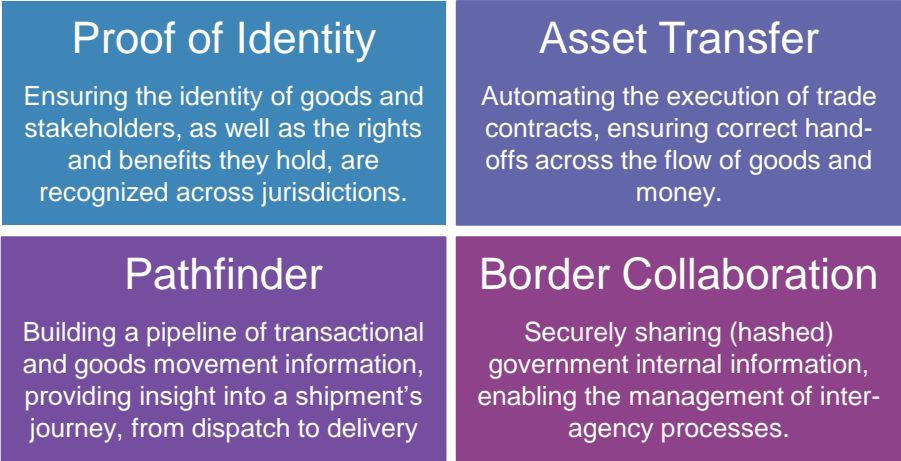
A WORLD WITHOUT TRUST

- X International trade is plagued by inefficiency
- X A key reason for this is the overall complexity of the trade supply chain
- X Government to government initiatives suffer from the same complexities

AT THE CORE OF THIS COMPLEXITY SITS THE INHERENT LACK OF TRUST BETWEEN SUPPLY CHAIN ACTORS ACROSS DIFFERENT COUNTRIES.

A BURNING PLATFORM

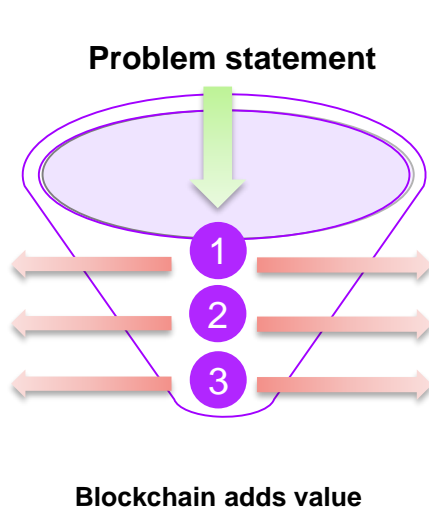
FOUR WAYS TO APPLY BLOCKCHAIN* TECHNOLOGY



BLOCKCHAIN, NOT THE ANSWER TO ALL PROBLEMS

3 THINGS TO CONSIDER

Defining the right use case(s) is critical to the successful implementation of blockchain technology. Rather than taking a **solution-based approach** looking at the platforms that exist and considering where they can apply in your organisation, it is more valuable to take an **issue-based approach** considering where inefficiencies exist in **your** ecosystem. To define the right use case(s), ask yourself these questions*:



1

Question 1: Do multiple stakeholders need to access the same data to solve the problem?

If not: opt for a private database

2

Question 2: Is there mistrust between those stakeholders in using each other's data?

If not: opt for a joint database

3

Question 3: Is there a lack of a trusted 3rd party with a clear mandate across jurisdictions?

If not: 3rd party governed database

*This is a very simplified perspective, used for the purpose of making a specific point. The questions listed here are not exhaustive.

BLOCKCHAIN, NOT THE ANSWER TO ALL PROBLEMS

EXERCISE

BLOCKCHAIN AT THE BORDER

BY USING TRUST AND TRACEABILITY INTO THE TRADE AND TRAVELER ECOSYSTEM, BLOCKCHAIN OFFERS MORE EFFICIENT, SECURE AND COST-EFFECTIVE WAYS TO MANAGE THE COMPLEXITY OF PROCESSES, PROCEDURES AND STAKEHOLDERS.

END USERS ACCEPTING A DELIVERY

A CITIZEN CAN ORDER PRODUCTS FROM OVERSEAS IN A FASTER, SIMPLER WAY, SAFT IN THE KNOWLEDGE THAT ONLY A LEGITIMATE PRODUCT WILL PASS CUSTOMS AND THEIR DIGITAL PAYMENT WILL BE HANDLED SECURELY.

PROOF OF IDENTITY

USE OF BLOCKCHAIN TO BRIDGE THE TRUST GAP BY PROVIDING VERIFIABLE WITH TIME AND IMMUTABLE RECORDS OF IDENTITY AND ACCESS RIGHTS.

SMART CONTRACTS

USE OF BLOCKCHAIN EMBEDDED WITH BUSINESS LOGIC TO AUTOMATE THE EXECUTION OF TRAVEL AND TRADE RELATED AGREEMENTS.

PATHFINDER

USE OF BLOCKCHAIN TO TRACK, TRACE AND MONITOR TRAVELER'S JOURNEY AND MOVEMENT OF TRAVELERS, VESSELS AND CONTAINERS ALONG THE SUPPLY CHAIN OR TRADE JOURNEY.

BORDER COLLABORATION

USE OF BLOCKCHAIN TO FACILITATE INTER-COUNTRY COLLABORATION OF BORDER AGENTS WITHOUT THE RISK OF SENSITIVE INFORMATION BEING SHARED UNSECURELY.

SHIPS COMING INTO THE HARBOR

SHIPS SAVE PROCESSING TIME AT THEIR DESTINATION AND AVOID THE NEED TO CARRY DETAILED PAPERWORK AS VERIFICATION OF THE GOODS ON BOARD IS DONE DIGITALLY AND SECURELY.

ACTORS IN THE SUPPLY CHAIN

USING BLOCKCHAIN, TRADERS CAN SHARE AND ACCESS INFORMATION AHEAD OF GOODS ARRIVING IN ORDER TO SPEED UP PROCESSING AND VERIFICATION AT VARIOUS POINTS ALONG THE SUPPLY CHAIN.

TRACKING GOODS ON A JOURNEY

WITH THE ADDITION OF INTERNET OF THINGS, TRADERS AND CUSTOMS OFFICIALS CAN TRACK THE ENTIRE SUPPLY CHAIN JOURNEY TO MONITOR APPROPRIATE AND SAFE HANDLING (E.G. CORRECT TEMPERATURE IN SHIP, NO UNAPPROVED ACCESS ETC.)

CUSTOMS OFFICIALS IN THE OFFICE

IN PREPARATION FOR AN ARRIVAL OF GOODS, CUSTOMS OFFICIALS CAN DIGITALLY VERIFY RELEVANT SUPPLY CHAIN INFORMATION DETAILS SUCH AS ORIGIN, PHYSICAL CHARACTERISTICS, LICENSING, DESTINATION AND JOURNEY. THE BLOCKCHAIN HELPS QUICKLY PROCESS LEGITIMATE TRADE WHILST IDENTIFYING SUSPICIOUS PRACTICES.

CUSTOMS OFFICIALS AT THE DOCK OR ENTRY POINT

UPON ARRIVAL OF GOODS, CUSTOMS OFFICIALS CAN DIGITALLY VERIFY THE AUTHENTICITY OF GOODS AND QUICKLY IDENTIFY SUSPICIOUS TRAFFIC, ILLEGITIMATE TRADE AND FRAUDULENT PRACTICES. SENSITIVE OR SPECIALIST GOODS CAN ALSO BE QUICKLY FLAGGED TO ENSURE CORRECT HANDLING AND APPROPRIATE TRANSPORT.

REFUGEES ARRIVING AT THE BORDER

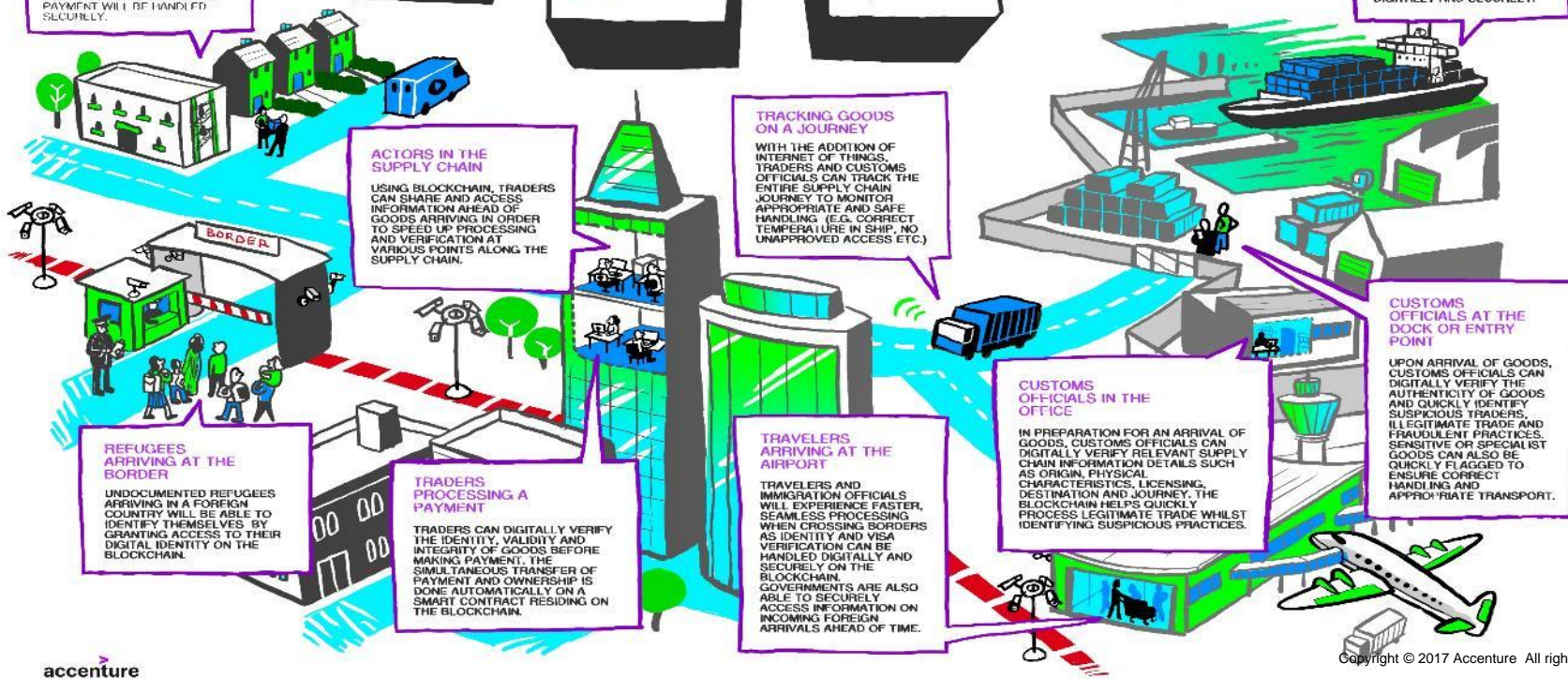
UNDOCUMENTED REFUGEES ARRIVING IN A FOREIGN COUNTRY WILL BE ABLE TO IDENTIFY THEMSELVES BY GRANTING ACCESS TO THEIR DIGITAL IDENTITY ON THE BLOCKCHAIN.

TRADERS PROCESSING A PAYMENT

TRADERS CAN DIGITALLY VERIFY THE IDENTITY, VALIDITY AND INTEGRITY OF GOODS BEFORE MAKING PAYMENT. THE SIMULTANEOUS TRANSFER OF PAYMENT AND OWNERSHIP IS DONE AUTOMATICALLY ON A SMART CONTRACT RESIDING ON THE BLOCKCHAIN.

TRAVELERS ARRIVING AT THE AIRPORT

TRAVELERS AND IMMIGRATION OFFICIALS WILL EXPERIENCE FASTER, SEAMLESS PROCESSING WHEN CROSSING BORDERS AS IDENTITY AND VISA VERIFICATION CAN BE HANDLED DIGITALLY AND SECURELY ON THE BLOCKCHAIN. GOVERNMENTS ARE ALSO ABLE TO SECURELY ACCESS INFORMATION ON INCOMING FOREIGN ARRIVALS AHEAD OF TIME.





**QUESTIONS?
COME SPEAK WITH
US AT BOOTH 28**

THE PRESENTERS **BLOCKCHAIN ENTHUSIASTS**



Alexander de Voet
Manager
Accenture Border Services
alexander.de.voet@accenture.com



Jorien Kerstens
Manager
Accenture Border Services
jorien.kerstens@accenture.com