



wbcscd

- 1. An overview, top-down approach
- 2. An overview, bottom-up
- 3. An overview, middle-out
- 4. An overview, middle-out and bottom-up
- 5. An overview, middle-out and top-down

1.22



# HUMANITY AND TECHNOLOGY: THOUGHTS ON A SUSTAINABLE FUTURE



techvshuman.com

8.35



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Information is that which informs. In other words, it is that which relates to data and technology. As data represents values attributed to knowledge through understanding of real things or abstract concepts, it is that which relates to data and technology. As data represents values attributed to knowledge through understanding of real things or abstract concepts, it is that which relates to data and technology. As data represents values attributed to knowledge through understanding of real things or abstract concepts, it is that which relates to data and technology.

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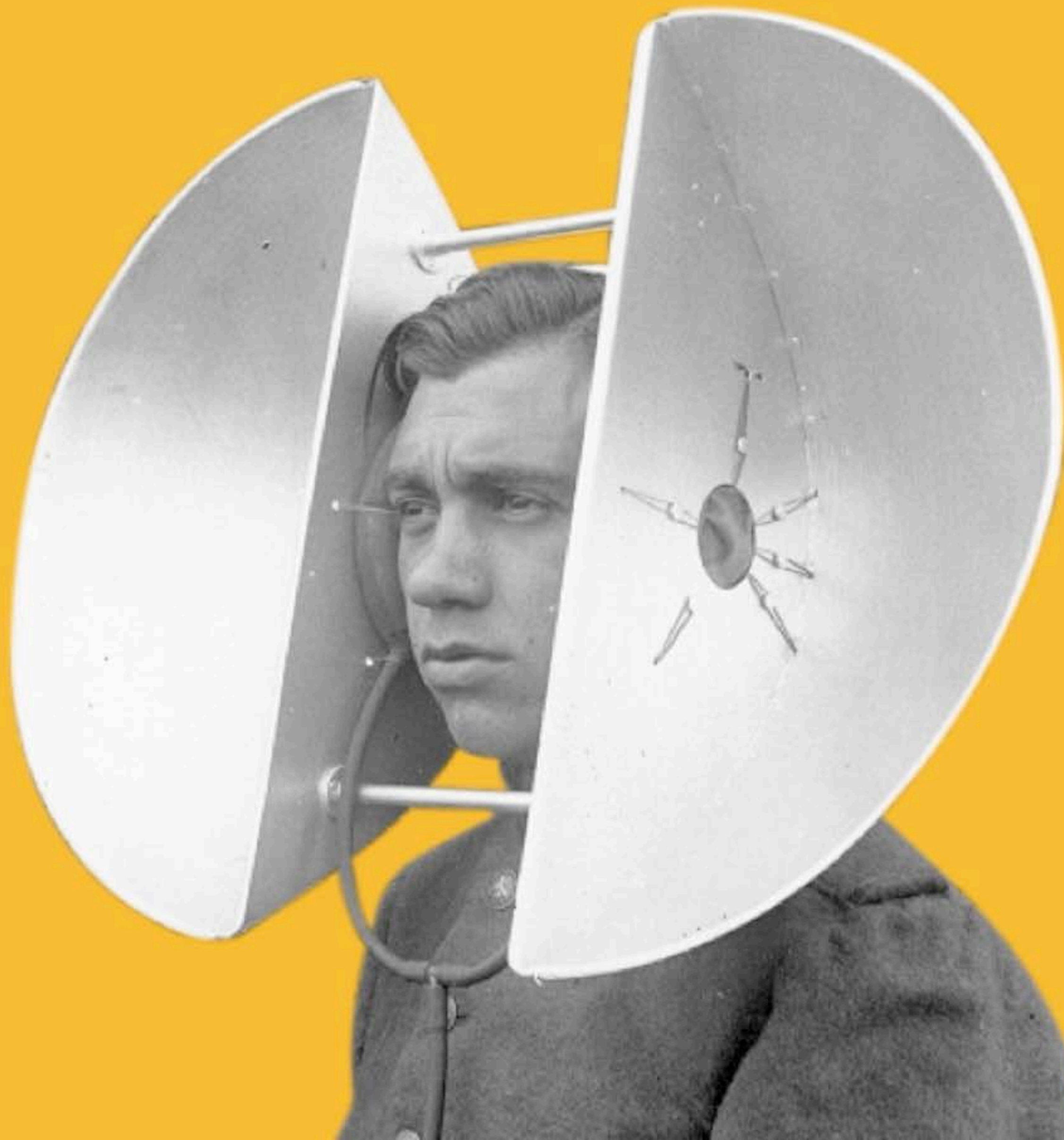


@gleonhard



futuristgerd.com

**THE FUTURE IS NO LONGER A TIME-FRAME; IT'S A MINDSET**



**The future is better than we think !**



**The future is better than we think !**



**Within the next 20 years, scientific and technological progress will enable us to:**

**Address global food shortages**

**Stop or even reverse global warming**

**Prevent or slow-down many major diseases**

**Cheaply desalinate as much water we need**

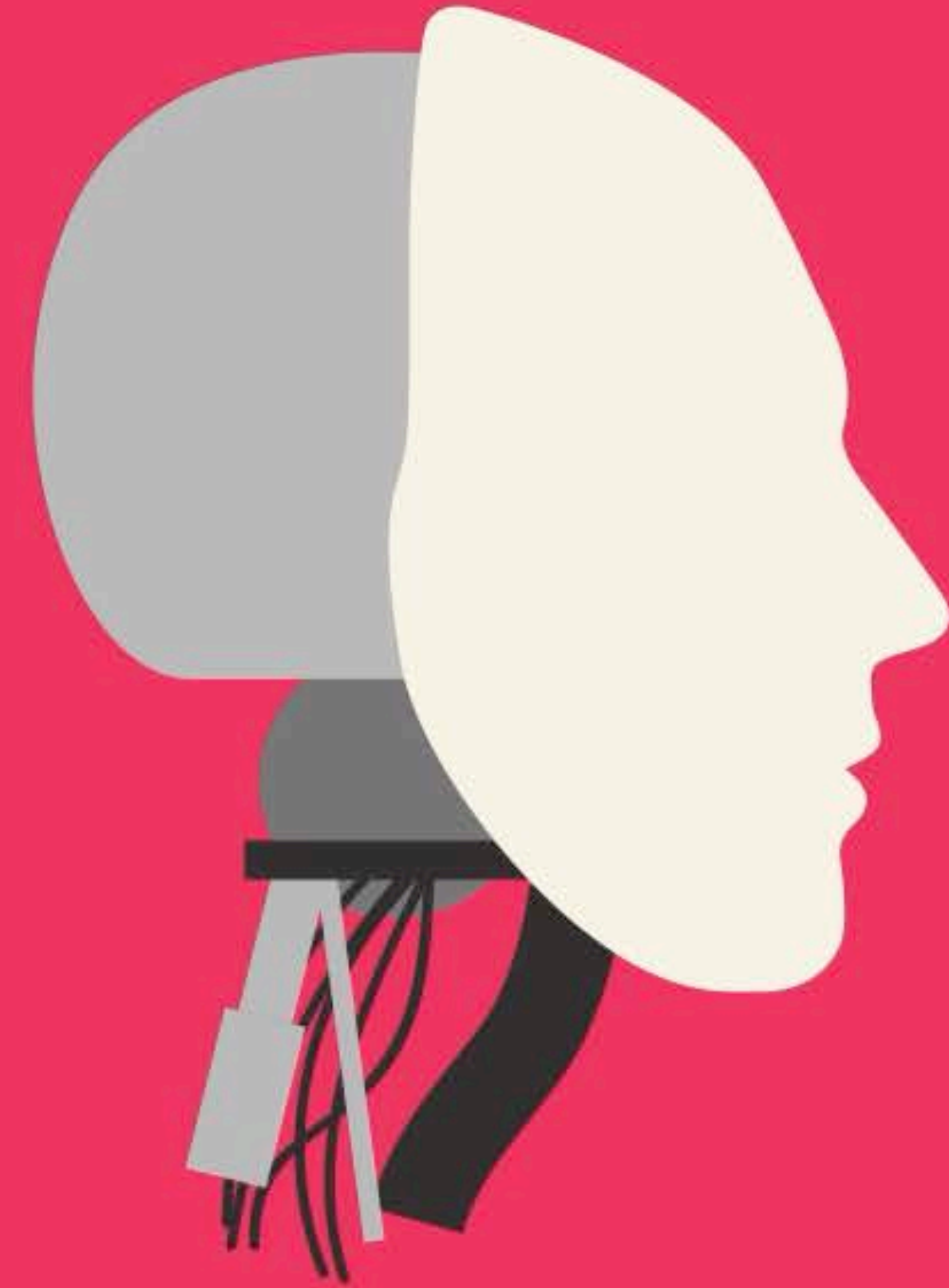
**Solve the energy problem (i.e. reach abundance)**

**...IF we govern it wisely!**

**Our world will change more in the next 20 years than the previous 300 years**

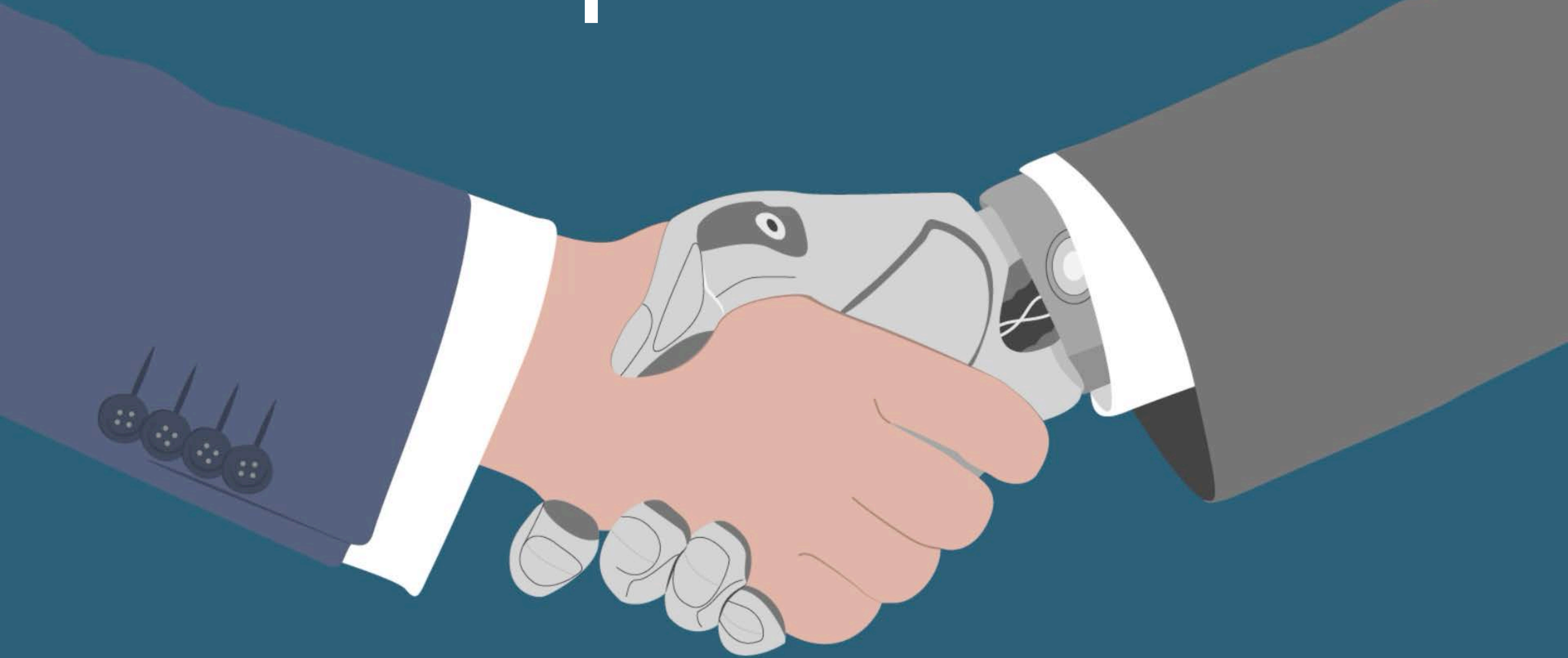


# Humans Technology

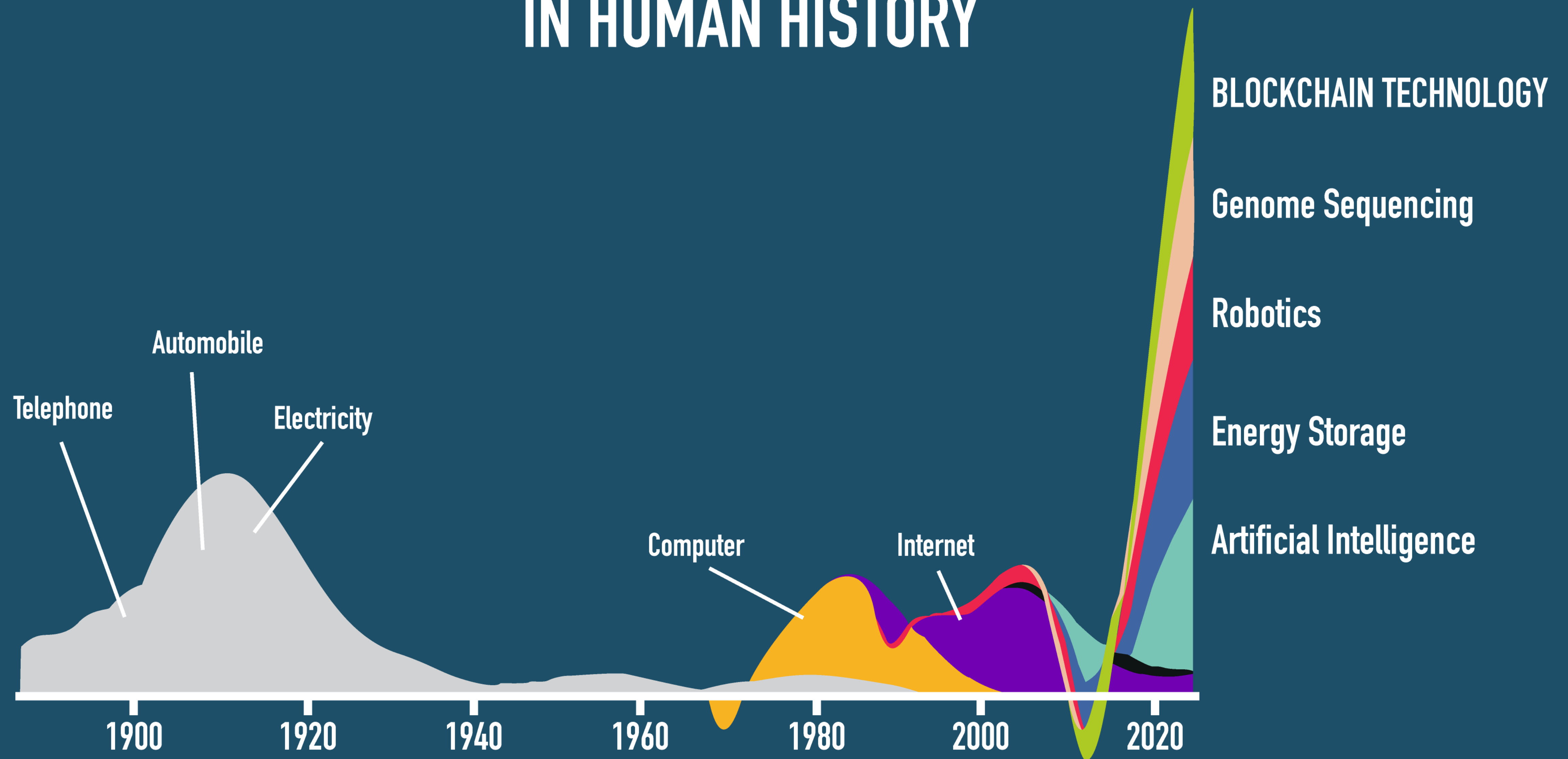




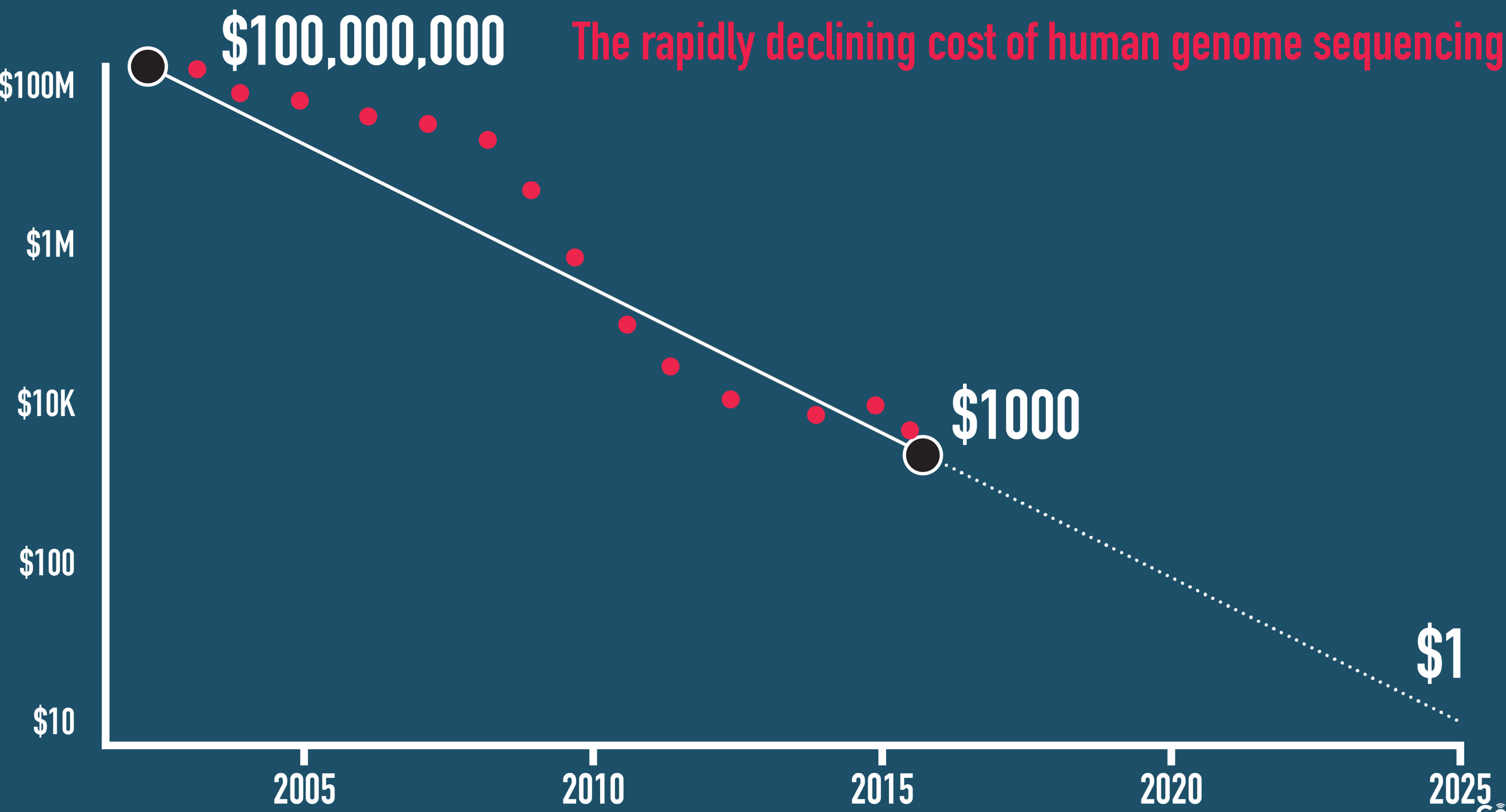
# Purpose Tool



# THE LARGEST TECHNOLOGICAL TRANSFORMATION IN HUMAN HISTORY



# The rapidly declining cost of human genome sequencing



# Exponential | Combinatorial | Convergent

$e^x$



1 2 4 8 16 32 64 128 256 512

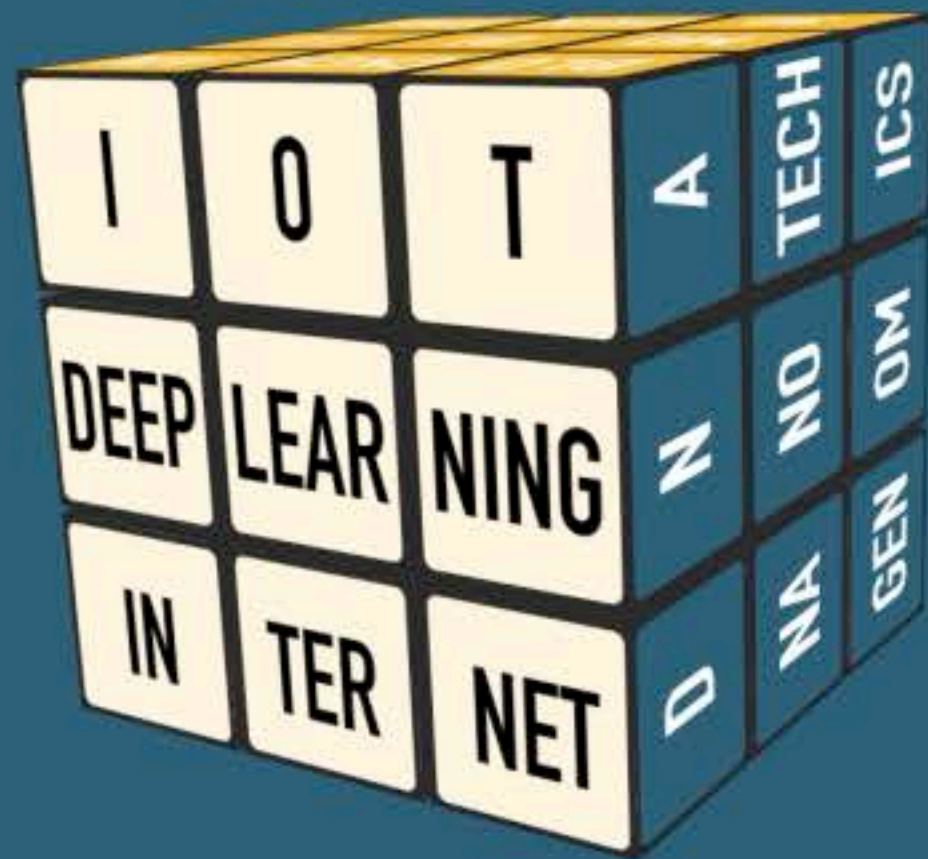
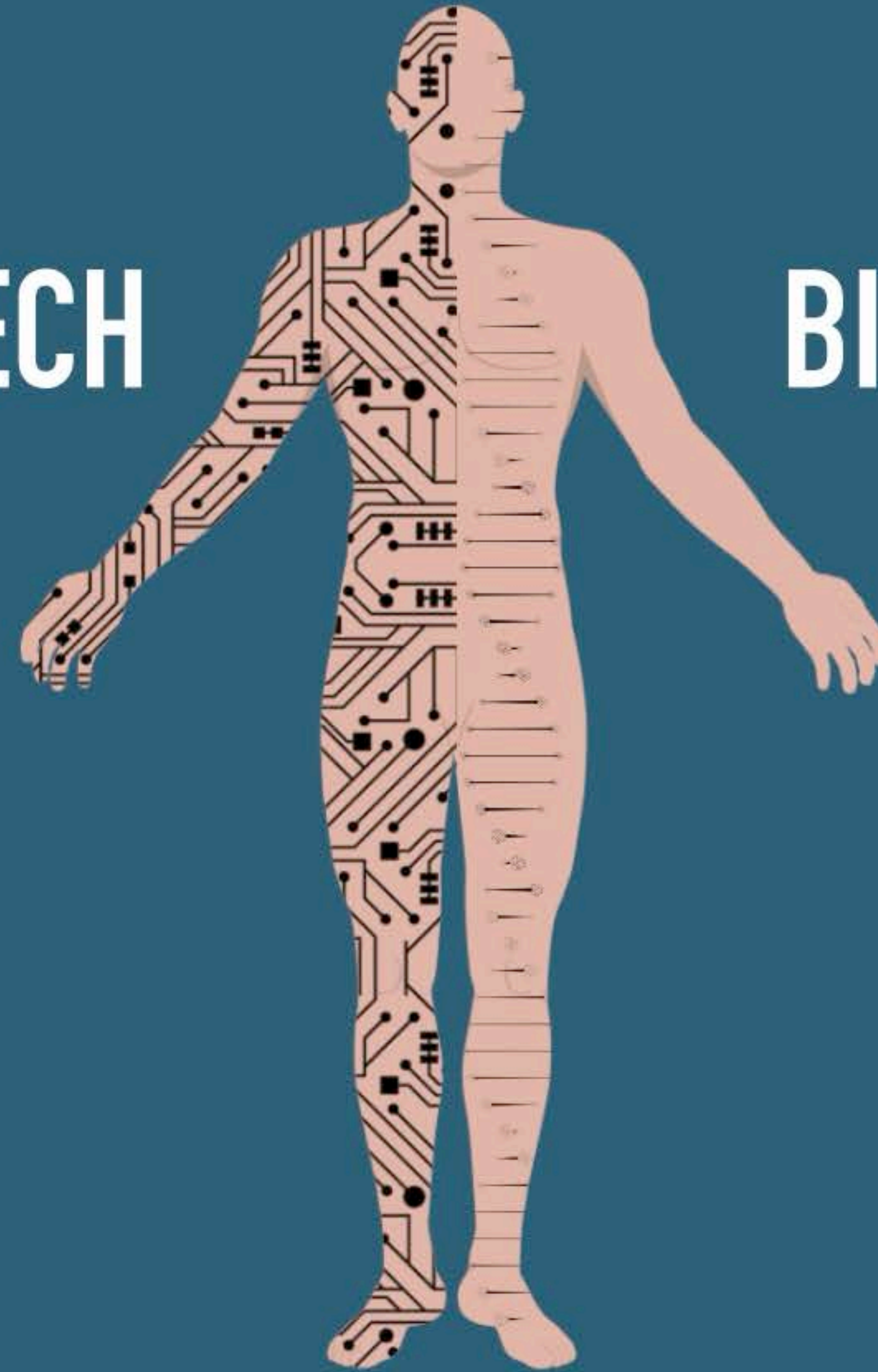
# Exponential | Combinatorial | Convergent

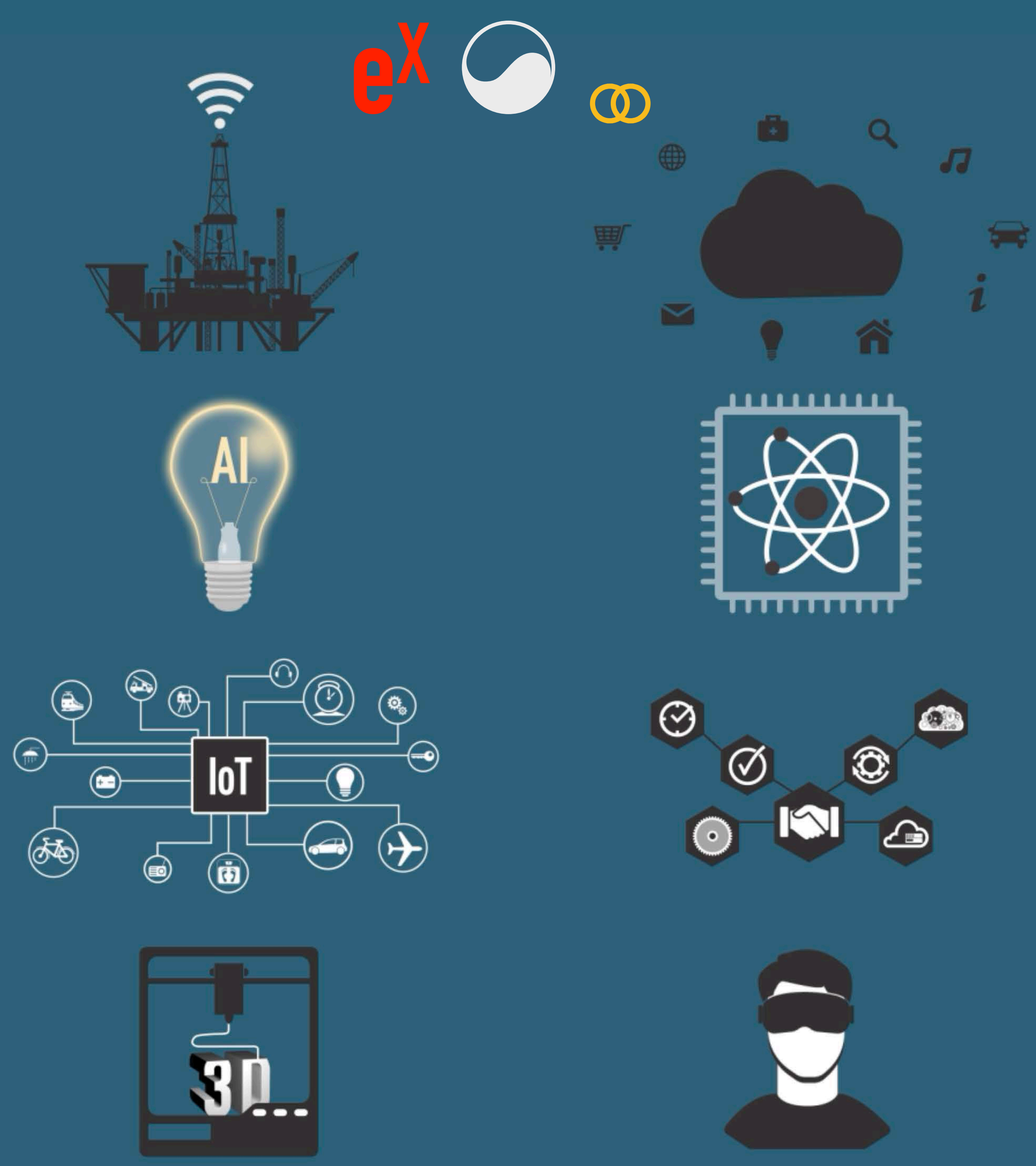
$e^x$



INFOTECH

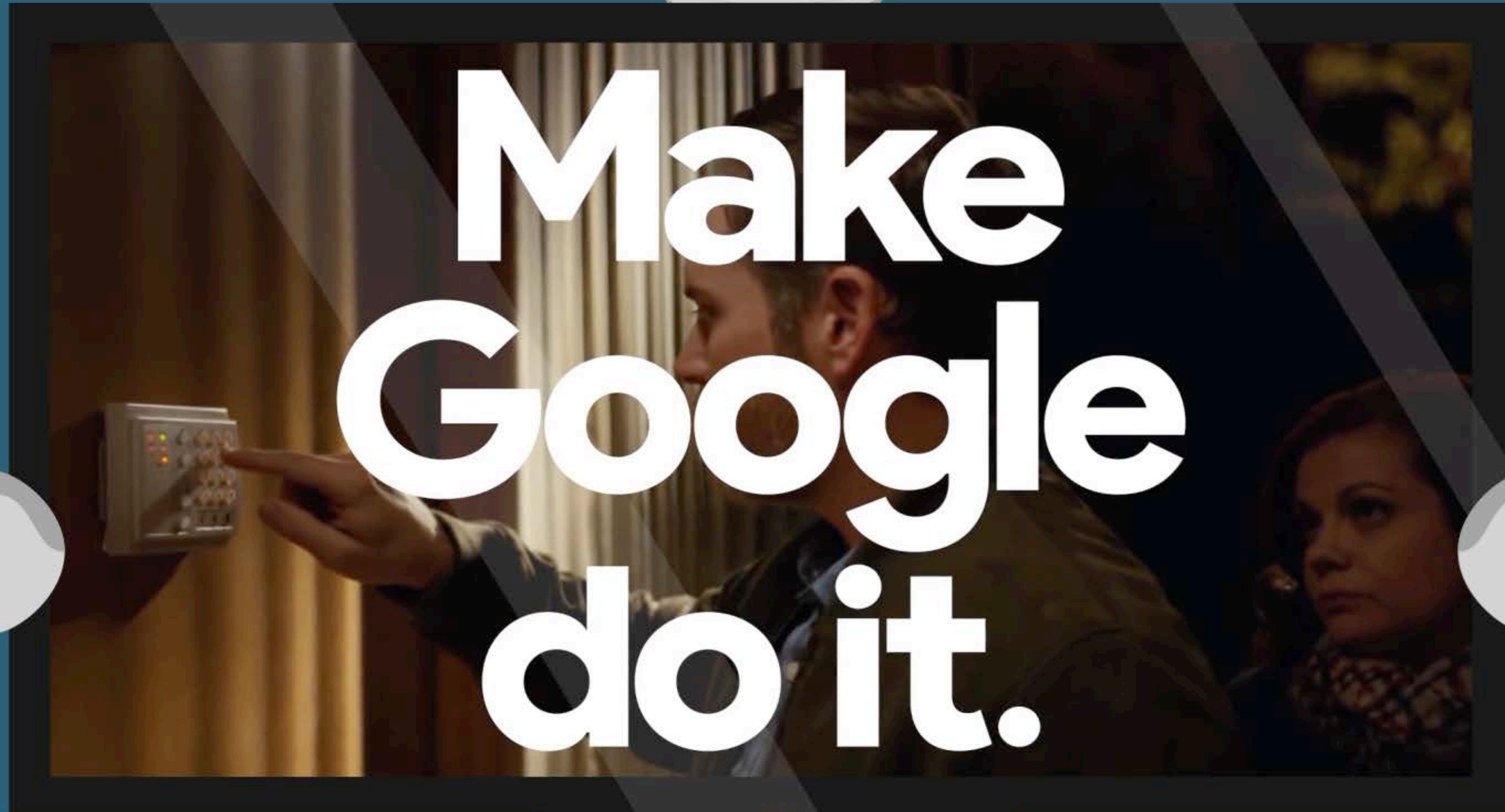
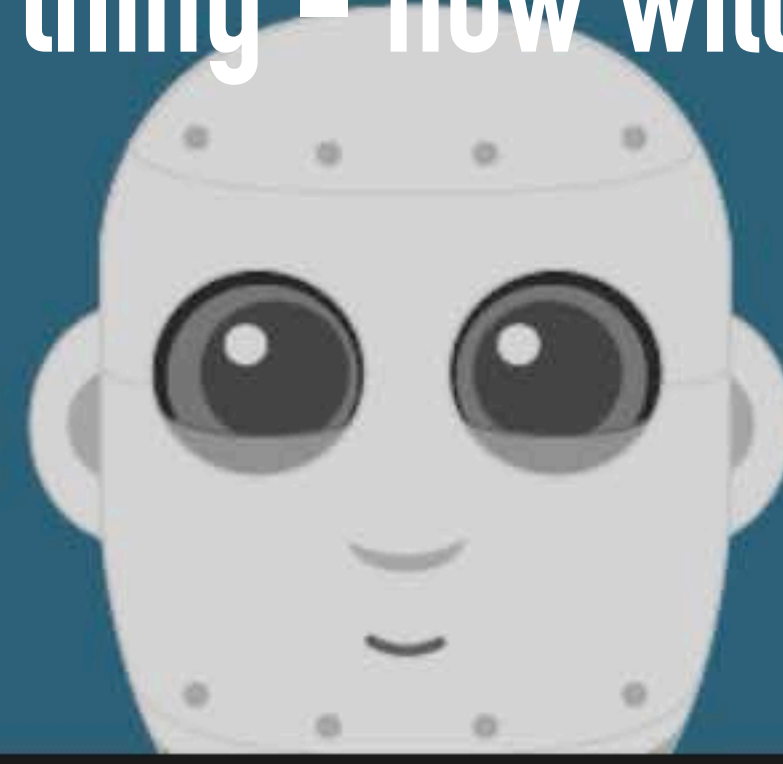
BIOTECH





RANK	COMPANY	REGION	CURRENT MARKET VALUE (\$B)
1	Apple	USA	\$964
2	Amazon	USA	783
3	Microsoft	USA	753
4	Google / Alphabet	USA	739
5	Facebook	USA	538
6	Alibaba	China	509
7	Tencent	China	483
8	Netflix	USA	152
9	Ant Financial	China	150
10	eBay + Paypal*	USA	133
11	Booking Holdings	USA	100
12	Salesforce.com	USA	94
13	Baidu	China	84
14	Xiaomi	China	75
15	Uber	USA	72
16	Didi Chuxing	China	56
17	JD.com	China	52
18	Airbnb	USA	31
19	Meituan-Dianping	China	30
20	Toutiao	China	30
<b>TOTAL</b>			<b>\$5,788</b>

Too much of a good thing can be a very bad thing – how will we define a humanly sustainable balance?



# Too much of a good thing can be a very bad thing – how will we define a humanly sustainable balance?



...Yes





In order to address the externalities and the unintended consequences of scientific and technological progress we need a stronger focus on ethics & values, new social contracts, renewed public debate, new corporate accountability, regulation and global treaties



**“Technology can do great things. But it does not WANT to do great things. It doesn’t want anything”**

(Tim Cook, Apple)



Within the next 20 years, a new economic logic based on 'sustainable capitalism' will emerge

... and before that, we will start to separate work and money!



**"Ethics is knowing the difference between what you have a right  
(or the power) to do and what is the right thing to do"**

adapted from Potter Stewart



**TECHNOLOGY HAS NO ETHICS**

As technology becomes virtually unlimited in its capacity, the question will be WHY we do something, not how

If?

How?

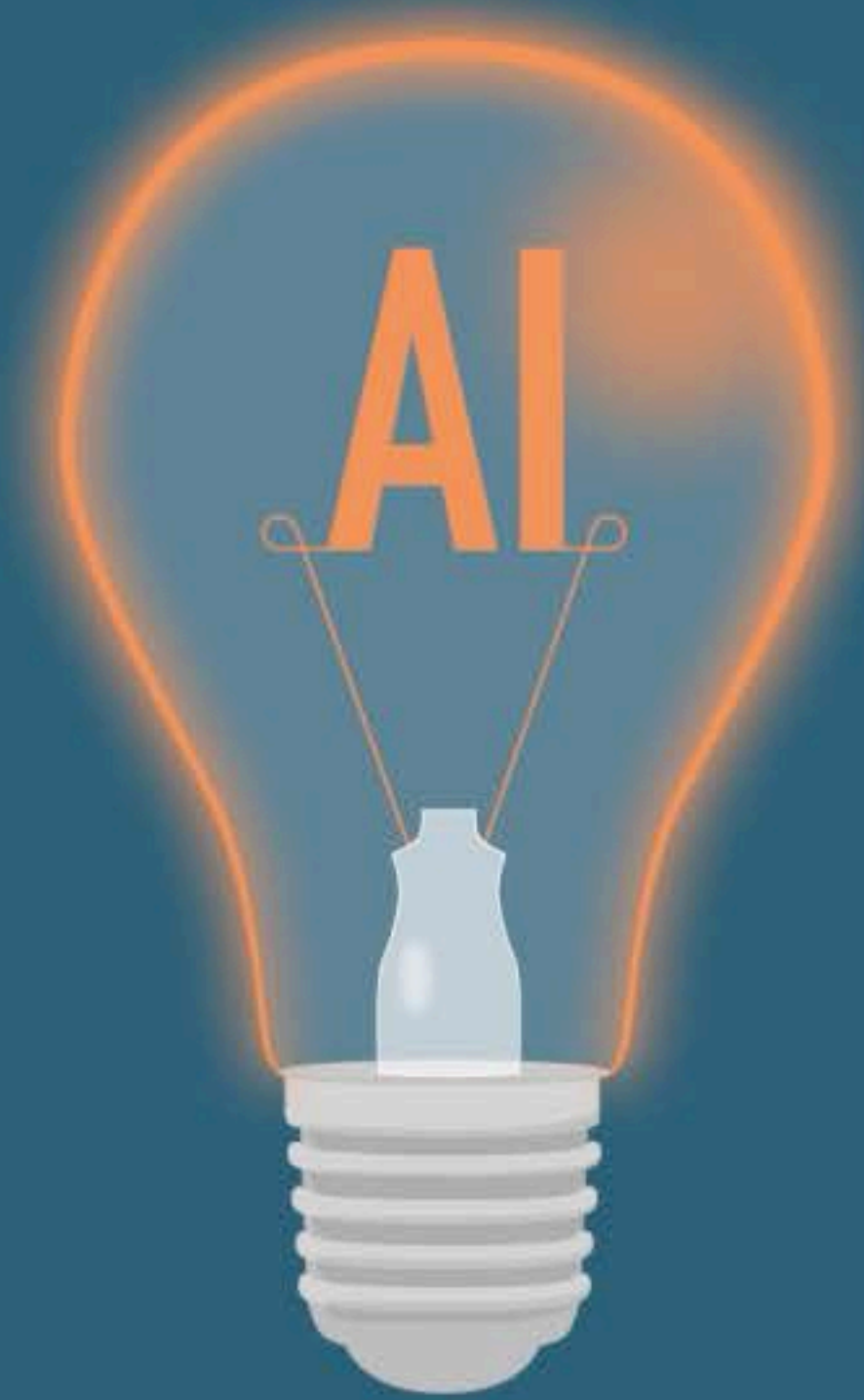
As technology becomes virtually unlimited in its capacity, the question will be WHY we do something, not how

Why?

Who?

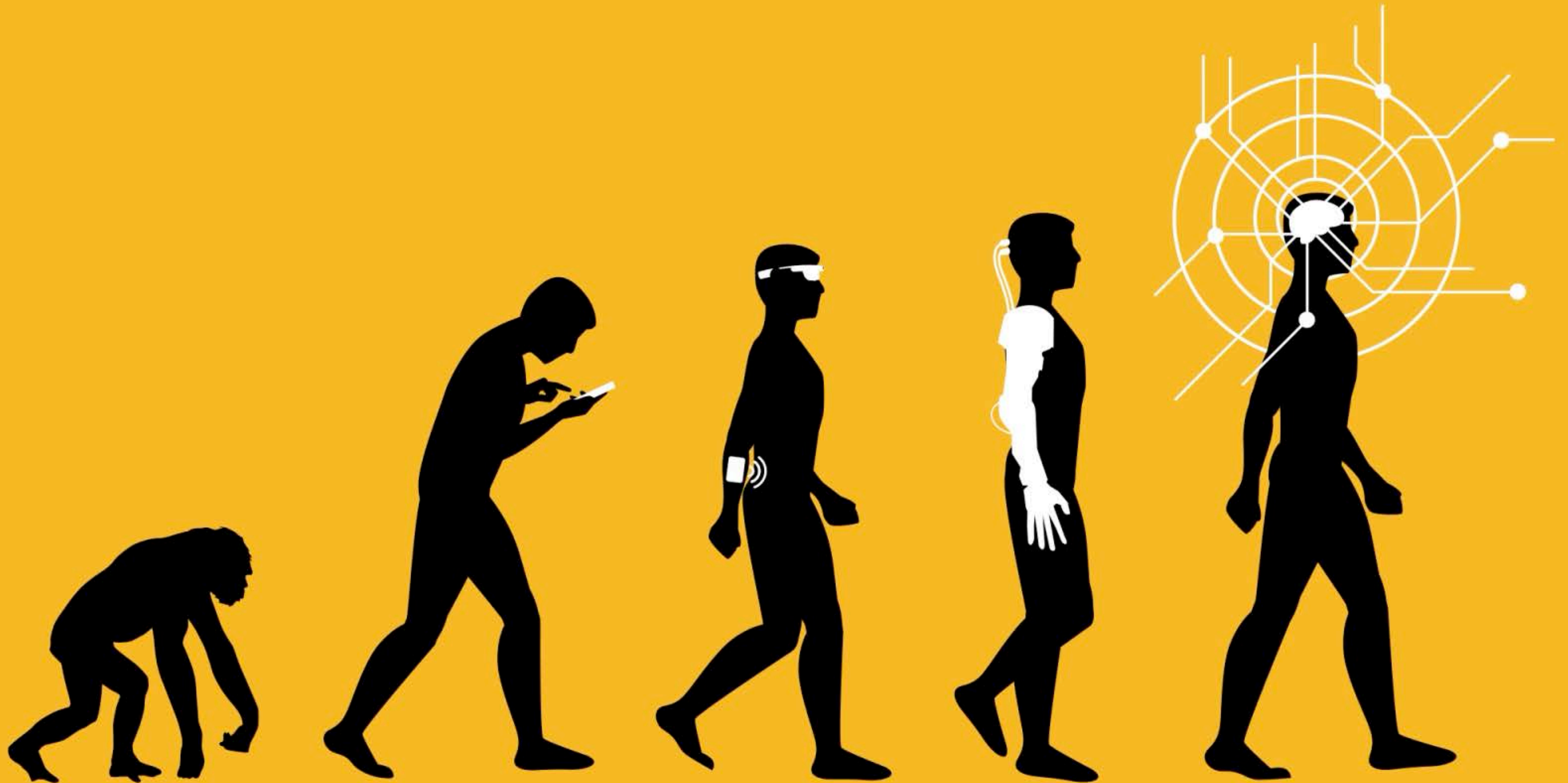
# Who is Mission Control for Humanity? Who is responsible, accountable and trustworthy?



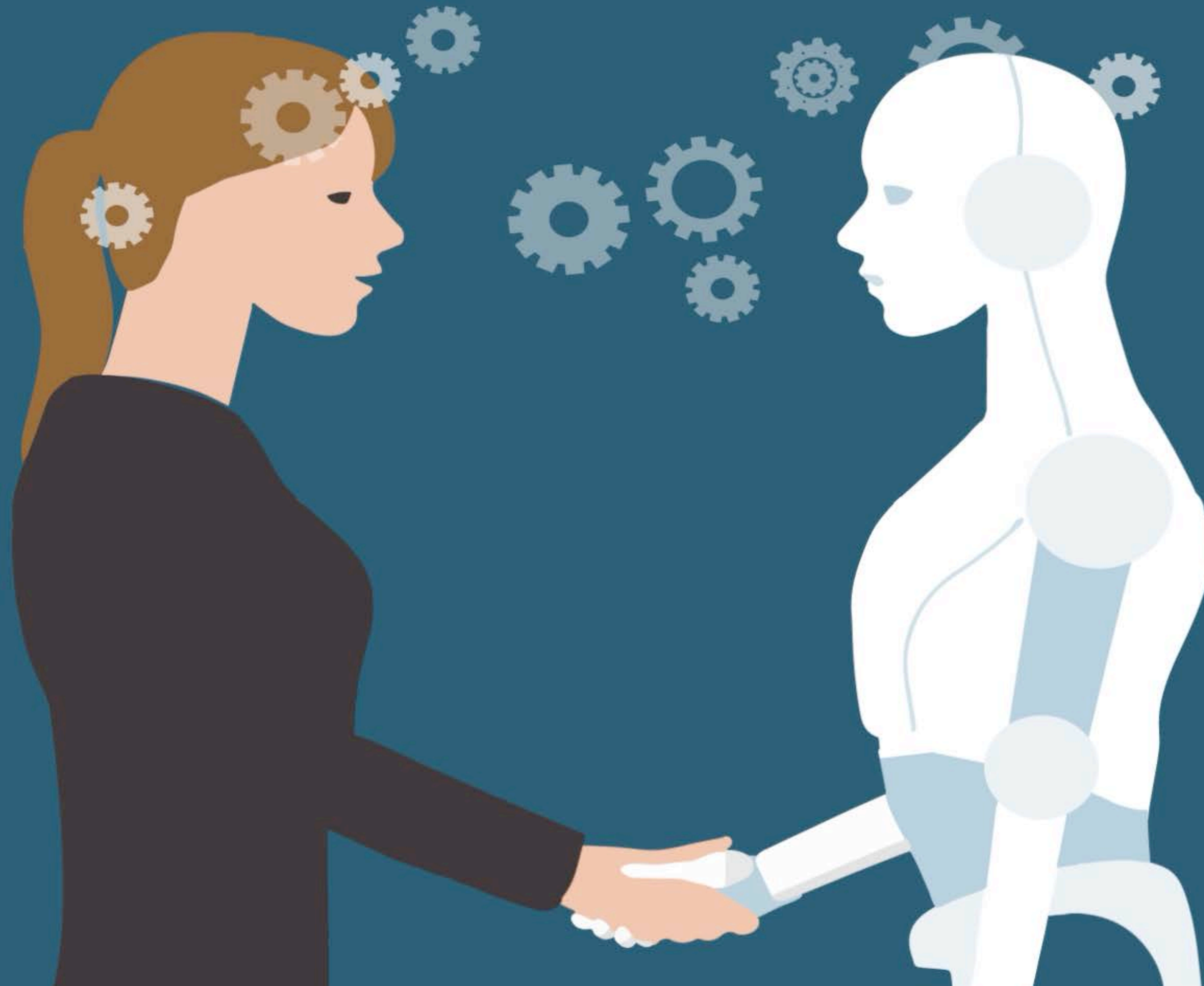




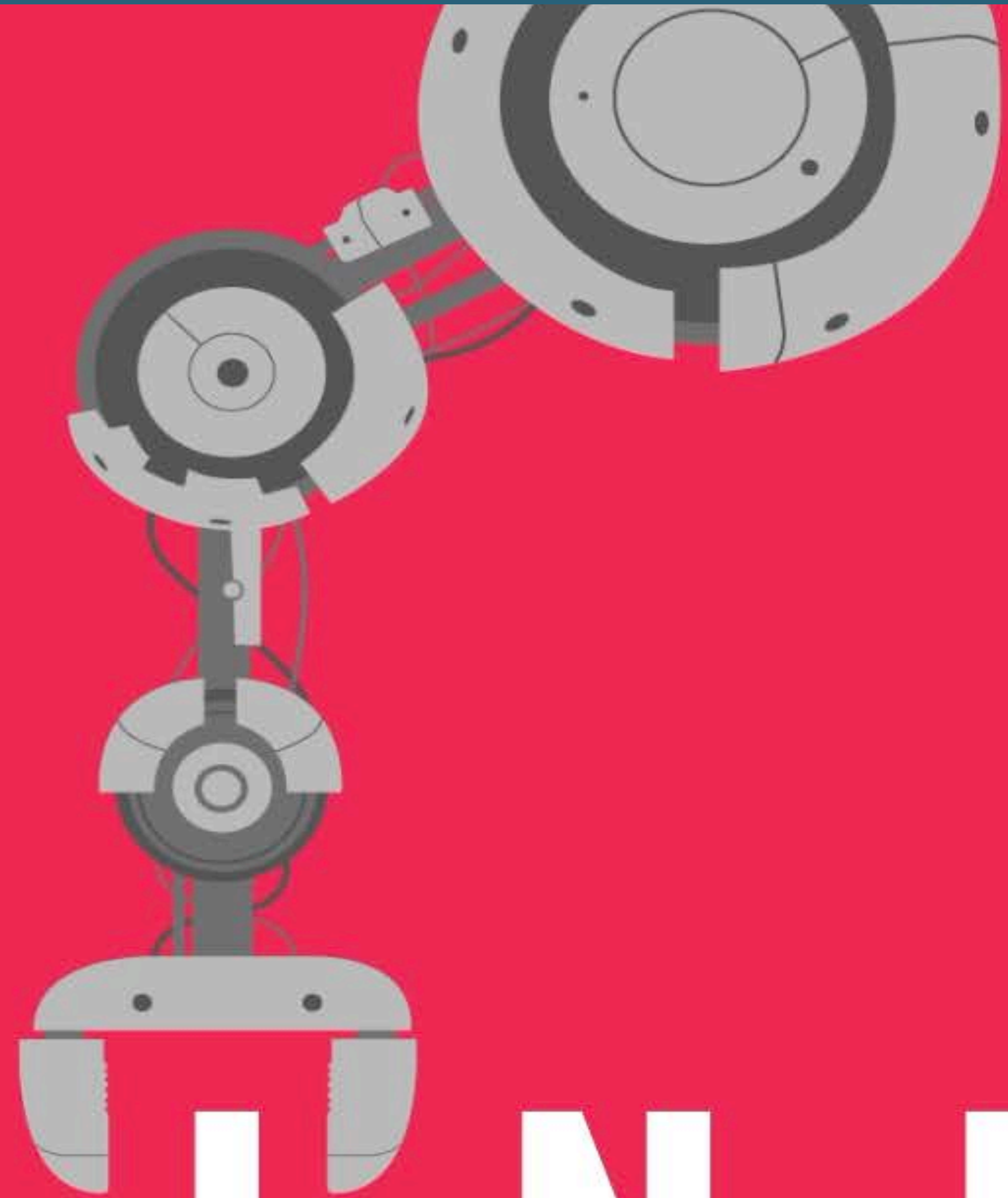
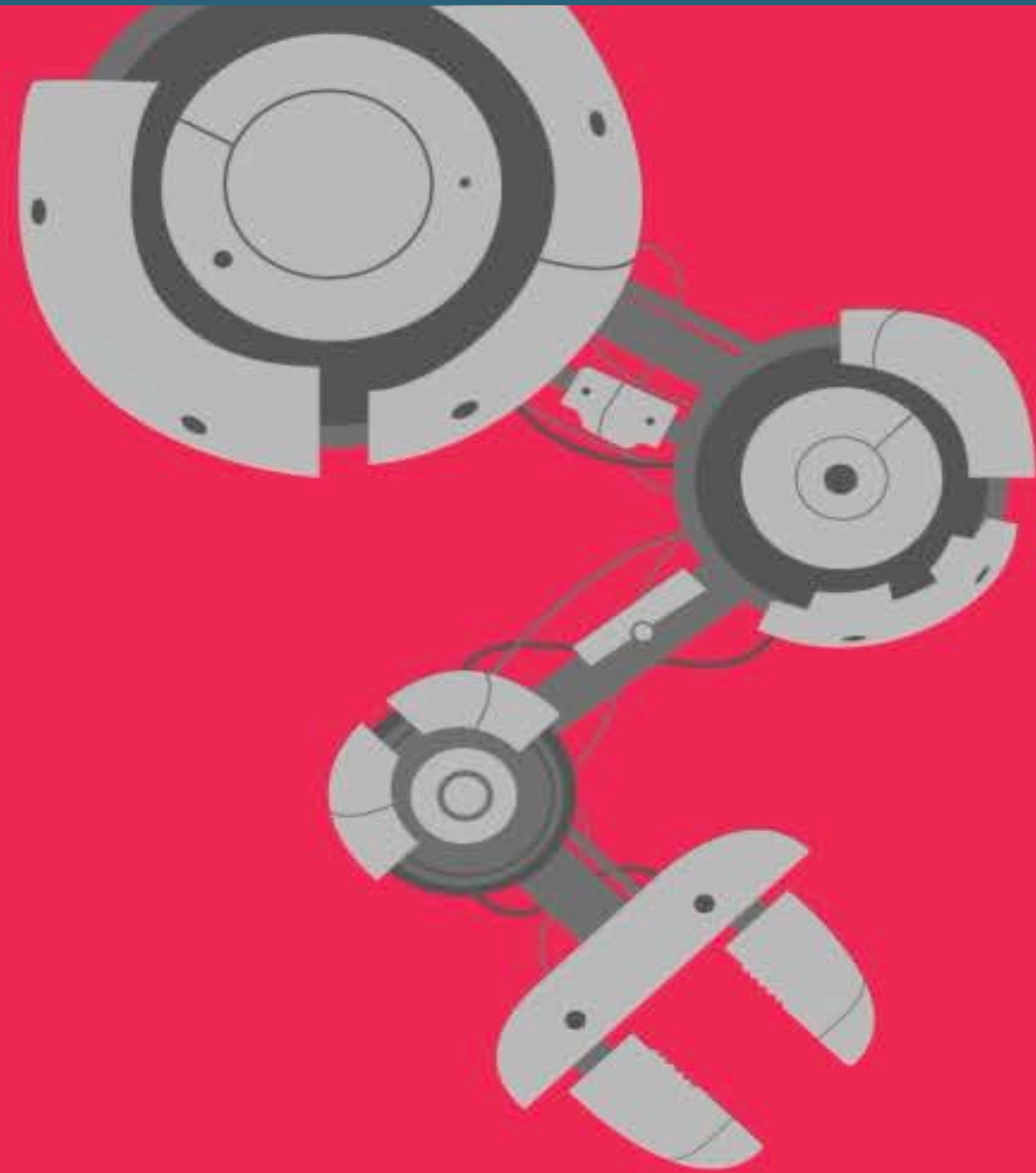
**The biggest risk in our near-future is that we might actually gain almost unlimited technological powers – but fail to use it for collective human benefit**



# Automation will be a much bigger challenge than globalization



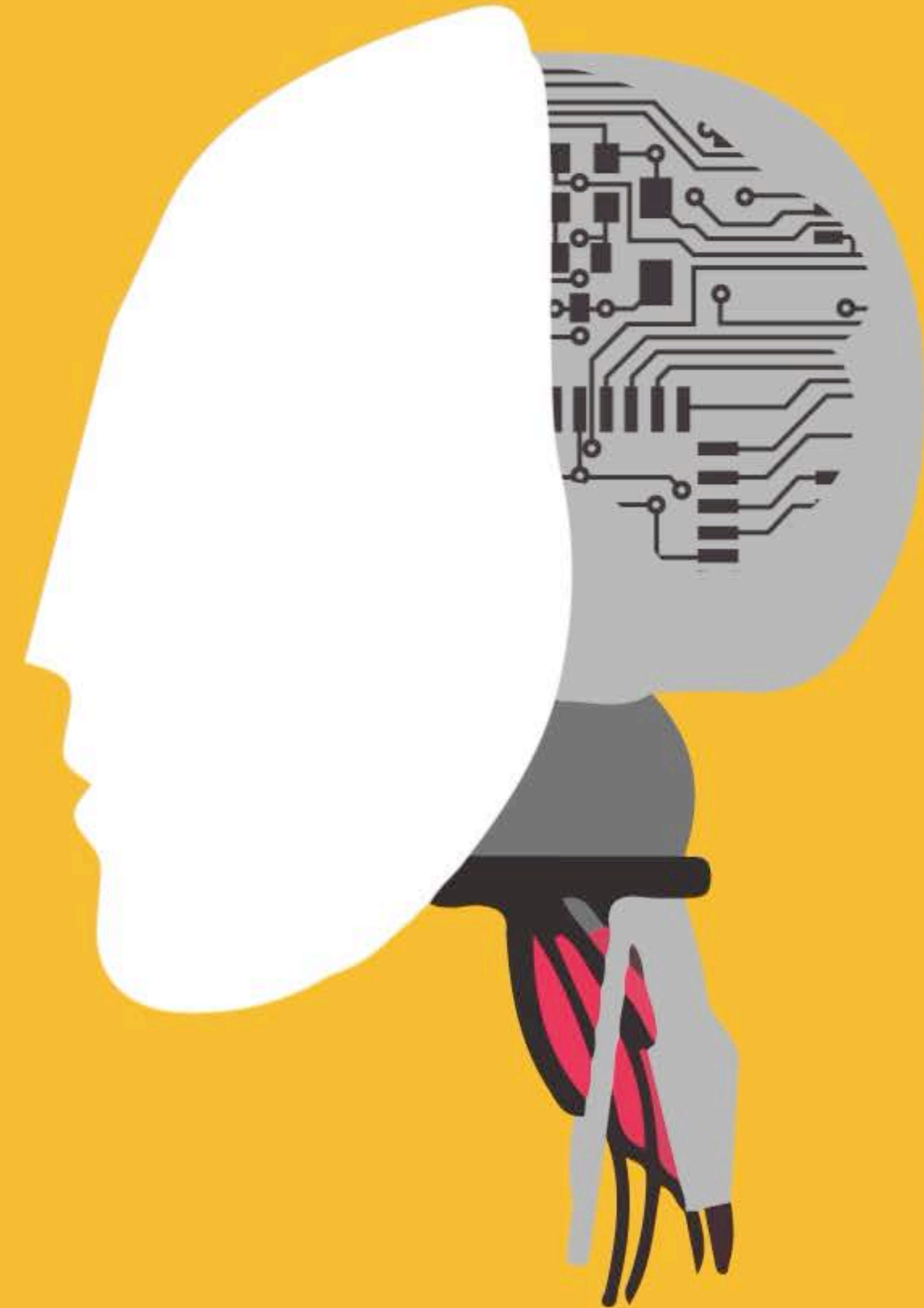
The end of routine is coming – but it's NOT the end of human work!



**R O U T I N E**

# 'Thinking Machines': Don't mistake a clear view with a short distance !

(Paul Saffo)





**DATA AND INFORMATION**  
**is not Knowledge\***  
**is not Understanding**  
**is not Wisdom**  
**is not Purpose**

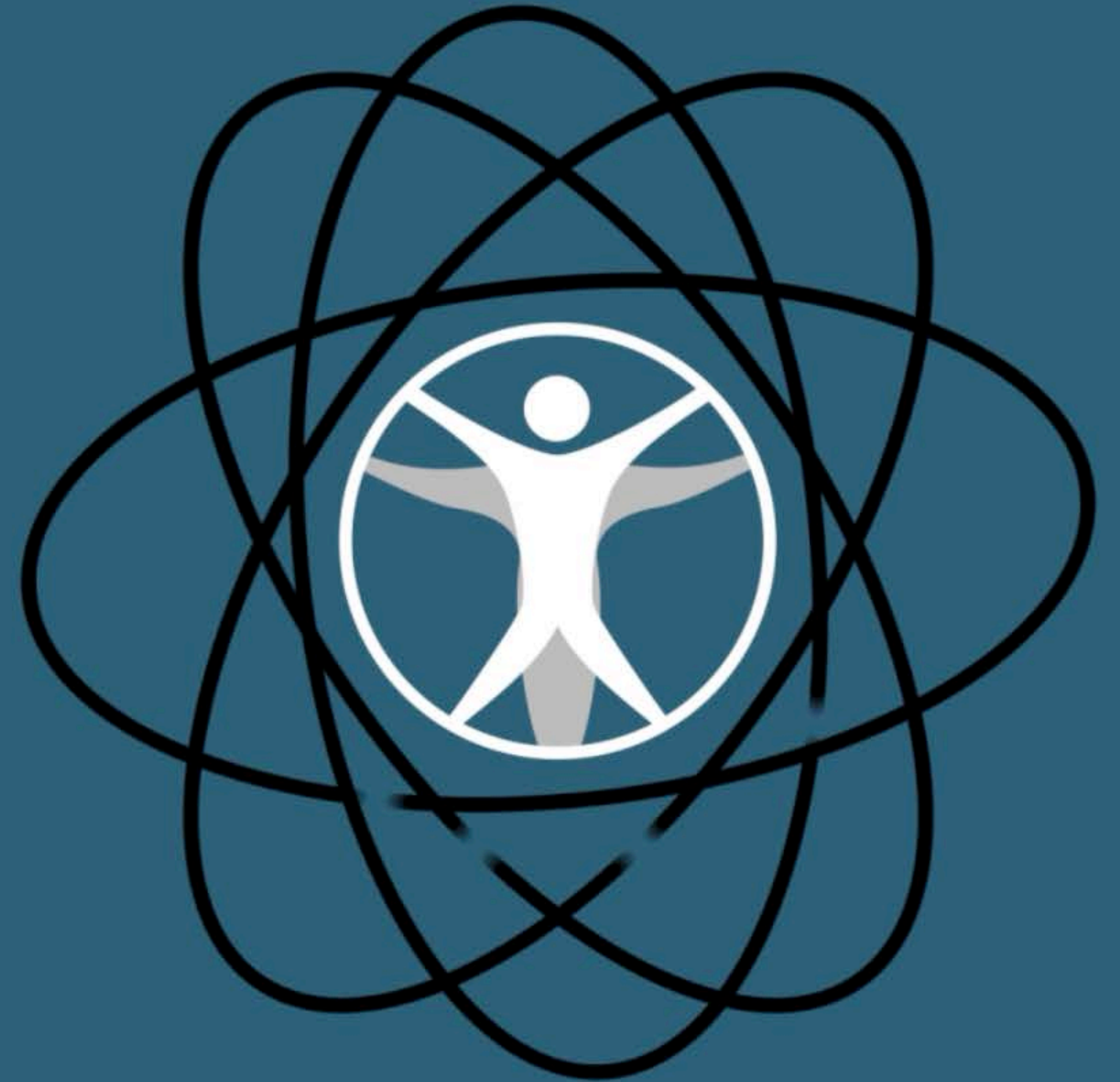
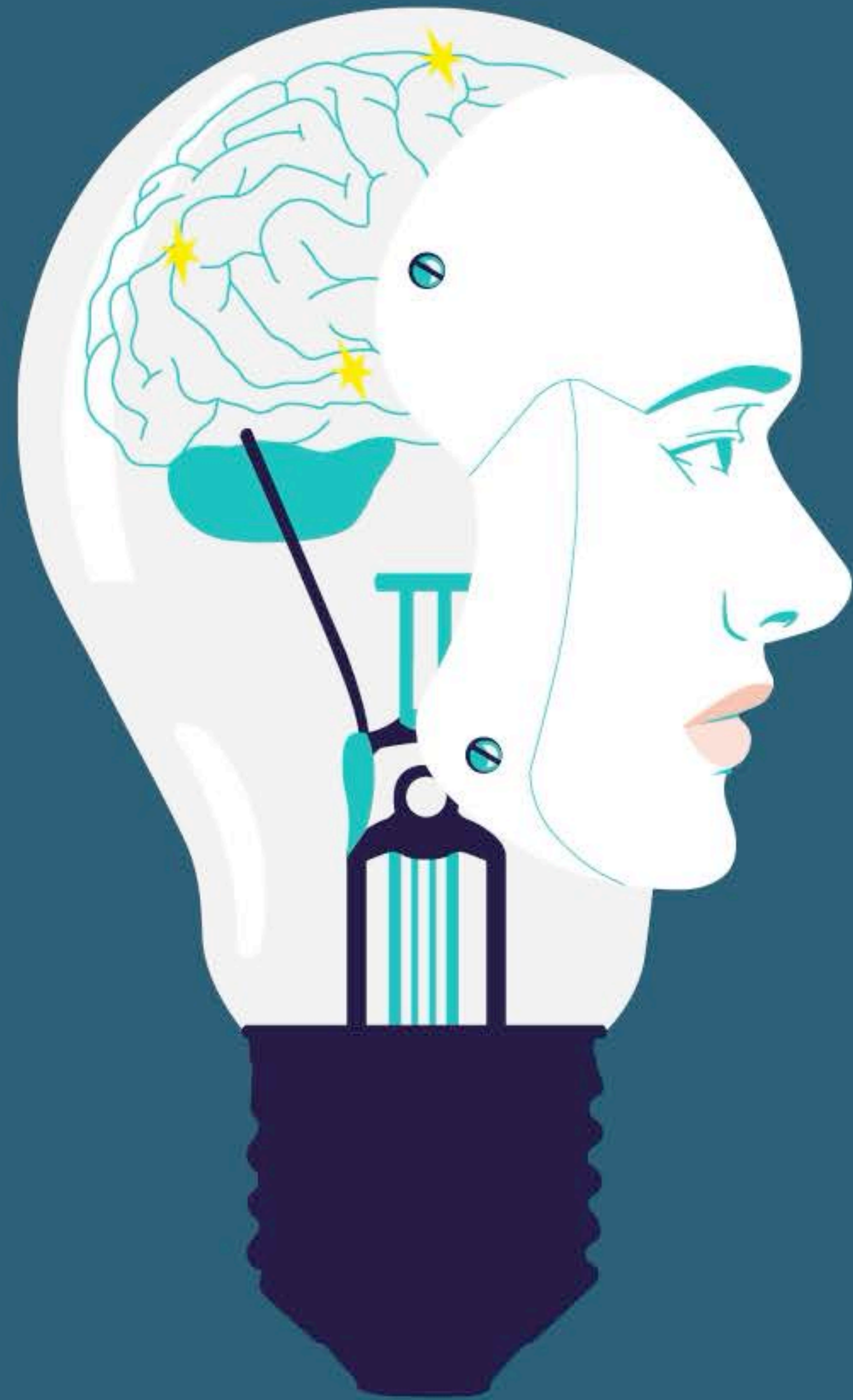
Today, the biggest danger is not that machines will eliminate us but that we become too much like them!



#hellven

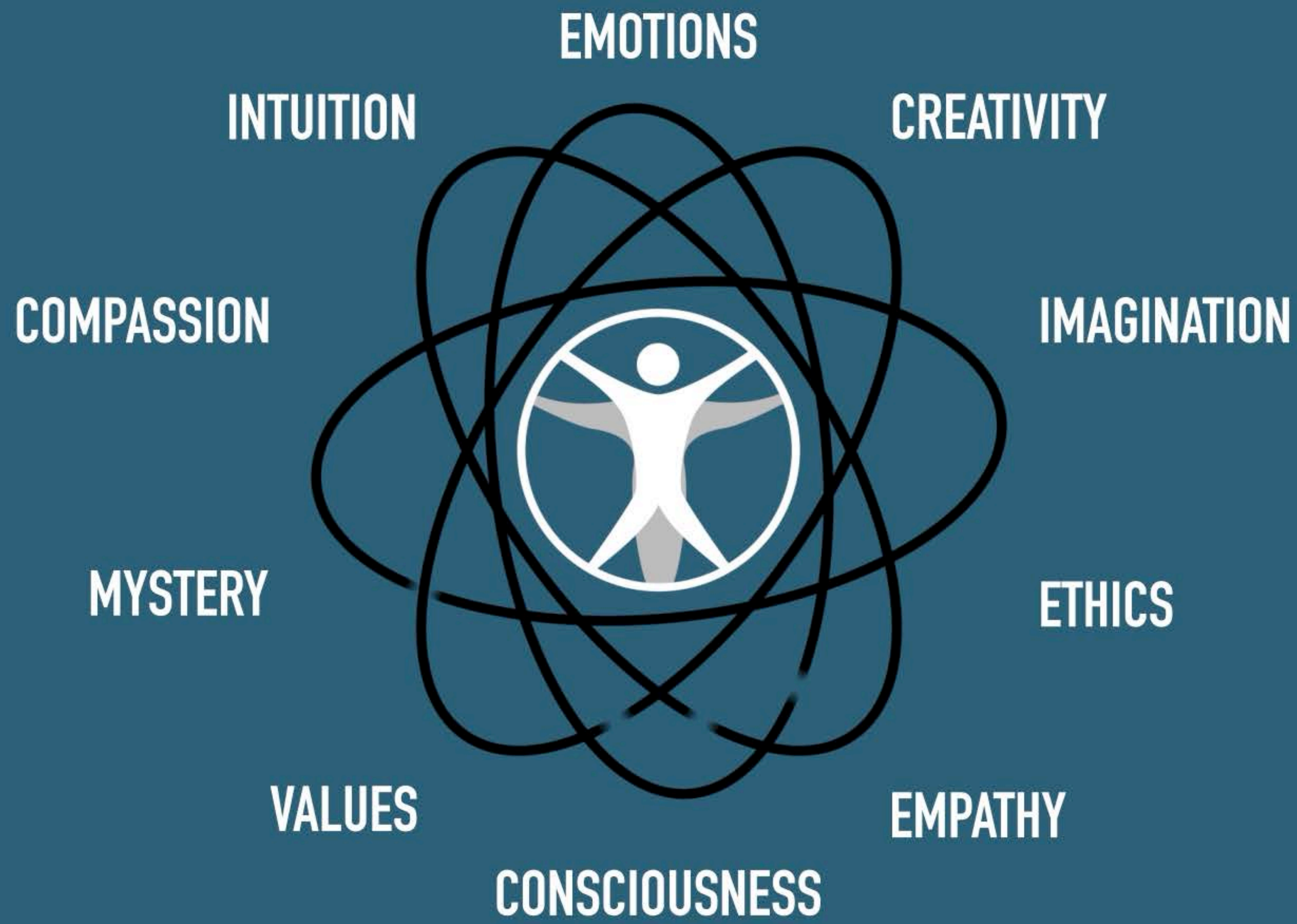


In a world dominated by technology we can (and must) become **MORE** human not less!





In a world dominated by technology we can (and must) become MORE human not less!



**WE MUST INVEST AS MUCH IN  
HUMANITY AS WE DO IN TECHNOLOGY**

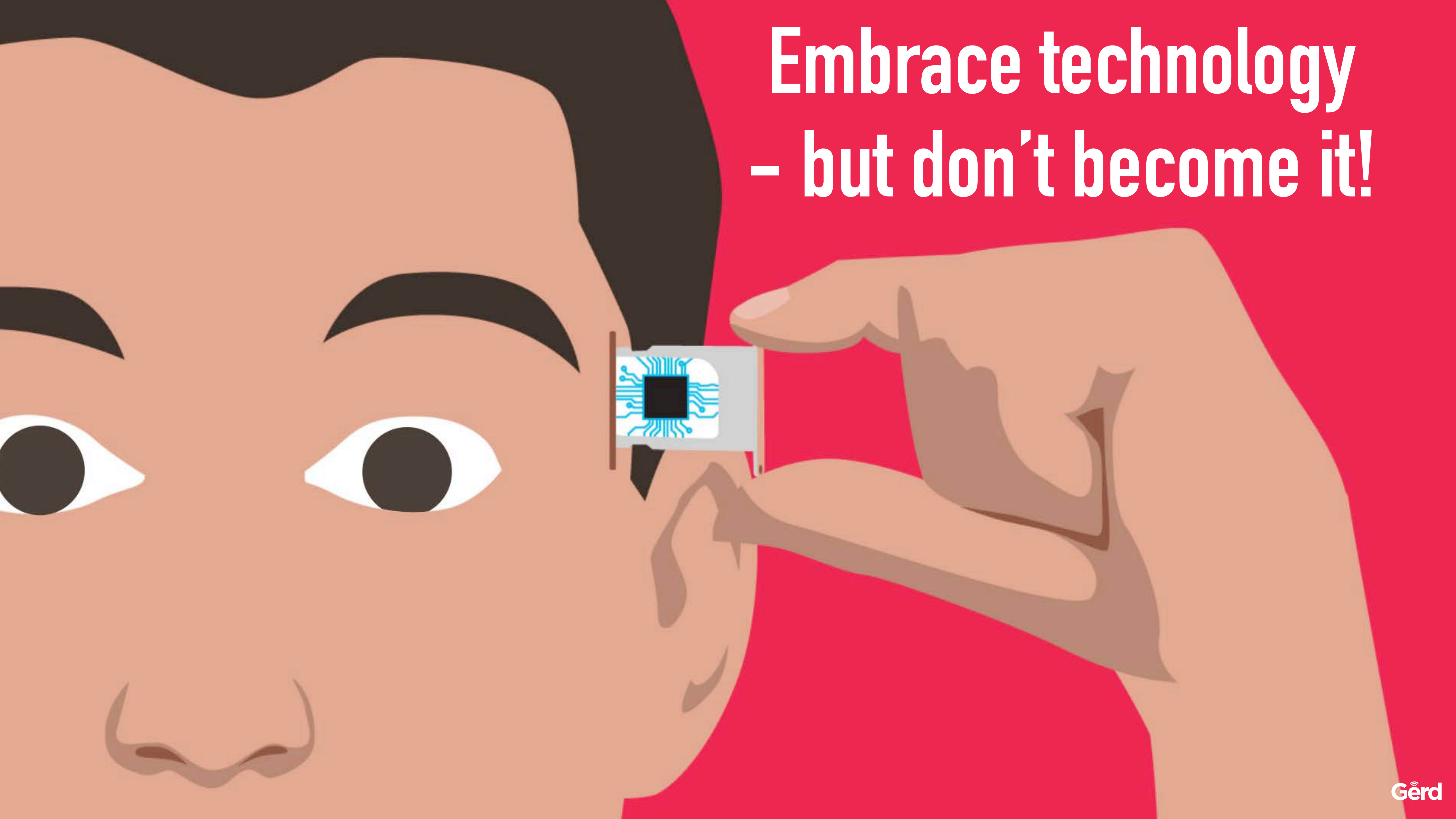
**Morals**

**Values**

**Ethics**

**Humanity**

**Embrace technology  
- but don't become it!**





THANK YOU  
FOR YOUR TIME

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8.03



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6.85



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2.41

Information is that which, because, by itself, it is not related to data and has not been attributed to humans, and which, when abstracted from its context, is not understood. At its most fundamental level, information is a message.