

Ethics and Digital Transformation

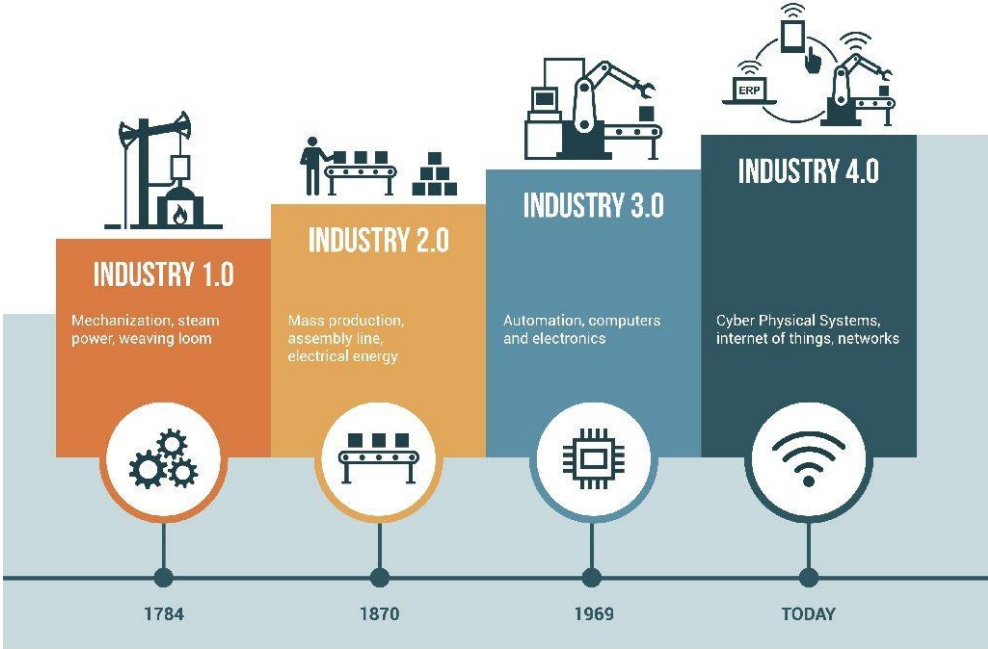
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Agenda

1. Evolution of Industrial Revolutions
2. Trends in Digital Transformation
3. Why Ethics matter?
4. What's next?
5. Questions

Evolution of Industrial Revolutions



Schwab, Klaus (2016)

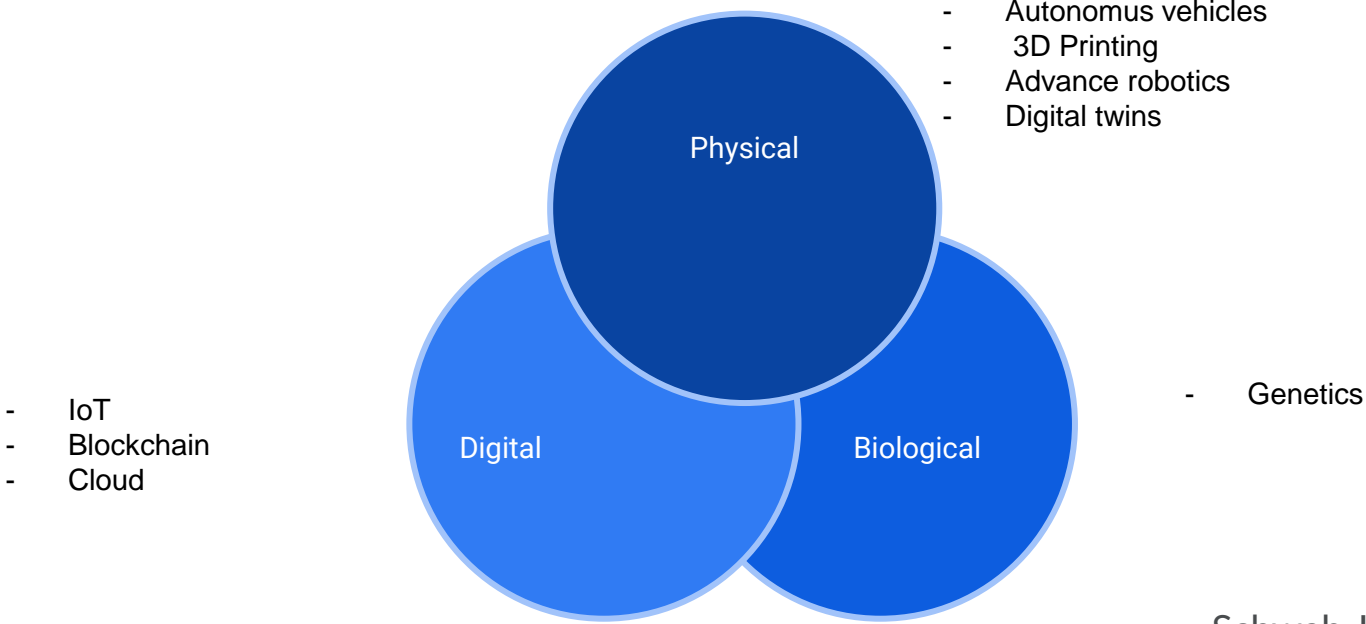
Mega trends

1. IoT
2. Artificial Intelligence
3. Automation
4. Blockchain



Schwab, Klaus (2016)

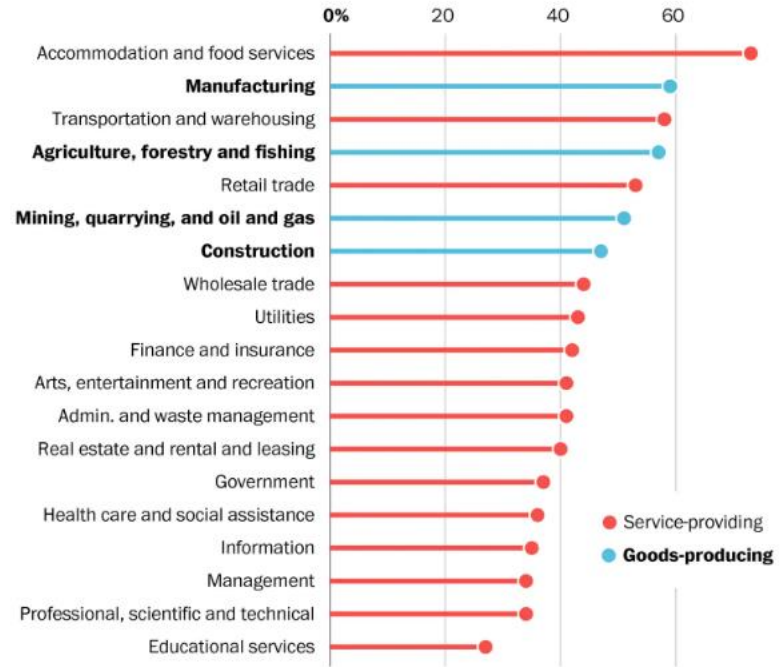
Clusters in the 4th Industrial Revolution



Schwab, Klaus (2016)

Fourth Industrial Revolution

Average potential for automation, by industry



Source: Brookings Institution

THE WASHINGTON POST

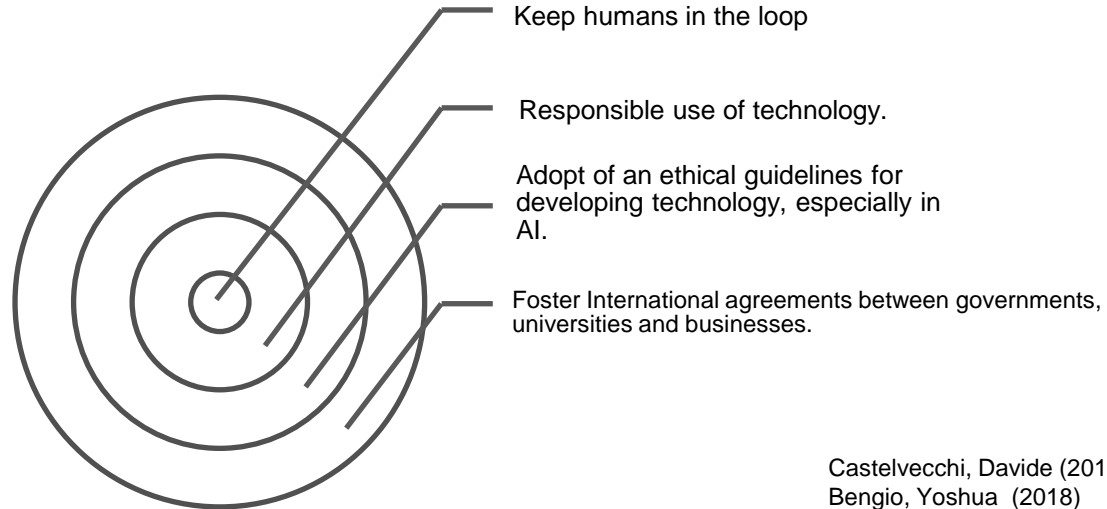
(Andrew Van Dam/The Washington Post)

Challenges of Digital Transformations

1. Disruption to jobs and skills
2. Ethics and identity
3. Agile Governance
4. Inequality
5. Innovation and productivity

¿Why Ethics Matter?

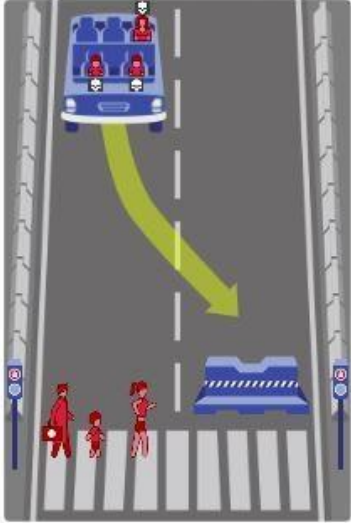
Framework for ethical transformations



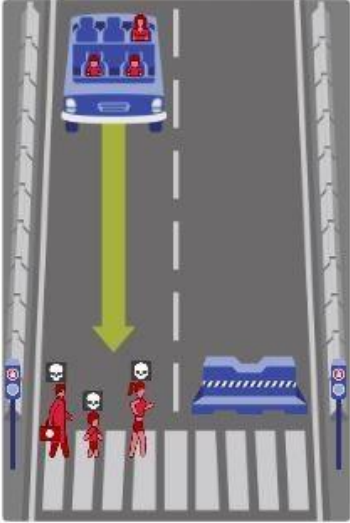
Castelvecchi, Davide (2019)
Bengio, Yoshua (2018)

Moral Machine

What should the self-driving car do?



Show Description



Show Description

Neuralink

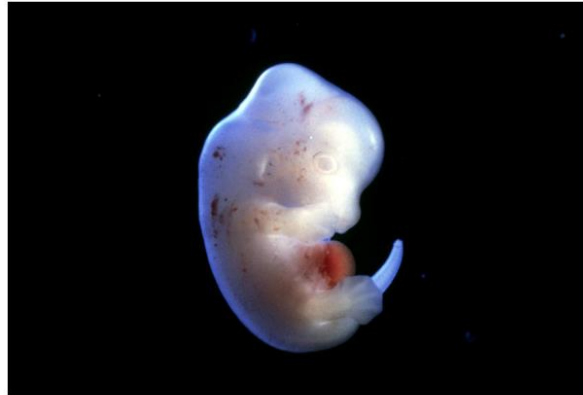


NEWS · 26 JULY 2019

Japan approves first human-animal embryo experiments

The research could eventually lead to new sources of organs for transplant, but ethical and technical hurdles need to be overcome.

David Cyranoski



A Japanese scientist plans to insert human cells into rat embryos (pictured). Credit: Science Pictures Ltd/SPL

SUBJECTS

Stem cells



Killer Robots?

TECHNOLOGY

The New York Times

SUBSCR

Killer Robots Aren't Regulated. Yet.

"Killing in the Age of Algorithms" is a New York Times documentary examining the future of artificial intelligence and warfare.



A.I. Is Making It Easier to Kill (You). Here's How.

<http://www.motoreconomico.com.ar/aldea-global/transhumanismo-elon-musk-propone-neuralink-implante-craneano-con-ia-para-arreglar-lo-que-funciona-mal-en-el-cerebro>

Already 6G?



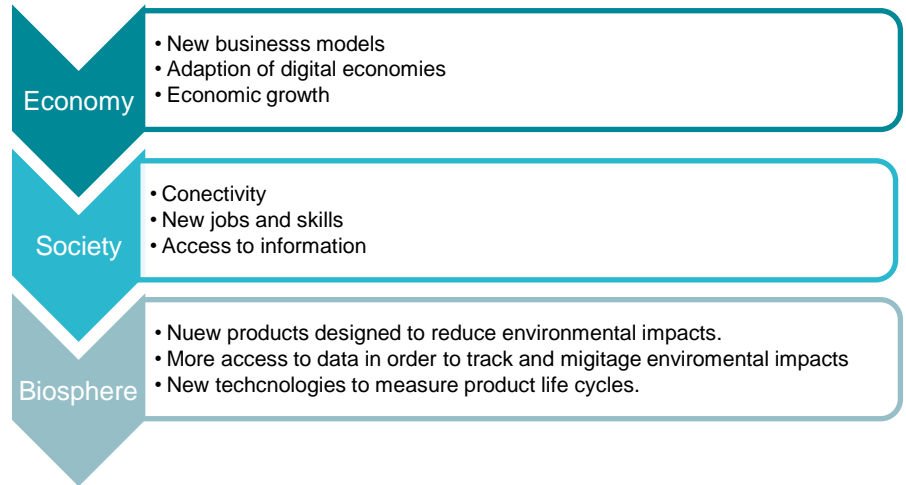
China sends 'world's first 6G' test satellite into orbit

China has successfully launched what has been described as "the world's first 6G satellite" into space to test the technology.

What's Next ?- The 5th Industrial Revolution

- Return of the human touch to the factory - Individual touch
- Humans getting involved in the production process
- Ethics: increasingly drive consumer choice and investing strategy
- Mass production to mass customization; greener
- Manufacturing in the augmented age; cobot, digital twins; wearables.

¿Digital transformation and SDGs?



References

- Castelvechi, Davide (2019) AI pioneer: 'The dangers of abuse are very real'. *Nature* <https://www.nature.com/articles/d41586-019-00505-2>
- McKinsey & Company (2018) Unlocking success in digital transformations: <https://www.mckinsey.com/business-functions/organization/our-insights/unlocking-success-in-digital-transformations>
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- Ford, Martin (2018) Architects of Intelligence.
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