

**The Future is
already here – we
just have to pay
more attention!**



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



Some things may take much longer than we think, but when they finally happen they are more impactful than we ever imagined



90% opportunity
10% threat

But:
linear thinking
will be
DETRIMENTAL

Quantum Computing
Leaps in Material Sciences

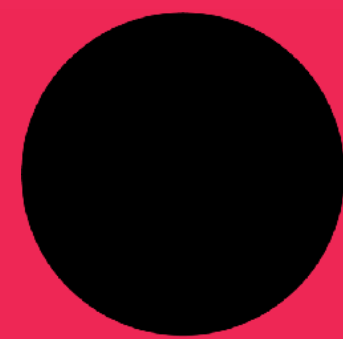
AR / Virtual Reality / MR

Smart-everything & AI

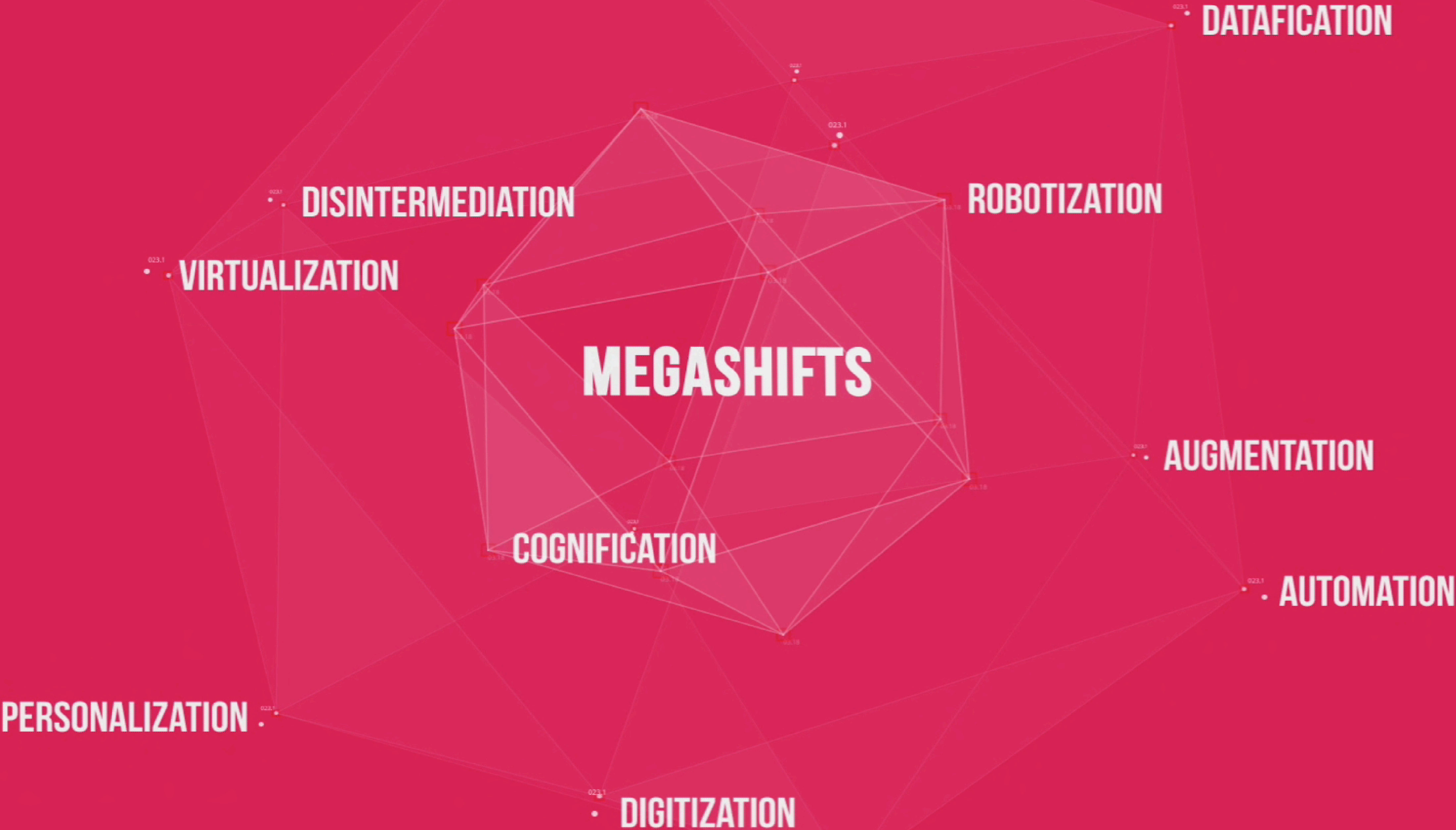
The Internet of Things

Big^x Data + Cloud

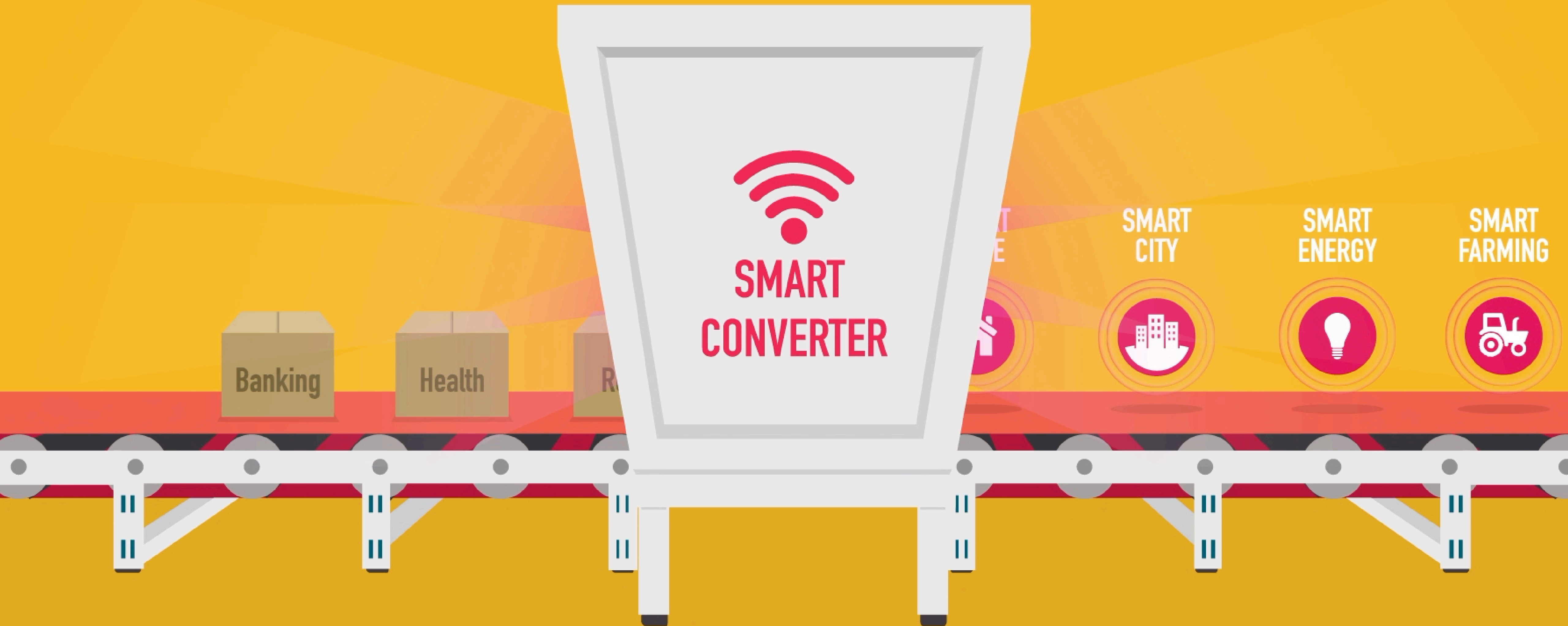
Hyper-connectivity



1 2 **4** 8 16 32 64 128



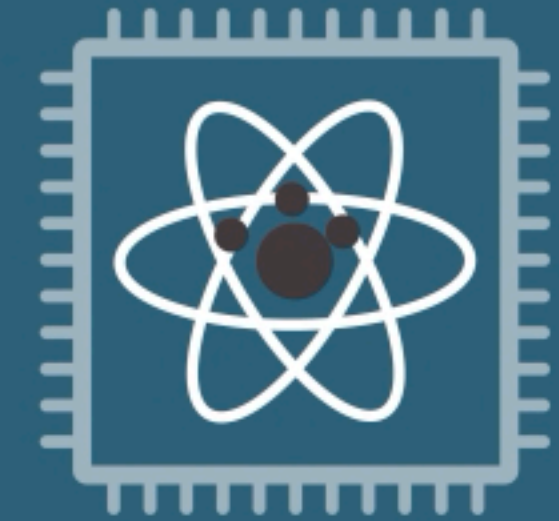
Smart everything, everywhere, anytime: IA (not AI)



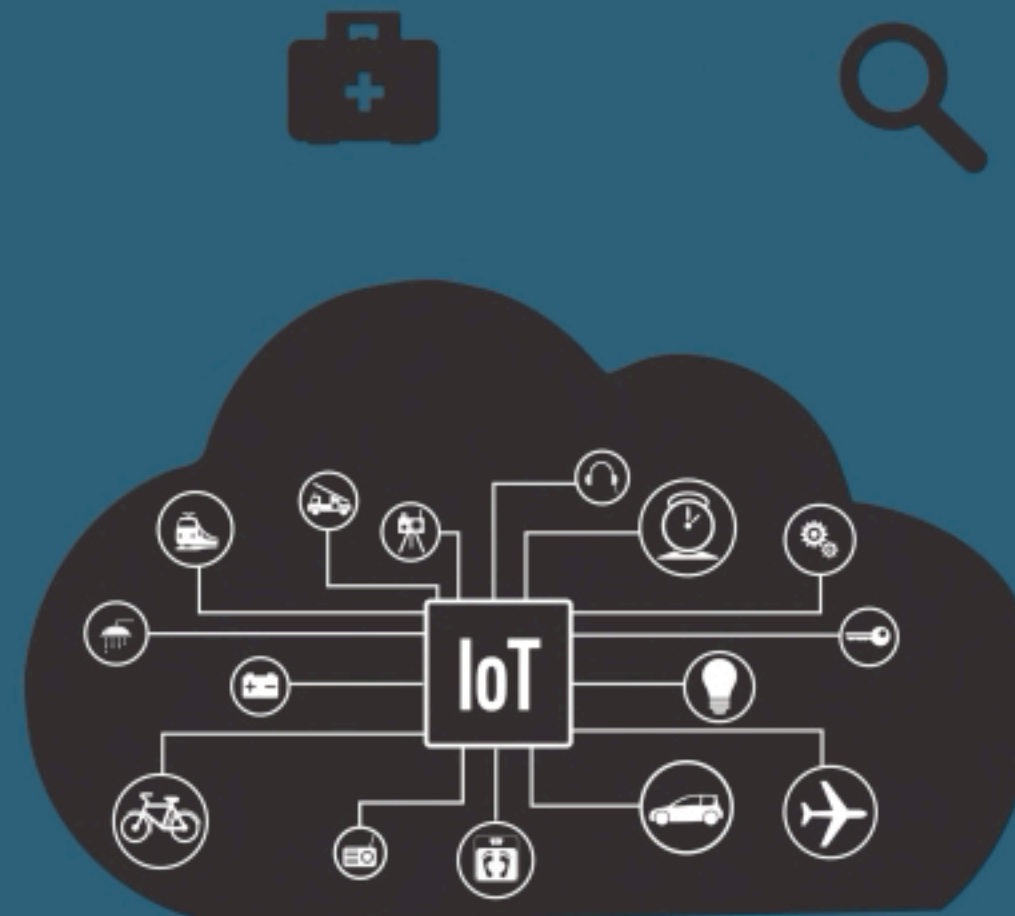
Note: smart everything does not mean 'no humans' – but routines are for machines!

The 8 technological game-changers

COMPUTE EVERYTHING



NETWORKED EVERYTHING
CLOUD EVERYTHING



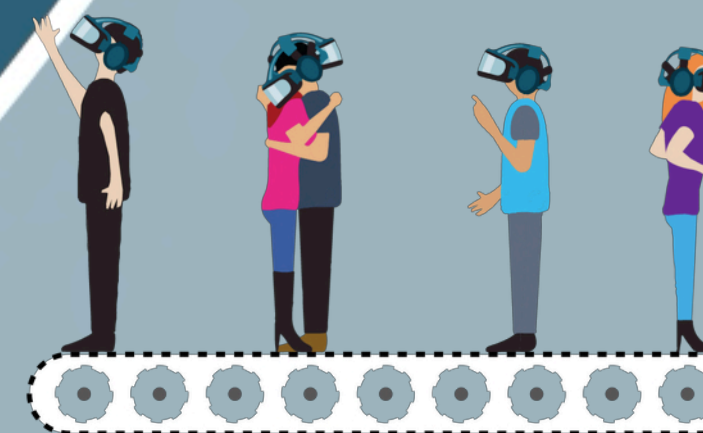
DATA EVERYTHING



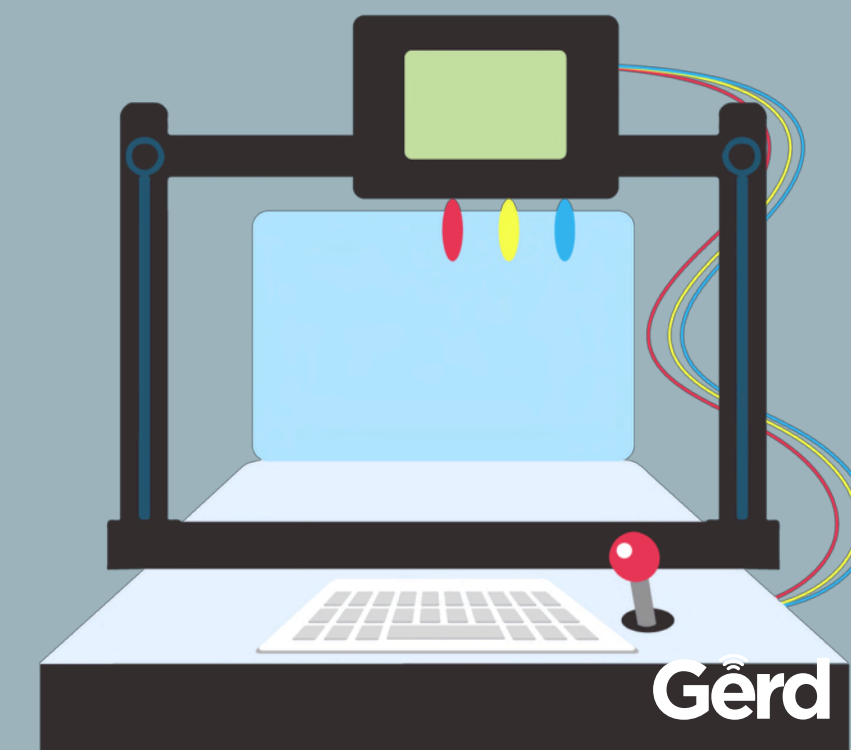
SMART EVERYTHING



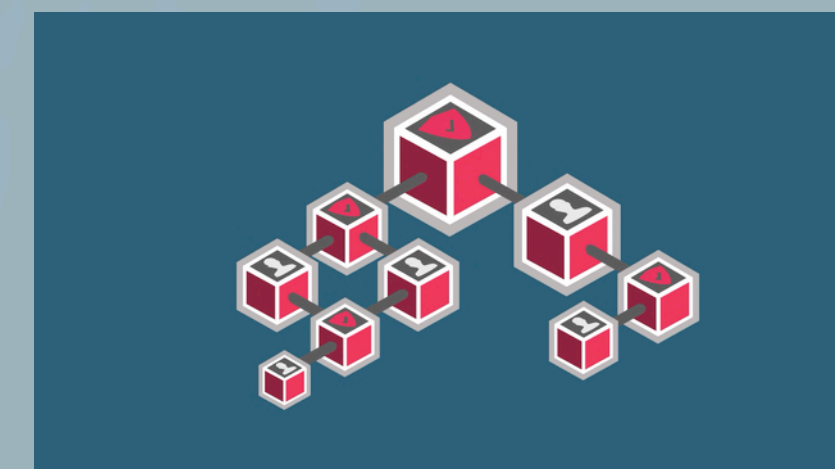
SEE ANYTHING



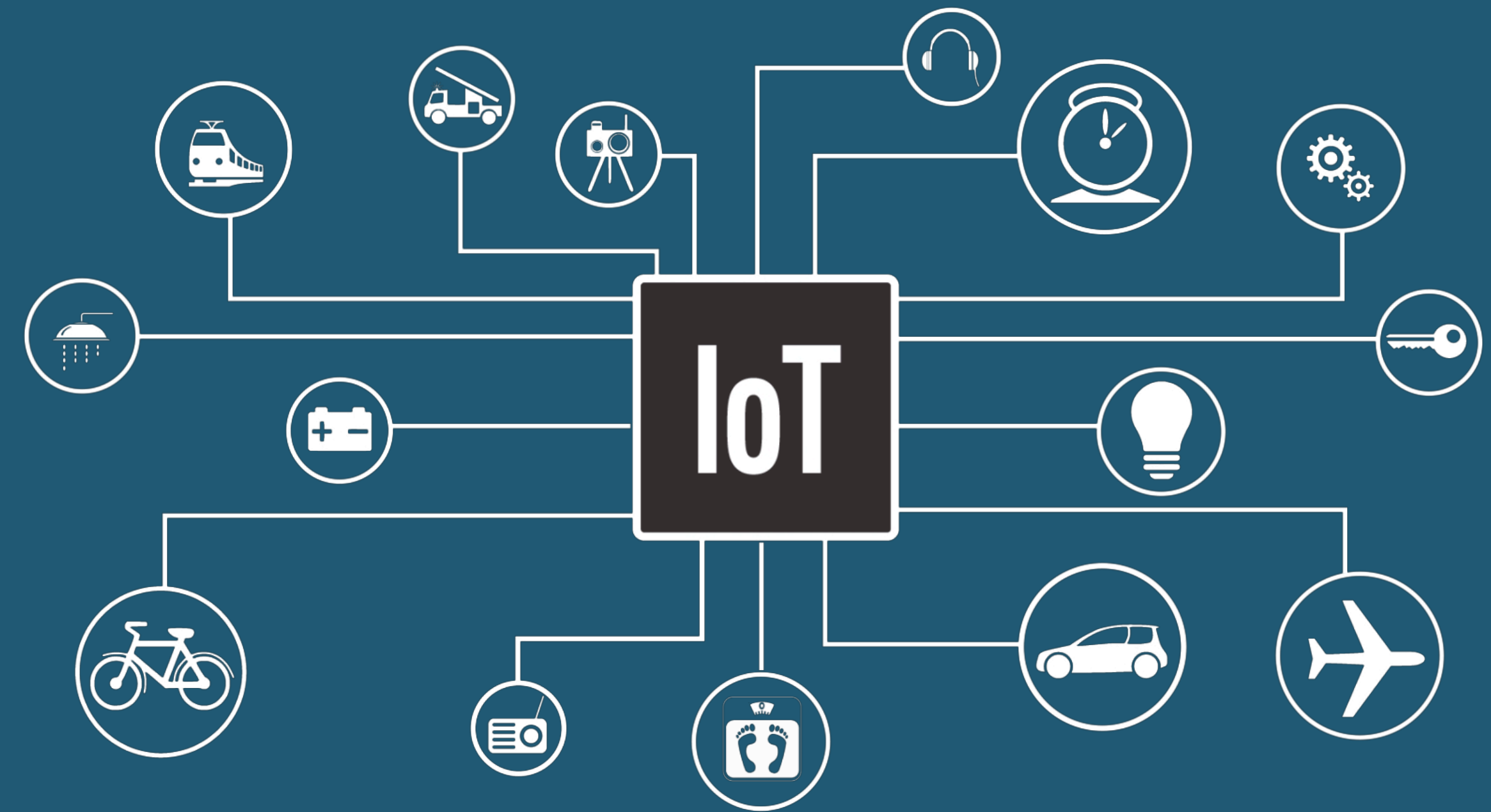
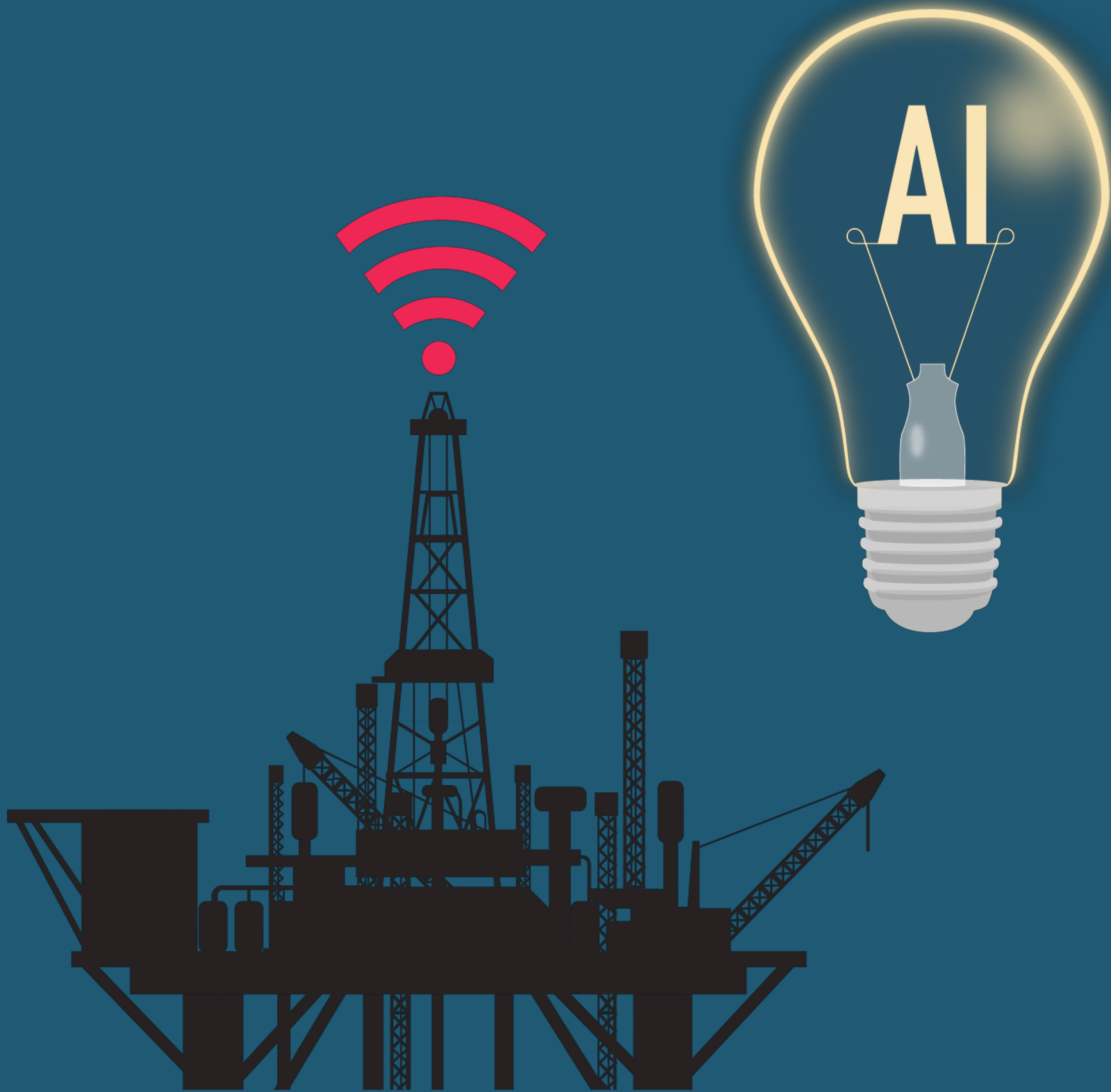
MAKE ANYTHING



TRANSACTION ANYTHING

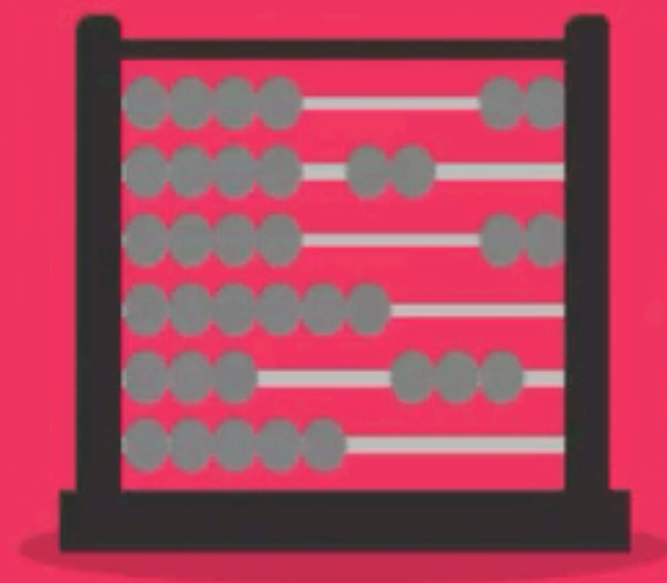


Data is the new Oil. AI is the new electricity. The IoT is the new nervous system.



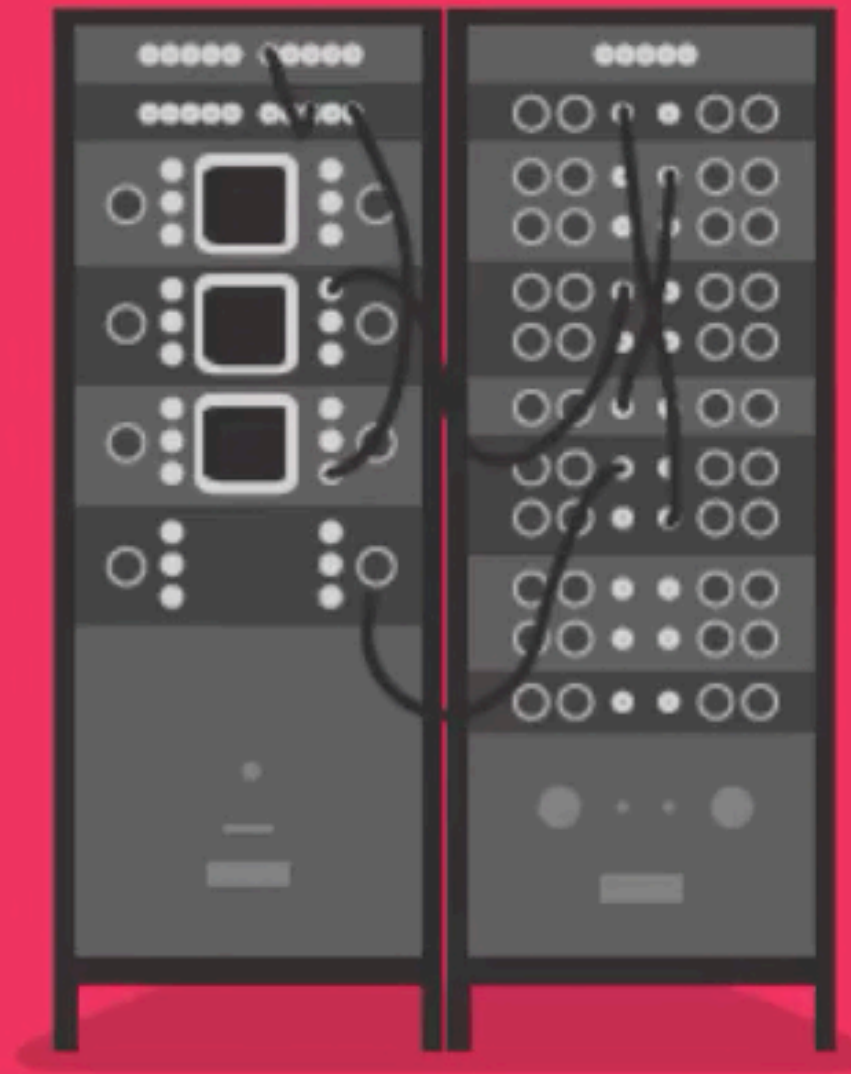
AI: Computer systems that turn information and data into KNOWLEDGE

(Demis Hassabis, CEO, DeepMind)



*Tabulating
Systems Era*

1900



*Programmable
Systems Era*

1950



*Cognitive
Systems Era*

2020

“Machine learning is the science of giving computers the ability to learn and find insights without explicitly programming the machines on what to do”



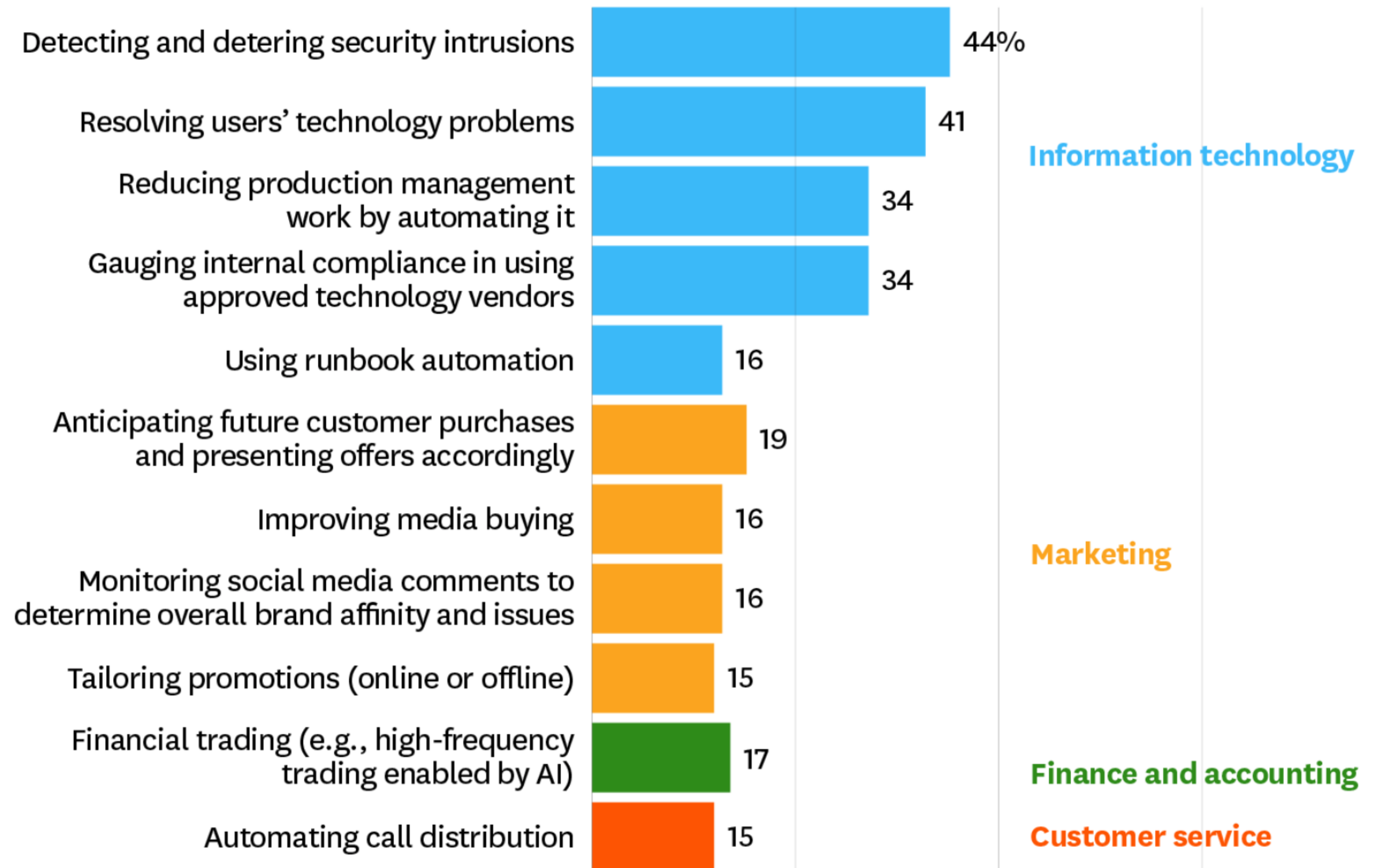
IA and narrow AI is disruptive – but AGI will bring existential risk. Who will be ‘Mission Control?’



Ignore Hollywood: for the next 5 years it's all about smart software (IA) *

How Companies Around the World Are Using Artificial Intelligence

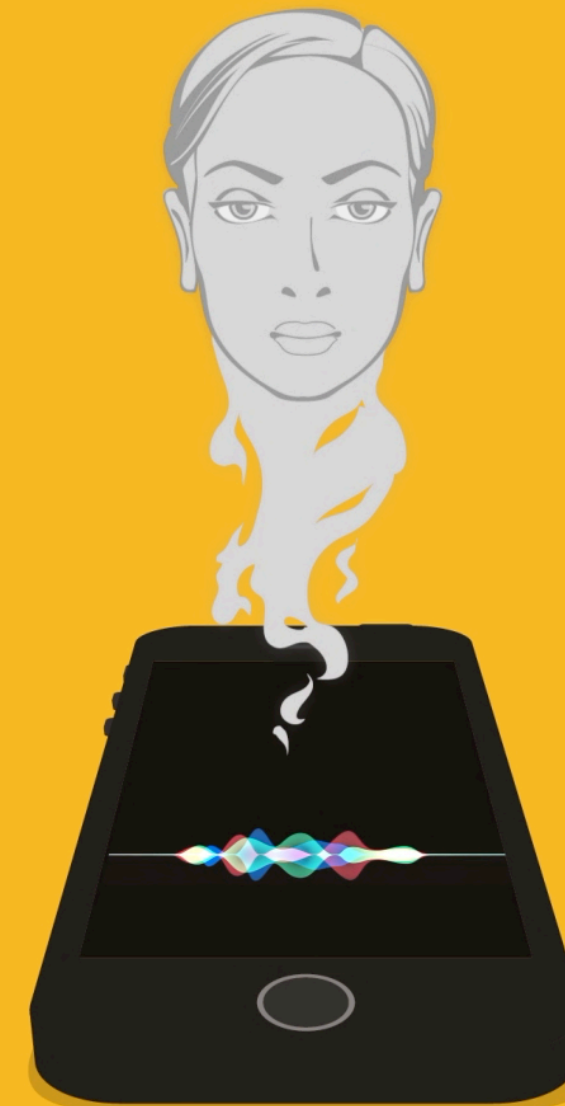
IT activities are the most popular.



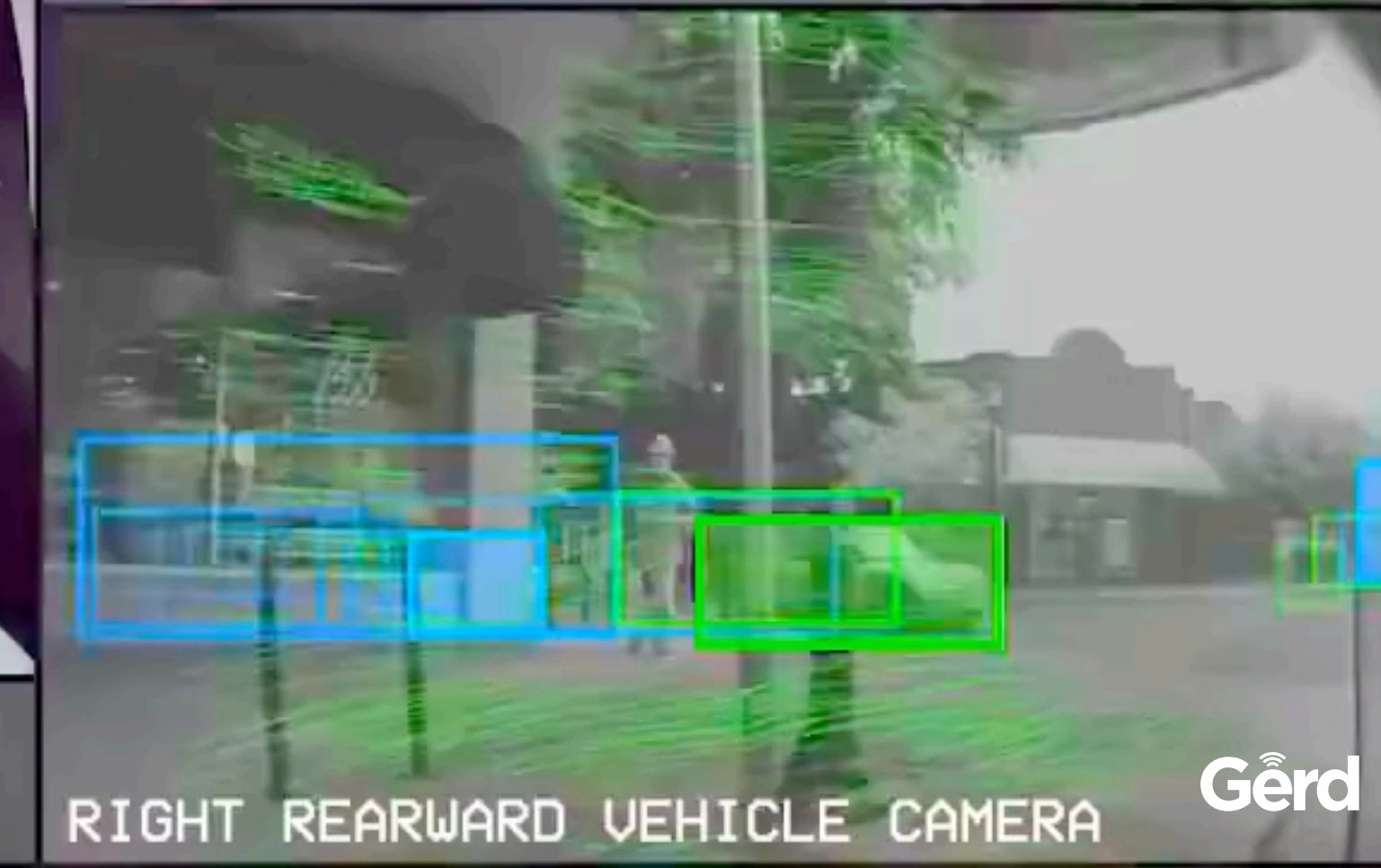
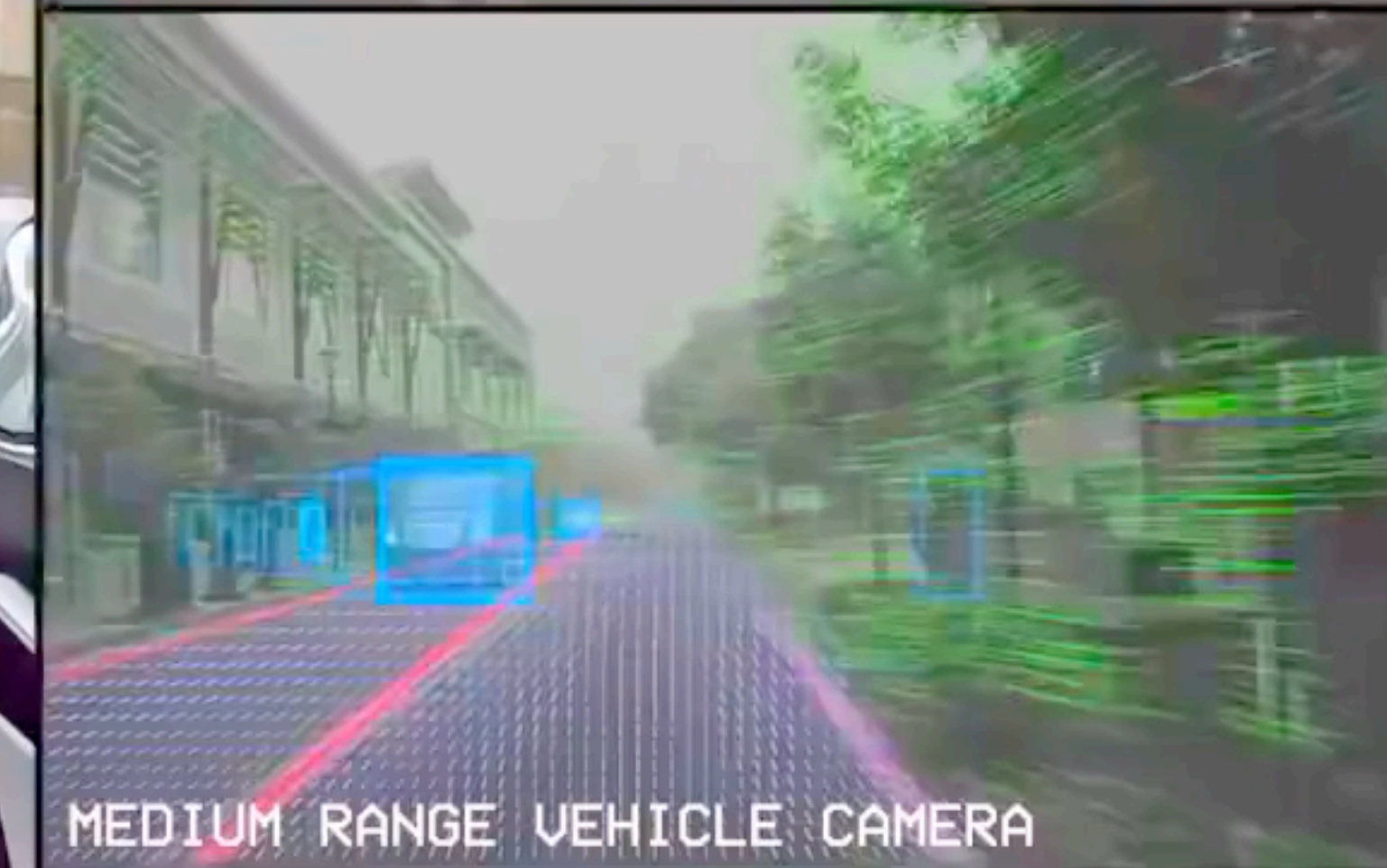
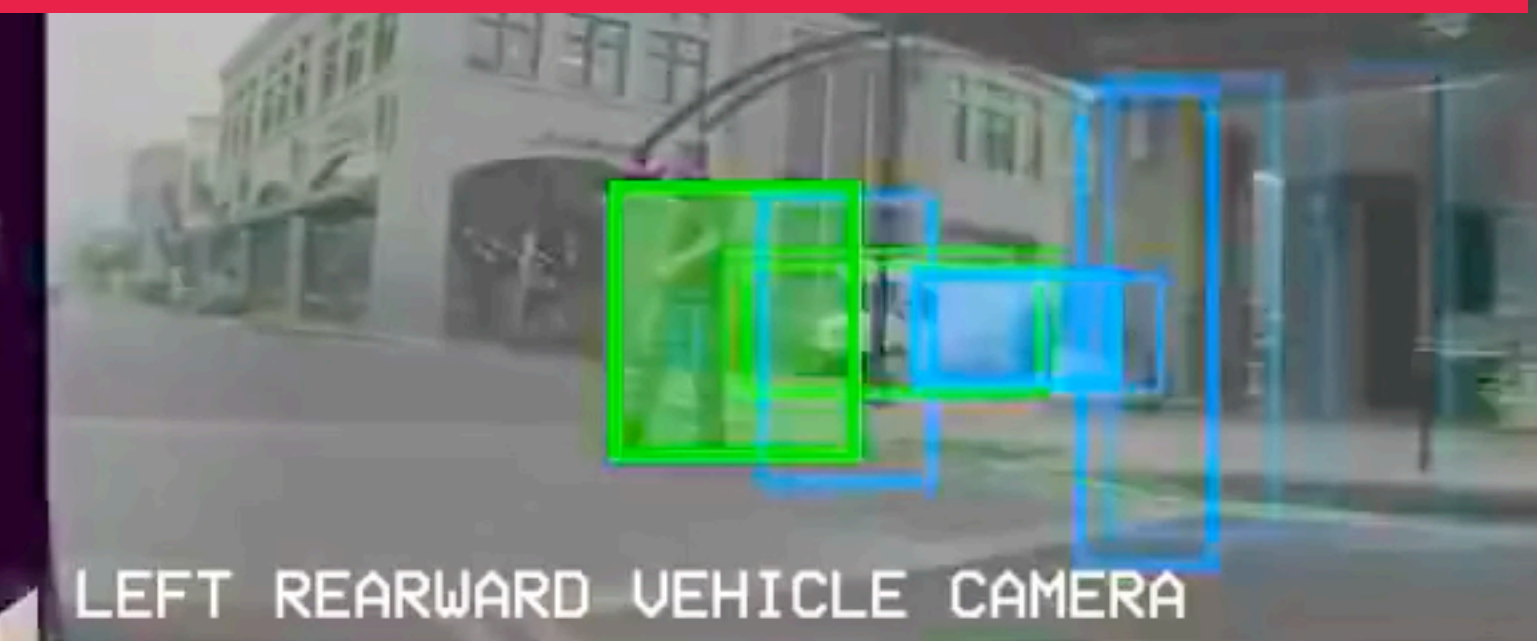
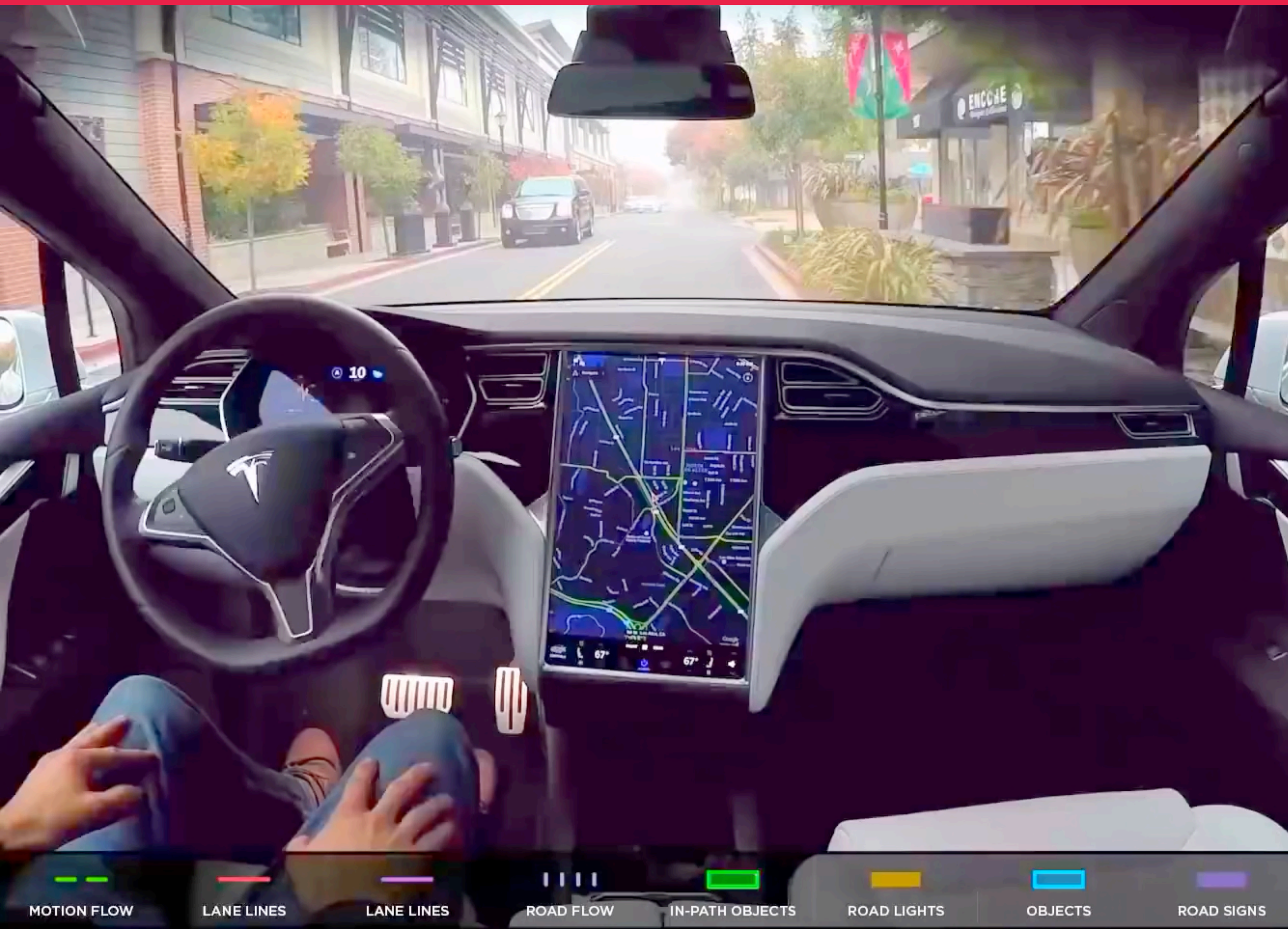
SOURCE TATA CONSULTANCY SERVICES SURVEY OF 835 COMPANIES, 2017

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Smart and networked machines: keep humans in the loop, implement ethics guidelines, beware of machine thinking and automation bias, experiment but keep asking 'why'!



Amazing new opportunities 🌐 Tough new responsibilities



Amazing new opportunities Tough new responsibilities

SENSEVIDEO

2017-03-28 TUE 09:57:48

Camera 1 Vehicle 263 Cyclist 457 Ped 370 Alarm 0

0 DATA 91 DATA 56 DATA

Vehicle Image

2015-06-28 08:56:28 鄂岭大道与合盛市场

Attributes Regions

Pedestrian



Vehicle labels: Black, Car, Adult, Cyclist, Trousers, Female, Adult, ShortSleeve, Male, Adult, ShortSleeve, Trousers, Gray, Van, White, Small truck, Blue, Car, Blue, SUV, Gray, Small truck.

Pedestrian labels: Male, Adult, ShortSleeve, Trousers, Black, Male, Adult, ShortSleeve, Gray, SUV.

Timeline: 09:57:45, 09:57:47, 09:57:45, 09:57:45, 09:57:44, 09:57:46, 09:57:42, 09:57:46, 09:57:41, 09:57:46, 09:57:40, 09:57:44.

Pedestrian timeline: 09:57:48, 09:57:48, 09:57:48, 09:57:48, 09:57:47, 09:57:47, 09:57:47.

It could be heaven..... or it could be hell



It could be heaven.... or it could be hell





Contract for the Web

CORE PRINCIPLES

The web was designed to bring people together and make knowledge freely available. Everyone has a role to play to ensure the web serves humanity. By committing to the following principles, governments, companies and citizens around the world can help protect the open web as a public good and a basic right for everyone.

GOVERNMENTS WILL

Ensure everyone can connect to the internet so that anyone, no matter who they are or where they live, can participate actively online.

Keep all of the internet available, all of the time so that no one is denied their right to full internet access.

Respect people's fundamental right to privacy so everyone can use the internet freely, safely and without fear.

COMPANIES WILL

Make the internet affordable and accessible to everyone so that no one is excluded from using and shaping the web.

Respect consumers' privacy and personal data so people are in control of their lives online.

Develop technologies that support the best in humanity and challenge the worst so the web really is a public good that puts people first.

CITIZENS WILL

Be creators and collaborators on the web so the web has rich and relevant content for everyone.

Build strong communities that respect civil discourse and human dignity so that everyone feels safe and welcome online.

Fight for the web so the web remains open and a global public resource for people everywhere, now and in the future.

..... or it could be hell



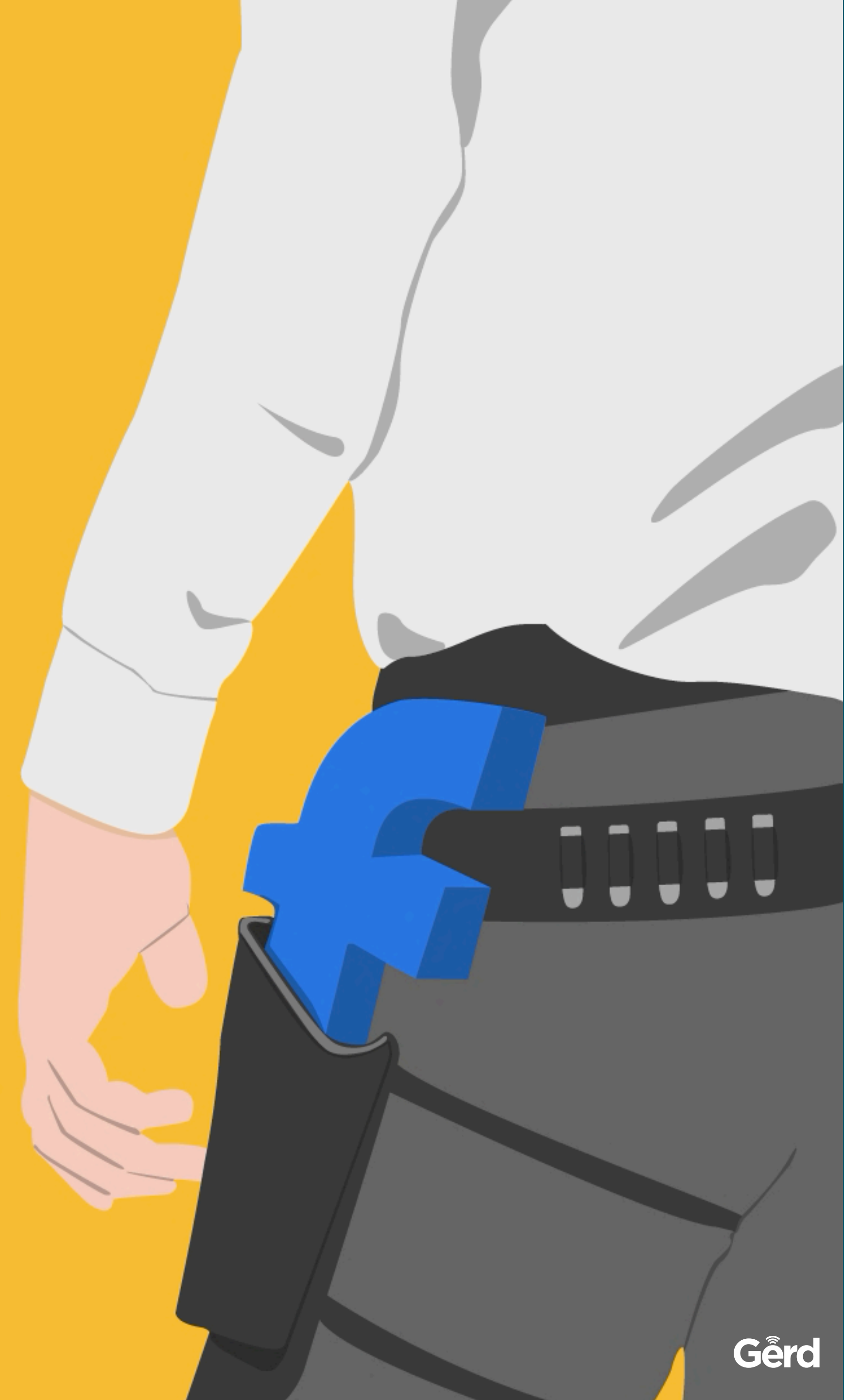


"Ethics is knowing the difference between what you have a right (or the power) to do and what is the right thing to do"

adapted from Potter Stewart



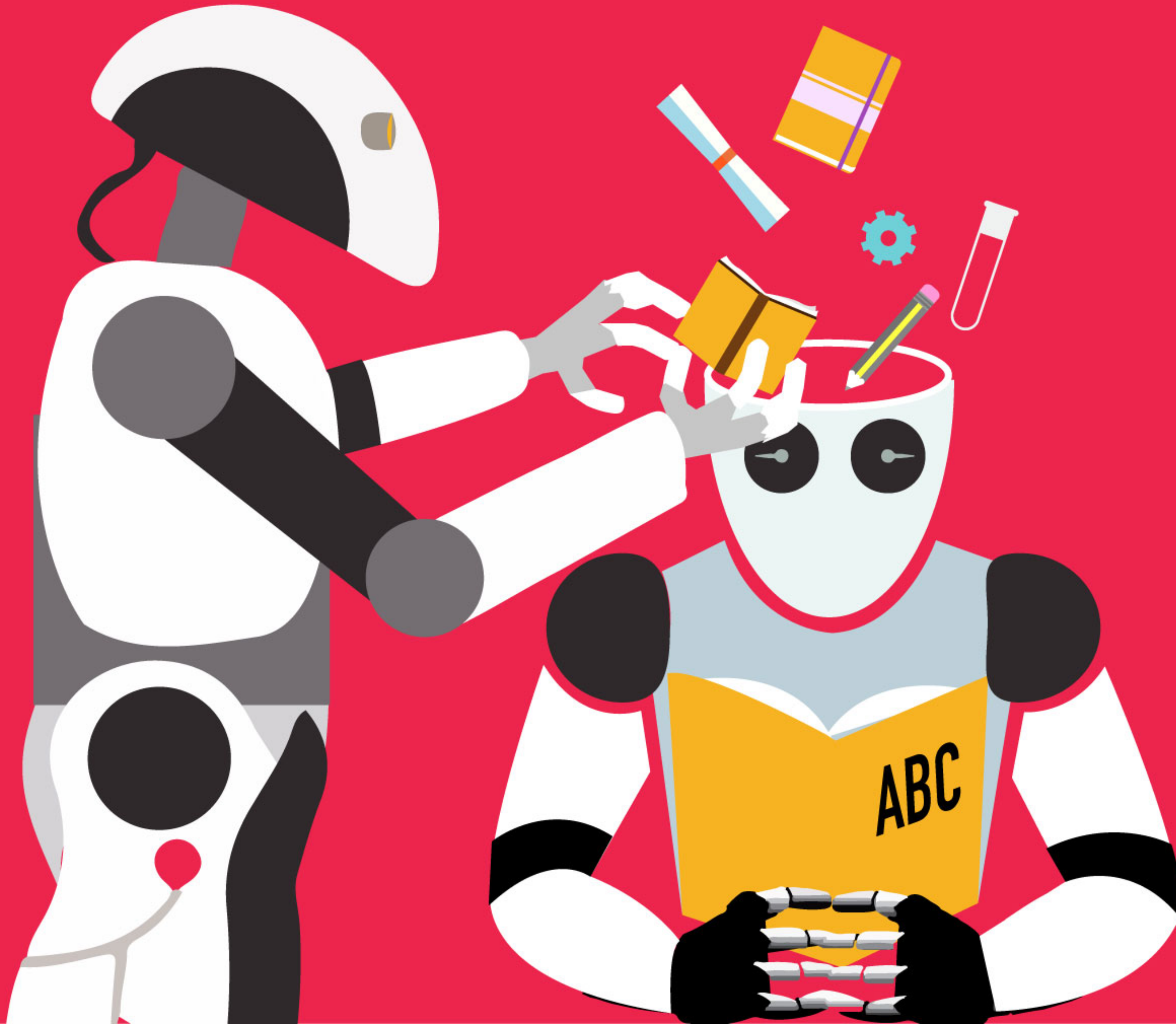
TECHNOLOGY HAS NO ETHICS





Not really *





**Data and
Information ≠
Knowledge ≠
Understanding ≠
Wisdom**

Commerce is driven by data; MEANING is created by humans!

Algorithms

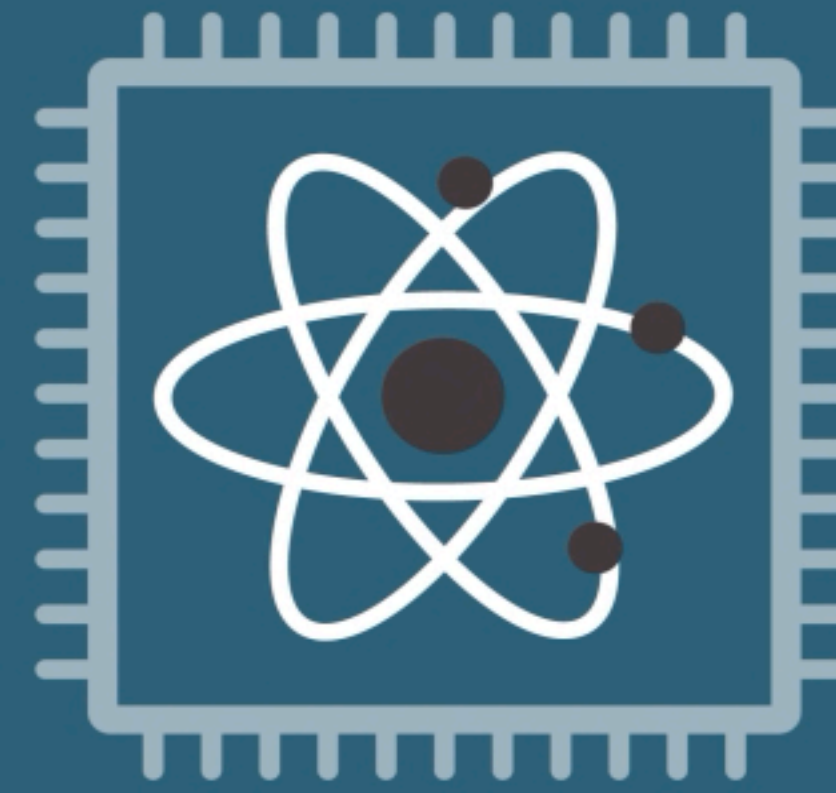
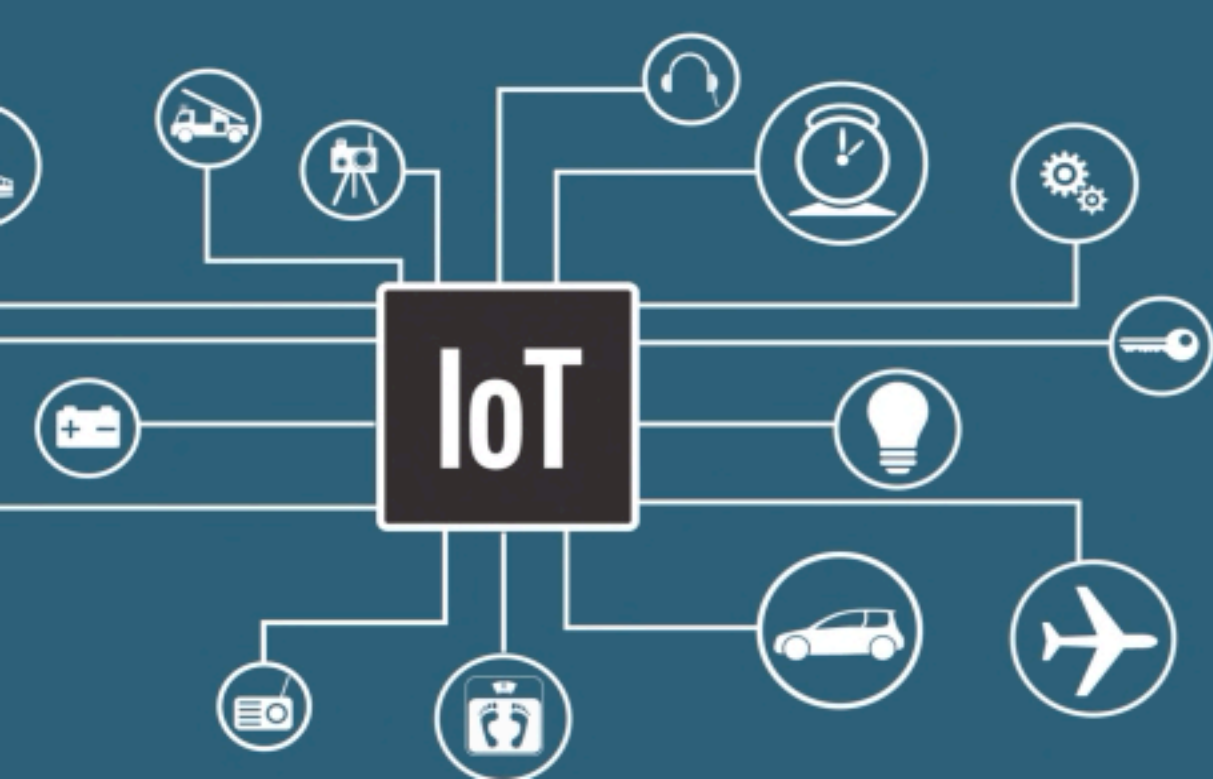
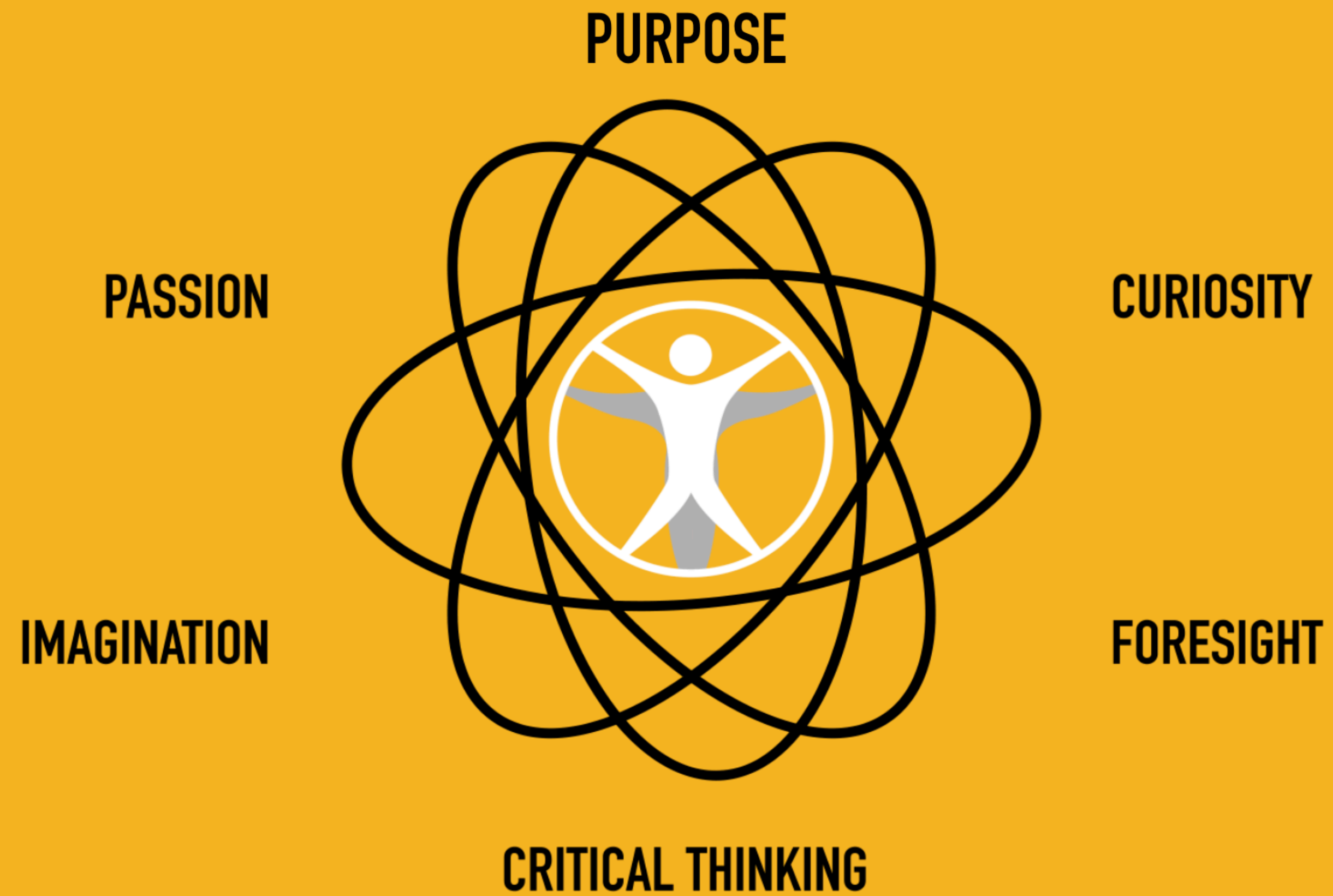
**“When it comes to really
important decisions
data trumps intuition
every time”**

Androrithms

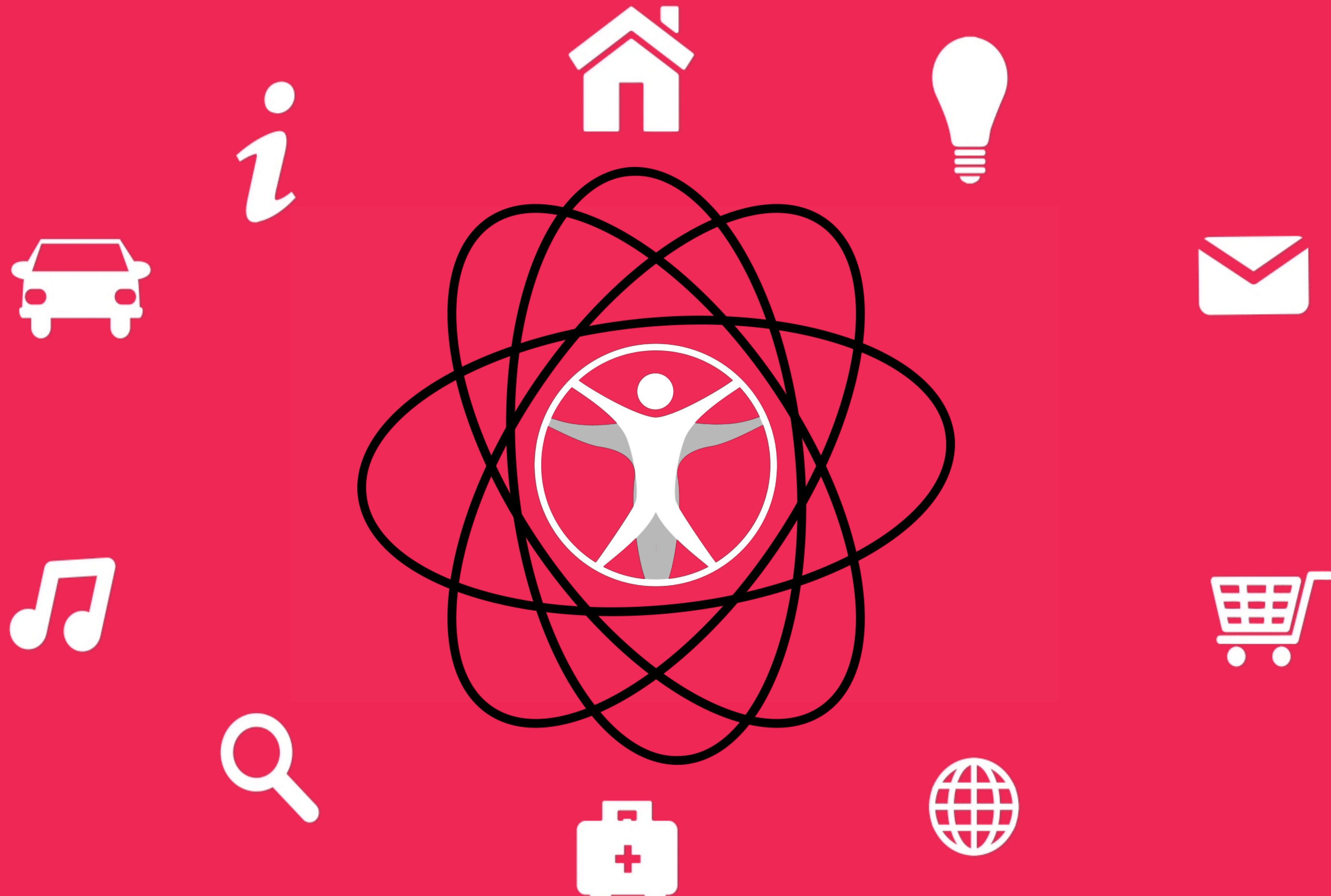
**“All of my best
decisions in
business and life
have been made
with heart, intuition,
guts... not
analysis”**



The Future: awesome humans on-top of amazing technology



As the world goes digital it will be your **HUMANITY** that differentiates you



Embrace technology but don't become it!

