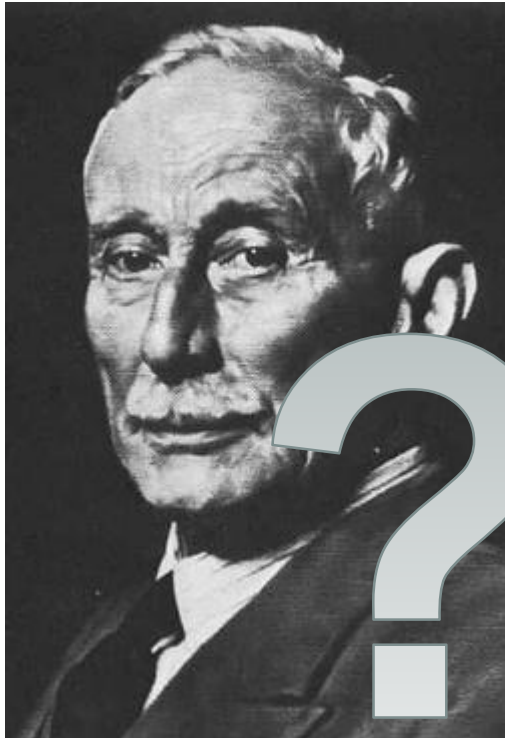


Impact of disruptive technology on NMCA's

How to stay relevant ?





Hubert Cecil Booth
1905



Jean-Claude Biver
1970s and '80s
2010-20



Gwynne Shotwell
2004-2020

What is disruptive technology

- ❑ “Advances that will transform life, business, and the global economy.”
- ❑ “A new technology that unexpectedly displaces an established technology.”
- ❑ “Disruptive technology refers to any enhanced or completely new technology that replaces and disrupts an existing technology, rendering it obsolete. It is designed to succeed similar technology that is already in use.”
- ❑ “A technology that significantly alters the way that businesses operate.”

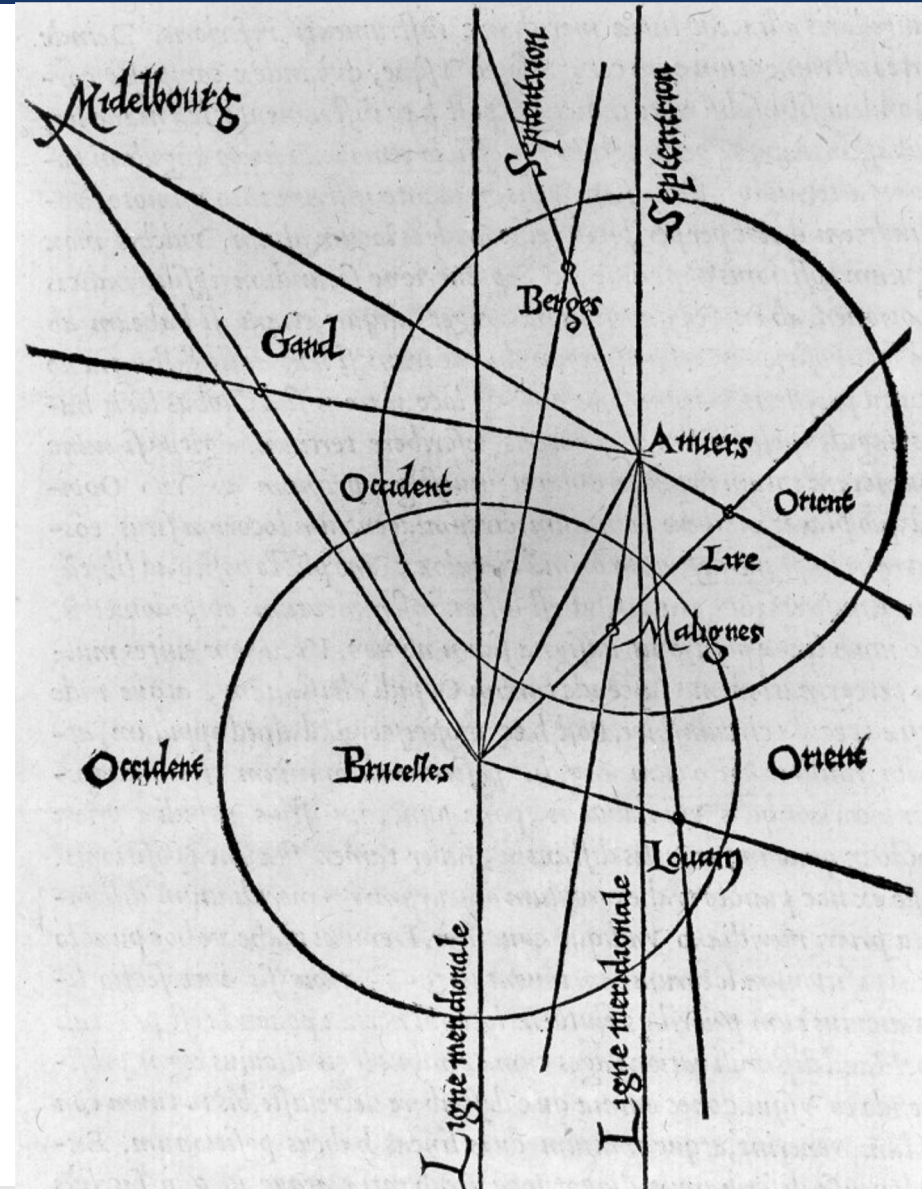
Impact of disruptive technology on NMCA

Content:

- ☐ Disruptive technology policy developments
- ☐ Disruptive technology for NMCA
- ☐ Disruptive innovation
- ☐ Next steps



Gemma Frisius



Policy Disrupters

GPS – disruptive policy decisions:

Clinton decree on 2000 removal of SA from GPS signals, spurred a whole new location industry!



May 1, 2000
US Presidential Decision
Removing SA





DECLARATION on Cooperation on a European Blockchain Partnership signed by 22 countries

DECLARATION on Cooperation on Artificial Intelligence signed by 25 countries



Blockchain Policy and Framework Conditions Working Group - April 2018

High-Level Expert Group on Artificial Intelligence - March 2018

EU Blockchain Observatory and Forum - February 2018



5G European network extended by signing regional agreements on 5G corridors



Commission's Communication on Artificial Intelligence launched – 25April 2018

EU-funded success stories

Blockchain
give
people
more
control on
their data

Data
analytic for
industry

HPC
computing
leading to
more
accurate
forecasting

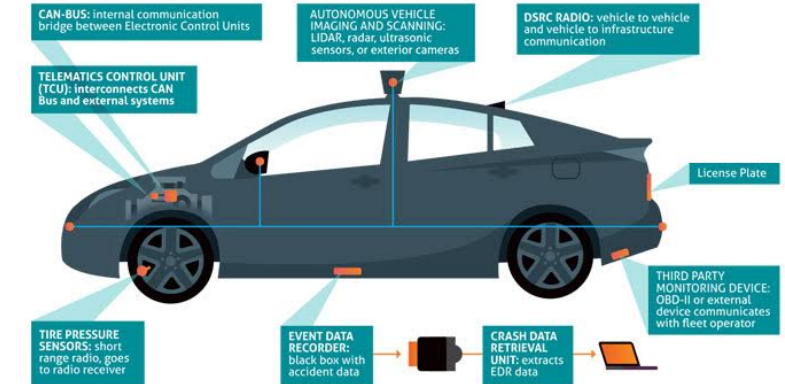
5G next
generation

Tech for
smart and
sustainable
use of hot
water

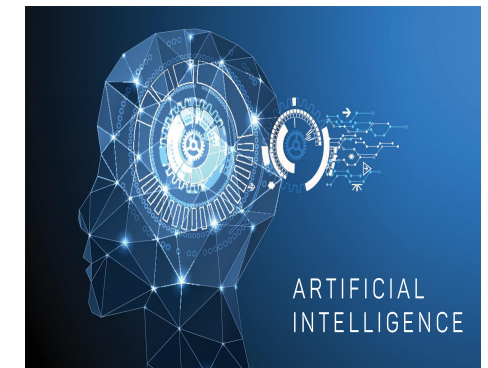
Blockchain
to enable
medical
data to be
stored and
transmitted



DATA and the CONNECTED CAR



BLOCKCHAIN



“The use of blockchain to record title deeds could spell the end of the Land Registry in its current form”

“Blockchain could disintermediate conveyancers”

James Dearsley PropTech Consult

Digital transformation specialists for the property industry, high growth PropTech businesses and investors.

"Lucid, analytical—and scary."

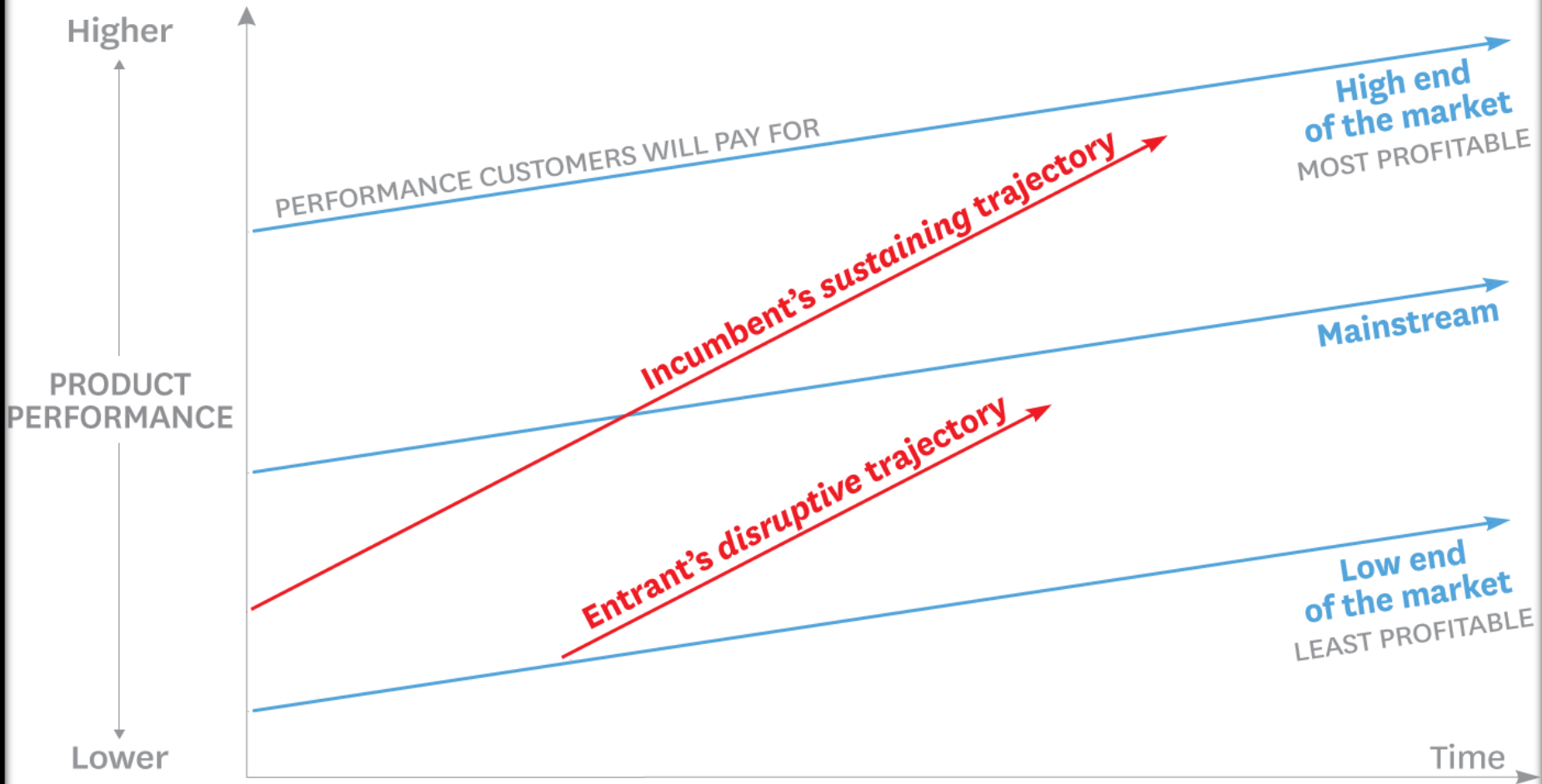
—Dr. Andrew S. Grove
Chairman and CEO, Intel Corporation



Disruptive Innovation

Disruptive product relentlessly improves performance

Clayton



SOURCE CLAYTON M. CHRISTENSEN, MICHAEL RAYNOR, AND RORY MCDONALD
FROM "WHAT IS DISRUPTIVE INNOVATION?" DECEMBER 2015

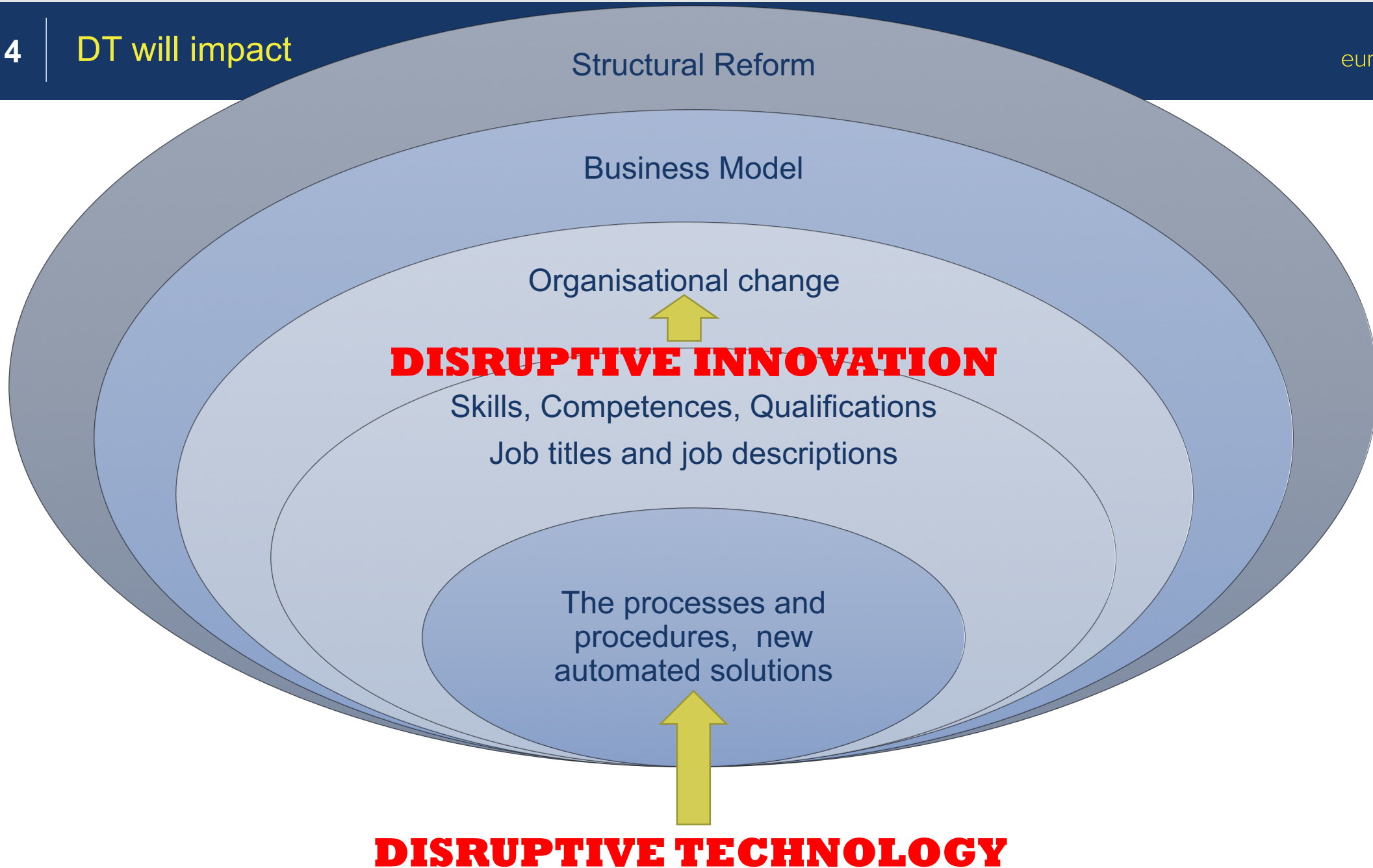
© HBR.ORG

Examples of Disruptive Innovation

- Disruptive innovations usually find their first customers at the bottom of the market: as unproved, often unpolished, products, they cannot command a high price.
- Incumbents are often complacent, slow to recognise the threat that their inferior competitors pose. But as successive refinements improve them to the point that they start to steal customers, they may end up reshaping entire industries:
 - classified ads (Craigslist),
 - long distance calls (Skype),
 - record stores (iTunes), research libraries (Google),
 - local stores (eBay),
 - taxis (Uber) and
 - newspapers (Twitter)
 - OSM - ?

Incumbents' response

- IBM dealt with this dilemma by launching a new business unit to make PCs, while continuing to make mainframe computers.
- Netflix took a more radical move, switching away from its old business model (sending out rental DVDs by post) to a new one (streaming on-demand video to its customers).



Discuss today

to remain relevant in the future.

Contribute to create position

be realistic in the proposal

Participate

in public consultations, forums, expert groups and other increasingly available official online tools for stakeholders inclusion.

e-participating and e-democracy is expanding all over the world and will replace traditional manner.

Develop own pathways

for the introduction of disruptive technology, while also addressing the societal challenges and contribution to the 'public good' within scope of topographic maps, cadaster and land registry data.



Puffing Billy

Hubert Cecil Booth
1905



Jean-Claude Biver
TAG Heuer
1970s and '80s
2010-20



Falcon Heavy

Gwynne Shotwell
2004-220

“Digital Disruption Is a People Problem”

Organisations will effectively navigate the challenges posed by digital disruption if they look at them as organizational and managerial problems, rather than technical ones.