Blockchain and Artificial Intelligence in Our Life

Socio-Political Significance of Recent Technological Developments

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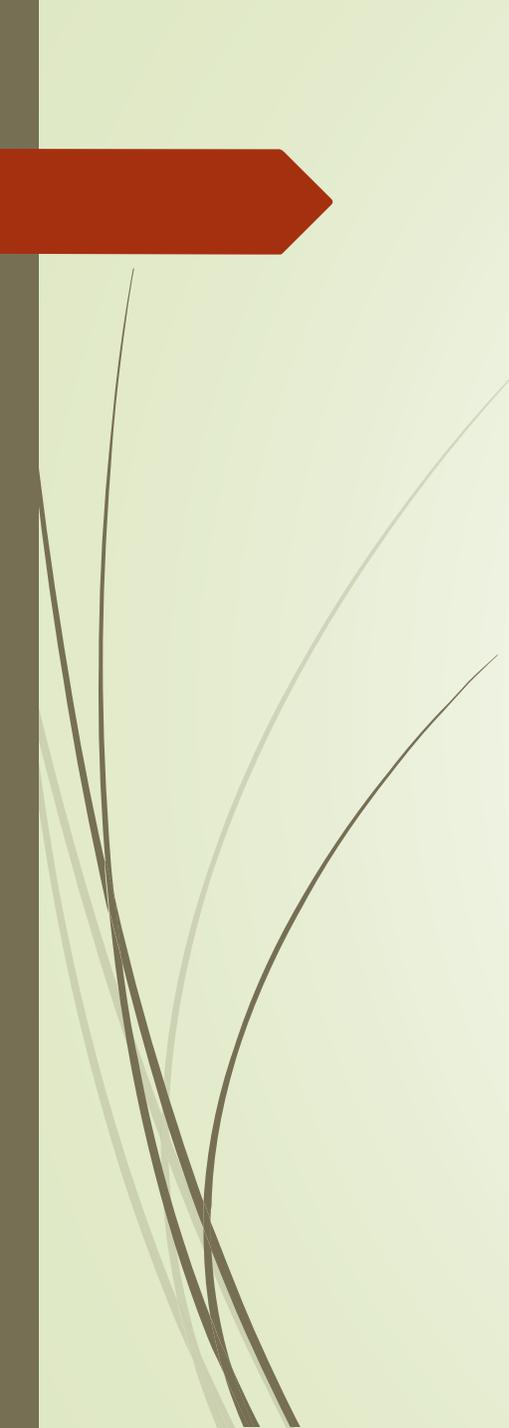
- Nanotechnology,
- the internet of things,
- web 2.0,
- semantic web,
- cloud computing,
- motion-capturing games,
- smartphone apps,
- tablets and touch screens,
- GPS,
- augmented reality,
- driverless cars,
- unmanned drones,
- artificial companions,
- wearable computing devices,
- identity theft,
- digital identity
- online courses,
- social media,
- cyberwar….

4th Revolution

- Copernican (we are not in the centre of universe)
- Darwinian (we are not unique creatures, we are animals)
- Freudian (we do not do everything consciously)
- New technological revolution (we are not the smartest)

History:

- Pre-history
- History
- Hyper history (Being ONLIFE)

BLOCKCHAIN AND HUMANITARIAN AID

- Blockchain is a distributed ledger technology (DLT)
- to provide services rapidly and cheaply through cryptographic security
- without intermediaries,
- offering transparency and accountability.

- No need for a central authority.
- Secure, verifiable and transparent
- Decentralised and serverless
- Peer-to-pair.

Blockchain-based projects

- [Disberse](#) are tracking the distribution of aid;

- [UN World Food Programme](#) are providing blockchain-enabled emergency cash assistance in Jordan) to identity management

   Blockchain against Hunger

- [BanQu](#) identities for refugees and the 'unbanked';

- Save the Children's [humanitarian passport](#);

- [Doctors Link](#)'s medical passport

- 'Blockchain For Good' in business management ([Surrey University](#)) and

- Healthcare records-making and audit ([iRespond](#) and [Google DeepMind Health](#))'

Digital identity
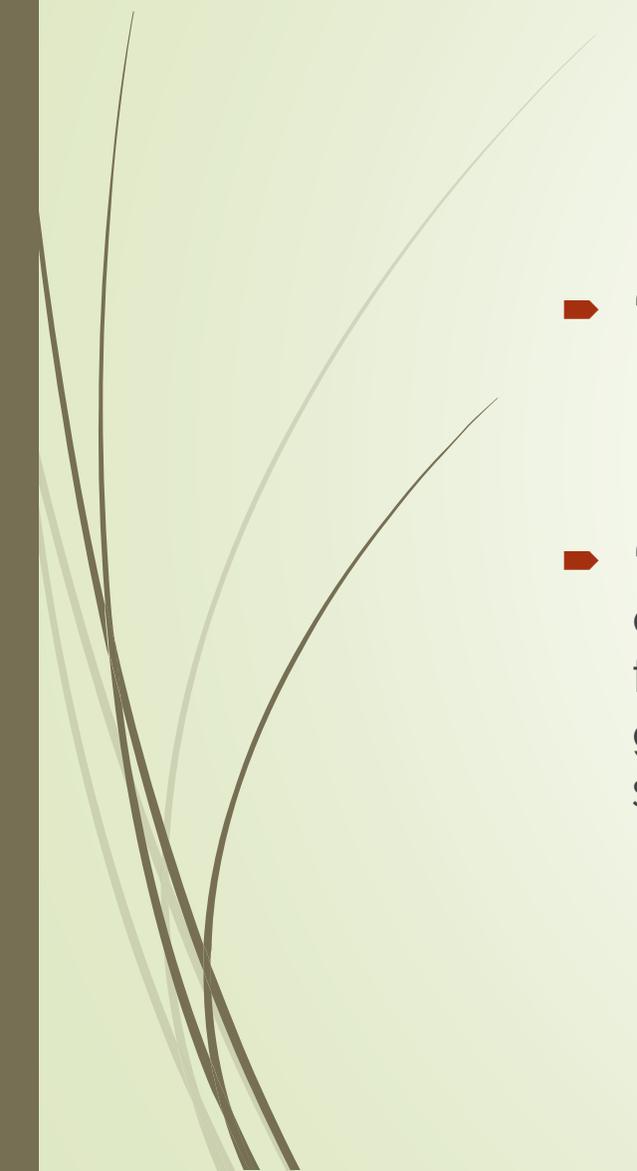
- "Digital identity is 'the greatest poverty killer app we've ever seen'".

  Jim Yong, the World Bank Group President

- "If such initiatives are successful, an additional 500 million new consumers and 40 million new merchants can be brought into the global economy from among the world's 2 billion unbanked people. The firm believes that greater financial inclusion around the world is a path to long-term sustainable economic growth'"

  Mastercard Vice Chairman Walt Macnee,

QUESTIONS

- Do all these mean that people are empowered?

- Is there a risk of abuse?

- What is the real goal of corporations?

ARTIFICIAL INTELLIGENCE

SUPPLY CHAIN MANAGEMENT

- Global supply chain management: a hierarchical structure of production, from corporations to suppliers and workers.

ARTIFICIAL INTELLIGENCE

- is massive undertaking of data collection and analysis,

- the representation of the world in models of ever-increasing resolution and sophistication.

- Teaching machine to think and derive meaning.

- Training machines to use the vast amount of data and provide answers based on models.

DEBATES ON THE ETHICS, POLITICS AND LEGALITY OF AI

- 'How can suppliers and workers/trade unions participate in this process?

- Producing <u>objective judgments</u> and not legitimising existing <u>discrimination</u> or inequalities

- Accountability and transparency of algorithms

- '<u>ETHICS BY DESIGN</u>

- *"There was the voice recognition software that <u>struggled to understand women</u>, the crime prediction algorithm that <u>targeted black neighbourhoods</u> and the online ad platform which <u>was more likely to show men highly paid</u> executive jobs. ou will not have inappropriate bias in the statistical prediction."*

10 PRINCIPLES OF ETHICAL AI RELEASED BY UNI GLOBAL TRADE UNION

- Workers must have access to, and influence over, data collected on them
- Implementing sustainable data processing safeguards
- The data minimalization principle must be applied
- Data processing must be transparent
- Privacy laws and fundamental rights must be respected throughout the company
- Workers must have a full right of explanation when data is used
- Biometric data and personally identifiable information (pii) must be exempt
- Equipment revealing employees' location
- A multi-disciplinary, inter-company data governance body should be established
- All of the above should be implemented in a collective agreement