

INTELLIGENT ENTERPRISE UNLEASHED

Redefine your company
based on the company
you keep.



TECH VISION 2018 SURVEY

#TechVision2018

For the fourth year, Accenture conducted a global survey of thousands of business and IT executives to understand their perspectives on the impact of technology on their organizations, and to identify their priority technology investments over the next few years.

>6300

EXECUTIVES
SURVEYED

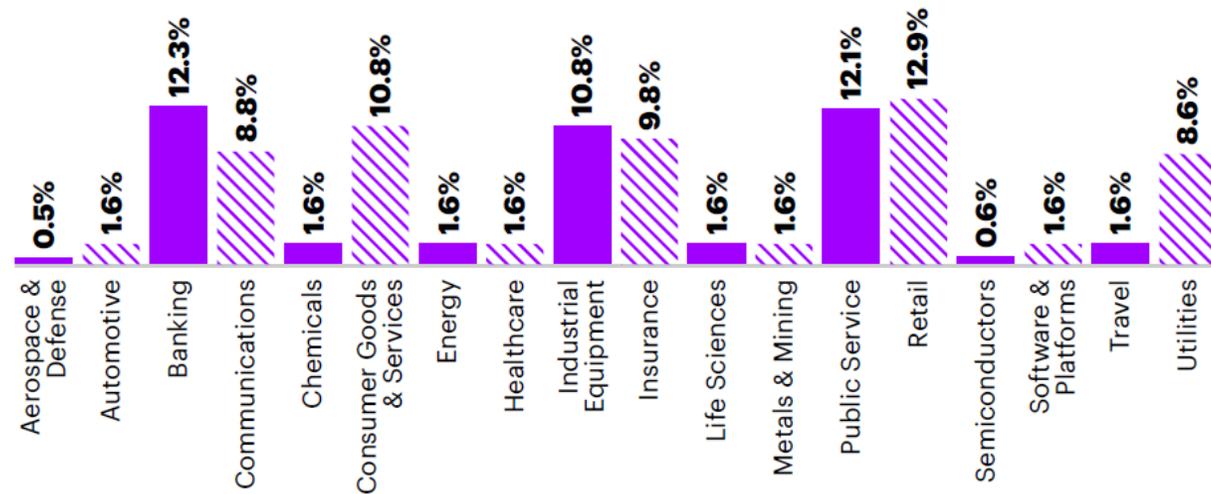
ACROSS
COUNTRIES

25

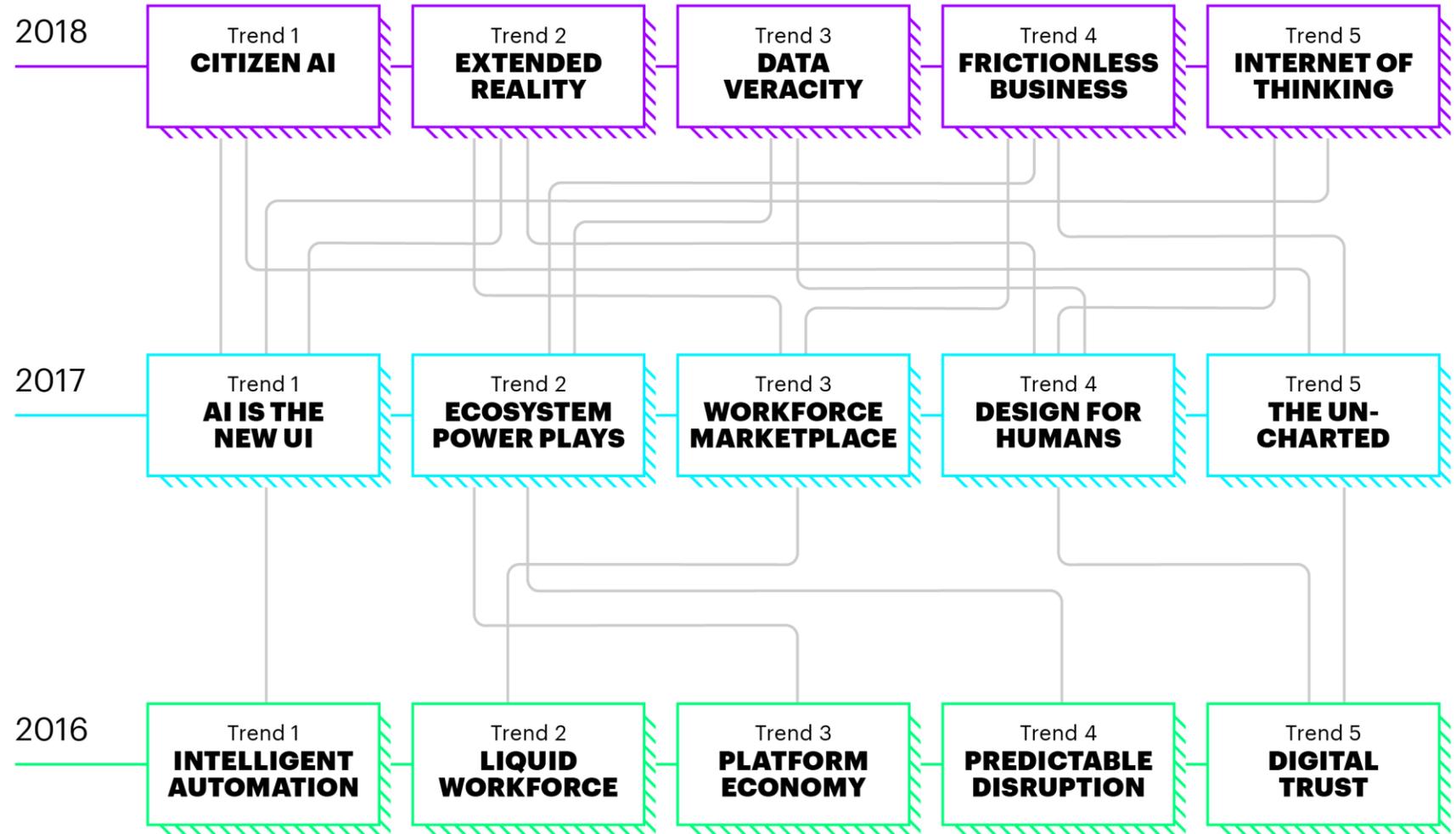
25 COUNTRIES SURVEYED

Argentina	Chile	India	Peru	Switzerland
Australia	China	Indonesia	Portugal	Thailand
Austria	Columbia	Ireland	Singapore	United Arab Emirates
Brazil	France	Italy	South Africa	United Kingdom
Canada	Germany	Japan	Spain	United States

INDUSTRIES



Accenture Technology Vision Trend Evolution



INTELLIGENT ENTERPRISE UNLEASHED

#TechVision2018

By embedding themselves throughout society, companies are blurring the lines between business and personal—and blazing a new trail for **future growth**.

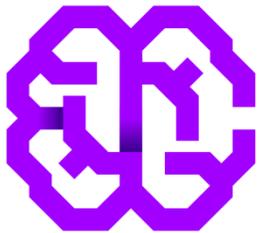
Technology is now firmly embedded throughout our everyday activities, But its reach is larger than that: it's **reshaping pieces of our society**.



The **Accenture Technology Vision 2018** predicts the rapid technology advancements that will improve how people work and live.

INTELLIGENT ENTERPRISE **UNLEASHED**

Trend 1



CITIZEN AI

Raising AI to Benefit
Business and Society

Trend 2



EXTENDED REALITY

The End of Distance

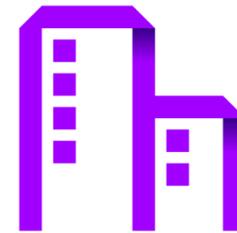
Trend 3



DATA VERACITY

The Importance of
Trust

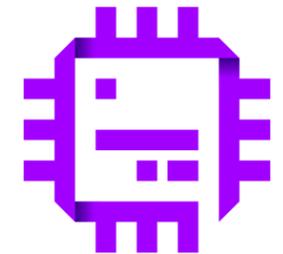
Trend 4



FRICTIONLESS BUSINESS

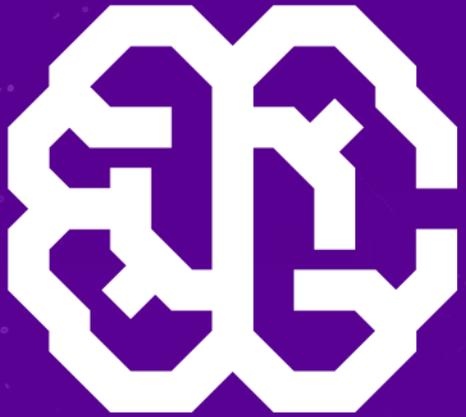
Built to Partner
at Scale

Trend 5



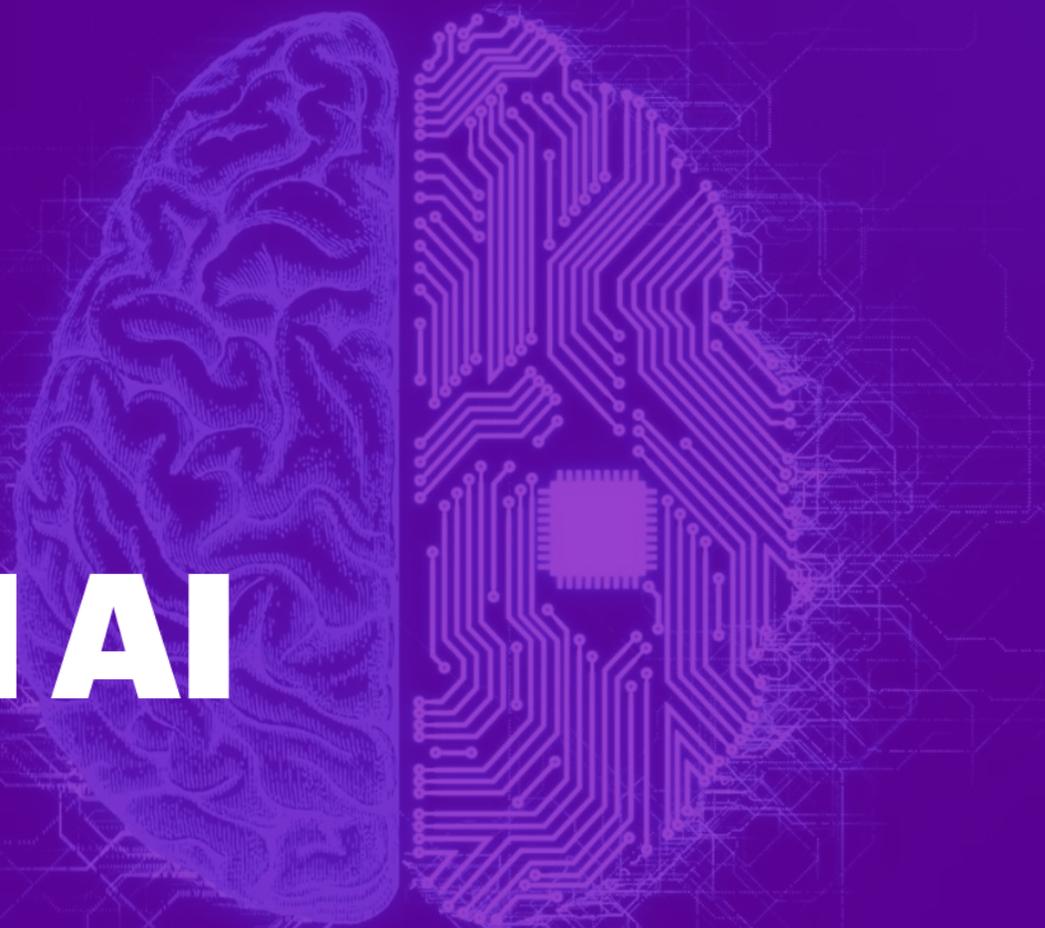
INTERNET OF THINKING

Creating Intelligent
Distributed Systems



CITIZEN AI

**Raising AI to Benefit
Business and Society**



Deploying AI is no longer just about training it to perform a given task. It's about “raising” it to act as a responsible representative of the business, and a contributing member of society.



AI exposes businesses to new opportunities and challenges.

Enterprise AIs can interact with customers and society, and thus become a representative—for good or for ill—of the business.

Enterprise AIs can be allowed to make decisions with as much authority as human members of the workforce.

Enterprises can use machine learning to develop a library of skill sets that can be deployed across the enterprise.

78%

of Brazilian respondents agree that their organizations seek to gain customer trust and confidence by being transparent in their AI-based decisions and actions.

HOWEVER...

52%

of Brazilian respondents agree that AI is advancing faster than their organization's pace of adoption

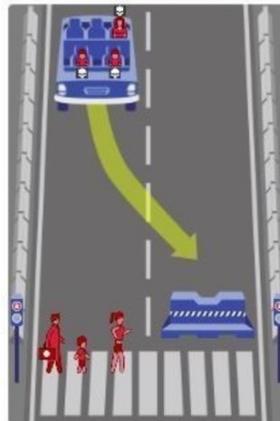
CITIZEN AI AI AND VALUES



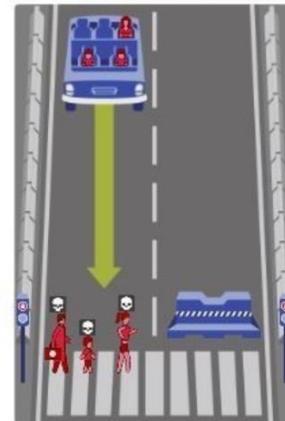
Audi's Traffic Jam Pilot AI can take over driving in slow-moving traffic. In case of an accident, Audi has acknowledged that if the car made a wrong decision, the **manufacturer can be held liable for damages.**



What should the self-driving car do?



Show Description



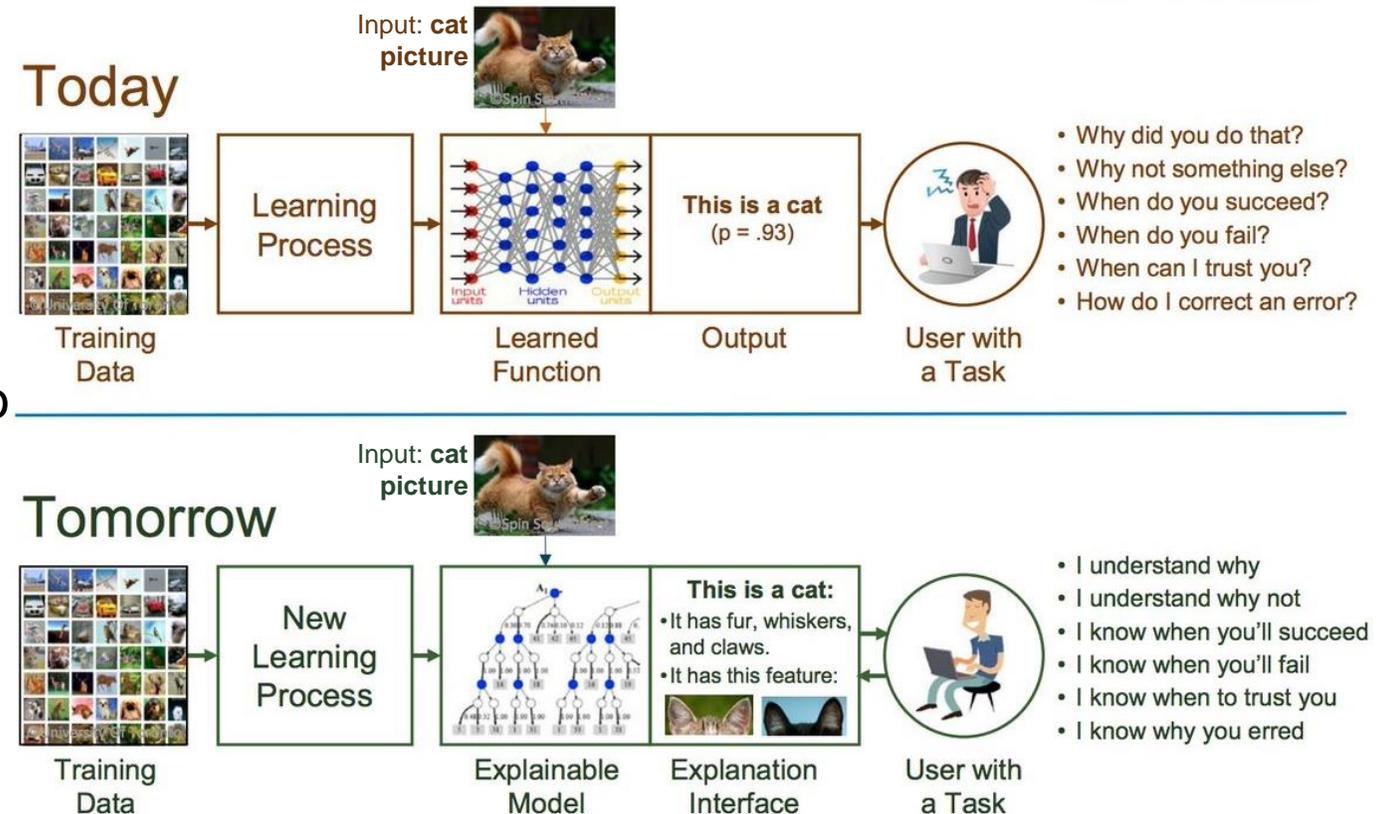
Show Description



Capital One

Capital One is researching ways to make AI more explainable, hoping to use it to review credit card applications since banking regulations require that financial companies furnish an explanation to customers when their applications are denied.

“Our research is to ensure we can maintain that high bar for explainability as we push into these much more advanced, and inherently more opaque, models,” says Adam Wenchel, vice president of machine learning and data innovation at Capital One



Mastering 'Go'

AlphaGo Zero, an AI deployed by Google's DeepMind group, taught itself the ancient game of Go without human guidance—by playing against itself thousands of times. Using novel playing moves, AlphaGo Zero beat the former Go champion, AlphaGo Master 100 games to none.



BOLD PREDICTIONS

BY 2023

AI techniques will be the primary method of significant discoveries in life sciences.

BY 2025-2028

Between 2025-2028, an AI will demonstrate its creativity by producing a global blockbuster film. The AI will build a script from scratch, cast virtual characters, and even provide scenery.

BY 2025

The first national or sub-national government will ban human-driven vehicles.

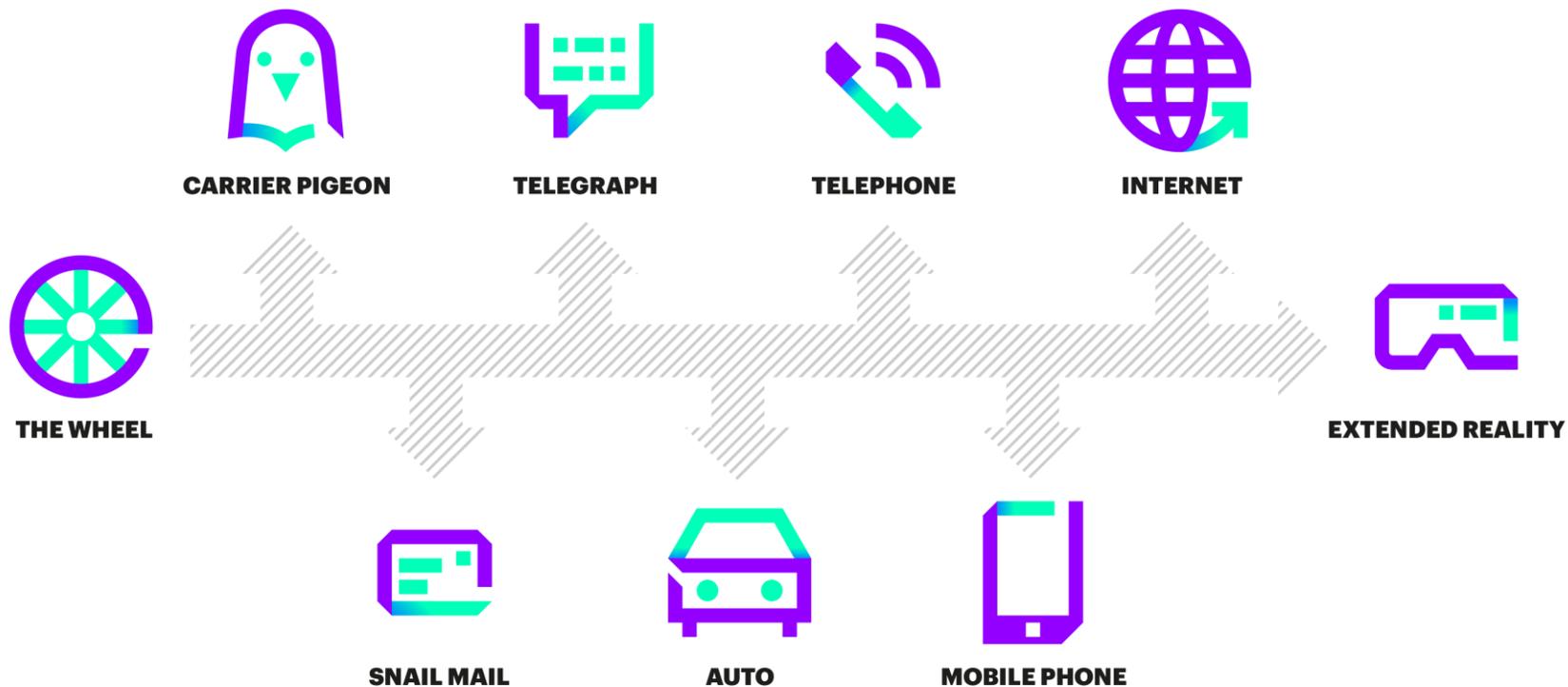


EXTENDED REALITY

The End of Distance

EXTENDED REALITY

In the year 1890 people used carrier pigeons to get important messages to people in far away lands. Extended Reality technologies – including Virtual and Augmented Reality – are the latest innovations that connects people, information and experiences.



Businesses can reap the benefits of the end of distance by focusing on 3 key areas today...



PEOPLE

Using a headset, employees can now connect with other colleagues anywhere in the world to solve problems and collaborate.



INFORMATION

Information is being delivered to employees via AR headsets as they need it.

Through VR, employees can also receive training to better prepare for on-the-job complex experiences.

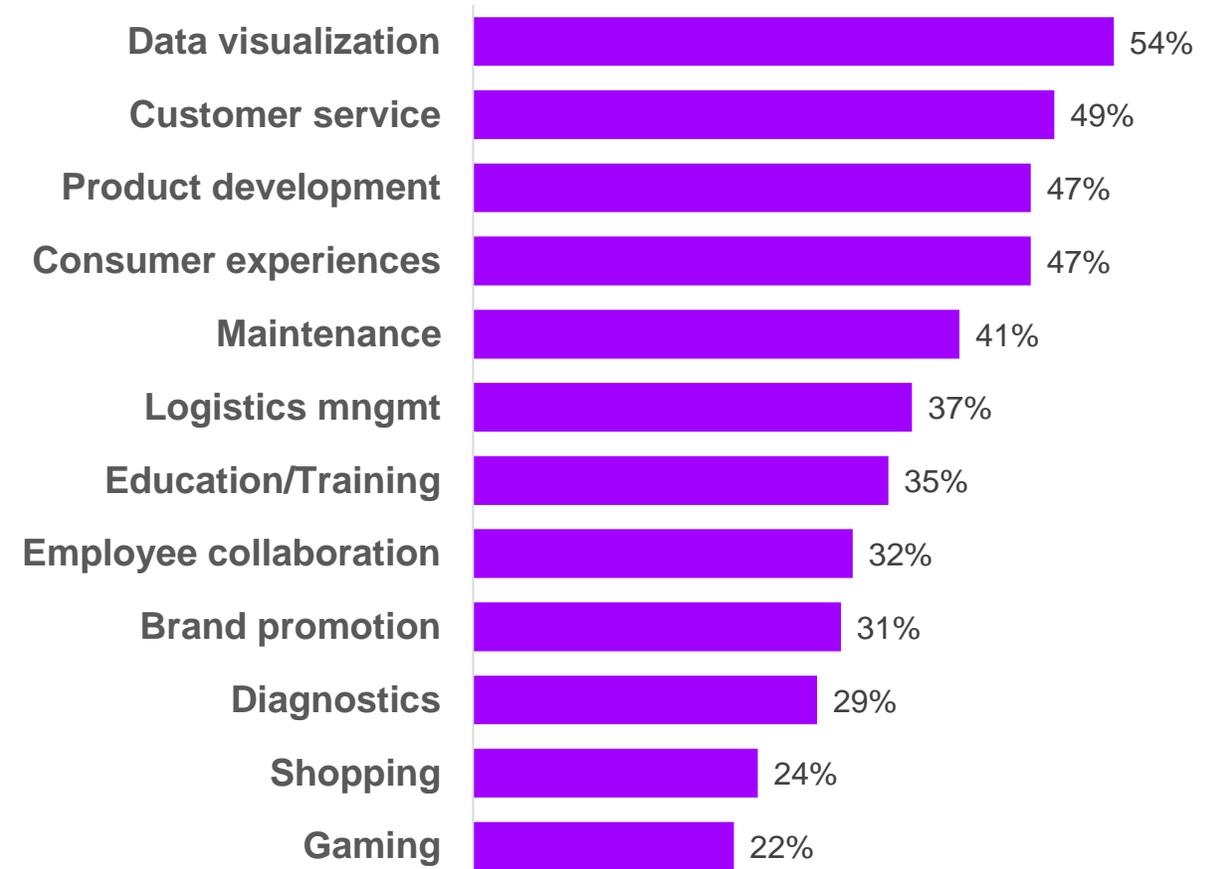


NEW EXPERIENCES

XR allows companies to interact with customers in new ways. The Baltimore Ravens are the first NFL team to use AR to “splash paint” on fans faces for an enhanced in-stadium experience.

86%
of Brazilian respondents believe it will be important to leverage XR solutions to close the gap of physical distance when engaging with employees and customers.

In which area do you expect Extended Reality technologies will be most relevant over the next 2 years? (n=260 Brazilian respondents)



Facebook Spaces

A new VR app where you hang out with friends in a fun, interactive virtual environment as if you were in the same room.

This helps people recognize you and makes VR feel more like hanging out in person.



EXTENDED REALITY

#TechVision2018

BMW iVisualiser

Accenture created the BMW iVisualiser, an augmented-reality solution that helps BMW sell cars, enthuse new tech-savvy customer groups, and bring dealerships to customers digitally. This new, immersive approach transforms the way car buyers make purchasing decisions.



EXTENDED REALITY

#TechVision2018

Komatsu Virtual Training

Komatsu, a heavy machine manufacturer, has expanded its value proposition by offering virtual training for heavy equipment operators, in any location and regardless of weather conditions.

With VR, Komatsu's customers can ensure that its operators get the "seat time" needed to learn, without putting them—or multimillion-dollar excavating equipment—at risk.



EXTENDED REALITY

#TechVision2018

GE INDUSTRIES

Skylight on Glass™ guides GE technicians by overlaying instructions digitally right in their line of sight via smart glasses

GE is using AR to deliver assembly information, improving worker productivity



GE Aviation
GE Healthcare



BOLD PREDICTIONS

BY 2023

“Zero office” environments will be normal among knowledge workers across industries.

BY 2030

There will be visual implant surgeries to give patients the ability to use XR without headsets. Screens will be dead.

BY 2025

The first global company will eliminate more than 90% of its footprint. Its employees will work in virtual offices from their homes or digitally-advanced co-working spaces.

BY 2030

The first national government will make XR technologies the standard for delivering education. This new generation of education will be individualized to each learner and able to scale infinitely.

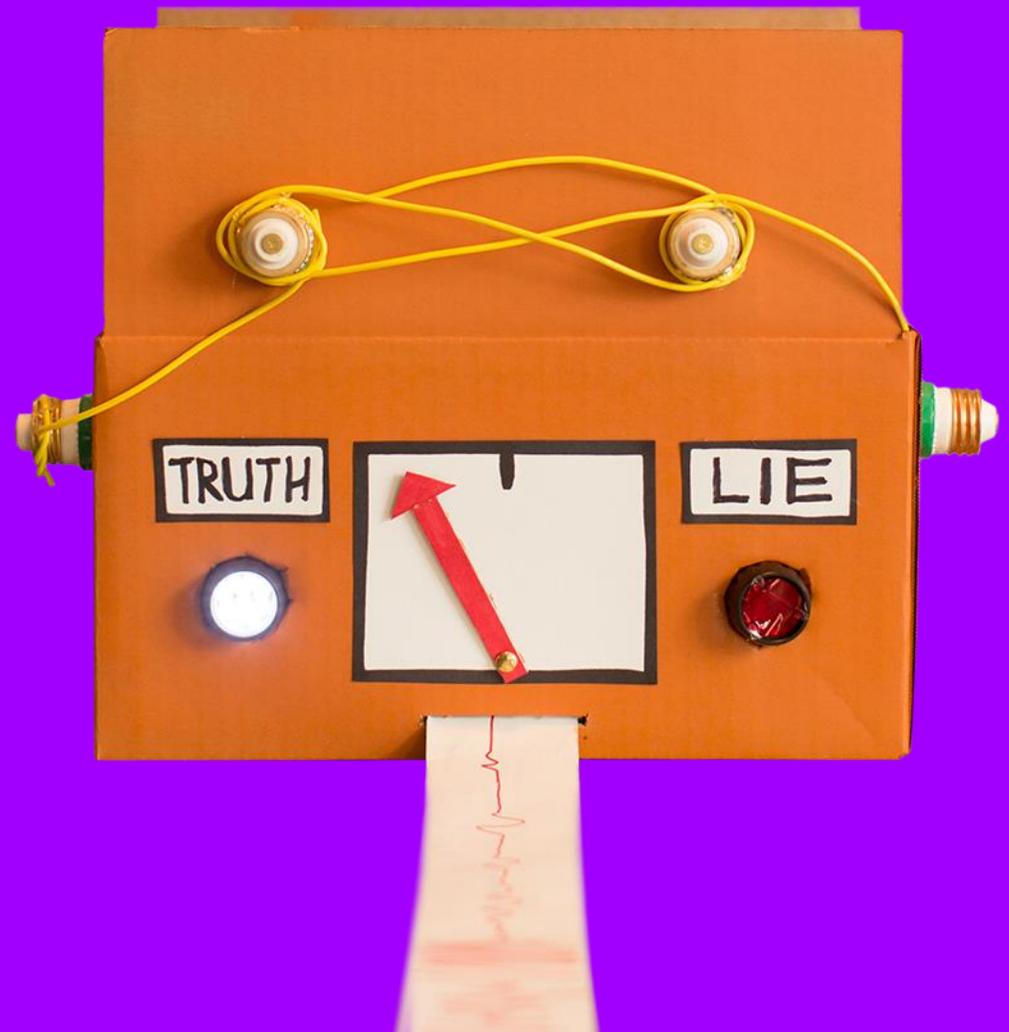


DATA VERACITY

The Importance of Trust

WHAT IS DATA VERACITY?

As businesses invest in technologies with intensive data demands, such as AI and edge-computing, ensuring data veracity—the truthfulness of the data driving decisions—will be of the utmost importance.



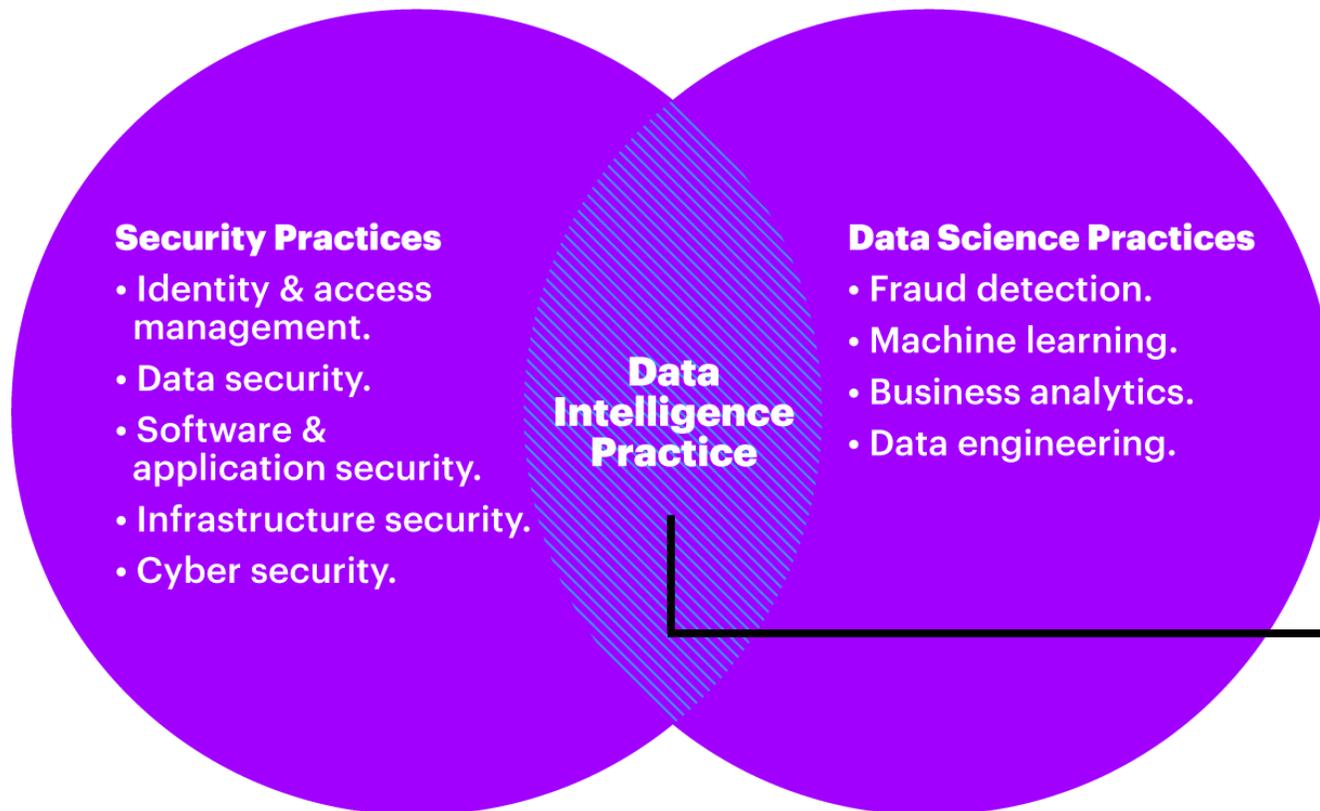
DATA DRIVES BUSINESS – BUT WHAT IF IT'S BAD DATA?

Unverified, inaccurate or manipulated information threatens to compromise the insights that companies rely on to plan, operate, and grow.

DISTORTED DATA PRESENTS A THREAT TO BUSINESSES.

The potential impact of unverified information carries far more financial risk than traditional cyberattacks.

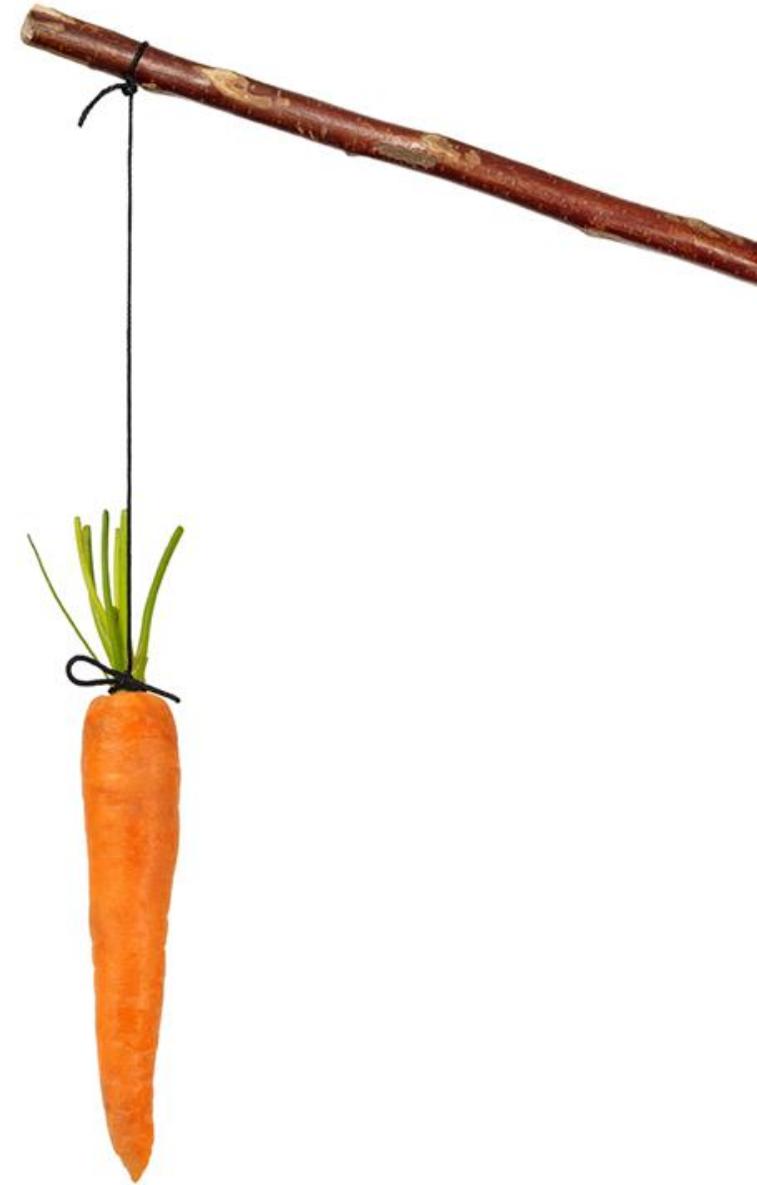
CREATING A DATA INTELLIGENCE PRACTICE



A data intelligence practice determines the embedded risks across a portfolio of data supply chains using capabilities from both security and data science practices. Additionally, this group will help set standards for acceptable risk based on business priorities and implications of automated decisions.

INCENTIVIZE THE TRUTH.

Understanding anomalous behavior during data observation provides a critical secondary benefit: it helps businesses uncover and adjust the incentive mechanisms that lead to faulty data being collected or provided in the first place.



78%

of Brazilian respondents agree that their organizations are increasingly using data to drive critical and automated decision-making, at unprecedented scale.

54%

of Brazilian respondents agree that organizations are basing their most critical systems and strategies on data, yet many have not invested in the capabilities to verify the truth within it.

HOWEVER...

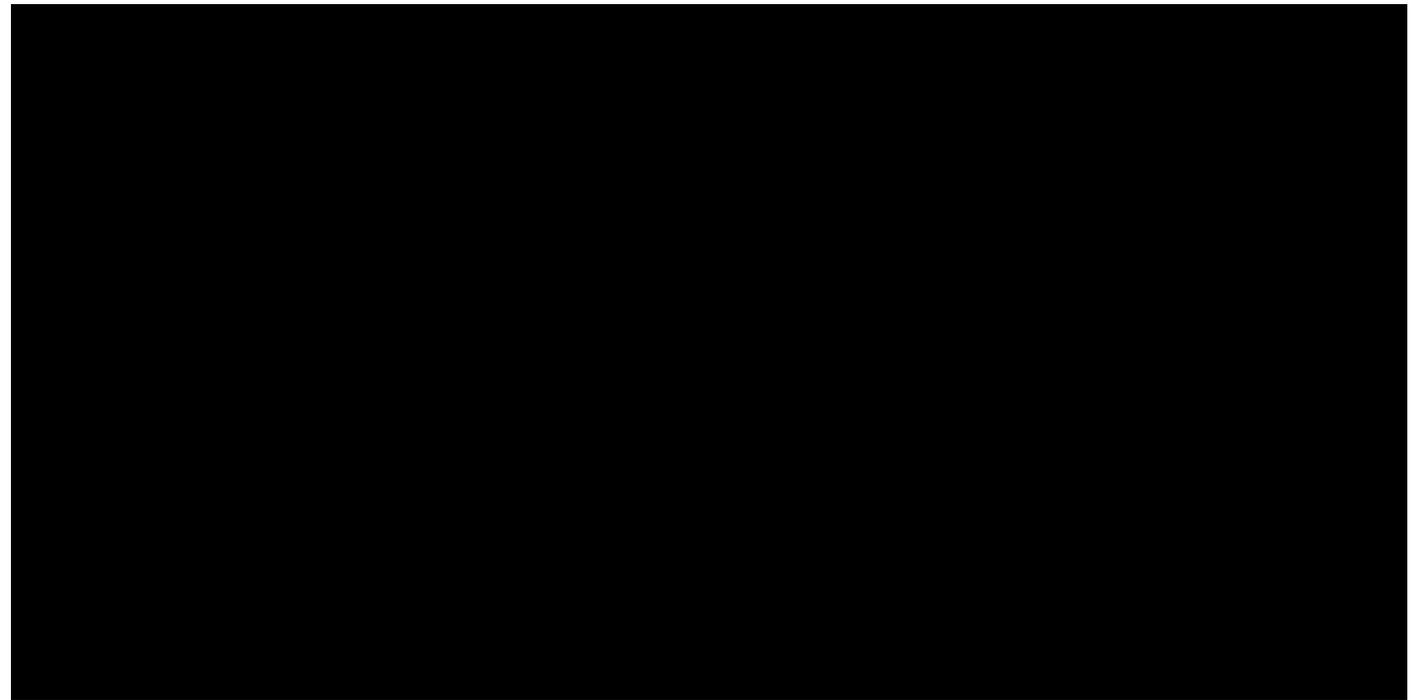
Thomson Reuters

Responding to the critical need for accurate information to feed the 24-hour news cycle, Thomson Reuters has developed an algorithm that uses streams of real-time data from Twitter

The algorithm help journalists classify, source, fact-check, and debunk rumors faster ever than before.



THOMSON REUTERS



On Amazon, third-party sellers were buying fake reviews to artificially inflate their product and seller ratings.

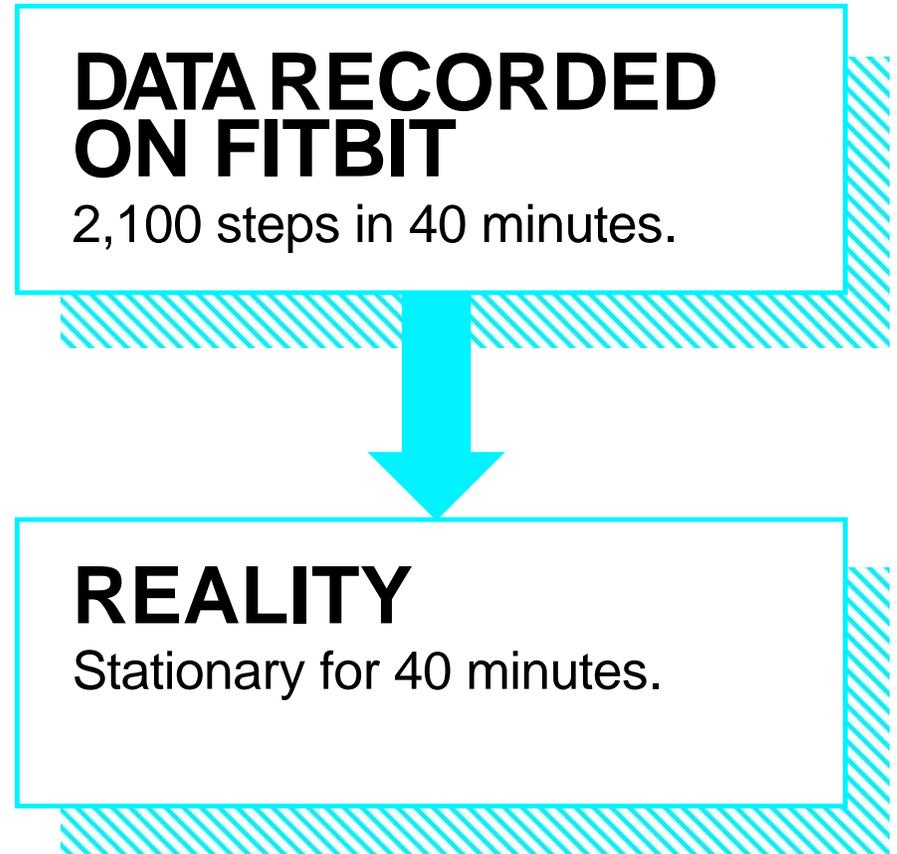


DATA VERACITY

Data captured by sensors is often trusted without question.

In attempts to gather more and more data, businesses have left the door open to manipulation of cheap, unprotected, and now pervasive sensors.

A recent study led by researchers at the University of Michigan found that accelerometers used in smartphones to track walking distance and other movement-related metrics can be fooled by a single acoustic tone – some indefinitely.



BOLD PREDICTIONS

BY 2022

the first business will be effectively shuttered by regulators for failure to sufficiently protect consumer privacy.

BY 2024

data monitoring, auditing, and verification services will be a core offering from cloud providers; leaders will go a step further to offer services that will proactively notify its customers if they detect gaming of automated systems.

BY 2025

there will be a major war started by state-sponsored cyberattack. Through 2025, most IoT devices will still lack cybersecurity features and will be a primary injection point for those looking to game autonomous systems.



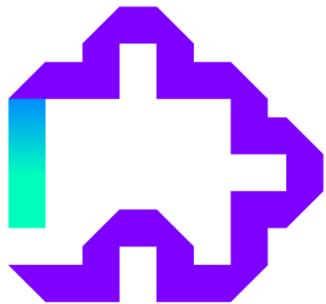
FRICITIONLESS BUSINESS

Built to Partner at Scale

TECHNOLOGY-BASED PARTNERSHIPS ARE BECOMING THE PRIMARY WAY BUSINESSES GROW AND COMPETE.

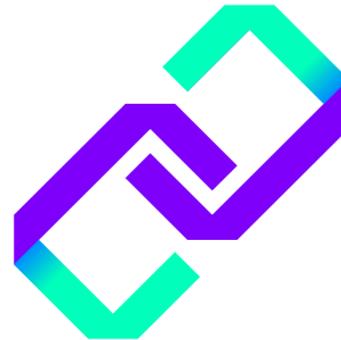
These partnerships are happening at an unprecedented scale, and pushing companies to be more integrated than ever before.

Businesses must adopt microservices architectures, and use blockchain and smart contracts to build a strong foundation for technology-based partnerships.



MICROSERVICES

break applications down to their simplest component functions. Each function is treated as a separate service with its own API.



BLOCKCHAIN

Information is replicated across a network of nodes delivering information and transactions that are secure, unalterable, and verifiable.

Those that invest in these changes today will gain competitive advantage and redefine how businesses transact in the future.

86%

of Brazilian respondents agree that **Microservices** are critical for scaling and integrating ecosystem partnerships.

77%

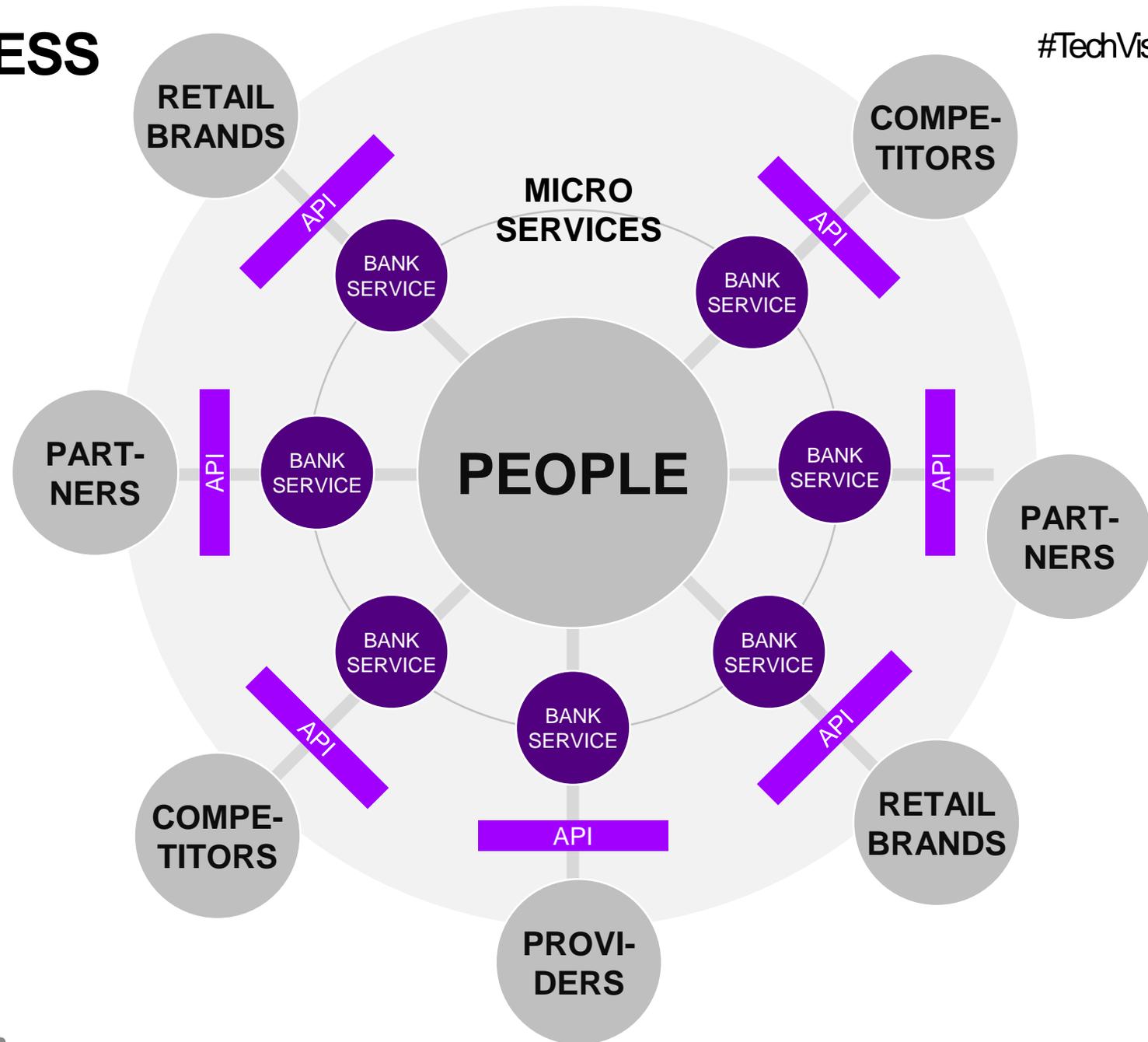
of Brazilian respondents agree that **blockchain and smart contracts** be critical for their organizations over the next three years

FRICITIONLESS BUSINESS

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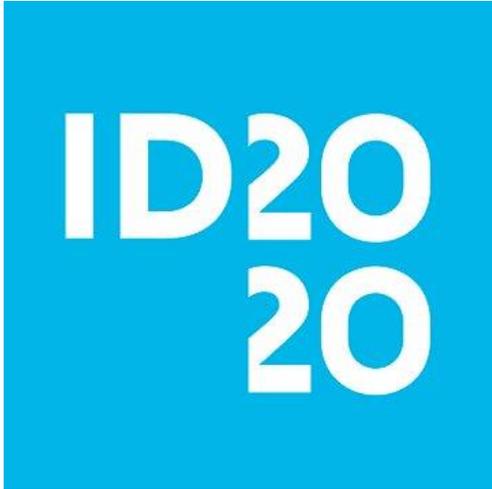
OPEN BANKING

Microservices can enable banks to atomitize their services to provide better experiences and business models to clients and partners.

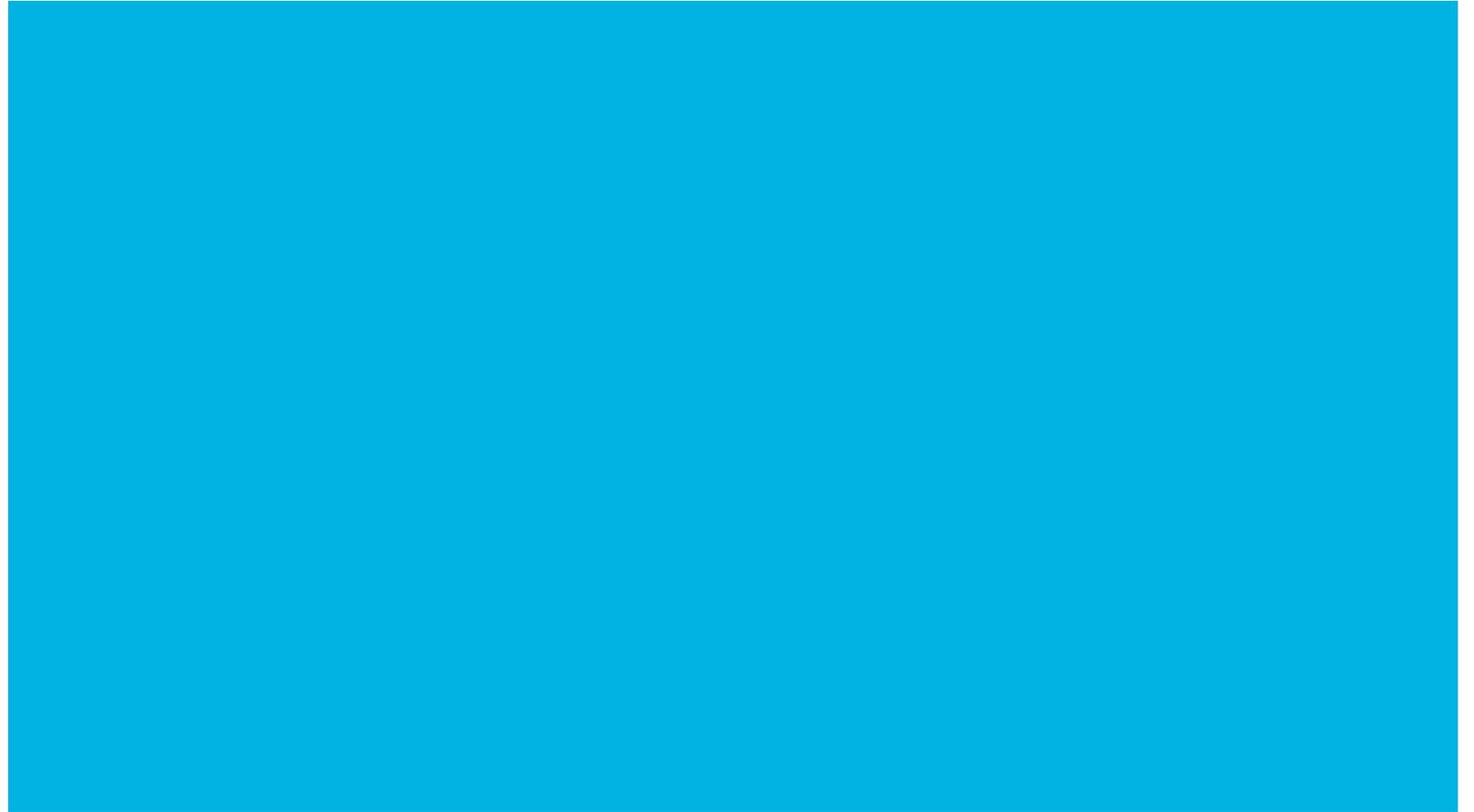


FRICITIONLESS BUSINESS

#TechVision2018



accenture



<https://www.youtube.com/watch?v=r81Atqd2MM0>

Blockchain enables frictionless transactions safely distributed across the globe



FRictionless Business BLOCKCHAIN

#TechVision2018

Estonia uses a blockchain based smart contract system enabling fast and secure data sharing.

Agencies independently maintain public data. The system automatically authenticates requestors' identities, their need to access the information, and regulates the time and ways in which the requestor can use the information.



BOLD PREDICTIONS

BY 2020

75% of the Fortune 100 will be using microservices, and 90% will have at least one public API.

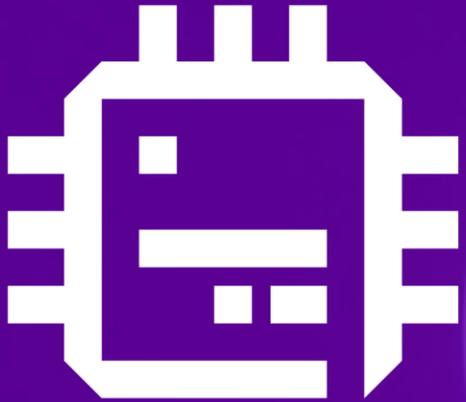
BY 2026

An emerging market will have all transactions between its national government and the private sector executed exclusively through a blockchain-based solution.

 CASE - PROJECT UBIN PHASE 2

BY 2028

It will be standard for industry ecosystems to require blockchain and smart contract capabilities to participate.



INTERNET OF THINKING

Creating Intelligent Distributed Systems

Enabling intelligence for the next generation of technology demands an overhaul of existing infrastructures, with a balance of cloud and edge compute, and a renewed focus on hardware to deliver intelligence everywhere.



To overcome infrastructure challenges and achieve their boldest ambitions, businesses will have to drive intelligence across their network – from the enterprise to the edge – and can do so in three ways:

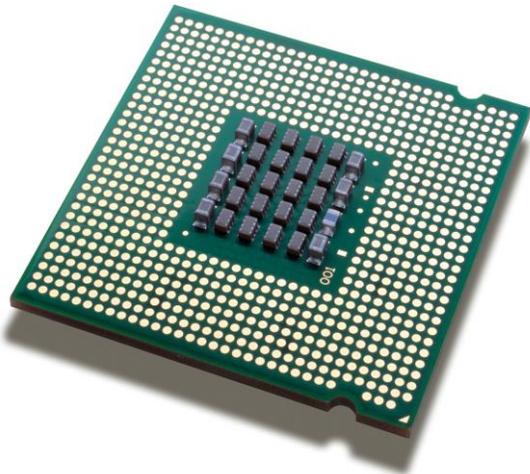
1 EMBEDDING INTELLIGENT TOOLS EVERYWHERE.

2 BALANCING THE CLOUD VS THE EDGE.

3 LEVERAGING CUSTOM HARDWARE.

WHY NOW?

**RELYING ON CLOUD ALONE
WILL OVERBURDEN
BANDWIDTH AND STORAGE.**



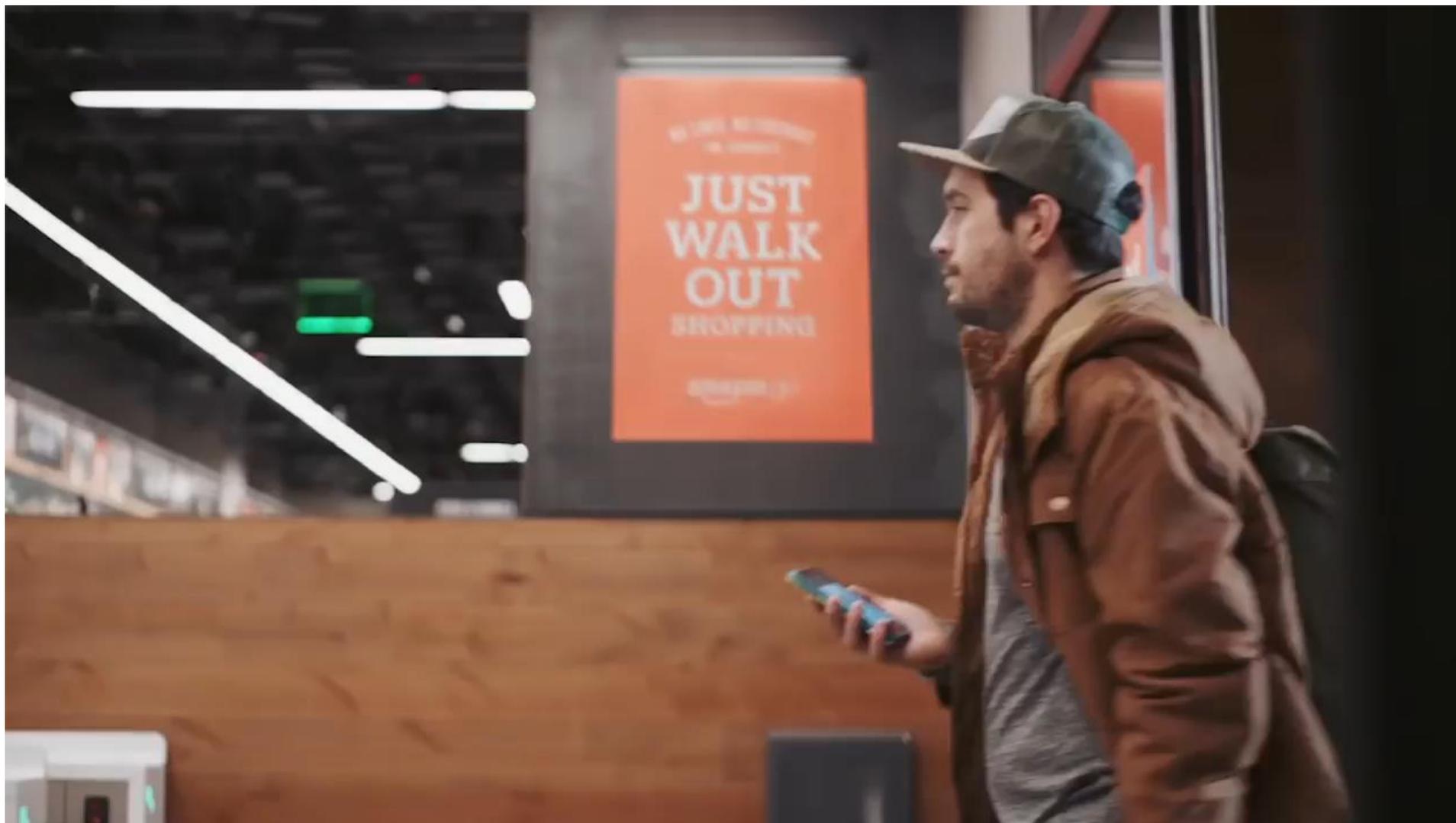
**PHYSICAL LIMITATIONS ON
TRANSISTORS WILL SOON
AFFECT EXPERIENCE.**

82%

of Brazilian respondents agree that in order to support real-time insights and actions, organizations need a renewed focus on custom hardware and hardware accelerators

85%

of Brazilian respondents agree that enterprises must balance cloud and edge computing to maximize technology infrastructure agility and enable intelligence everywhere.



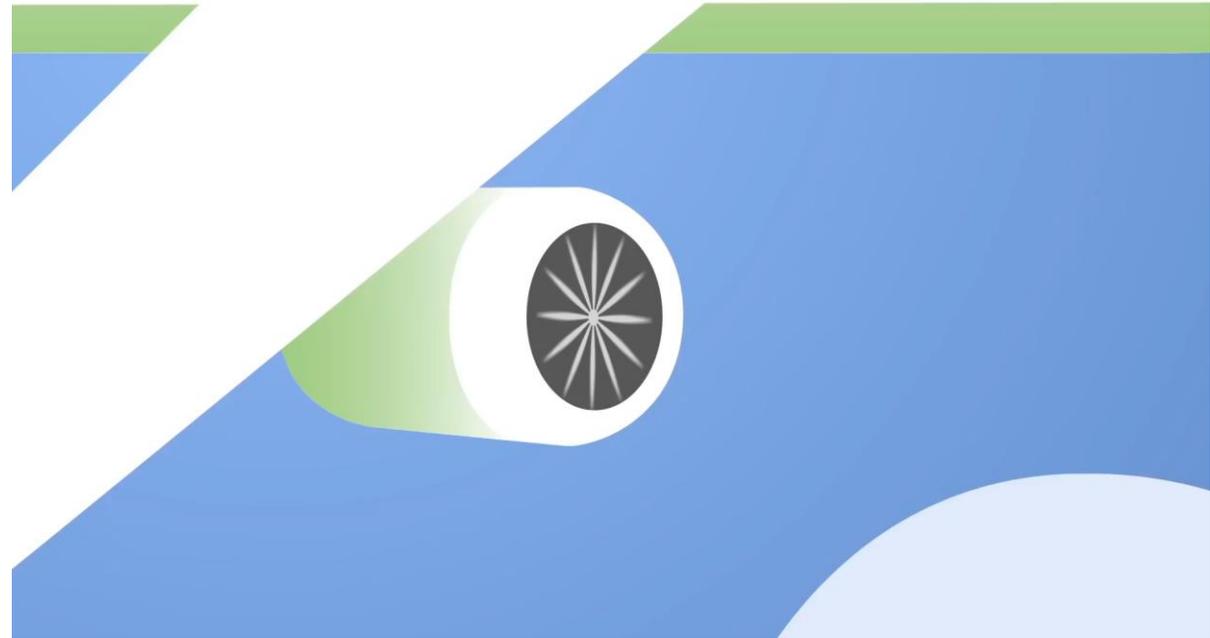
INTERNET OF THINKING



PREDIX

Driven by the demand for operational insight and efficiency, through GE's own digital transformation, they're forging new industries within the industrial sector of the economy

What these new industries will look like is still being shaped, but GE is writing the rules.



<https://www.youtube.com/watch?v=uE-R44Yv0FU>

BOLD PREDICTIONS

BY 2021

at least half of Global 2000 organizations will be using special purpose customized hardware on premises or in their own products.

BY 2023

breakthroughs in materials science, energy production, and energy storage will allow most edge devices to remain in the field for a decade or more.

BY 2025

businesses will be discarding 100x more data that they originate than they store – a function of having better edge analytics and real-time utilization of data.

THANK YOU

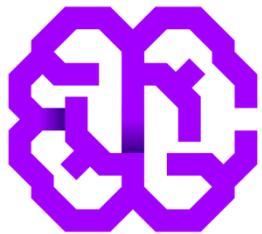
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Raising AI to Benefit
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Trend 2



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The End of Distance

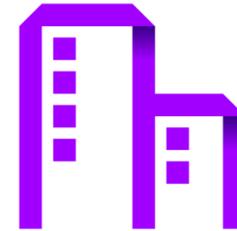
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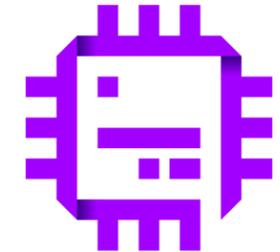
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