

Harnessing the 4th IR for Health

Presented by:
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Outline of Presentation

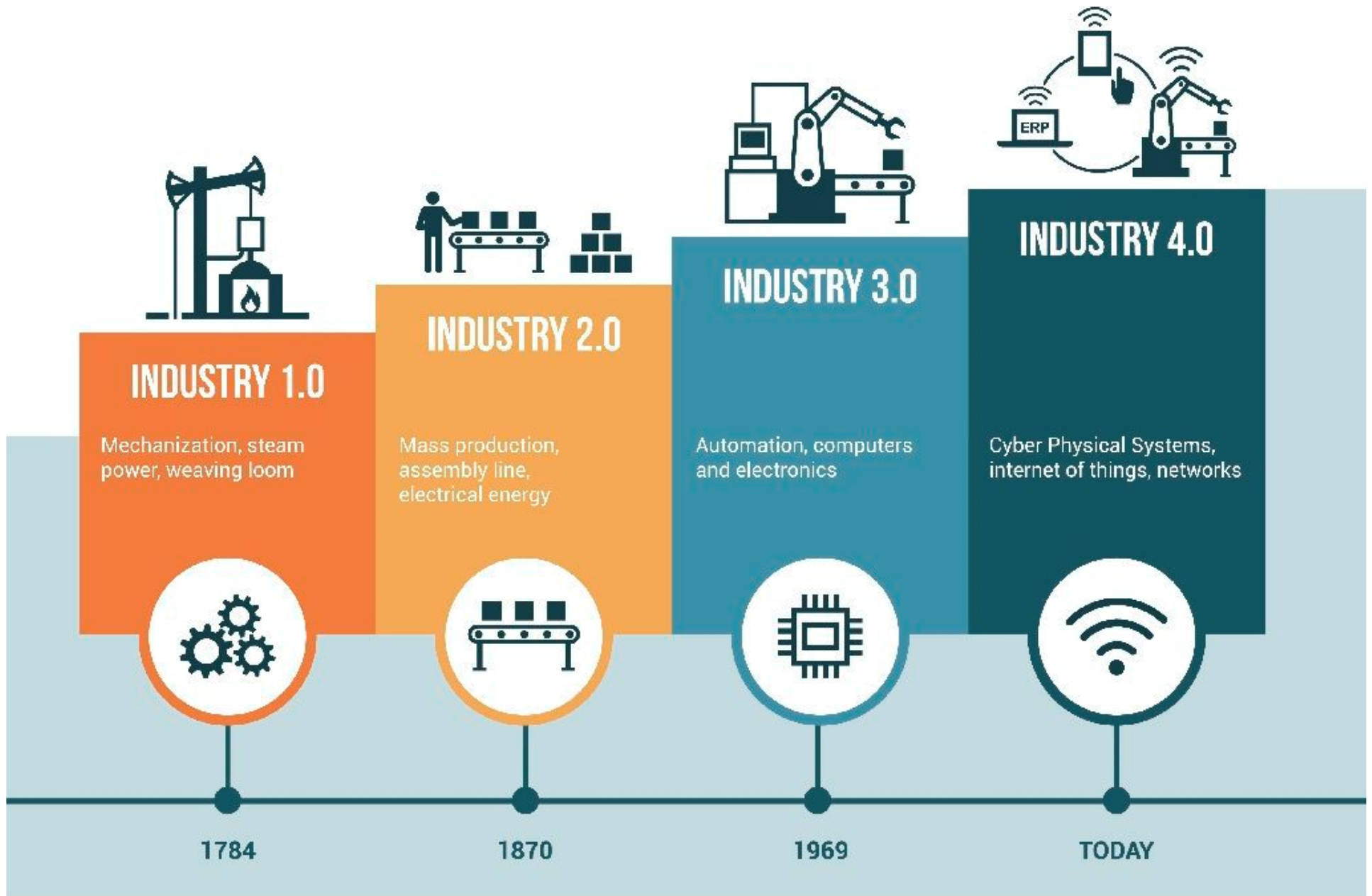
1. What is the 4th Industrial Revolution
2. What does it mean for the Health sector
3. Blockchain in brief and its utility in the health sector

What is the Fourth Industrial Revolution

What is The 4th Industrial Revolution



- WEF and 4th Industrial Revolution
- A history of disruption 1st to 4th IR
- Another major **disruption** is upon us
- 4IR is unique due to its speed, breadth and depth of changes. It is affecting more people faster than ever



What is The 4th Industrial Revolution



- Artificial Intelligence
- Robotics
- 3 D Printing
- Blockchain
- Drone technology
- Internet of Things (IoT)
- Big Data
- Quantum computing
- Bio informatics

What does 4IR mean for the health sector



Google^[x]

What does 4IR mean for the health sector



- Impacting disease management, aging, and the discovery of new medical innovations
- Disease management embedded in our daily lives, e.g. sensors, IoT
- Caring for aging population, with robots and drones
- Big Data, Biotechnology, etc..

What does 4IR mean for health sector in Africa

LOOK: Tuks performs world's first middle ear transplant using 3D-printed bones

PRETORIA NEWS / 13 MARCH 2019, 5:02PM / RUDZANI MATSHILI

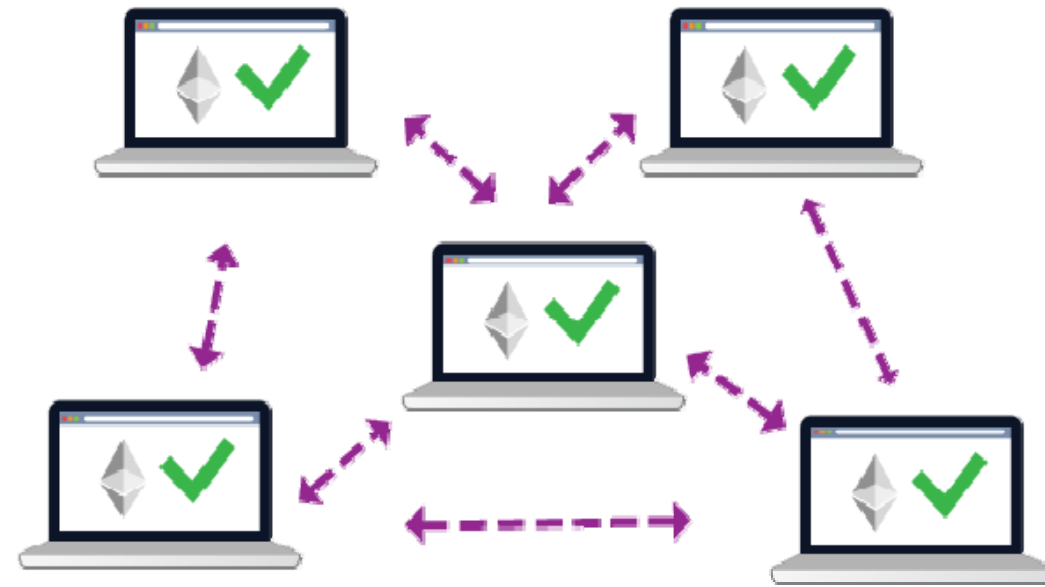


Blockchain in brief, and its utility in health

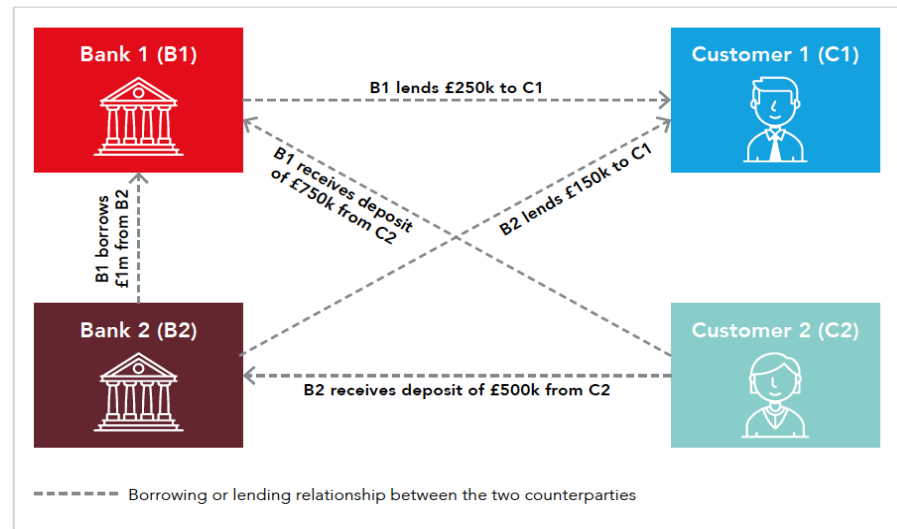
Blockchain and utility in the health sector

What is a blockchain ?

- A blockchain is a distributed ledger
- Information stored in linked “blocks”
- Records are time stamped & shared, P2P
- Each party has exact copy of the record
- Immutable secure record using consensus

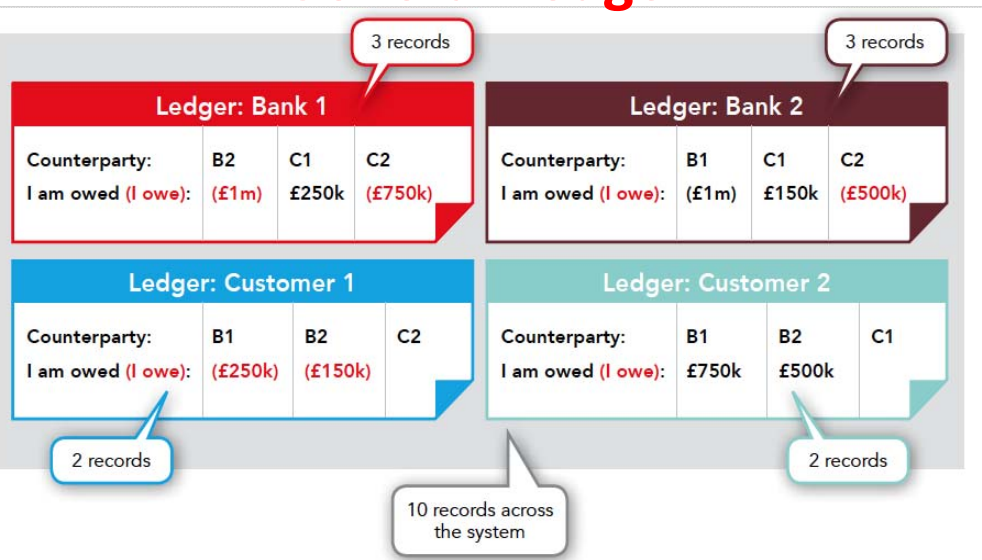


An Example

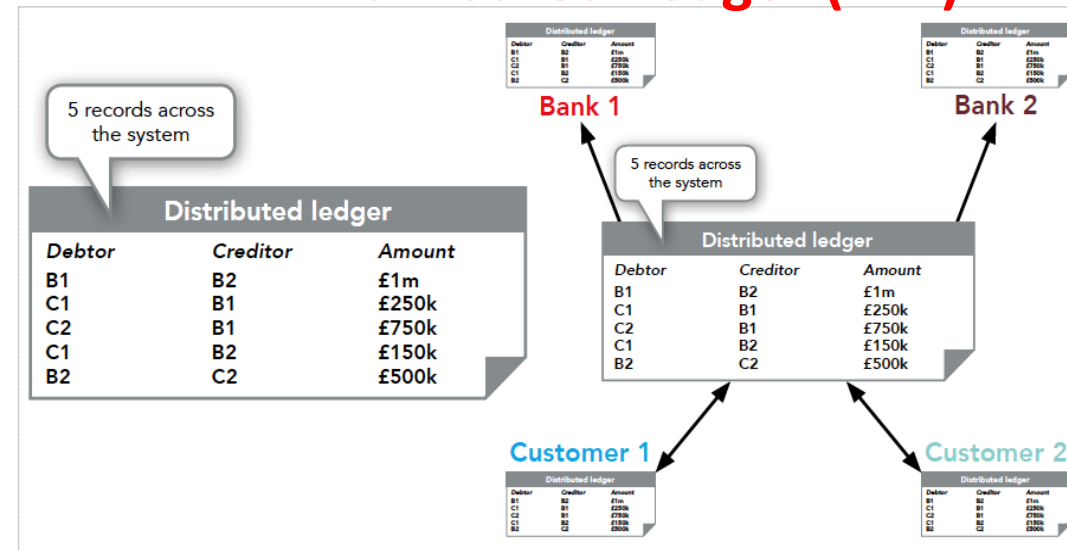


- Information stored in “blocks”
- Blocks cryptographically chained
- Time stamped & shared P2P
- Parties have exact copy of record
- Immutable and secure

General Ledger



Distributed Ledger (DLT)





“Businesses globally are afflicted by business secrets. Blockchain technology wants to remove opaqueness in business and replace it with total transparency.”

H.E. YOWERI KAGUTA MUSEVENI
PRESIDENT OF UGANDA

Blockchain and utility in the health sector

DLT improves the health sector in 3 main areas:

- **Data efficiency:** DLT in health care focuses less on process of treatment and more on how data arising from treatment is processed and stored
- **Security:** Legacy systems make data vulnerable to attack, like NHS 150 countries, Singapore data leaking 15k records, vs. DLT decentralizing
- **Efficiency:** DLT encourages cooperation between networks, improving payment processing, patient tracking, and workflows.

Forbes

Billionaires

Innovation

Leadership

Money

Consum

Why The Next Evolution Of Global Health Care Will Be Blockchain-Based



Chrissa McFarlane Contributor

Crypto & Blockchain

I am passionate about all things digital health.



THANK YOU

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