Disruptive/frontier technologies for customs

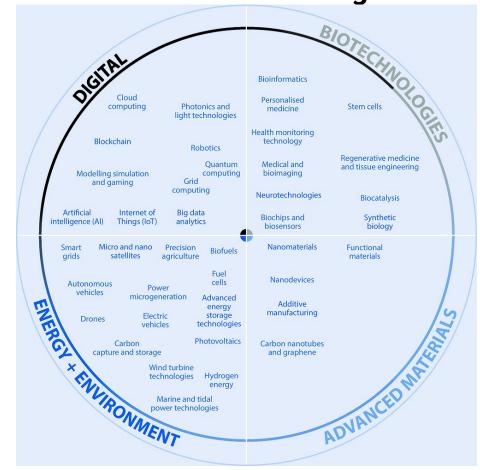
Hope or hype?

Dr Tengfei Wang Economic Affairs Officer United Nations Economic and Social Commission for Asia and the Pacific wangt@un.org



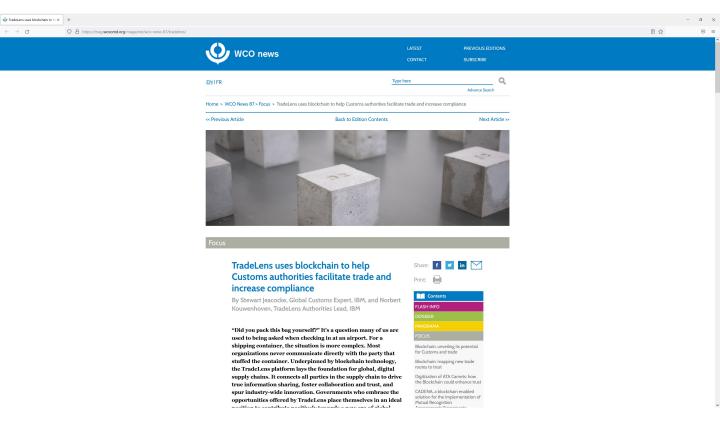


□ Amara's Law: "we tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run." Frontier technologies



Source: OECD

Block chain



Block chain: on the other hand



Computer scientist from Princeton University



My first paper (with the inimitable **Dr Eliza Mik**) to reach 1500 downloads on SSRN (not Eliza's though). This was not my first crypto paper but it was the point at which (after having studied the space for a good number of years) I became confident that much of the hype was just that - hype.

We explain how blockchains cannot really track provenance in the way that the law requires (because blockchain conceptions of security are different to that of legal systems). We also distinguish between the different senses of the word contract used by the community and its legal meaning. As we opine in our introduction:

"Regrettably, much of the excitement over the blockchain's transformative legal prowess stems from a mutual misunderstanding. Many lawyers do not understand the core technical terms in the blockchain narrative and incorrectly assume that they map directly onto similar legal terms. Concurrently, many technologists make false assumptions about how legal rules work and thus imagine legal systems ripe for disruption. As the saying goes, "a little knowledge is a dangerous thing". This paper seeks to unravel the confusion on both sides of the divide by clarifying the "Technicalities" in order to disclose pitfalls in the application of blockchain in relation to "Rights & Records" and "Smart" "Contracts"."

The more I learnt about the blockchain, the less sense it made as a system of tracking ownership (unless whole societies fork libertarian). It took me about 5 years to confidently state that this all just doesn't work (without radically changing our conception of ownership and at the expense of many of the socially disadvantaged in society). And if the blockchain cannot track provenance (as we suggest), then everything built atop that foundation simply collapses.

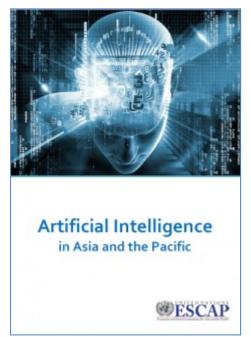
Artificial intelligence (AI)

- ☐ The field of AI research was born at a workshop at Dartmouth College in 1956 (66 years old!)
- ☐ AI winters
- Al promise: Japan has adopted Al models by using Big Data including Customs declaration data. Targeting and selection of importers subject to post-clearance audit (PCA), and for the examination and inspection at during Customs clearance.

AI: strength and weakness

Strength: imagine recognition and analysis

Weakness: conversation in a context





- □ Amara's Law: "we tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run."
- ☐ History teaches us a lesson: trade facilitation is not an IT problem.

Challenges for Single Window and paperless trade

- ☐ IT is often not a challenge.
- ☐ The real challenges include institutional setting, collaboration, business model, continual improvement, business process analysis and reengineering.

- □ Amara's Law: "we tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run."
- ☐ History teaches us a lesson: trade facilitation is not an IT problem.
- ☐ Partnership is the shortcut to pick the low-hanging fruit

- ☐ Amara's Law: "we tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run."
- ☐ History teaches us a lesson: trade facilitation is not an IT problem.
- ☐ Partnership is the shortcut to pick the low-hanging fruit.
- ☐ if you want to go fast go alone if you want to go far go together.

Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific

- The UN treaty entered into force on 20 February 2021
- · ESCAP is the secretariat of the treaty
- · Eight countries have acceded to the treaty.
- More countries will join the treaty soon

