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?
   a. Between 0 and 50 times
   b. Between 50 and 100 times
   c. > 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:

- Analytics 82%
- Blockchain 45%
- Automation 36%
ABOUT BLOCKCHAIN
BITCOIN ≠ BLOCKCHAIN – BITCOIN IS ONE BLOCKCHAIN EXAMPLE

Peer-to-peer
Cryptography
Transactions
Consensus Mechanism
Distributed Storage
International trade is plagued by inefficiency

A key reason for this is the overall complexity of the trade supply chain

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**

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<tr>
<th><strong>Proof of Identity</strong></th>
<th><strong>Asset Transfer</strong></th>
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<td>Ensuring the identity of goods and stakeholders, as well as the rights and benefits they hold, are recognized across jurisdictions.</td>
<td>Automating the execution of trade contracts, ensuring correct hand-offs across the flow of goods and money.</td>
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<th><strong>Pathfinder</strong></th>
<th><strong>Border Collaboration</strong></th>
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<td>Building a pipeline of transactional and goods movement information, providing insight into a shipment’s journey, from dispatch to delivery</td>
<td>Securely sharing (hashed) government internal information, enabling the management of inter-agency processes.</td>
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*in this context, blockchain refers to distributed ledger 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

IN-UNION TRADE AND EFFICIENCY INTO THE TRADE AND TRAVELER ECOSYSTEM, BLOCKCHAIN OFFERS MORE EFFICIENT, ORGANIZED AND EFFICIENT WAYS TO MANIPULATE THE COMPLEXITY OF PROCESSES, PROCEDURES AND STAKEHOLDERS.

EXD USERS ACCEPTING A DELIVERY
A CUSTOMER CAN ORDER PRODUCTS FROM A TRADER, ACCEPTED AND PAYED IN A BLOCKCHAIN. traceability is provided by tracking the goods through each stage of the supply chain, including delivery, ensuring security.

PROOF OF IDENTITY
MANUFACTURERS EXPRESS THE AUTHENTICITY OF GOODS, INCLUDING THE PRICE, LOCATION AND MANUFACTURER, ALONG WITH THE TRACEABILITY OF GOODS, ENABLING THE CUSTOMER TO CONFIRM THE AUTHENTICITY OF THE GOODS.

SMART CONTRACTS
EUROPEAN CUSTOMERS CAN ACCESS THE CONTRACTS AS PER THE AUTHORITY, ALONG WITH THE TRUCKS, AIRCRAFT AND SHIPS, USING THE BLOCKCHAIN TO MANAGE THE TRANSACTIONS, INCLUDING THE PAYMENT.

PATHFINDER
CUSTOMERS CAN ACCESS THE AUTHORITY AND TRUCKS, AIRCRAFT AND SHIPS, USING THE PATHFINDER, ENABLING THE CUSTOMER TO CONFIRM THE AUTHENTICITY OF THE GOODS.

SHIPS COMING INTO THE HARBOR
SHIPS CAN SAVE VOUCHING TIME AT THEIR DESTINATION AND AVOID THE NEED TO CORRECT DETAILS AND VERIFICATION OF THE GOODS ON BOARD IS DONE DIGITIONALLY AND SECURELY.

TRADING GOODS ON A JOURNEY
WITH THE ADDITION OF THE INTERNET OF THINGS, TRADERS CAN TRACK THE ENTIRE SUPPLY CHAIN JOURNEY TO MATCH THE HANDLING (E.G., CORRECT TEMPERATURES IN SHIPS, UNAPPROVED ACCESS ETC.)

ACTORS IN THE SUPPLY CHAIN
USING BLOCKCHAIN, TRADERS CAN TRUST AND TRUSTED CUSTOMERS, OFFICIALS AND OFFICIALS CAN TRACK THE ENTIRE SUPPLY CHAIN JOURNEY TO MATCH THE HANDLING (E.G., CORRECT TEMPERATURES IN SHIPS, UNAPPROVED ACCESS ETC.)

CUSTOMS OFFICIALS AT THE DOCK OR ENTRY POINT
UPON ARRIVAL OF GOODS, CUSTOMS OFFICIALS CAN DIGITALLY VERIFY THE AUTHENTICITY OF GOODS, INCLUDING THE TRADING TARIFFS AND TRADING PRATICES. ON SPECIFIC GOODS CAN ALSO BE QUICKLY PLACED TO PROVIDE THE CORRECT HANDLING AND APPROPRIATE TRANSPORT.

CUSTOMS OFFICIALS IN THE OFFICE
IN PREPARATION FOR AN ARRIVAL OF GOODS, CUSTOMS OFFICIALS CAN DIGITALLY VERIFY THE AUTHENTICITY OF GOODS, INCLUDING THE TRADING TARIFFS AND TRADING PRATICES. SPECIFIC GOODS CAN ALSO BE QUICKLY PLACED TO PROVIDE THE CORRECT HANDLING AND APPROPRIATE TRANSPORT.

TRAVELERS ARRIVING AT THE AIRPORT
TRAVELERS AND INNOVATION OFFICIALS WILL EXPERIENCE FASTER, SAWLESS PROCESSING WHEN CROSSING BORDERS AS TRAVELER AND VISA INFORMATION IS HANDLED DIGITIONALLY AND SECURELY ON THE BLOCKCHAIN. GOVERNMENTS ARE ALSO ABLE TO ACCESS INFORMATION ON CROSSING BORDER ARRIVALS AHEAD OF TIME.

TRADERS PROCESSING A PAYMENT
TRADERS CAN DIGITALLY VERIFY THE AUTHENTICITY, SAFETY AND INTEGRITY OF GOODS BEFORE MAKING PAYMENTS TO THE MANUFACTURER. INFORMATION OF PAYMENT AND OWNERSHIP IS SUPPORT AUTOMATIALLY ON A SMART CONTRACT PRESENTING ON THE BLOCKCHAIN.

REFUGEES ARRIVING AT THE BORDER
UNDOCUMENTED REFUGEES ARRIVING IN A FOREIGN COUNTRY WILL BE ABLE TO VERIFY THEIR IDENTITY, ACCESS TO THEIR DIGITAL IDENTITY ON THE BLOCKCHAIN.

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QUESTIONS?
COME SPEAK WITH US AT BOOTH 28

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