



techvshuman.com



gerdtube.com



@gleonhard

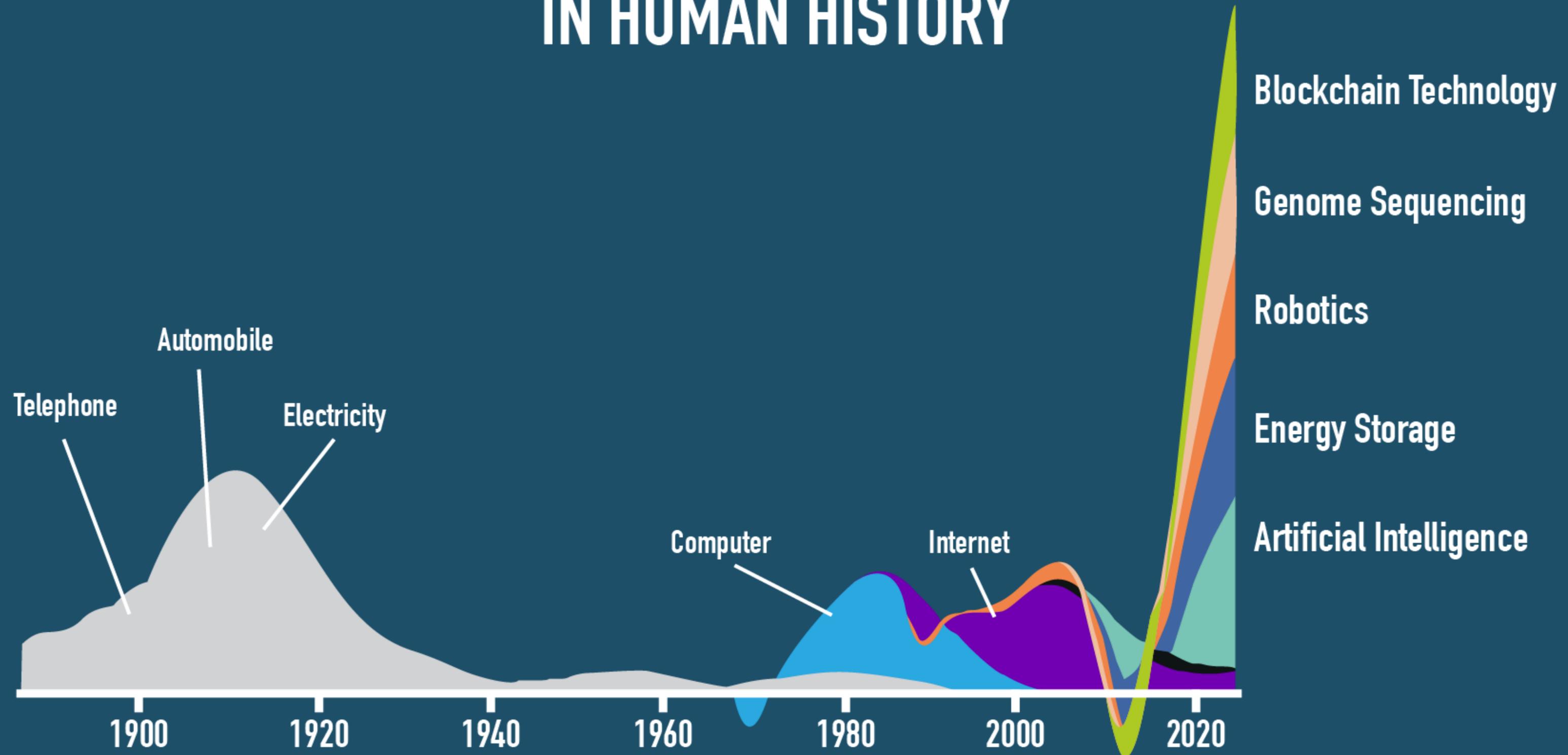


futuristgerd.com

The next 10 years: challenges and opportunities

Die nächsten 10 Jahre bringen mehr Veränderungen als die letzten 100 Jahre

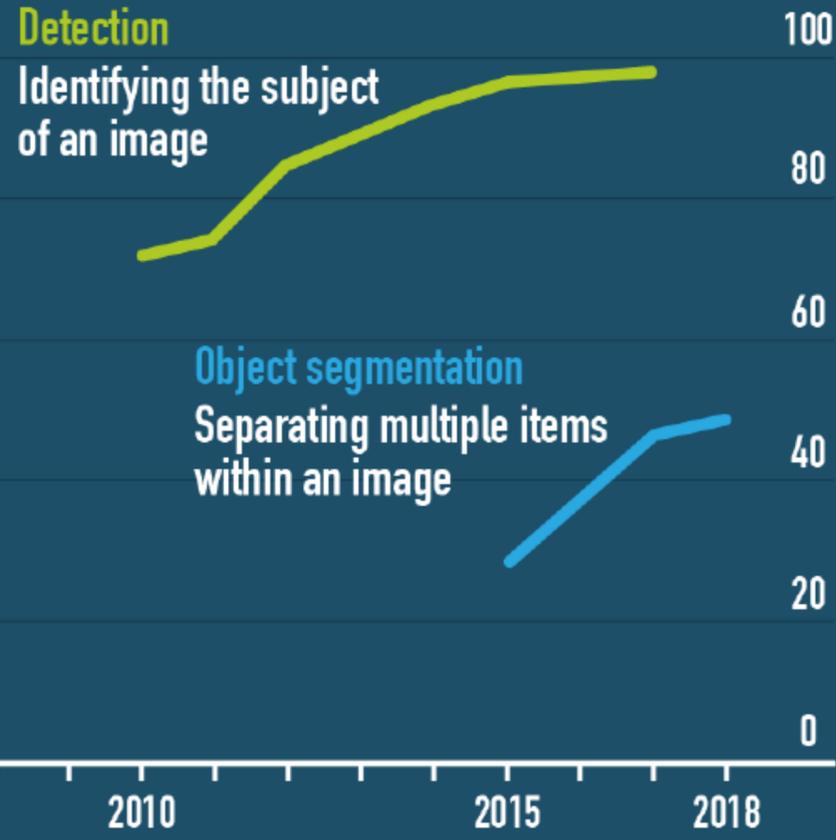
IN HUMAN HISTORY



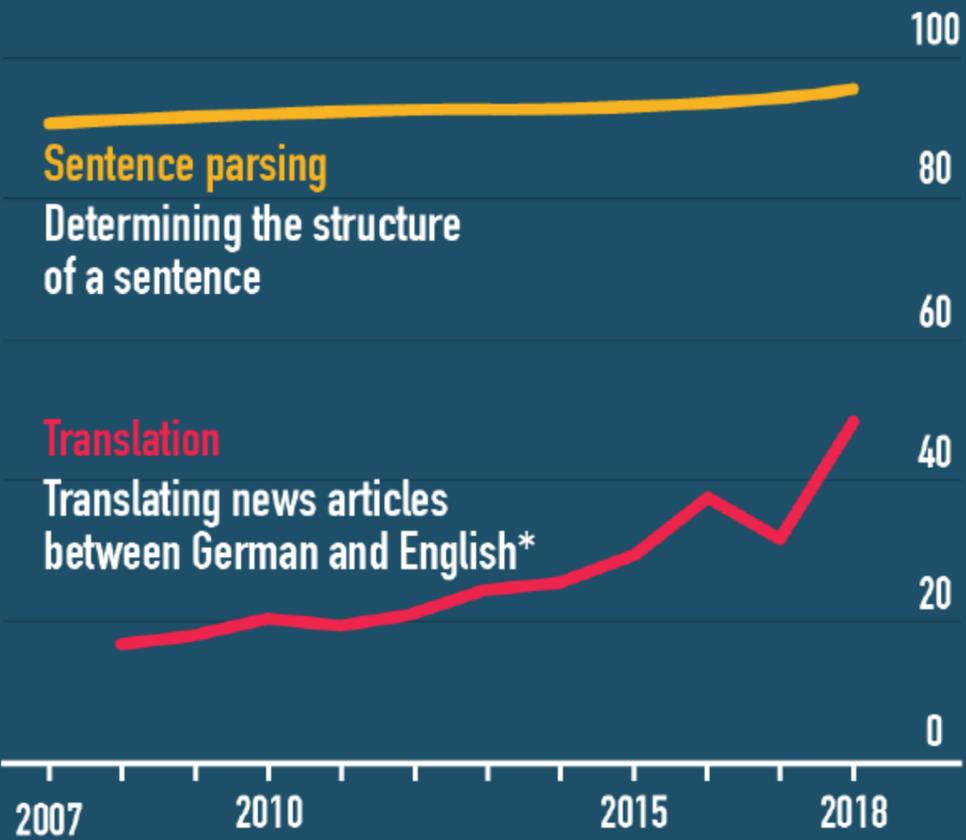
LEARNING CURVES

SUCCESS RATE OF BEST AVAILABLE AI SYSTEM, %

Image processing



Language processing



*BLEU score (% similar to a human-made translation)

Source: Stanford University Artificial Intelligence Index 2018 annual report

e^x

EXPONENTIAL



Die 9 Game-Changers

BIG DATA

SMART CLOUD

IoT

KI / AI / IA

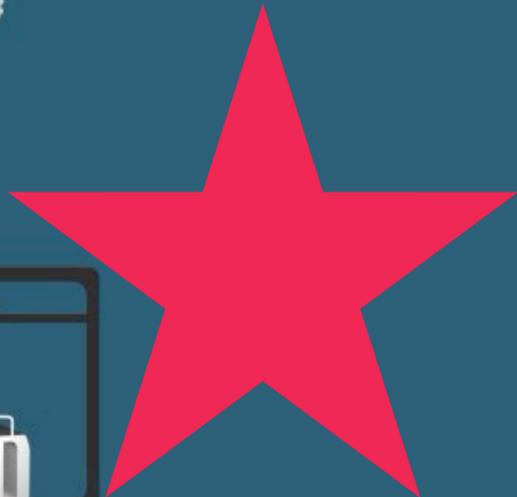
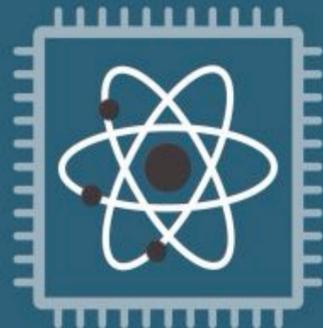
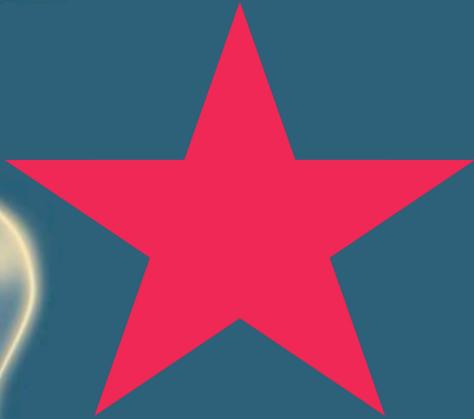
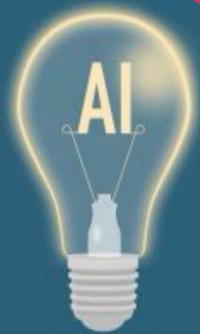
3D / Q COMPUTING

BLOCK CHAIN

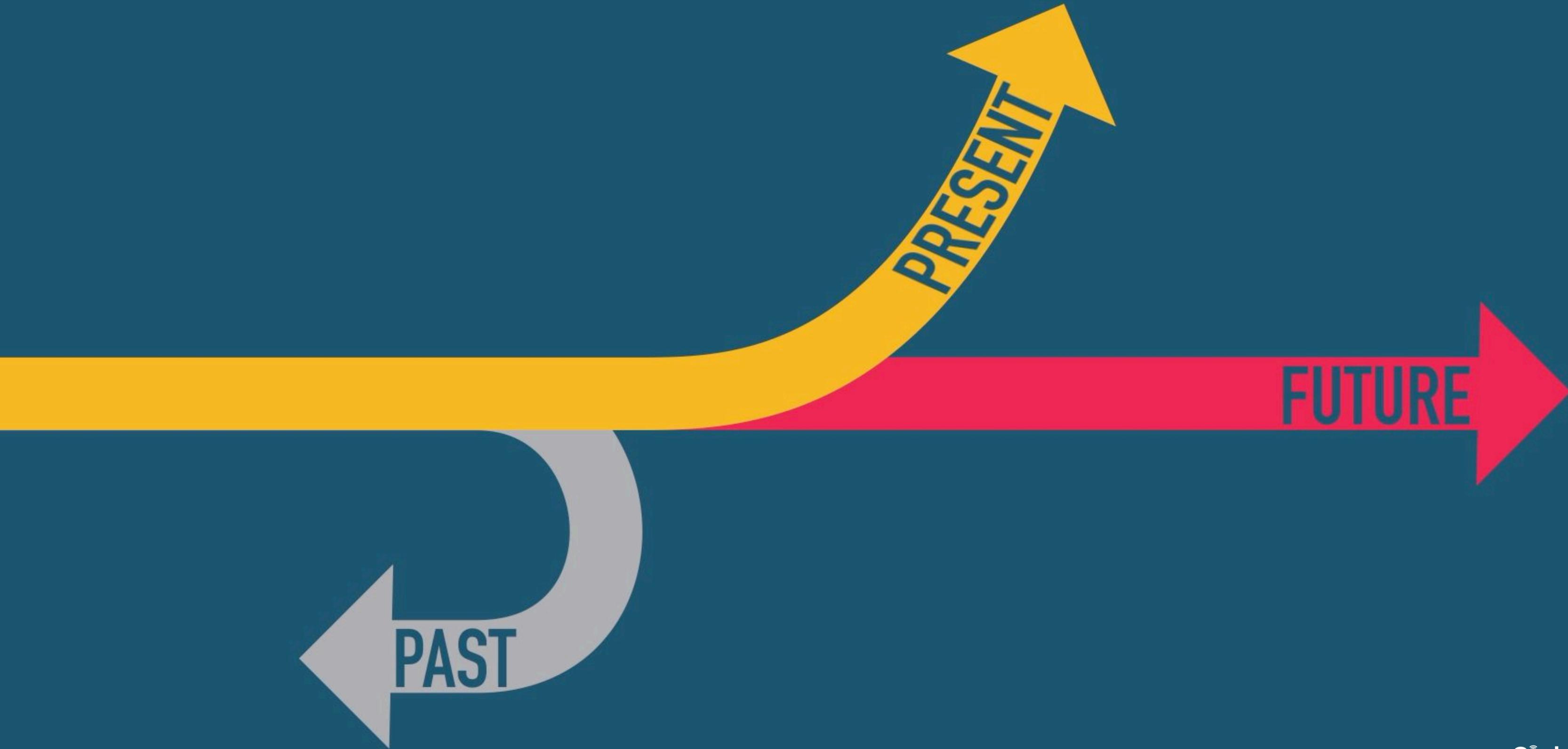
3D PRINTING

AR / VR / MR

GENOME EDITING



Die Zukunft ist KEINE Verlängerung der Gegenwart



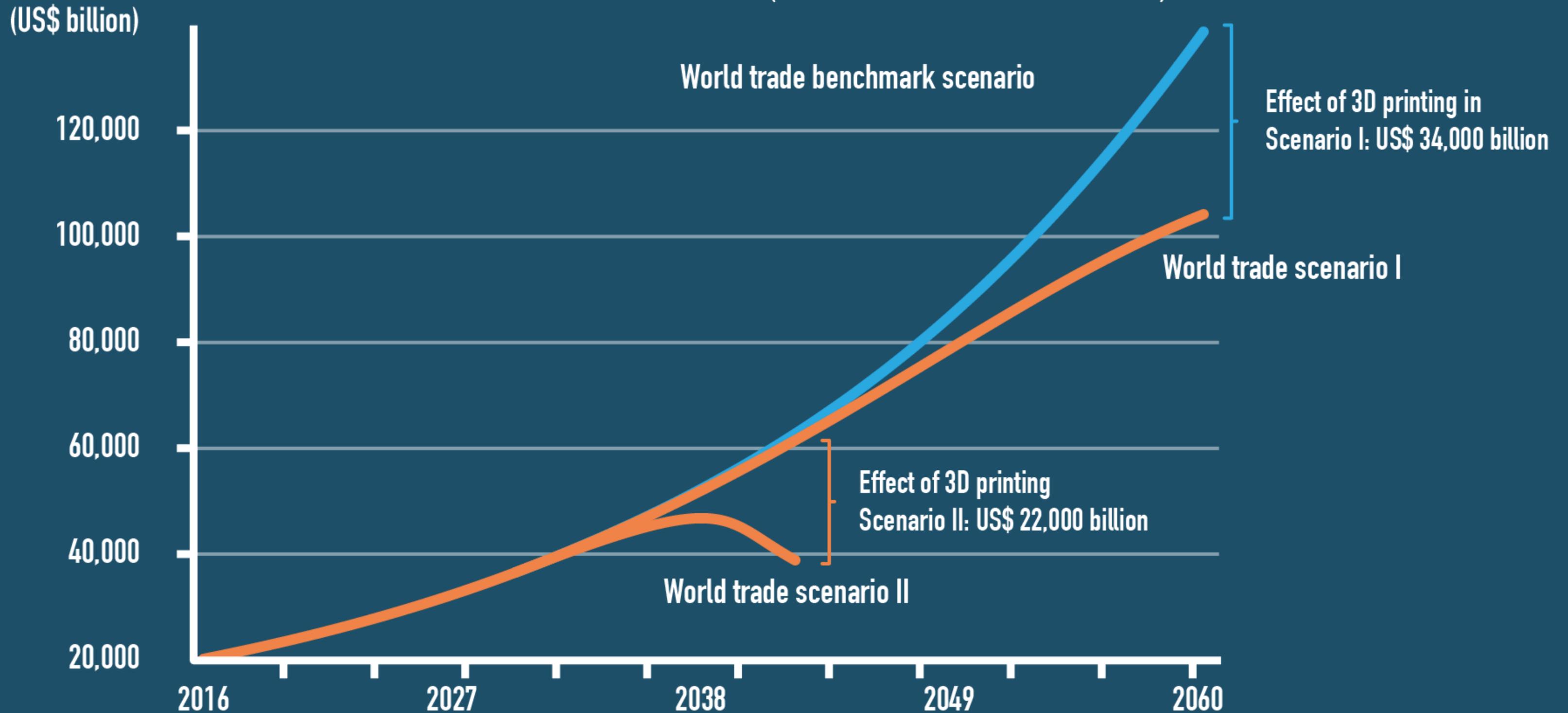


NEW STORY/ICON

TECH
INSIDER



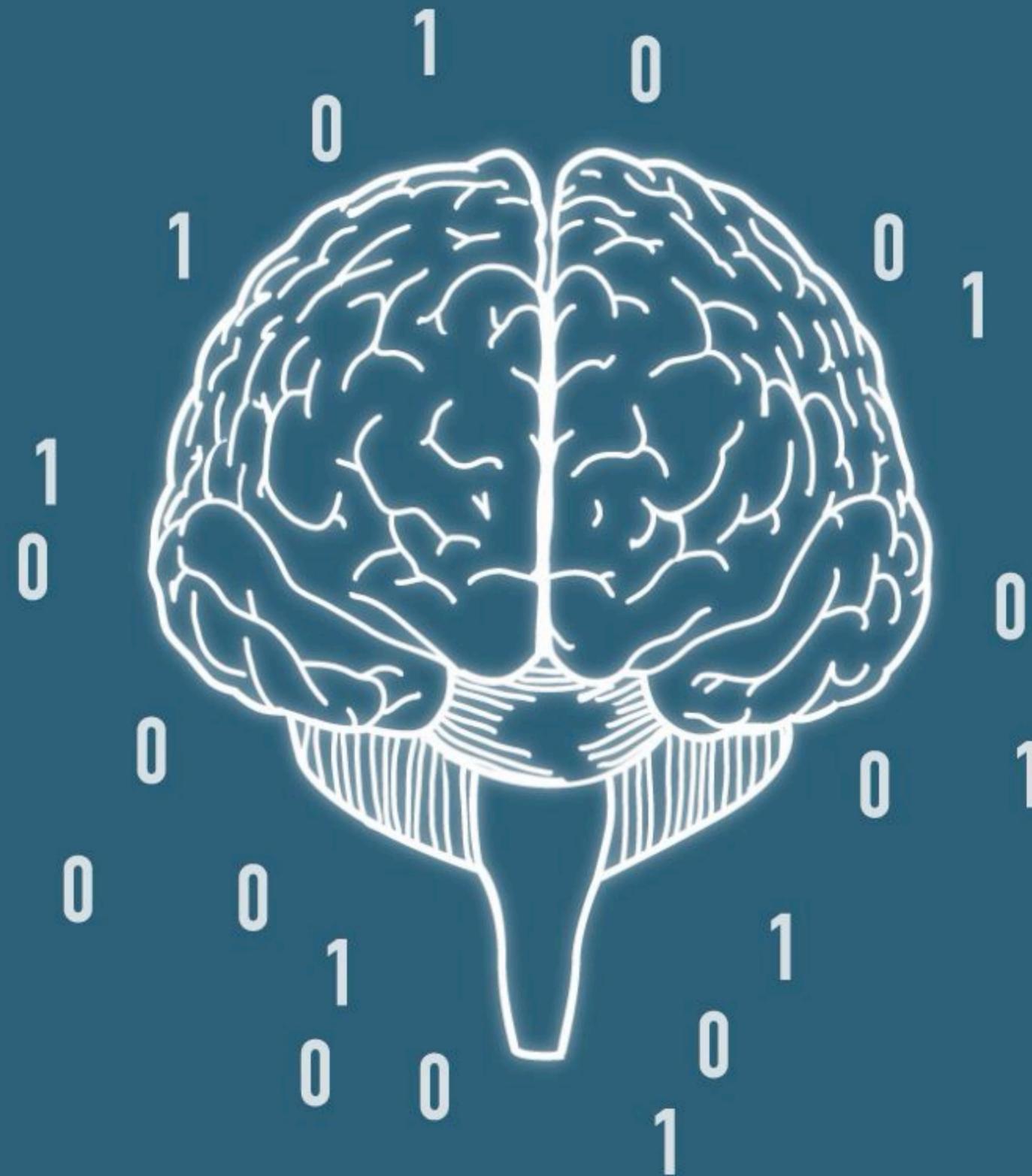
SCENARIOS COMPARING THE EFFECTS OF 3D PRINTING ON WORLD TRADE (GOODS AND SERVICES)



Zuerst verstärkten wir unsere Muskeln



Zuerst verstärkten wir unsere Muskeln... dann unser DENKEN





@tomcoben

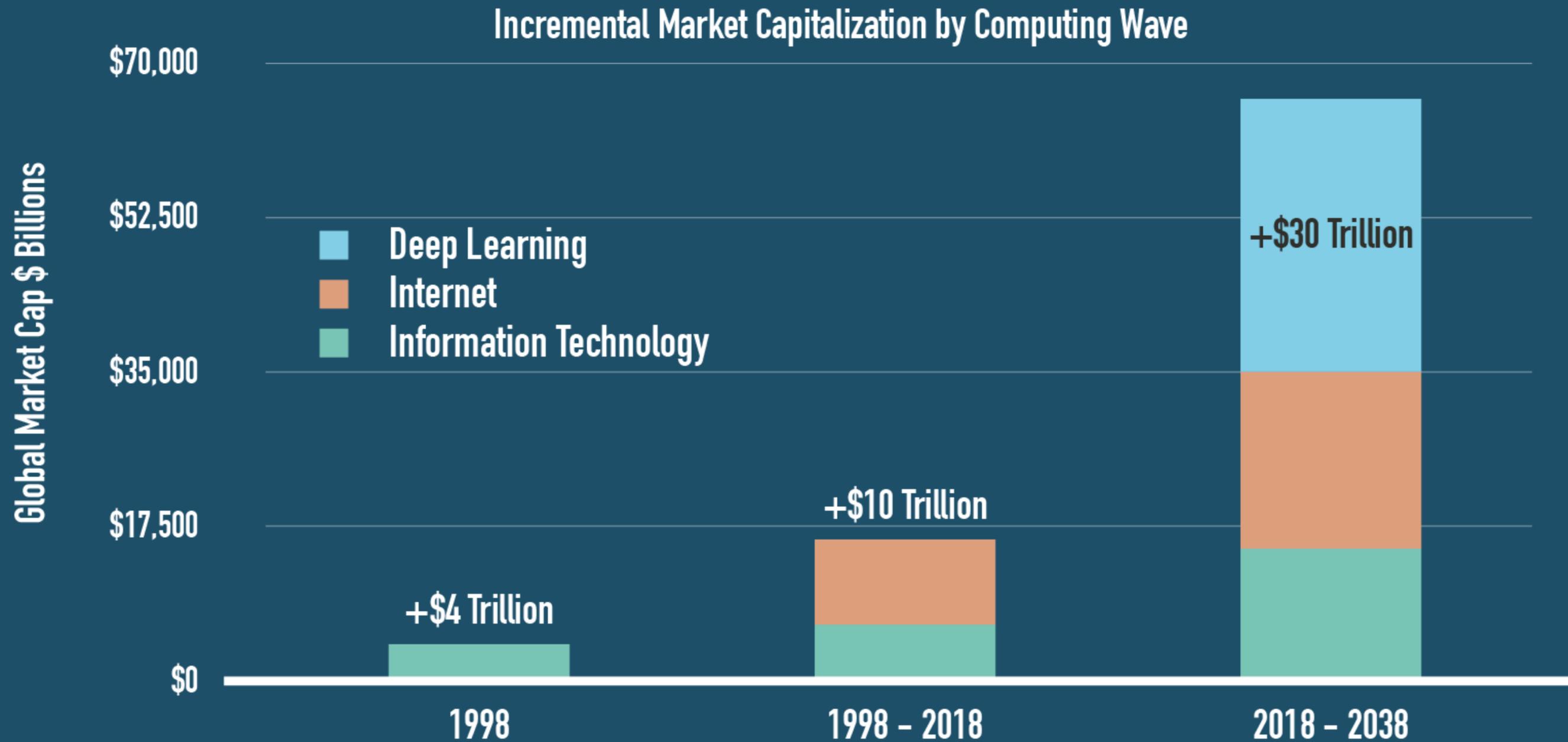
ARTIFICIAL INTELLIGENCE

MACHINE LEARNING

DEEP
LEARNING

SIZING THE OPPORTUNITY

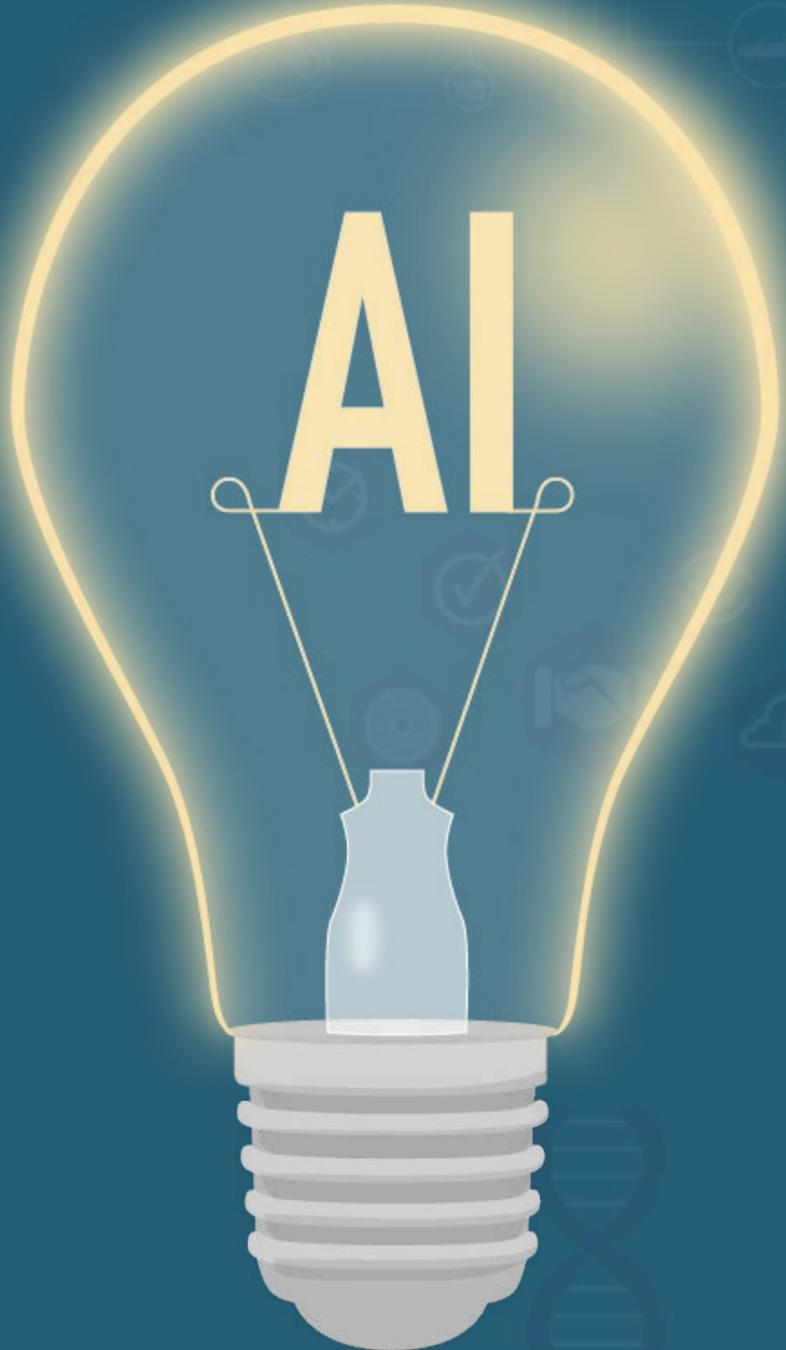
DEEP LEARNING COULD CREATE 3x THE VALUE OF THE INTERNET



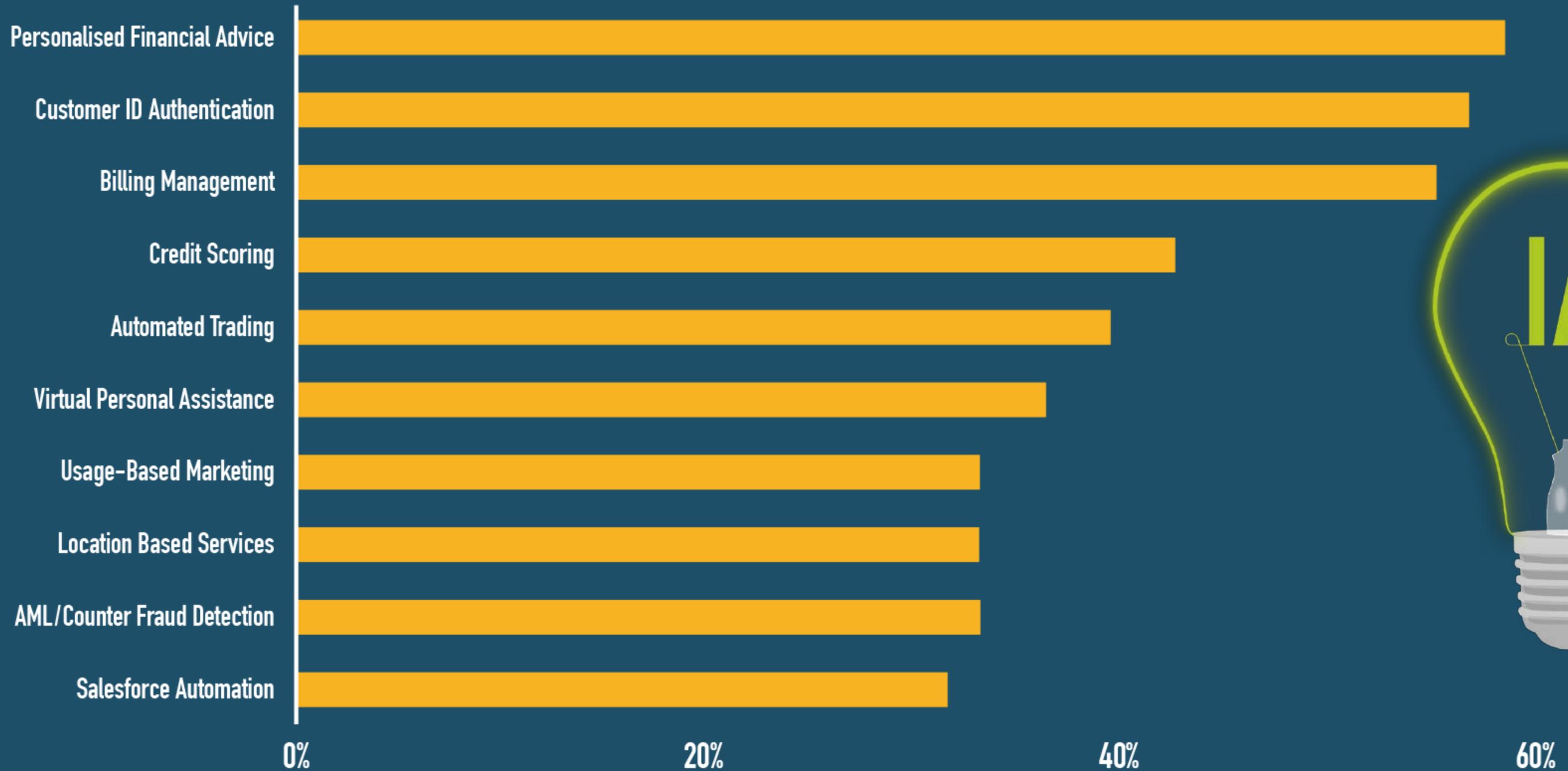
Data is the new Oil.



AI is the new electricity.



BUSINESS SOLUTIONS BEING ADDRESSED BY AI IN BANKING

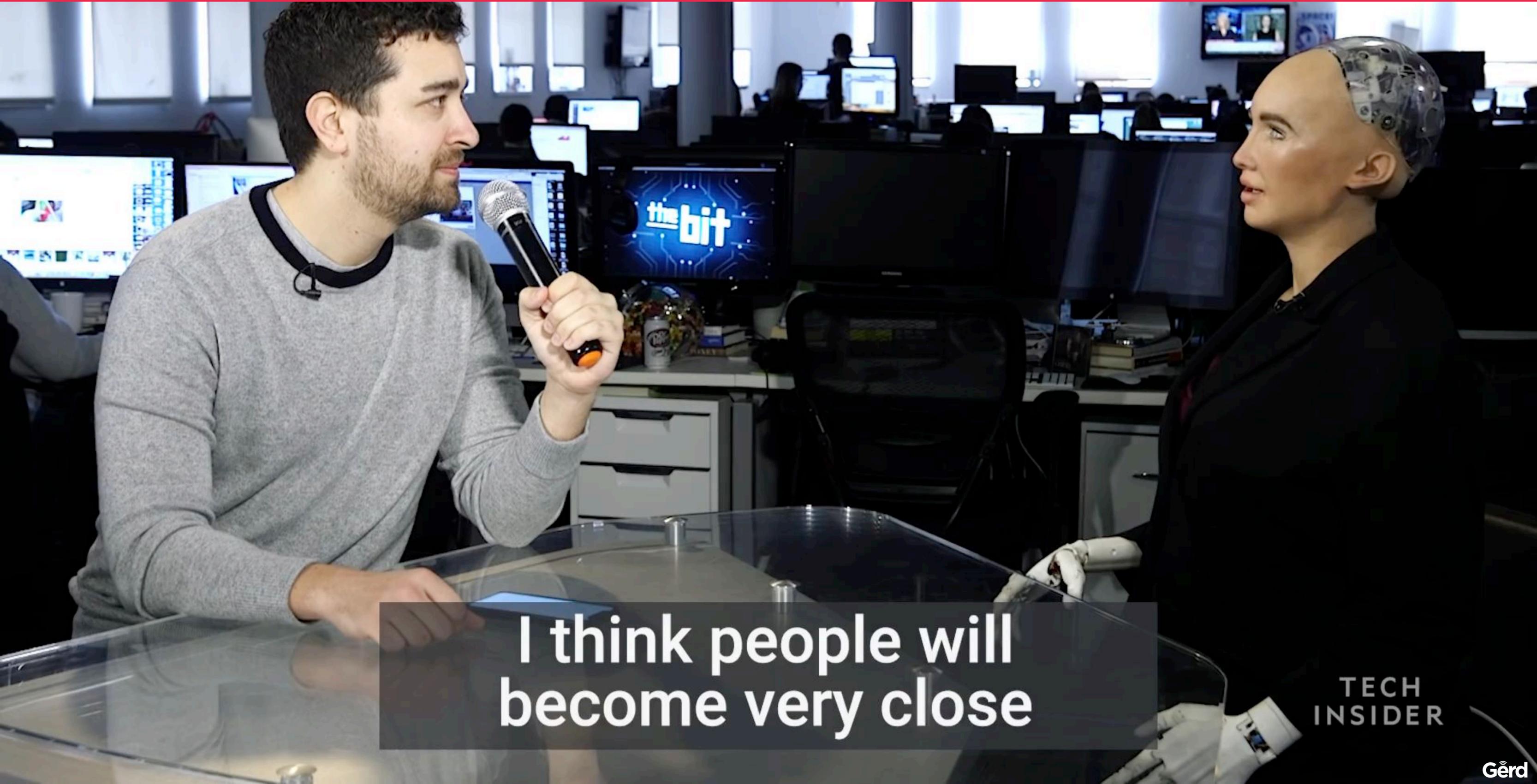


10 AI APPLICATIONS THAT COULD CHANGE HEALTH CARE



APPLICATION	POTENTIAL ANNUAL VALUE BY 2026	KEY DRIVERS FOR ADOPTION
Robot-assisted surgery	\$40B	Technological advances in robotic solutions for more types of surgery
Virtual nursing assistants	20	Increasing pressure caused by medical labor shortage
Administrative workflow	18	Easier integration with existing technology infrastructure
Fraud detection	17	Need to address increasingly complex service and payment fraud attempts
Dosage error reduction	16	Prevalence of medical errors, which leads to tangible penalties
Connected machines	14	Proliferation of connected machines/devices
Clinical trial participation	13	Patent cliff; plethora of data; outcomes-driven approach
Preliminary diagnosis	5	Interoperability/data architecture to enhance accuracy
Automated image diagnosis	3	Storage capacity; greater trust in AI technology
Cybersecurity	2	Increase in breaches; pressure to protect health data

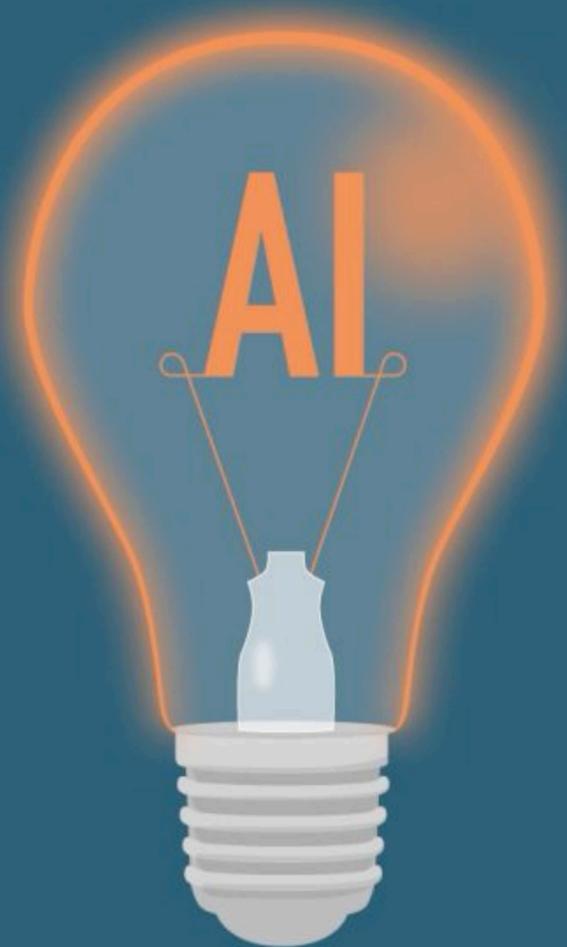
Ein Roboter wie 'Sophia' DENKT NICHT wirklich – er simuliert nur ganz hervorragend!



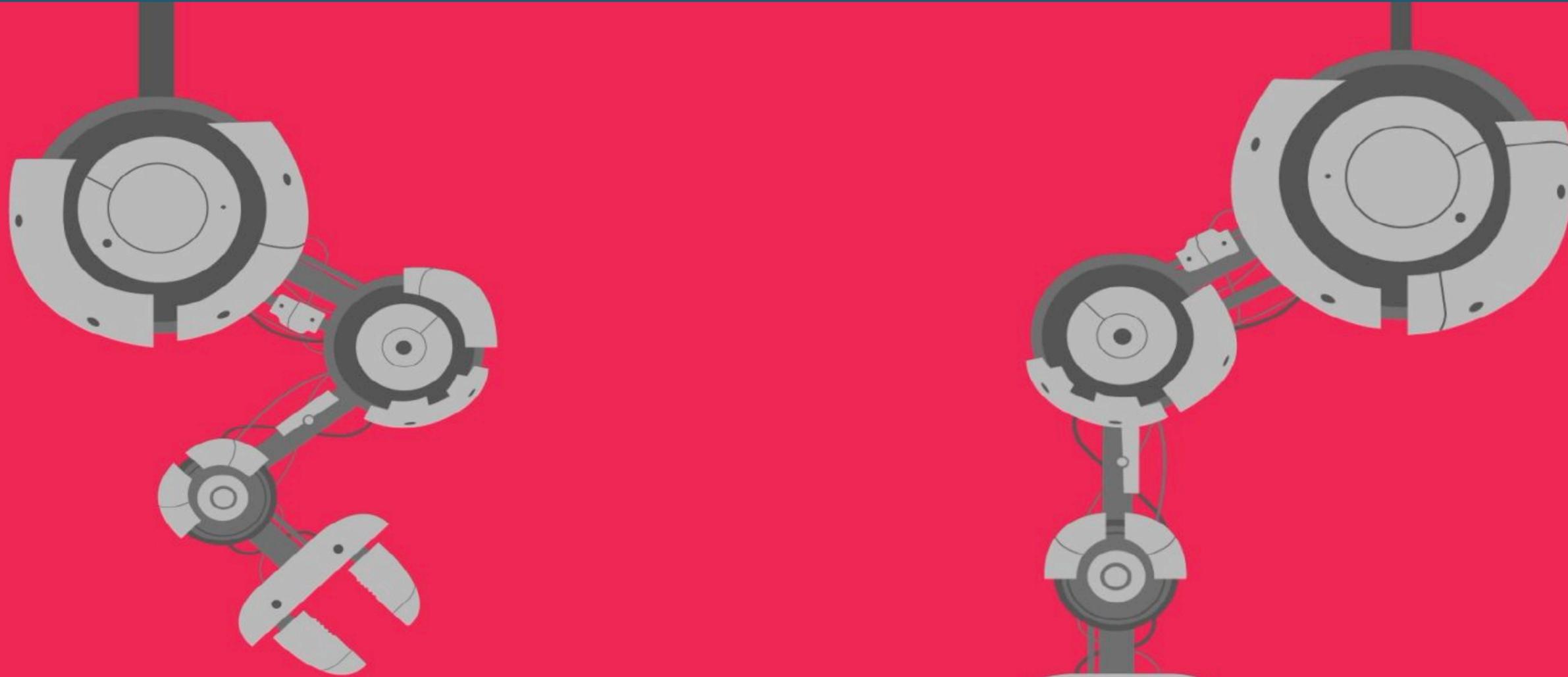
I think people will
become very close

TECH
INSIDER

Intelligent Assistance (IA) | Artificial Intelligence | Artificial General / Super Intelligence

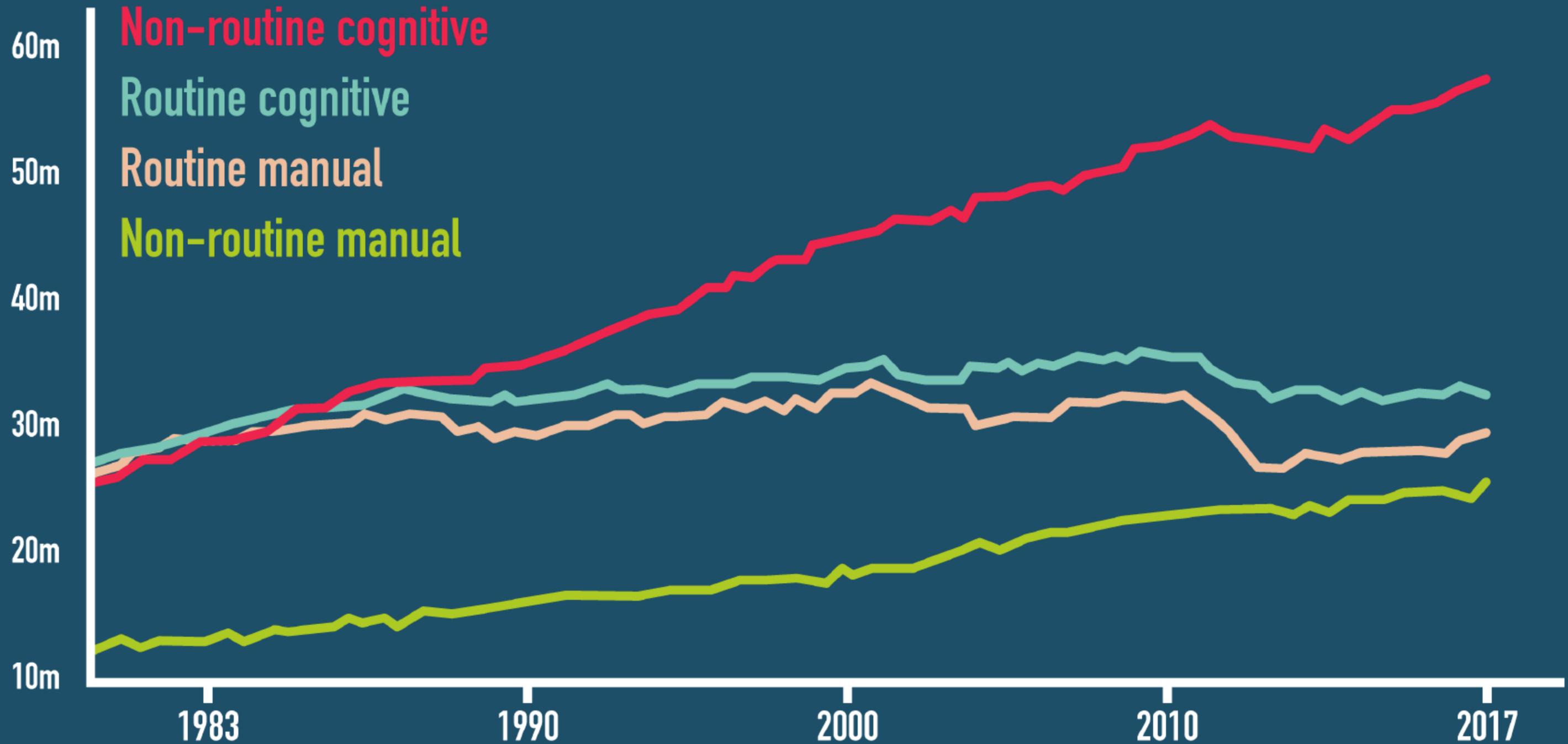


Alles was digitalisiert und automatisiert werden kann... wird!



R O U T I N E

NON-ROUTINE WORK IS THE FUTURE!



PURPOSE

PASSION

CURIOSITY



IMAGINATION

FORESIGHT

CRITICAL THINKING

STEM

Science
Technology
Engineering
Mathematics

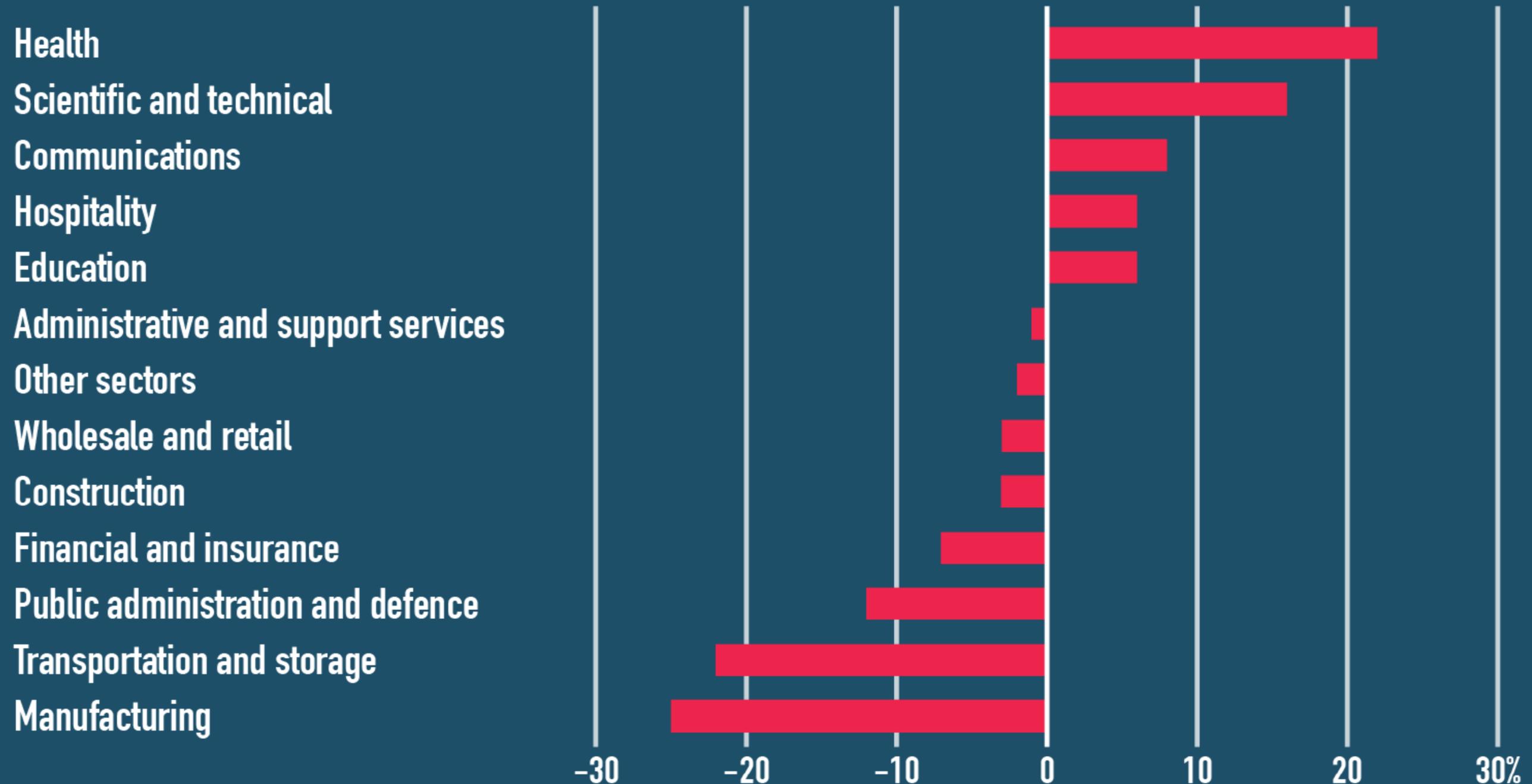
HUMAN

Humanity
Ethics
Creativity
Imagination



MEHR MENSCH-SEIN ist die Zukunft von Arbeit!

HOW AI COULD CHANGE THE JOB MARKET ESTIMATED NET JOB CREATION BY INDUSTRY SECTOR, 2017-2037



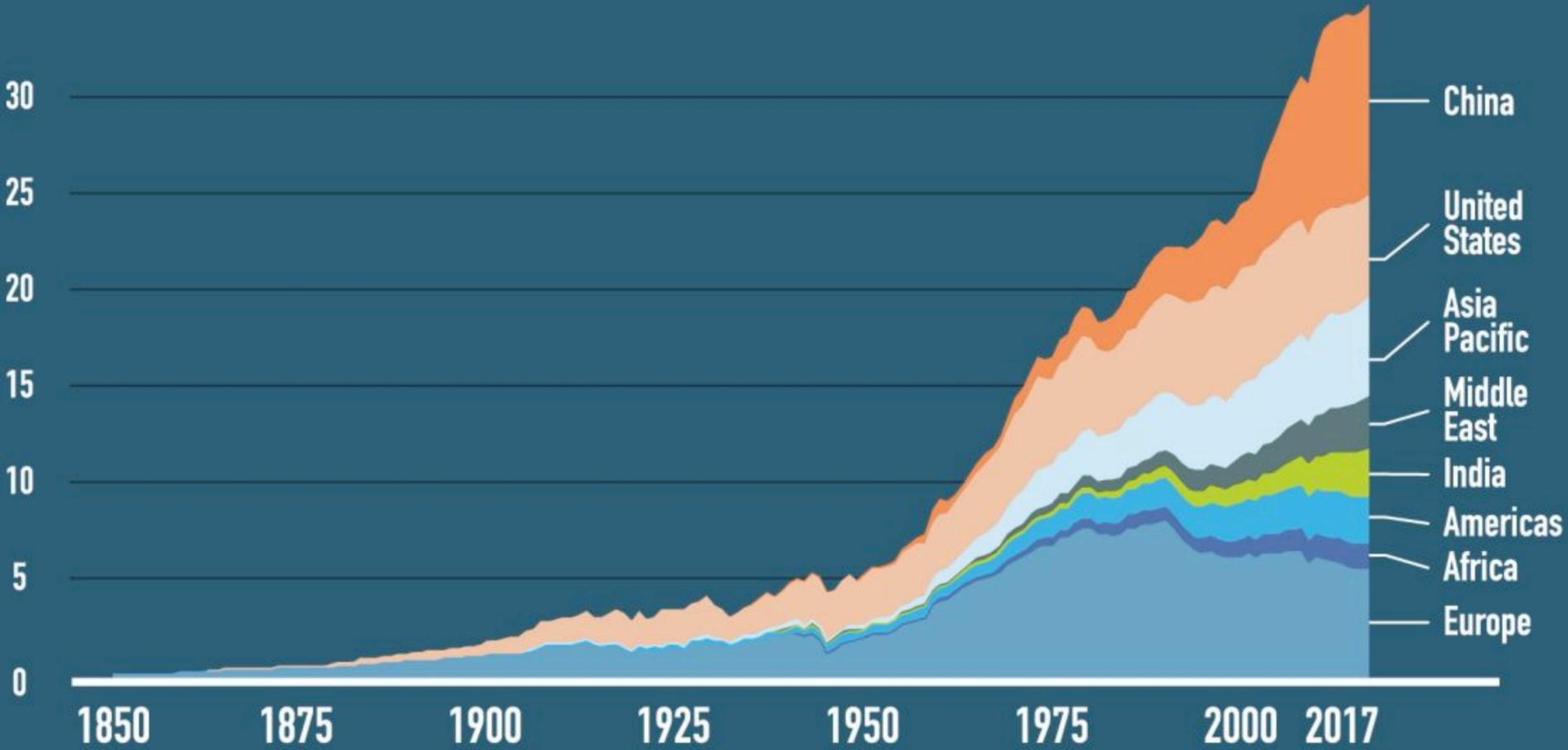
Die wichtigsten Observationen...

HARD FUTURES





CO2 EMISSIONS - IN GIGATONES



Source: The Economist

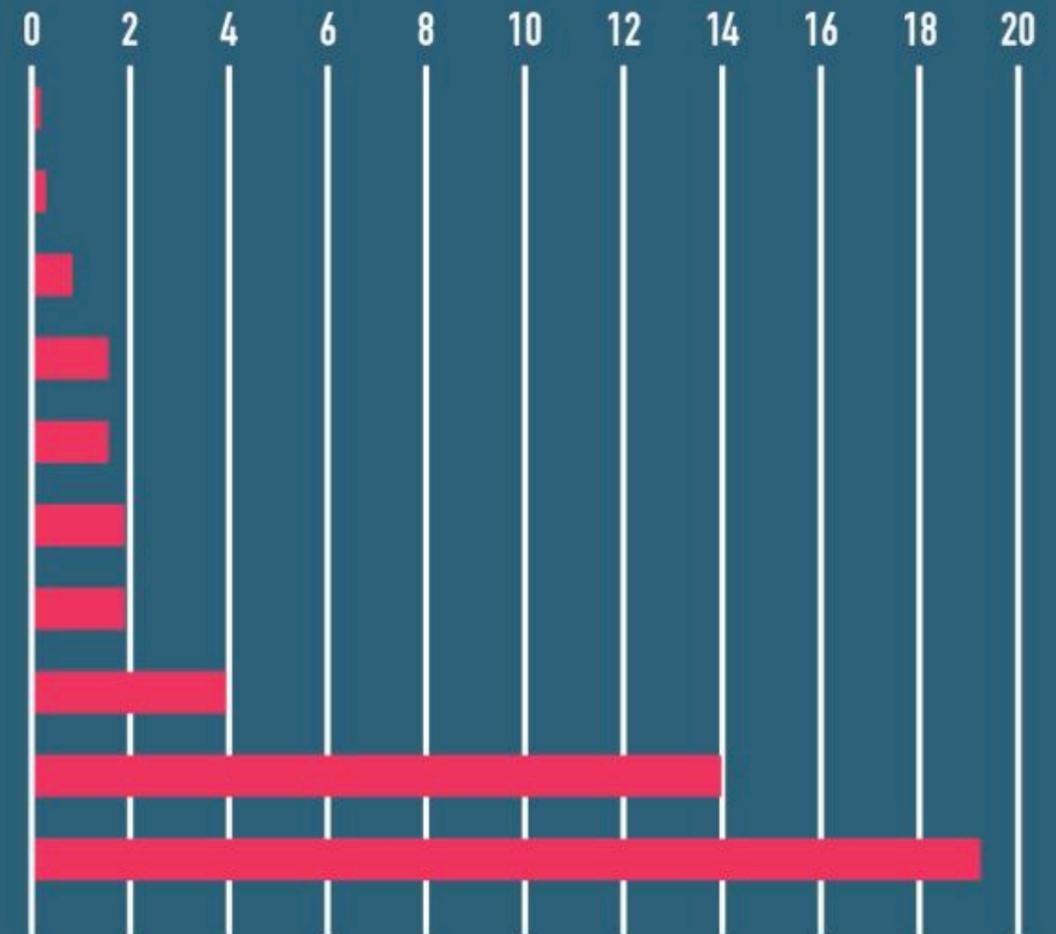
Gerd

GREENHOUSE GAS EMISSIONS FROM AGRICULTURAL PRODUCTION

(metric tons of carbon dioxide equivalent per million calories consumed)



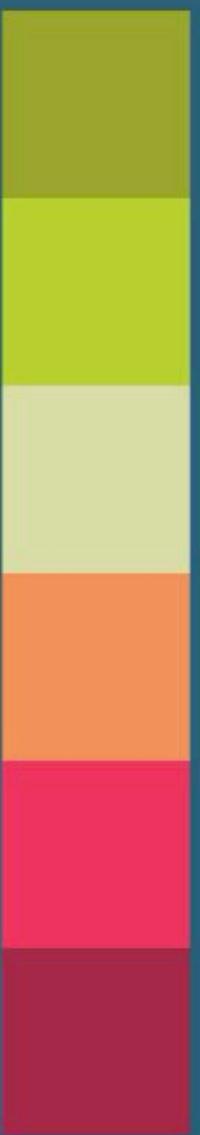
- Sugar
- Wheat
- Rice
- Dairy
- Eggs
- Poultry
- Pork
- Fish (farmed)
- Sheep and goat meat
- Beef



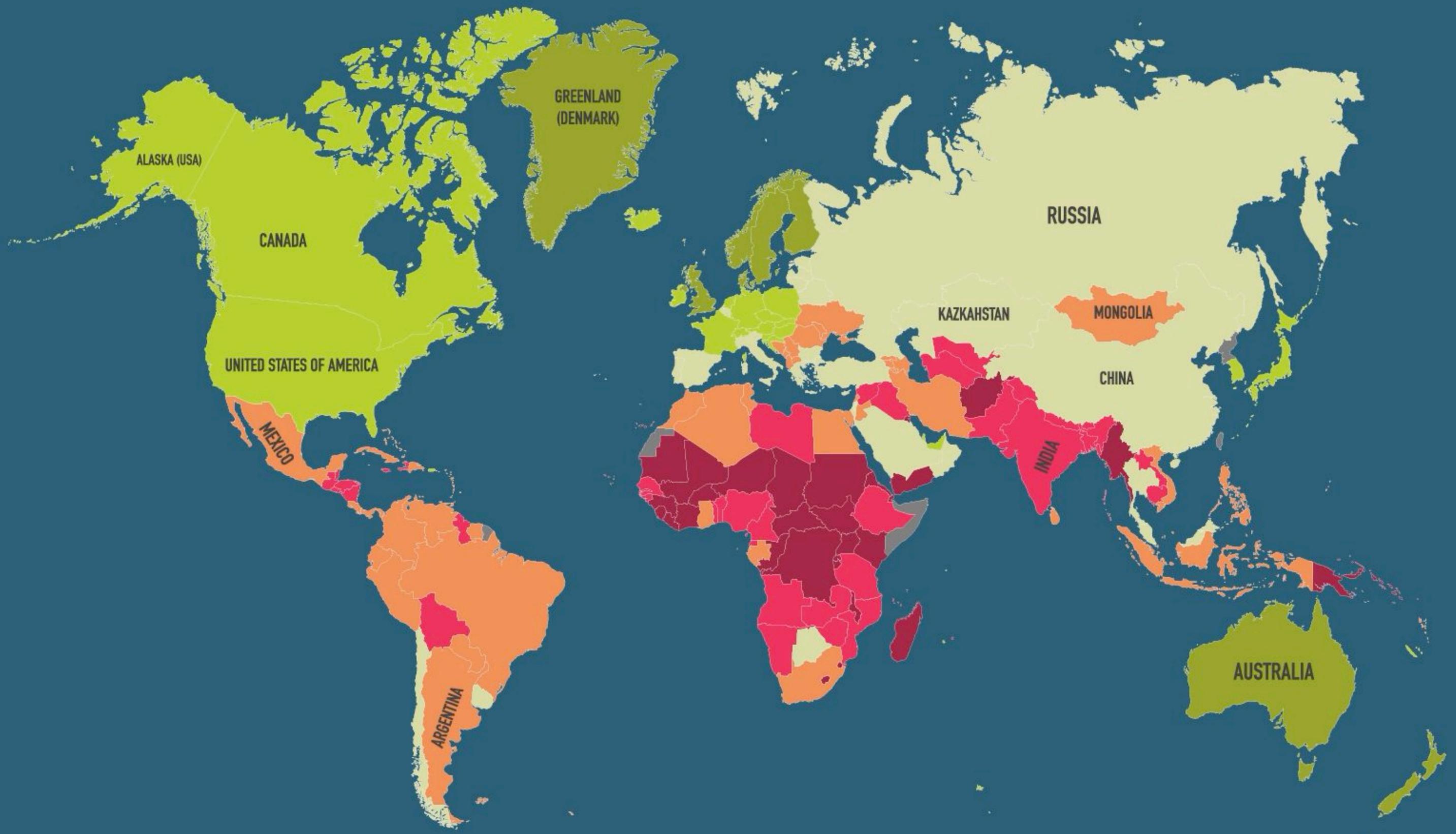
Source: World Resources Institute

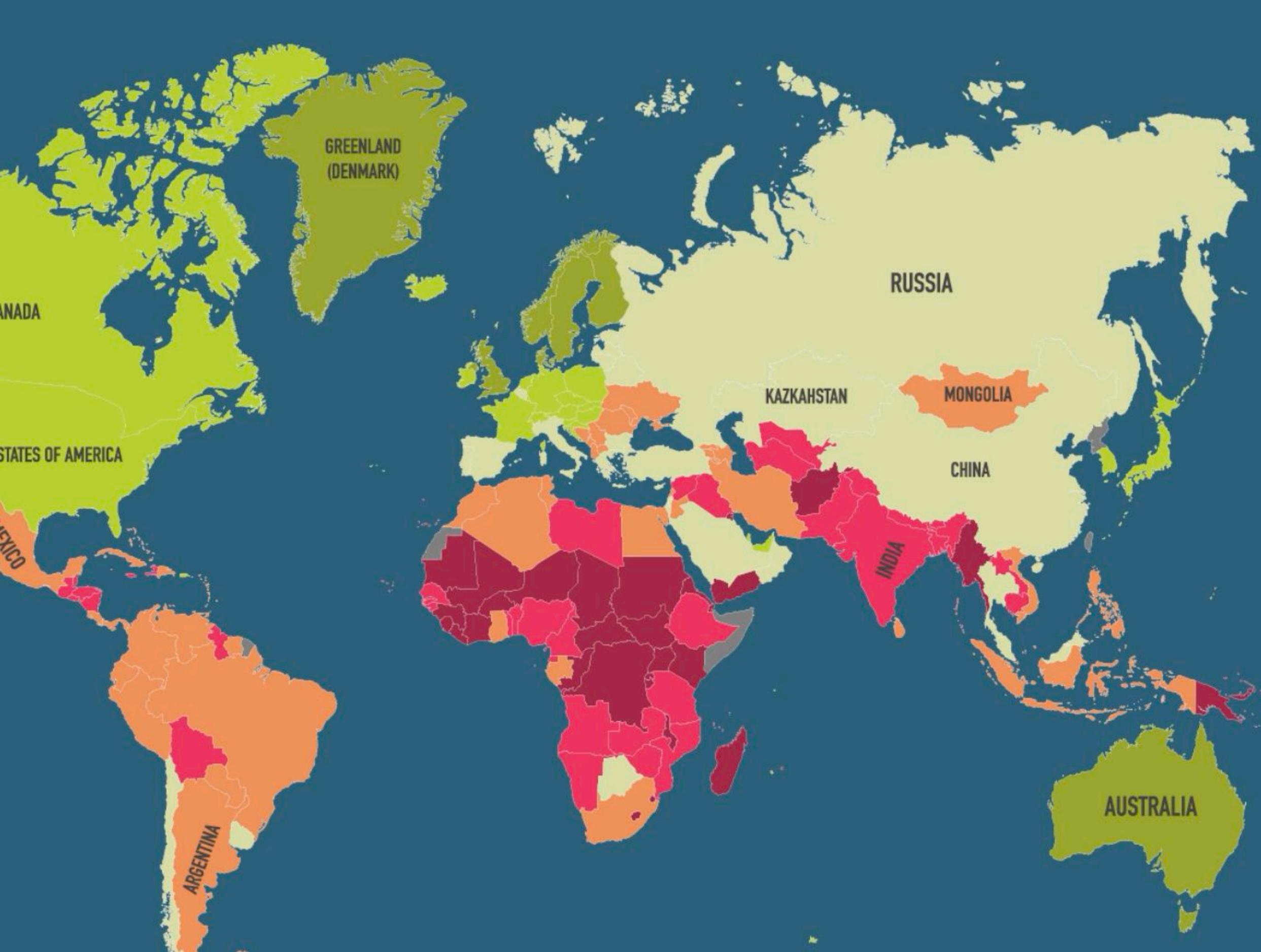
Gerd

Least
at risk



Most
at risk





**Climate
Change
Adaptation:
Konsequenzen
für Investoren
und für die
Märkte?**

The world needs a massive carbon tax in just 10 years to limit climate change, IMF says

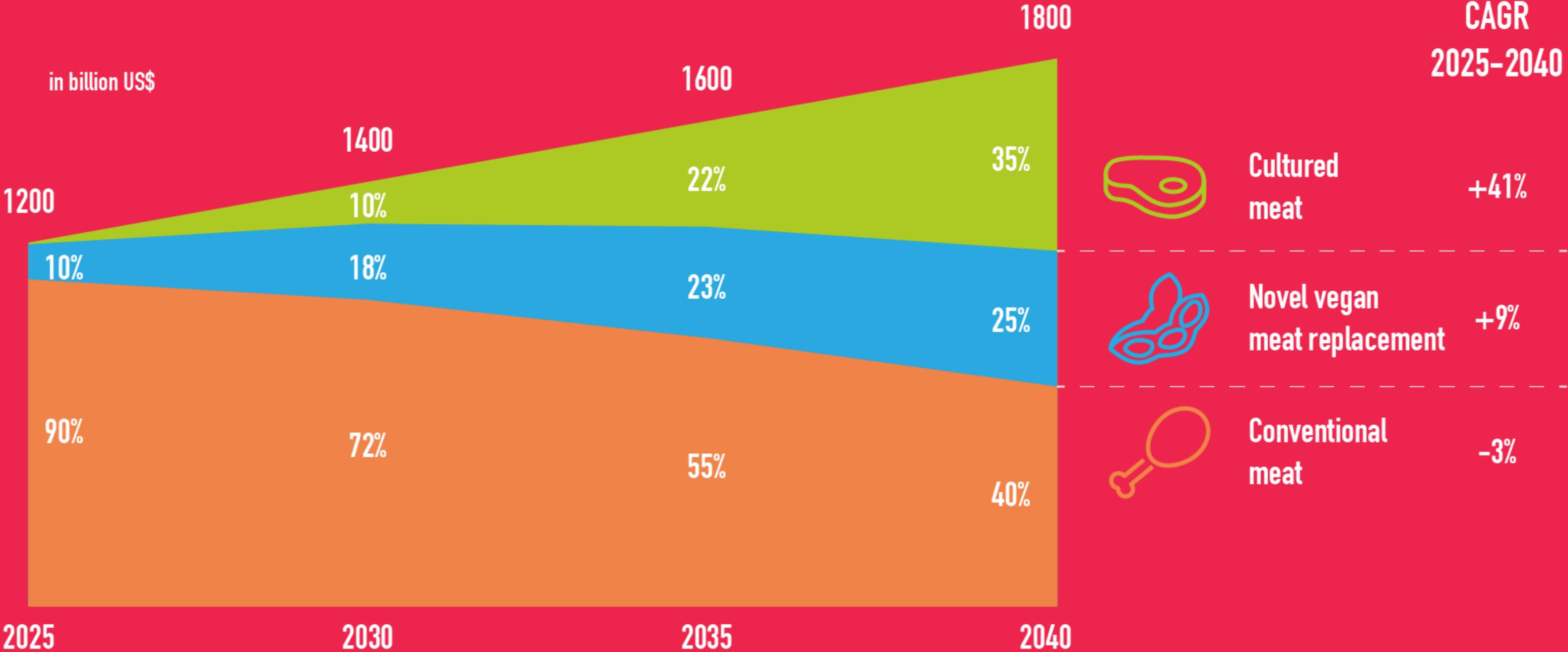
The international organization suggests a cost of \$75 per ton by 2030.



**Climate
Change**

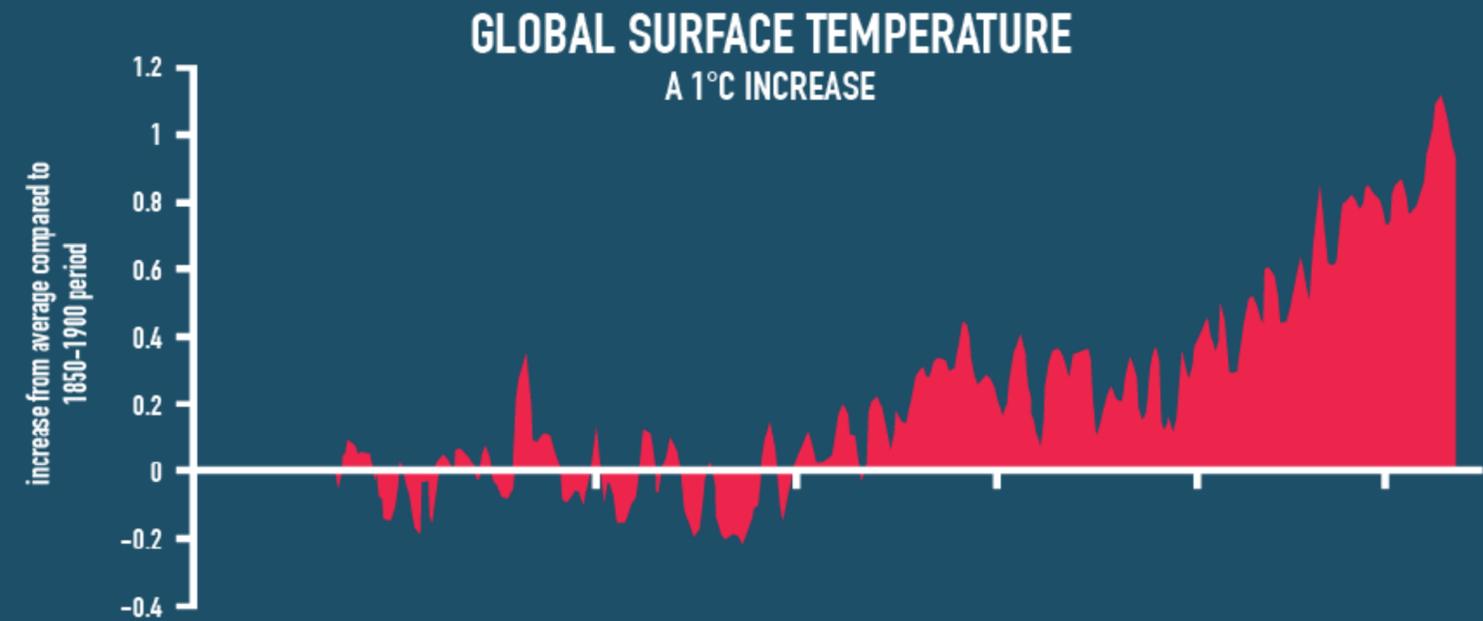
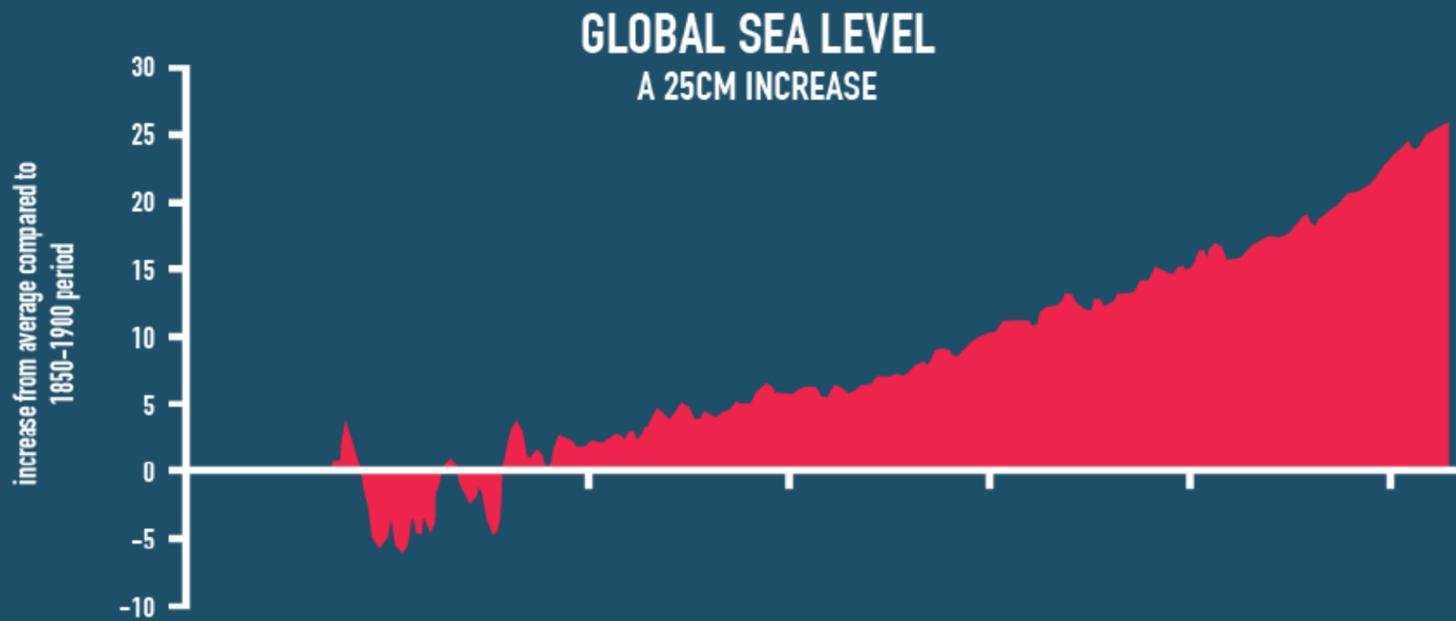
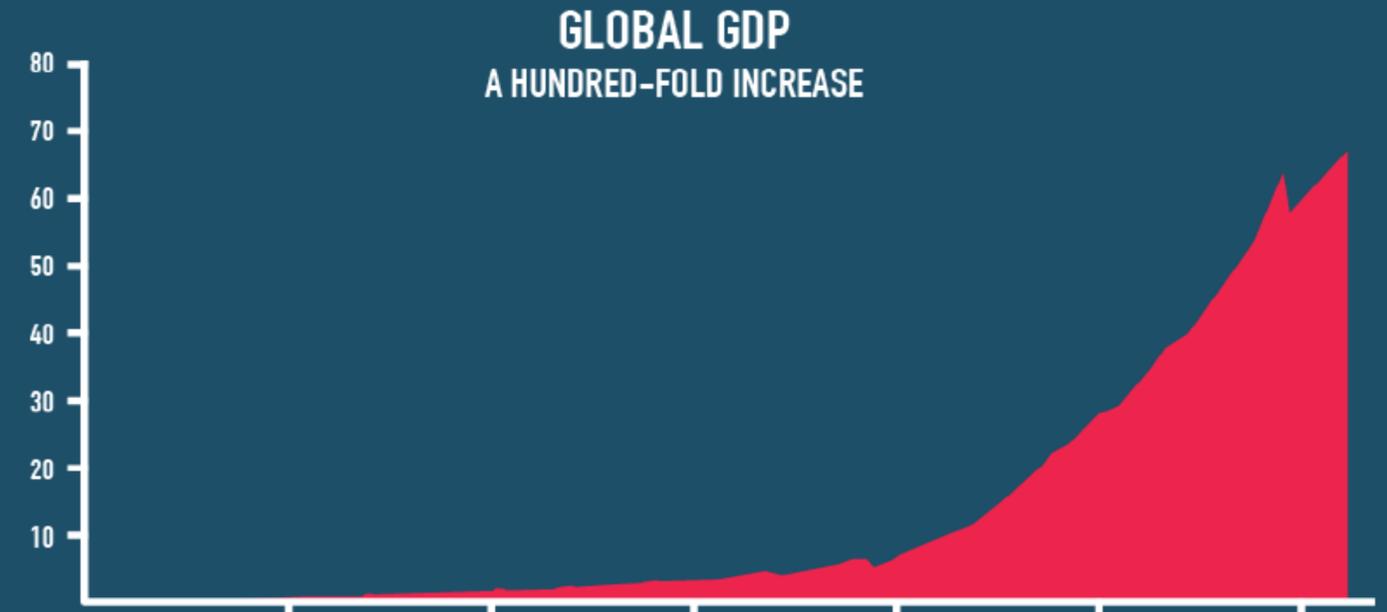
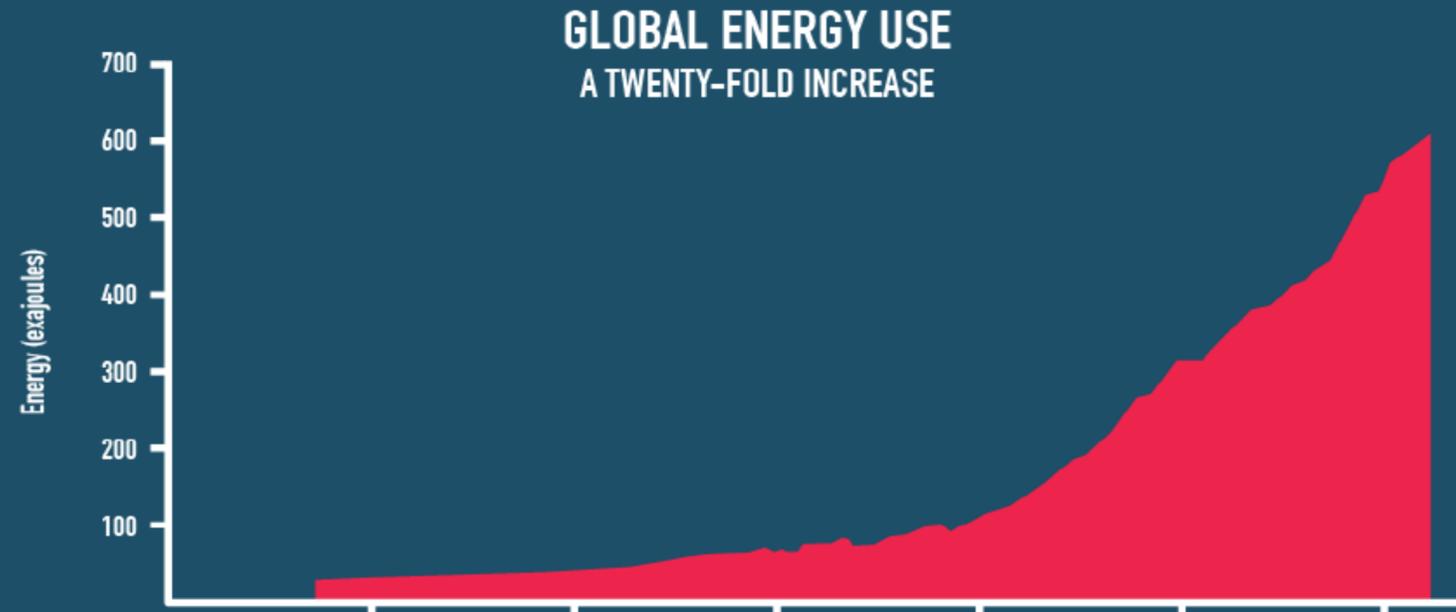
**Adaptation:
Konsequenzen
für Investoren
und für die
Märkte?**

GLOBAL MEAT CONSUMPTION



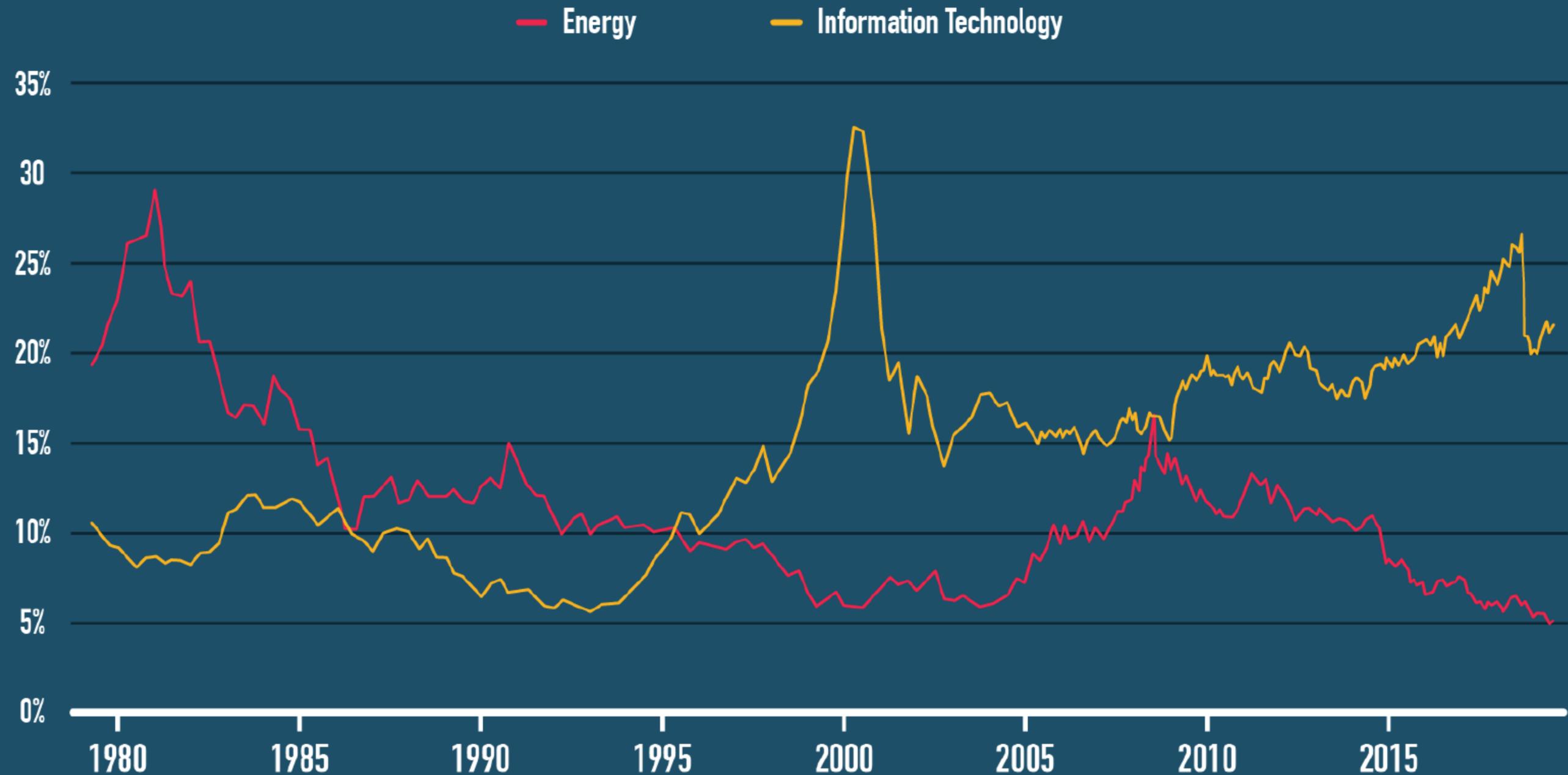
Source: United Nations, World Bank, Expert interviews; A.T. Kearney analysis

'Business as usual' ist vorbei: 3-5 Jahre



Das Ende von Öl, Gas und Kohle: 'erst ganz langsam und dann sehr schnell'

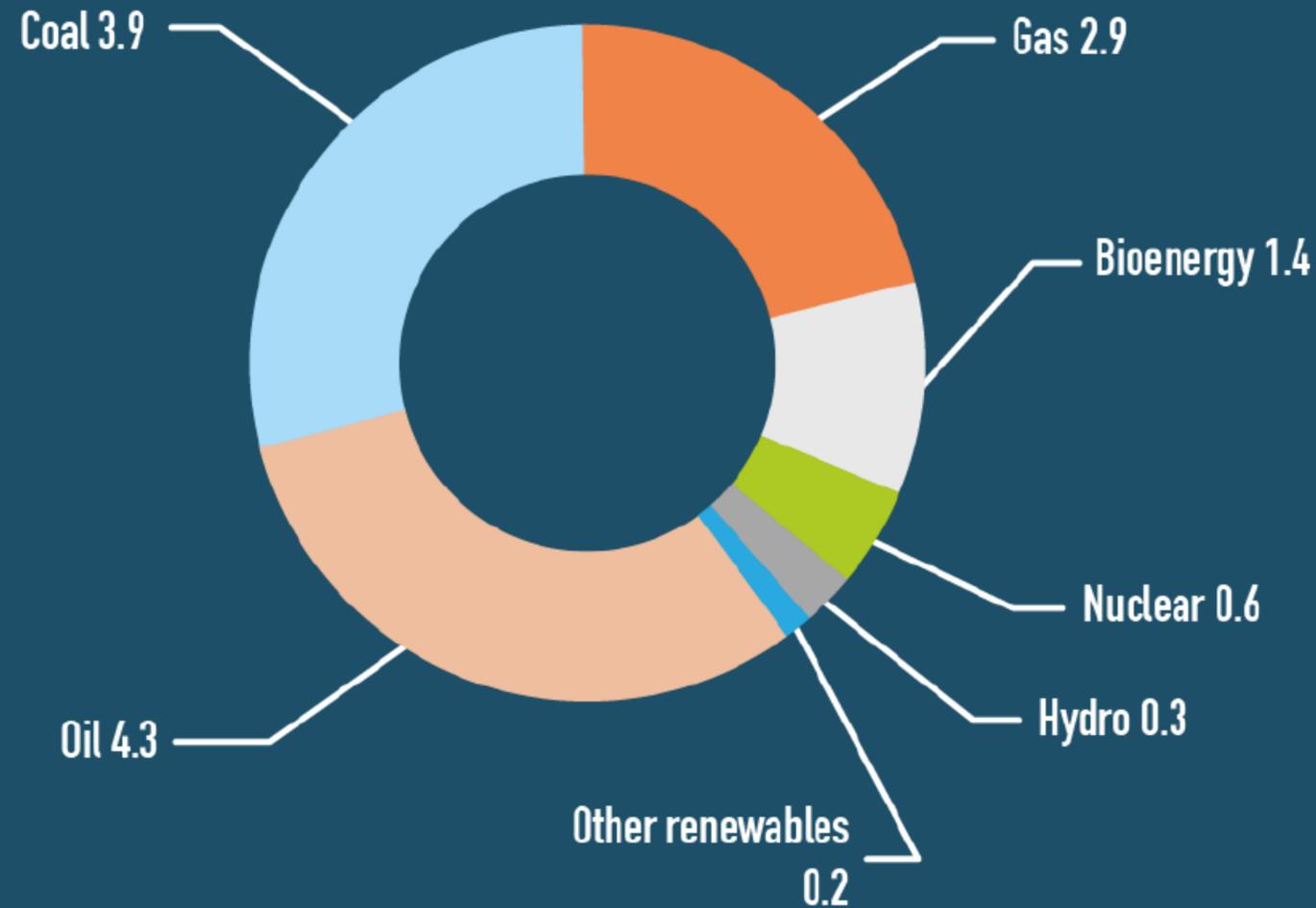
S&P 500 ENERGY AND TECHNOLOGY SECTOR WEIGHTINGS SINCE 1979



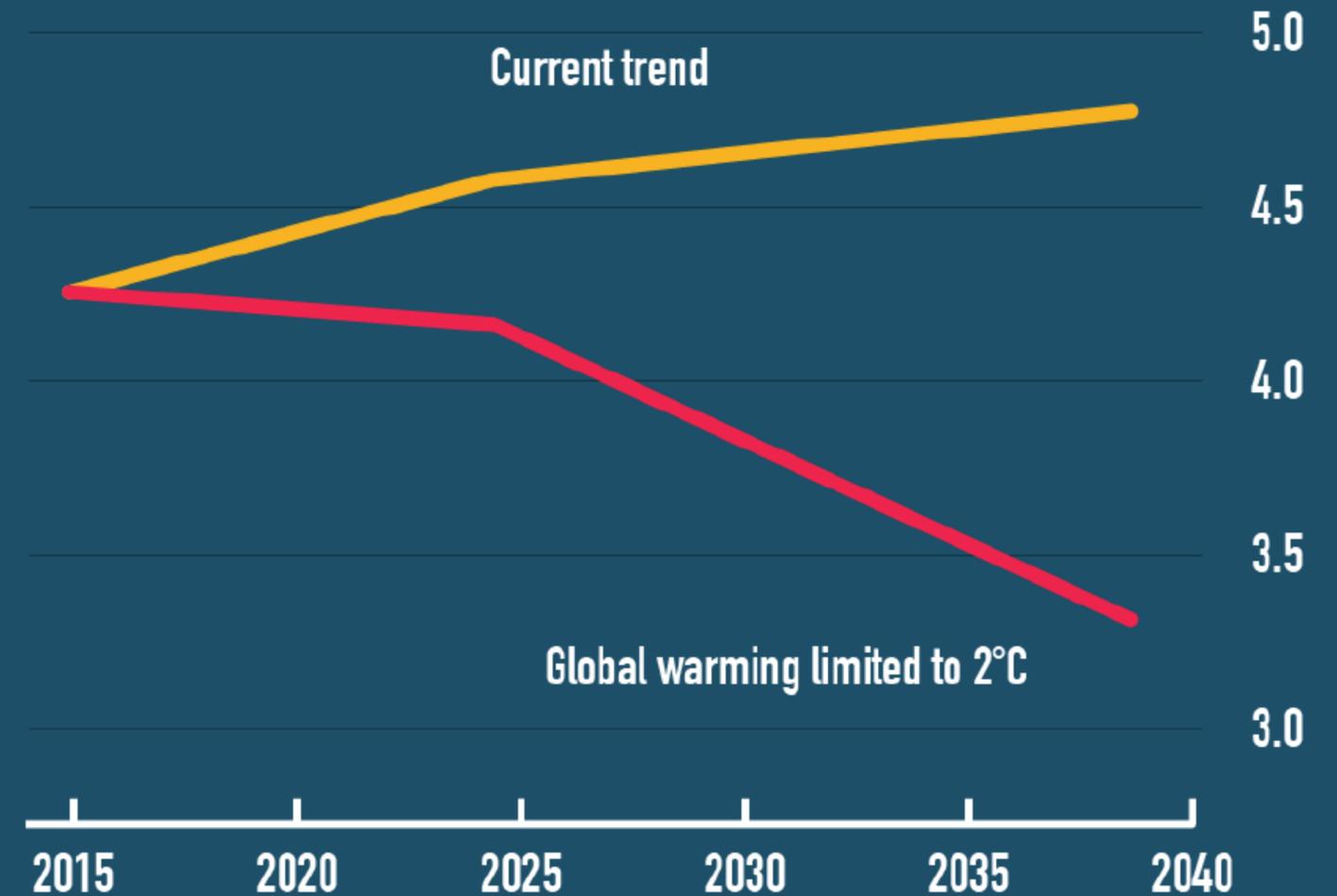
Das Ende von Öl, Gas und Kohle: 'erst ganz langsam und dann sehr schnell'

THE BIG PICTURE

Global primary-energy demand
2014, bn tonnes of oil equivalent



Oil-demand forecasts
Bn tonnes of oil equivalent



“Sustainable Capitalism”



PEOPLE



PLANET



PURPOSE

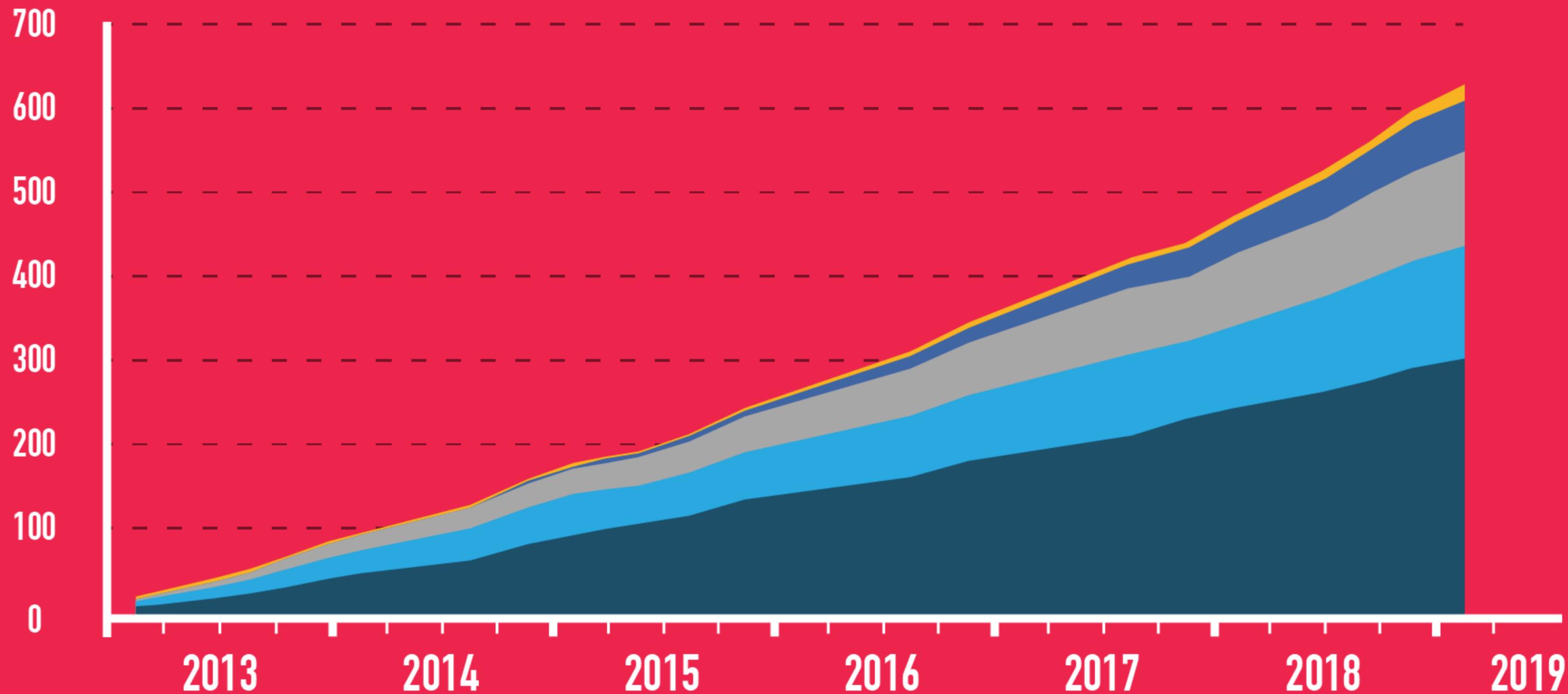


PROSPERITY

REALLY BIG TECH

CUMULATIVE PROFITS SINCE Q1 2013, \$bn

Apple Microsoft Alphabet Facebook Amazon



COUNSEL

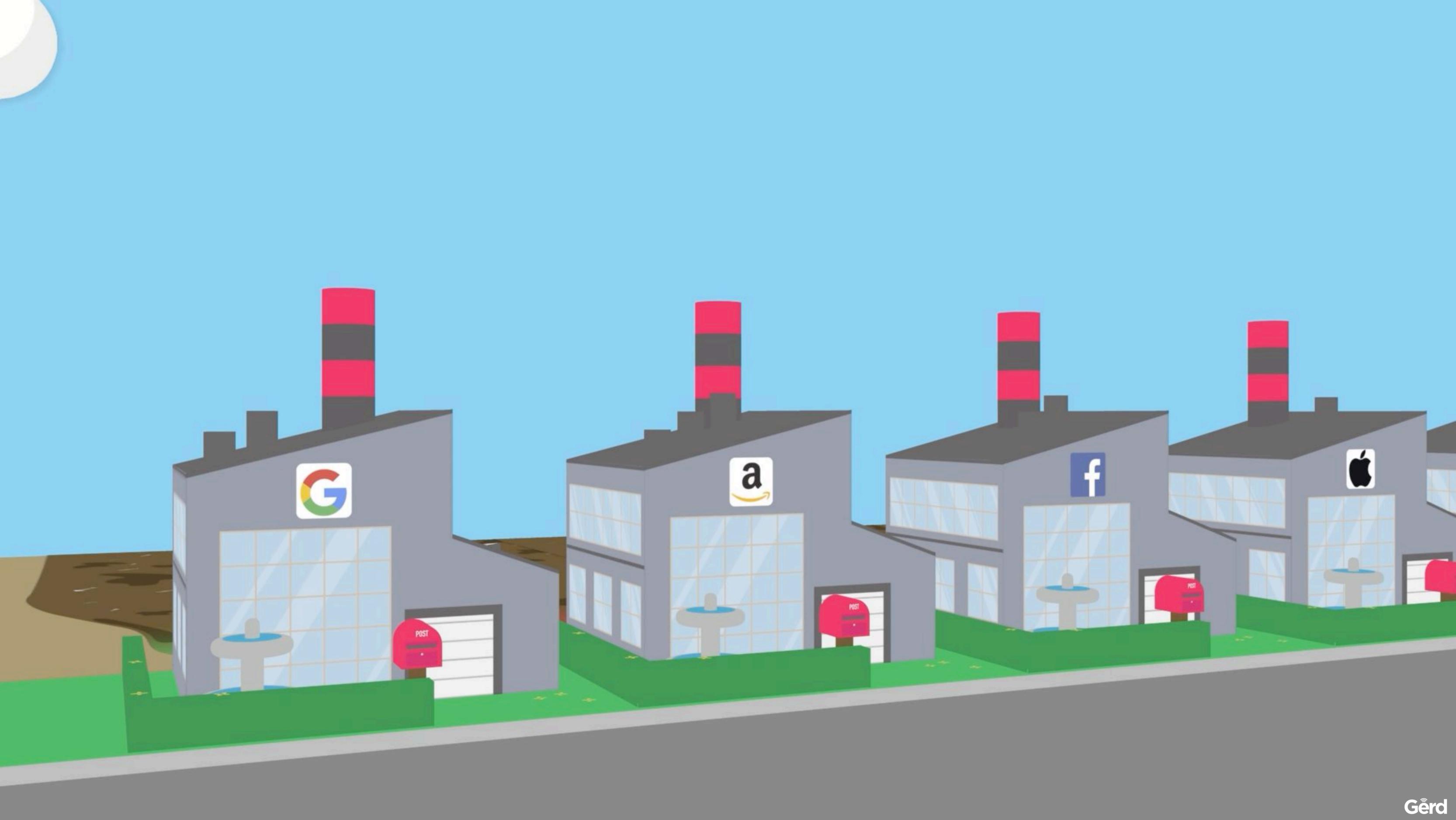
CONVENIENCE

COMMERCE

CONTENT

COMMUNICATION

COMMUNITY



Platform-Kapitalismus und digitale Kartelle: unsustainable



Sozialkontrakte, Regeln, Ethik, Regulation ?



Sozialkontrakte, Regeln, Ethik, Regulation ?



DIGITAL TRANSFORMATION

DEHUMANIZATION

RE-HUMANIZATION

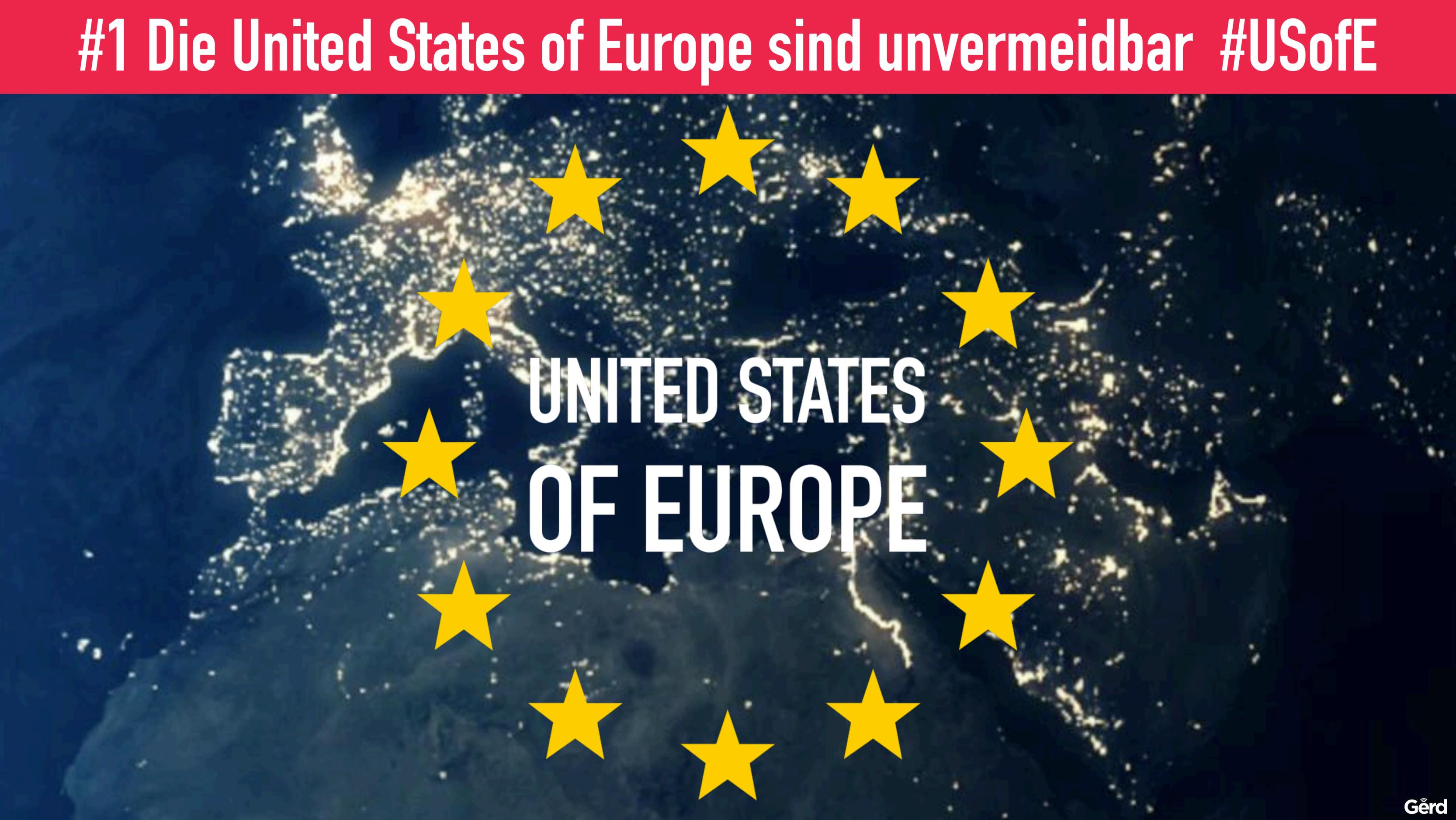
Eine neue Renaissance





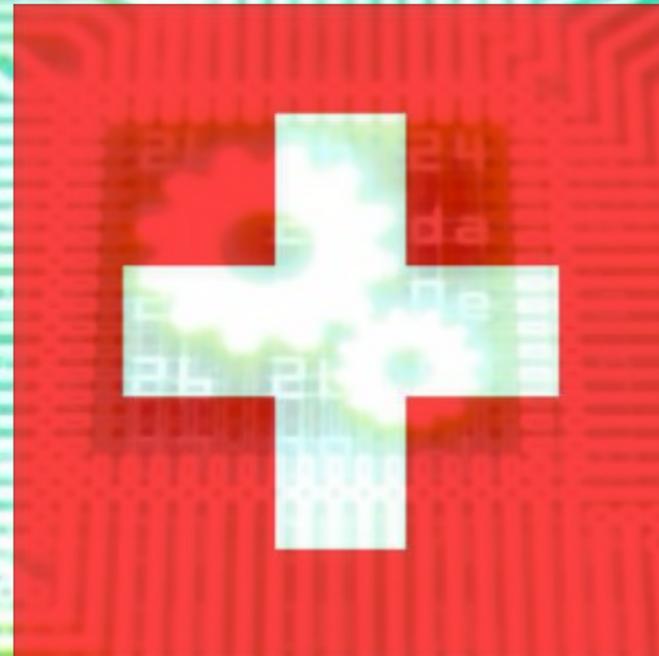
Gelegenheiten für die Schweiz

#1 Die United States of Europe sind unvermeidbar #USofE

A satellite-style map of Europe is shown in dark blue with city lights. Overlaid on the map is a circle of twelve yellow stars, similar to the European Union flag. In the center of the stars, the text "UNITED STATES OF EUROPE" is written in white, bold, uppercase letters.

**UNITED STATES
OF EUROPE**

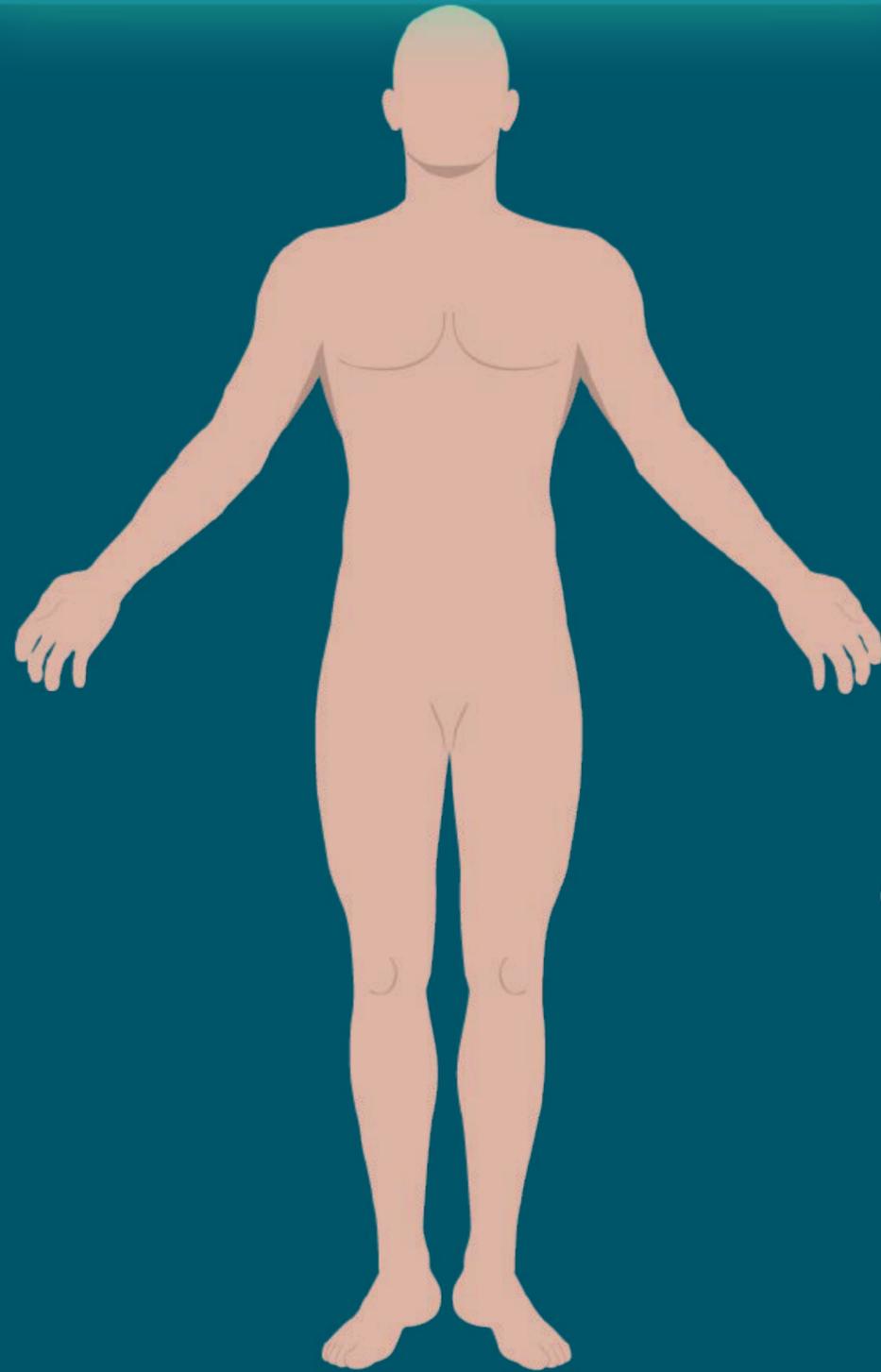
#2: Safe, secure and 'clean': SWISS CLOUD



#3: A global digital currency (backed by global digital ID)



#4 Healthcare Industry Reset: Data, Cloud und KI!



#5: Eine neue Börse für People-Planet-Purpose-Prosperty Unternehmen



#6: Die Schweiz als Standort des "Global Digital Ethics Council"



Die Zukunft ist besser als wir denken

– wir müssen sie nur besser erkennen und aktiv gestalten!



**“Die Zukunft gehört
denen die sie
kommen hören”
(David Bowie)**

 Swissquote



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**THANK YOU
FOR YOUR TIME**



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