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OLOS
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Course of the industrial revolution

- ✓Fusion of industries
  - ✓ First IT technology was merged with communication -ITC
  - ✓ Added new way of connectivity – WIFI, Bluetooth, LI-FI
  - ✓ Plus recently advancements in sensor technology
  - ✓ Light is coming soon
  - ✓ Other core industries are joining
    - ✓ Automotive
    - ✓ Household
    - ✓ Transport
- ✓Revolution of Information/Power Of Data = Power Of People?
- ✓Offset of business migration
  - ✓ Two market drivers social media and e-commerce

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Industrial revolution

完美世界 PERFECT WORLD

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Attributes of the industrial revolution

- ✓Innovation is and irremeable process
  - ✓Technology is neutral
  - ✓Technology is cross border
- ✓The process is inevitable not optional
- ✓Potential for fast growth in our hyper-connected world
- ✓It increase human capacity as it unleash productivity
- ✓This is for people with courage, creativity and entrepreneurial spirit

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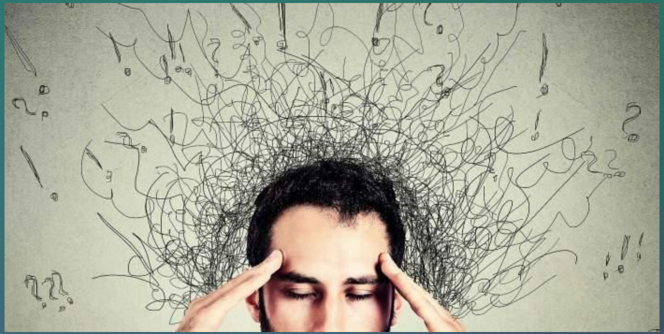
Industrial revolution



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Years of Transmission

- ✓ Transmission can be slowed by various issues,
- ✓ Increasing inequality can lead to political polarization, social fragmentation, and lack of trust in institutions -*World Economic Forum*
- ✓ Technology is neutral but the people not
  - ✓ The technology and its wealth generation can serve the interests of small, powerful groups above the rest
  - ✓ Many people are scary
  - ✓ Future of work looks very different
    - ✓ Technology didn't replace the people it empowered them do their job better
    - ✓ Workers with less education and fewer skills are at a disadvantage
    - ✓ Talent development, lifelong learning will be critical
- ✓ Responsibility of politics

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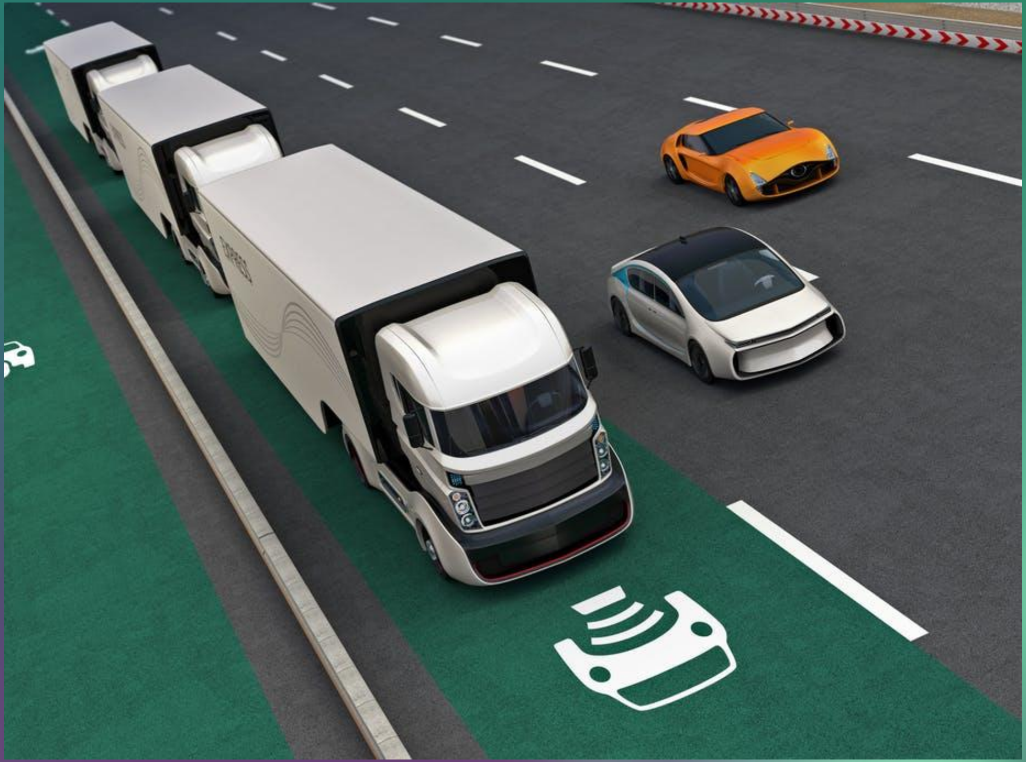
Transportation – cargo with intelligence



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Tansport market environment

- ✓ EU economy continue to grow
- ✓ European governments will rise toll charges as January 2018. Including Germany, Austria, Slovenia, and potentially other CEE countries.
- ✓ Europe is going to face driver shortages.
- ✓ European Commission regulations on drivers' pay and rest breaks
  - ✓ Different rules and regulations from country to country.
- ✓ Higher oil prices of 10-15% from beginning of 2017
- ✓ <u>Capacitiy will be fragile</u>

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Market outlook- impact on the supply chain

- ✓ Cross border transport management will be more challenging
- ✓ Growing e-commerce activity will require more last mile capacity
- ✓ European cross borders FTL capacity will be fragile
- ✓ Multimodal is not yet capable yet to take over missing road capacities
- ✓ Pressure on road transportation prices for 2018.
- ✓ The ratio of spot orders will grow
- ✓ Demand for more visibility – real time
- ✓ Shippers will look for further outsourcing -4PL

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New way of mobility

- ✓ More data generated/collected/processed
  - ✓ Vehicles could communicate
  - ✓ Combined the blockchain and Internet of Things, it will be as easy to get data from sensors
  - ✓ Only 1% of IoT data actually being used today, it is now critical to determine which data is actually valuable and actionable to help drive real results - *Theresa Bui Revon/Cisco*
  - ✓ Shippers regulators, and transportation companies will have real-time data
    - ✓ Real-time data from sensors imbedded on products, trucks and ships
  - ✓ New challenge-it have to be required to figure out who gets access to the DATA, how it can be used and who owns it

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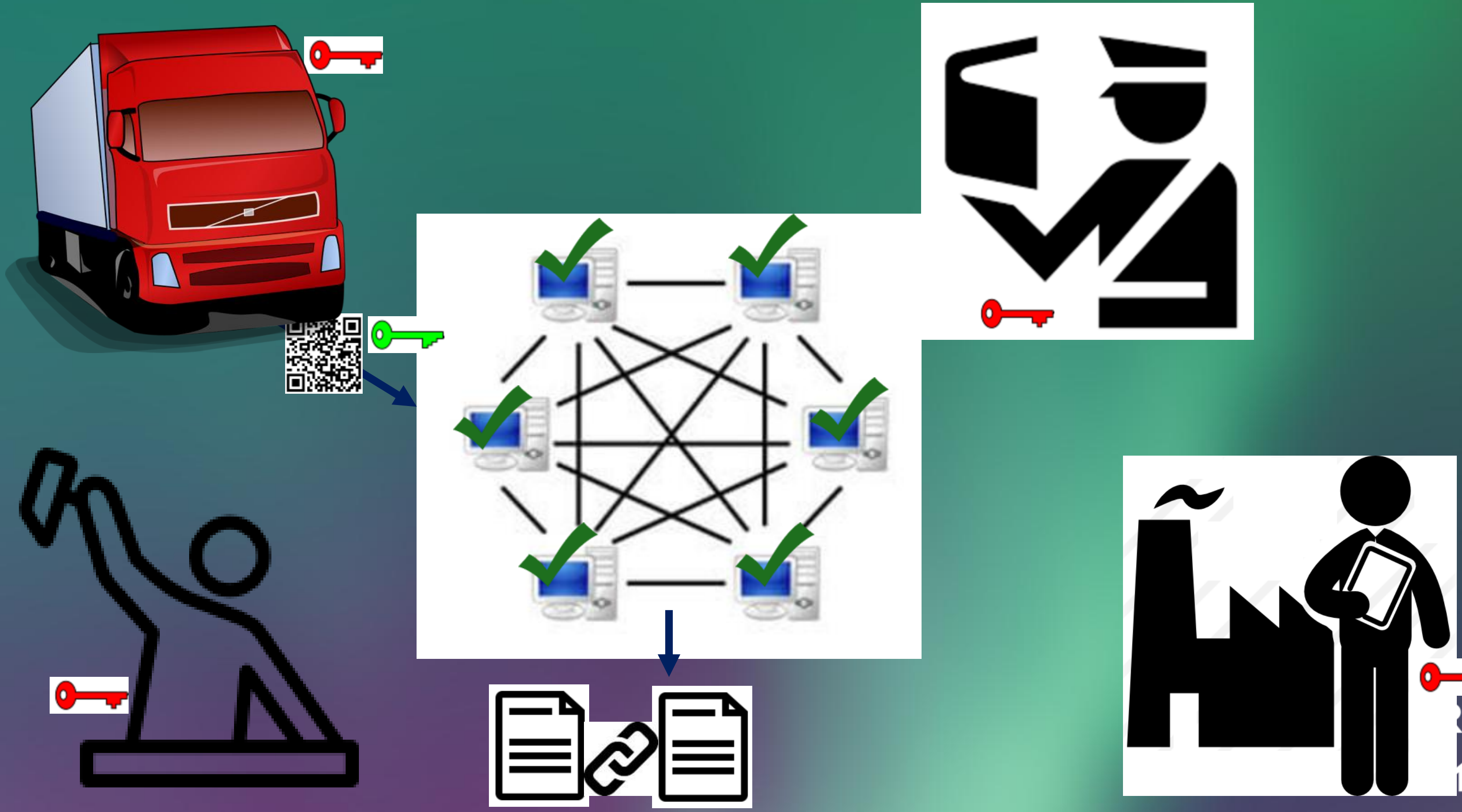
Block chain technology in supply chain



Holdbacks for mobility

- ✓ Cost of the vehicles and the total cost of operation (TCO) is still not clear
  - ✓ Currently fleets owners calculate with an18 month return on investment (ROI) window
- ✓ The biggest beneficiary of cost savings would be better-capitalized firms with the resources to dive into the new technology
- ✓ Vehicle hacking and motor vehicle cybersecurity

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Where is our responsibility?

- ✓ Industry faces long haul to legalize self-driving mobility
- ✓ Issues
  - ✓ If the regulatory environment becomes friendly, the true potential becomes realized and open the opportunity for a reasonable ROI
    - ✓ -„these are vehicles that share the road together, so they should share the same regulatory framework”
  - ✓ Lobbing of old industries –new competition (UBER, ARMB….)
- ✓ EU and its Members – it must be understood that mobility doesn't accept borders (28 transport ministers and their consensus)
  - ✓ Like in the US we have to create of innovation zones that would loosen national rules to allow track platooning and drone tests faster
  - ✓ EU is largest investor in TEN-T but doesn't have any rights in operation or regulation

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Future

- ✓Technology will become a reality, the question is when?
- ✓In 20 to 30 years the industry might be completely and totally different?
  - ✓two-truck platooning concept why only by 2020?
- ✓The claim of the people for more mobility cannot be limited
- ✓Social change=social struggle plus technology
- ✓Businesses and people have to be prepare for the new mobility environment

Thank you!
Q&A

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„we do not expect that we will generate a consensus”
„but we are people with courage, creativity and entrepreneurial spirit”
you can debate with me
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