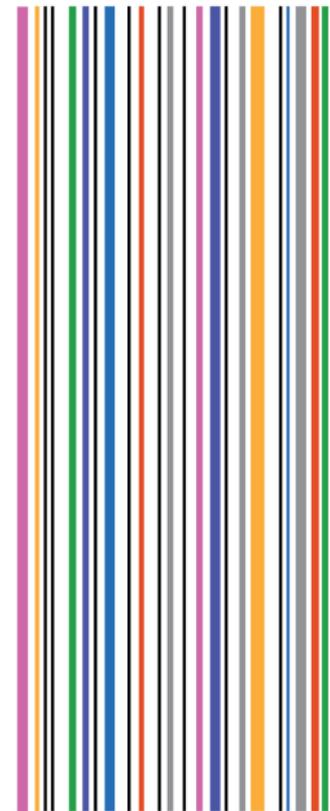# Blockchain Workshop/Conference

26 April 2018

Uses in Supply Chain Transparency and Traceability Issues

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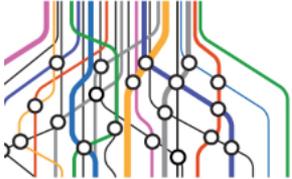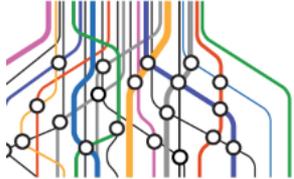
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Agenda

- Definitions

- Impacts of a lack of Transparency & Traceability (T&T)

- Benefits of T&T

- How this moves us forward

- Typical considerations and complications

- Recommendations

Traceability vs Transparency

- Traceability = Provenance, where it was, where it went, how it got there
  - Historical focus
  - Provides for accountability of supply
  - Aggregation of information can identify fraud

- Transparency = Where is it now, how is it being used
  - Real-time focus
  - Provides business insights leading to better decision-making
  - Access to information creates efficiency

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Impacts of a lack of T&T

- Trade suffers
  - Especially in developing countries

- Fraud flourishes
  - Few mechanisms to counter it

- Costs expand
  - Establishing and maintaining trust is expensive

- Processes slow down
  - Information flows are inefficient
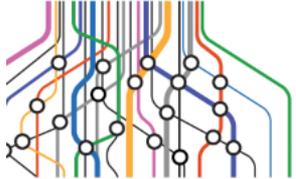
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Benefits of T&T

WTO estimates an increase in global trade of 4.4% (in volume) for 2018. T&T would allow

- Good actors to fully benefit

  - Reduced payoff for bad actors

- Resources to be protected

  - Logging, minerals, etc.

- Business efficiencies

  - Saved time and money, lower losses, improved margins, clearer accountabilities

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Impact on UN SDGs – Some Examples

- SDG1 Child poverty – Easier to identify goods produced using child labour or underpaid workers

- SDG 6 Water & sanitation – Producers who cannot prove sound environmental practices will eventually see a reduction in demand for their products (e.g. leather tanning, pharmaceutical manufacture)

- SDG 12 Responsible production & consumption – Producers who cannot prove that the product came from their production facility will find it harder to move their products on to customers (e.g. Loggers who get 1.5 acres of wood from 1 acre of certified logging rights, meat wholesalers who get 1000lbs of organic meat from a 900lb cow)

Improvements on Current Situation

- Trusting information – Easier to bring companies based in developing countries into the fold. Individual businesses can demonstrate conformity with international standards even when their authorities are not yet able to certify them for compliance

- Consumer requirements – At present many consumers simply don't ask about provenance because they don't expect an accurate answer. These answers will be readily and automatically available by scanning a barcode or QR Code.

- From questions to examinations –
  - Rather than than telephone or email a counterparty to ask for information about a shipment, businesses can examine the blockchain for up-to-date information.
  - Rather than ask a customer how they use your product, receive anonymous input (respecting privacy) from a product's IoT devices and find out how it is being used.

Implementation challenges

- Bad actors – This threatens the status-quo that harbours and rewards bad actors. How to overcome that?

- Blockchain interfaces – Hopefully addressable through the development of accepted standards.

- Data integrity –
  - Garbage in >> Garbage out.
  - Knowing and understanding limitations
  - Moving from hoping something is as is seems to certainty that it is with « increased probability » along the way
  - Insisting on perfection will impede progress

- Costs – The cost of inserting data onto public blockchains has to fall or at least become more predictable.
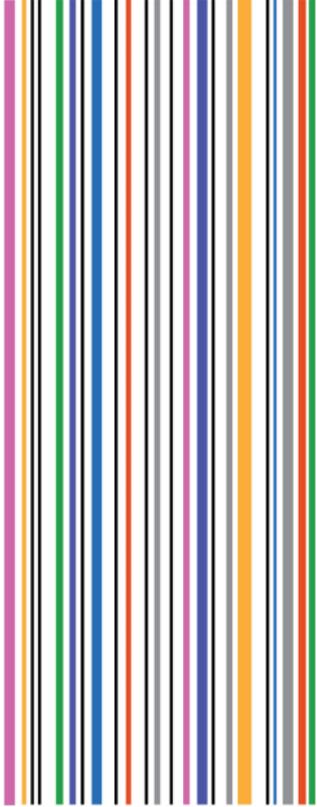
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Recommendations

To: Governments, Business and Authorities

- Return of the Czar/Champion – Organizations make a senior appointment to someone with authority to oversee all blockchain activity in order to help avoid fragmentation and integration issues.

- Inform & engage team members – The best way to reduce implementation friction is to engage teams early and consistently about what they think could and should change.

- Be engaged –
  - Talk to stakeholders and professional bodies about what use cases are getting realn interest.
  - Do not react too swiftly but be ready to embrace the changes that « have legs »

- Costs – This technology will reduce your costs overall but maybe not in the short-term so keep the finance guys fully engaged.

Thank you

Any questions please email
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