



U.S.-GERMAN STANDARDS PANEL 2018

Smart Agriculture

A brief outlook to the future – How digitization will fundamentally change our world



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@D0R0 (←double zero 😊)

History

Agriculture
as key factor
for cultural
progress and
wealth



This Fourth Industrial Revolution is, however, **fundamentally different**. It is characterized by a range of new technologies that are fusing the physical, digital and biological worlds, **impacting all disciplines, economies and industries**, and even challenging ideas about **what it means to be human**.

Klaus Schwab, Founder and CEO World Economic Forum

Internet of Things

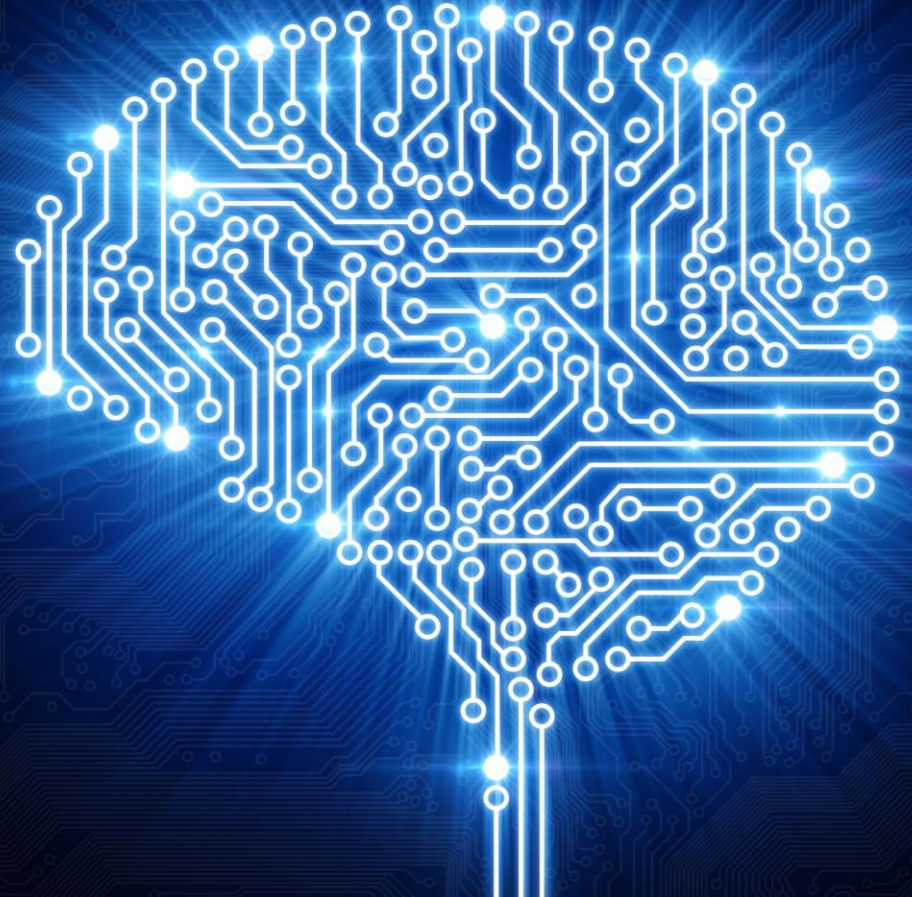
People and things
are inter-
connected,
producing huge
amounts of data



Artificial Intelligence

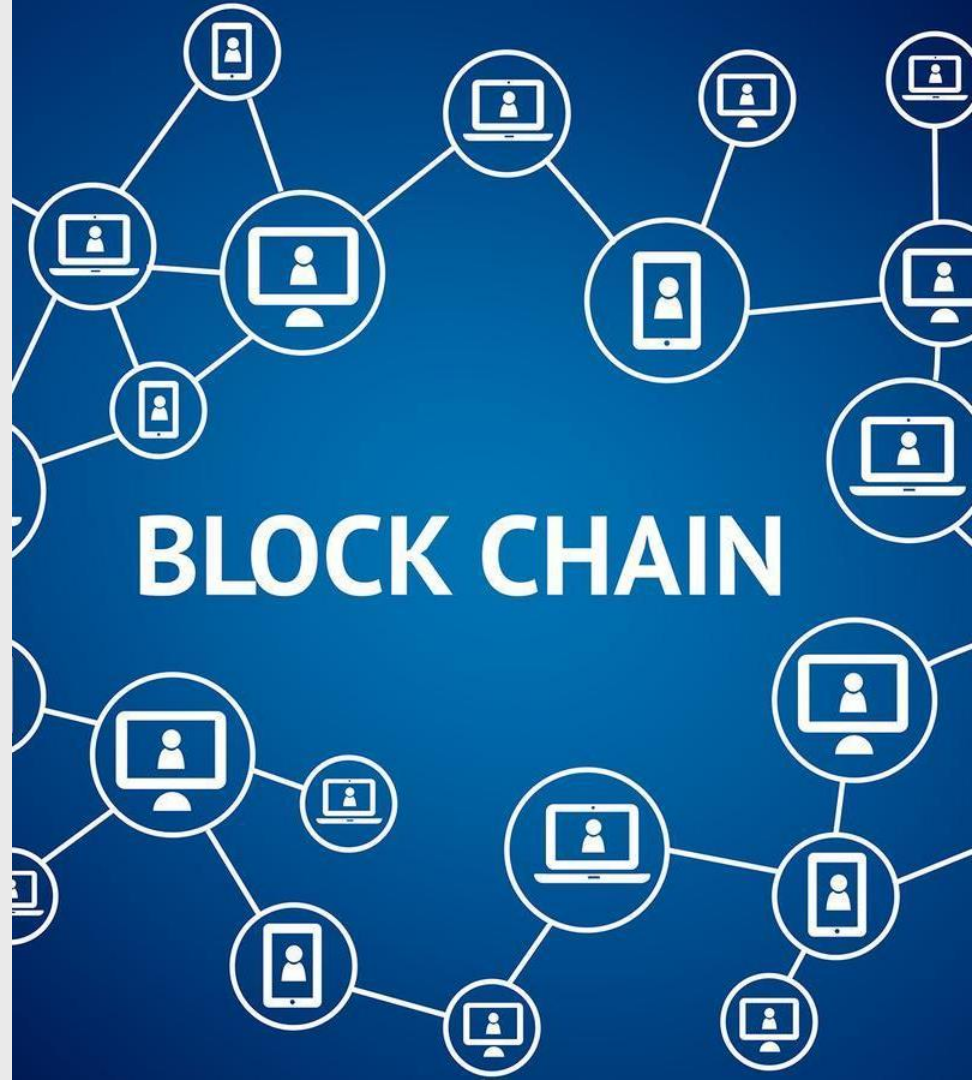
Machine Learning:
Processing data and
getting **new insights**

Deep Learning
Recognizing
language and
images like a human



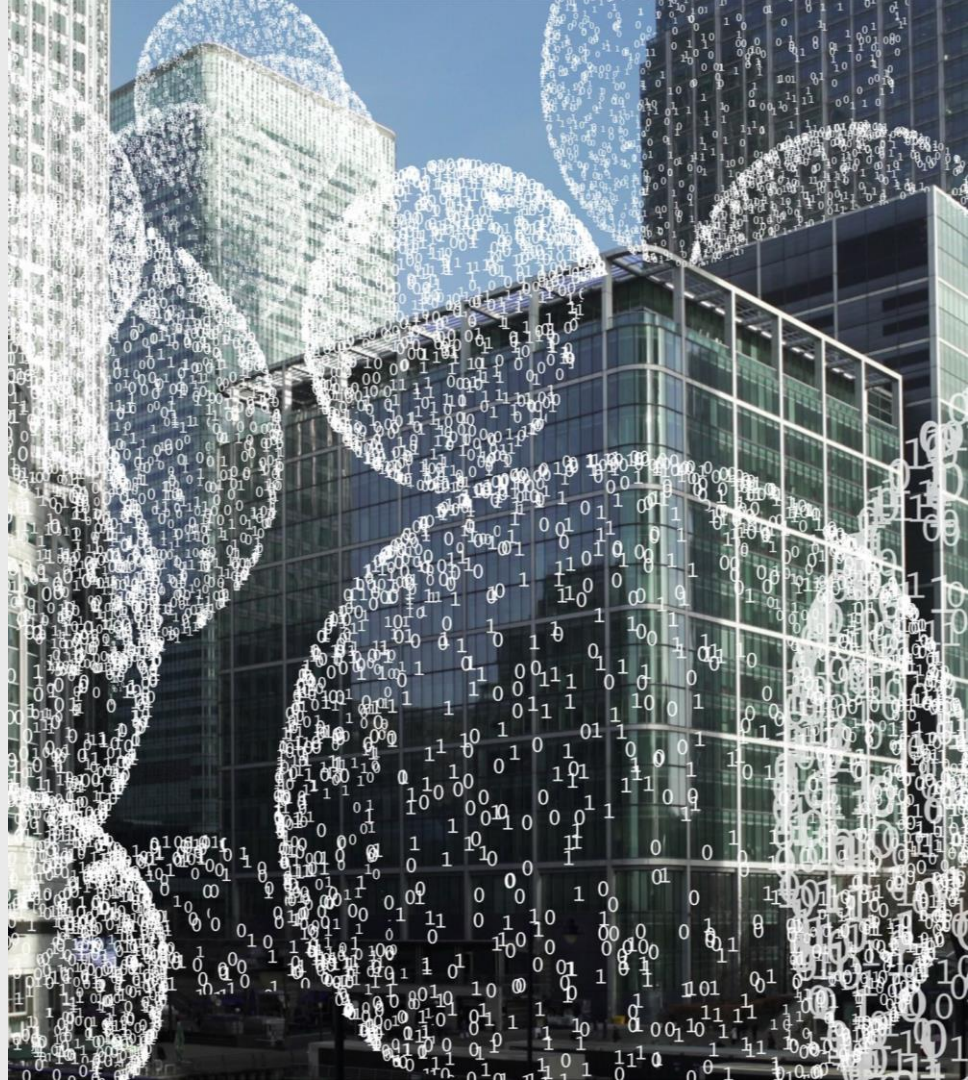
Blockchain

**Safely exchanging
any kind of
information
without a man in
the middle**



What is it all about?

**Added Value
from **Data**
instead of
producing
Goods**



Autonomous driving

Mobility as a **service**



ShareConomy

**Everything
is a
service.**



Urban Farms

Designing
the perfect
environ-
ment



Supply chain

**Everything
is trans-
parent**



**When will
this ever
stop?**

**When will
this ever
stop?**

**We have
just started!**



Technosphere

We have just arrived!



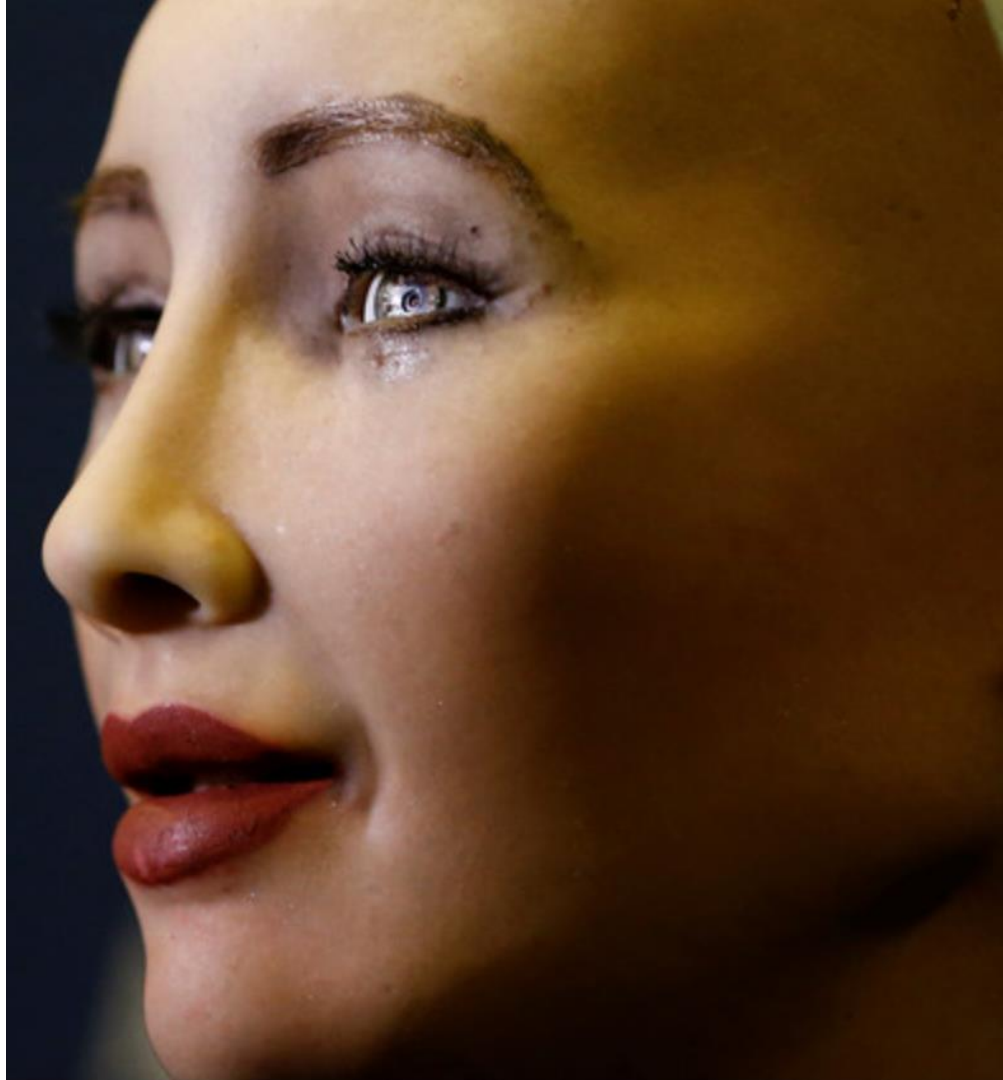
Next Nature Network

 **Abonnieren** 481

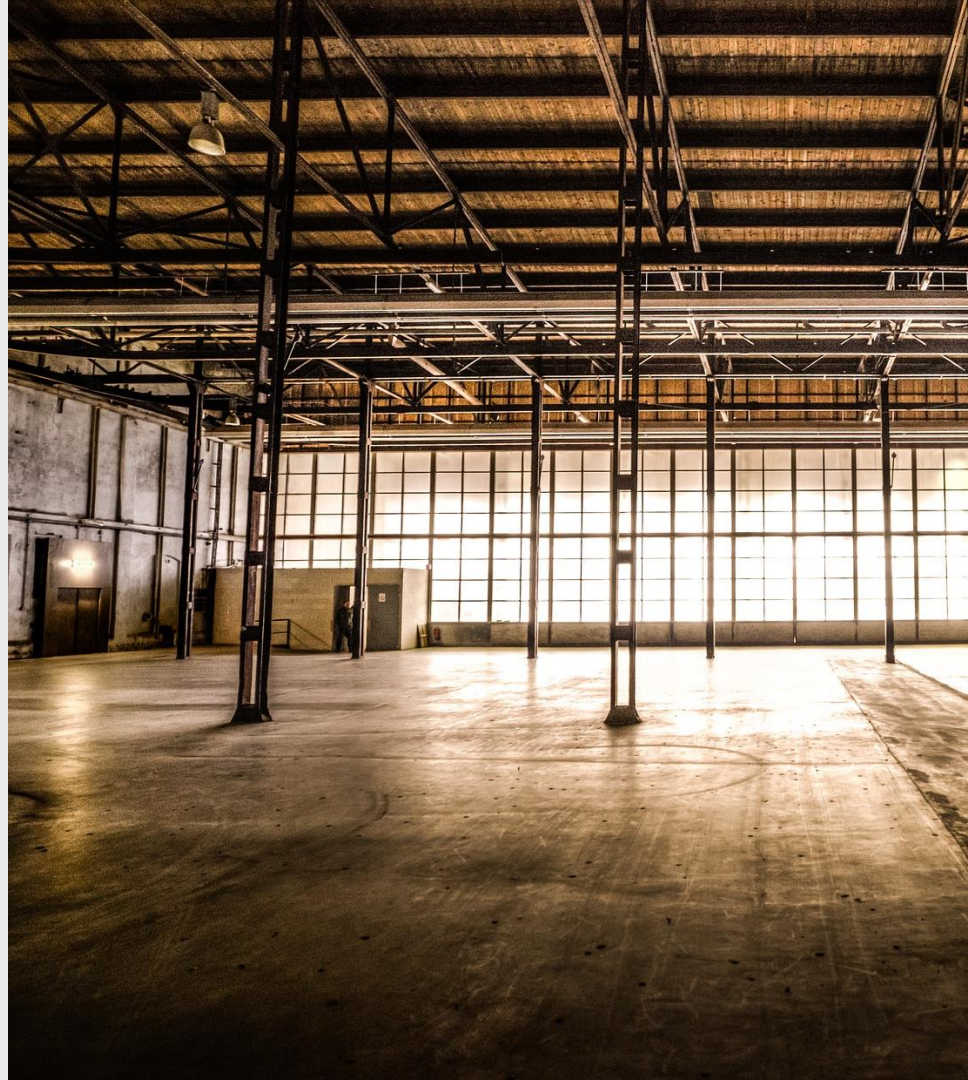


Human or robot?

**Boundaries are
blurring**



Looking for
new ways
instead of dead
ends



**Allow new
thinking**





Just start!

“If the highest aim of a captain were to preserve his ship, he would keep it in port forever.”

Thomas Aquinas

IBM

Links

Planetary Boundaries:

https://de.wikipedia.org/wiki/Planetary_Boundaries

Machine Learning:

<http://www.r2d3.us/visual-intro-to-machine-learning-part-1/>

Deep Learning:

<https://www.youtube.com/watch?v=o3RDCSJH2oo&list=PLDX3iJGAOVcndr-2N0dNnfRSzARxf3BRr&index=3>

Blockchain:

<http://bit.ly/2D6BDsH>

John Deere: From Products to Platform

<https://digit.hbs.org/submission/from-product-to-platform-john-deere-revolutionizes-farming/>

Caleb Harper: Next Generation of Food

<https://www.youtube.com/watch?v=cn5honzwHUJY&t=299s>

<https://www.media.mit.edu/posts/build-a-food-computer/>

<https://foodbusinessschool.org/faculty/caleb-harper/#>

Supply Chain with Blockchain:

<http://bit.ly/2B2Paj8>

Next Nature Network: We have just arrived:

<https://www.youtube.com/watch?v=cn5honzwHUJY&t=299s>