

HUBREPORT

2019

BEST OF **VIVA TECHNOLOGY**

MAY 16TH & 17TH 2019



WHICH AI FOR WHICH SOCIETY?

With 124.000 attendees, this fourth edition of VivaTech reaches a new record this year. Paris now welcomes the capital of Tech event in Europe!

With its unique mix of startups and big companies, politics and business, professionals and consumers, Viva Technology is now in the Top major event for international Tech actors.

Through the speech, debates, round tables and workshops of these 2 days, we understood that **Technology is no longer just a question of innovation and business**. As it takes a bigger part in our day to day lives, **there are now major political and social stakes linked to Technology and its evolution**. It is no longer just firms, but now also **countries with different mindsets, different cultures and different politics and ethics that are confronting each other** on new major questions, around technologies that are shaping our future way of living together.

If the **main arena's champions are the USA and China, Europeans are now picking up the pace**, questioning themselves about their place, strength and power of influence in that new world.

Emmanuel Macron position is to **resist to protectionism and increase international cooperation**, particularly on the legal field. Jack Ma, founder and former CEO of Alibaba believes that **governments sometimes over-react** : « You can't do anything about yesterday, so few things about today, **but a minor change in the present can have major effects on the future.**», he said, suggesting that **to many rules and restrictions could hurt the progress of technology and our society**.

The future for human society will be without a shadow of a doubt structured by an ubiquitous Artificial Intelligence, we need to prove that it can be positive and inclusive.

To do so, we need to find new paths of collaboration. For instance, between colleges and companies as Ginny Rometty, CEO of IBM, promoted. « **To inspire trust, we have to prepare society to work with new technologies**», she estimated.

This concerns as well Companies in their business : from Bernard Arnault (LVMH) to Mickey Mikitami (Rakuten), from Vas Narasimhan (Novartis) to Keith Weed (Unilever), CEOs and CMOs reminded the audience **that Innovation is much more than "pushing the button"**.

"Innovating is about being useful to others, Marc Pritchard (P&G) stated. We have to act as entrepreneurs : Identify a customers' issue, solve it, test it over and over to improve it. **The main difficulty is to give the priority to the right pain points among tremendous opportunities"**.

In this report, you will find a panorama of these ecosystems of cooperation in 10 main fields identified at VivaTech.





WHAT IS VIVA TECHNOLOGY ?

Viva Technology is the largest show in Europe about global technology. Organized for the 4th time, it became the unmissable rendez-vous for established companies and talented startups willing to shape the future thanks to vision and technology.

This year, the event shed light on 4 themes : **Tech for Good Talents, Women empowerment and Europe.**

Past editions have been successful : this year needed more space. The main stage has been moved to The Dôme de Paris, in the Palais des Sports to gather a bigger crowd.

With so many conferences, events and exhibitors 9 tracks have been designed to follow the highlights of Viva technology 2019 : what happens on **the Stage One, the CEO forum, Afric@Tech, Future Tech, the CMO Forum, Tech4Good, Startup Life, Agree to Disagree and United Tech of Europe.**

Source: Viva technology

VIVA

VIVA TECHNOLOGY KEY FIGURES 2019:

124 000

PEOPLE
ATTENDING

125

NATIONALITIES

+450

SPEAKERS

+13 000

STARTUPS


2 500

MEDIA
REPRESENTATIVES

Installation by



PUBLICISLIVE

Images by  Vandalas

Source: Viva Technology



THE ORIGINALITY OF VVT IS TO MIX PUBLIC AND PRIVATE WORLD

PIERRE LOUETTE
CEO
LES ECHOS - LE PARISIEN GROUP



Pierre Louette
CEO - LES ECHOS-LE PARISIEN GROUP



WHAT'S GOING ON AT VIVA TECHNOLOGY 2019 ?

Conferences

This year 5 stages (including the Dôme de Paris in the Palais des Sports) offered 180 sessions with 450 speakers. The key themes of the 3 days of the 2019 edition were gathered around 9 tracks.

Connect & work

Meeting & coaching, talent & HR programs for spotting new talents and unicorns are set up during the event. The TechCrunch Hackathon helped to showcase innovative projects during a 36H competition.

Tech Show

Innovations and immersive experiences are on display in the Hall of Tech and in the various Parks: Robotics, VR, GreenTech, and Mobility. Labs from leading brands exhibited both their own technologies and promising startups.

Challenges

100 innovation challenges have been organized by major corporate, regions, and Viva Technology in order to promote promising innovation projects.

Side events

Before, during, and after the show, events have taken place outside of the venue, either to convey information on VVT or to pursue the networking in a more relax mood in Paris.

ONE NEW HALL AND A BIGGER STAGE ONE



THIS YEAR LIGHTS ARE SHED ON :

Unicorns' Challenge

European Scaleups plan focuses on **the Next Unicorns!** VivaTech is participating to the hunt of those unicorns by organizing a dedicated challenge. This initiative aims at, not only spotting the potentials, but also at giving an international exposure through a renowned media and corporate partners' network. VivaTech wants truly boost this European Scaleups to attain sufficient growth and be competitive in a challenging market.

New talent in the spotlight

The show holds a **36h Hackathon** with TechCrunch for more than 1000 programmers in competition. Two prizes are made to identify young talents : **START prize** rewards employees under 35 who have created a new structure within their company; and the **PEPITE prize** for startups goes out to the most promising student entrepreneurs.

United tech of Europe

To face **data-driven competitiveness of USA and China**, VivaTech explores **Europe's specific challenges and potential** with country pavilions, Europe-based startups, a dedicated conference track, European partners, and events.

THIS YEAR LIGHTS ARE SHED ON :

Women in Tech

2 competitions are organized to support **women-led startups in getting financing** : the Female Founder Challenge, and the EU Prize for Women Innovators presented by Carlos Moedas. Women Networks, digital camps and mentoring sessions were also planned.

Tech for Good

Technologies can have a **positive impact for the economy, society and humanity**. The **Tech For Good Summit** opened the show with President Emmanuel Macron at the Elysée

AfricaTech

For the second year, Viva Technology focuses on Africa. More than **100 promising African startups** come on country pavilions sharing innovations that support the technology development booming. AfricaTech Lab features exclusive events and presentations especially with a pitch area shared by startups and established companies.

INNOVATION, THE DNA OF VIVATECH



VivaTech is a big show dedicated to collaboration between business leaders and emerging technology startups.

21 major Open Innovation Labs

Open Innovation Labs are booths with startups selected by major corporate thanks to challenges. Startups are selected on their capacity to offer solutions for issues faced by these corporates.

VivaTech challenges

Startups apply in order to exhibit on an Open Lab Innovation during 3 days. This year more than 10 000 startups applied, and 57 % come from abroad.

Collaboration

Thanks to challenges, big companies benefit from new talent technology expertise, and talents have the opportunity to concretely launch their product or service with leading partners.

PLATINUM PARTNERS



BNP PARIBAS



LA POSTE

LVMH



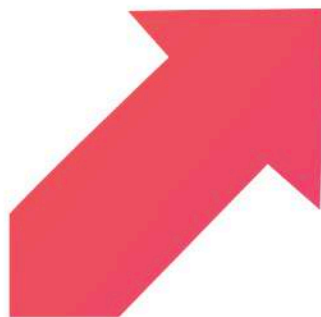
GOLD PARTNERS



INNOVATION CHALLENGES ATTRACT MORE AND MORE STARTUPS

TOTAL
APPLICATIONS
10,312

+22,5%
INCREASE COMPARED
TO 2018



CORPORATE
SPONSORS
21

CHALLENGES
120

INTERNATIONAL
STARTUPS
57%

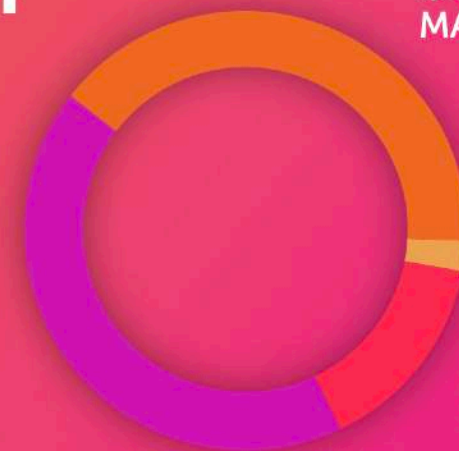
STARTUP MATURITY LEVEL

GROWTH
& SCALE **40%**

GOING TO
MARKET **43%**

STABLE
BUSINESS **2%**

CONCEPTION
STAGE **15%**



« TURNING EUROPE INTO A UNICORN'S FACTORY »

2019 is punctuated by central European events which could affect the tech industry: New European Commission, European Parliament elections and Brexit. After a new legislation (GDPR) on data- protection, the challenge is now **how Europe tech sector is going to compete against an increasingly data-driven and IA business sector in the US and China**. Today only **30 unicorns are Europe-based out of a world total of 265 in the world** (source: CB Insight), but with a governmental support, more and more qualified talents, and a real spirit of innovation, this number should grow up quite quickly. This is one of the main aims of this Viva Technology edition.

Thanks to dedicated events, challenges and key speakers, the ***United Tech of European*** program has been thought to explore and answer problematics of the European tech industry and promote European competitiveness :

**A dedicated
conference track**

**Next European Unicorn
Awards**

**EU
institutions speakers**

**Country pavilions
& partners**

Source: Viva Technology



"Competition is the main driver of innovation. If you have someone challenging you, you always get better. That's why we always want to protect competition inside Europe and we don't want to create monopoly with unregulated market."

Margrethe Vestager
EU Competition Commissioner

SPOTTING THE EUROPE BASED UNICORNS

Thursday May 16th, Viva Technology revealed the winners of the Next European Unicorn Awards in 4 categories : Tech For Good, BtoB for SME, BtoB for big Companies, Deep Tech and BtoC. **John Chambers**, CEO of Cisco was president of the jury . Discover the winners in the following pages, here is the list of the previous nominees :

Typeform Shift	Roli
Technology	Alan
Tessian	Frichti
Snyk	Kry
Dataiku	Vinted
GoCard	Invenia
Less	Instana
Meero	Chainalysis
SumUp	Spacemaker
Soldo	Algolia
aircall	Olio
Voodoo	Thrive
Payfit	OpenClassrooms
Qonto	Ynsect
Picnic	Karma App

Source: Viva technology



NEXT EUROPEAN UNICORN AWARDS

Accel

GRAND PRIX: NEXT EUROPEAN UNICORN



OpenClassrooms : make education accessible

WHAT ?

Openclassrooms is an online **professional training platform**. Formations are directly connected to professions matching with the labour market needs. It delivers diplomas recognized by states or in association with companies like Microsoft, or, recently IBM. OpenClassrooms also have an « alternance » program 100% online.

WHAT IS THE POINT?

OpenClassrooms listens to employer needs and provide **100% online quality trainings** to students or jobless people. In 2018, OpenClassrooms raised 60 millions de dollars funds.



OPENCLASSROOMS

CATEGORY: TECH FOR GOOD



OLIO : sharing food surplus with neighbours

WHAT ?

Olio is an app dedicated to **fight against waste** : it **connects neighbours with each other** and with local shops to share surplus food instead of throwing it away.

WHAT IS THE POINT?

Olio is easy to use : the user snaps a photo, adds a brief description and provide pick-up details. Neighbours interesting in these items answers and pick up. One half million of people already use it in 49 countries.



OLIO

buy
of oni
and only ne

Going on
holiday and y
fridge is fu
of food?

er cooked
o much food
or dinner?

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you
e time
it?

CATEGORY: B2B FOR SME



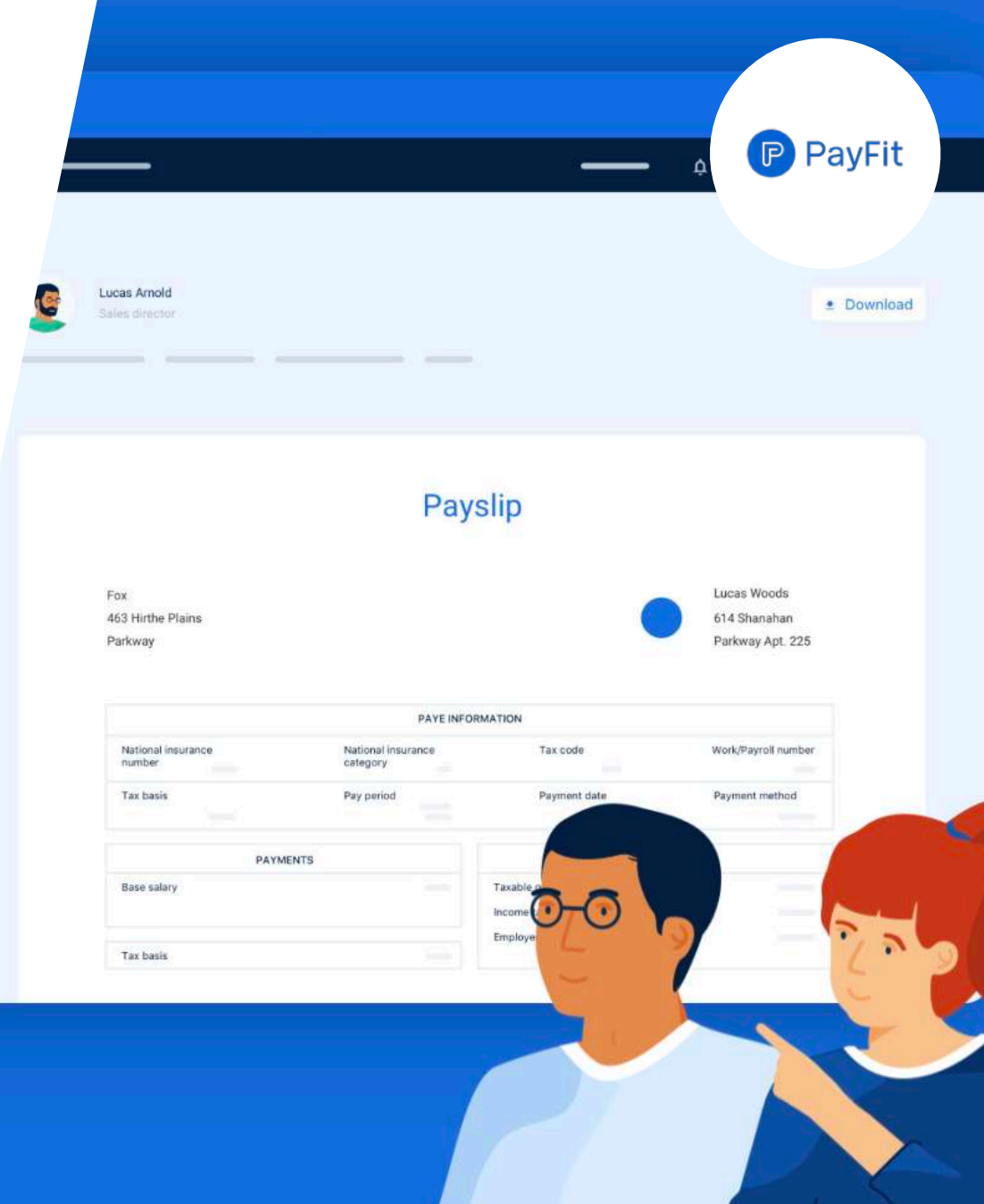
Payfit : Integrated payroll and HR management

WHAT ?

Payfit is an **integrated payroll and HR management software**. It automates everything from RTI submissions and employee payslips to leaves and expenses.

WHAT IS THE POINT?

It saves time and avoids delays and mistakes concerning payroll and take into account all a lot of HR management parameters : employee personal profiles différents holidays and leaves, and working hours. The company employs 17 people and counts 2500 clients.



CATEGORY: B2B ENTERPRISE



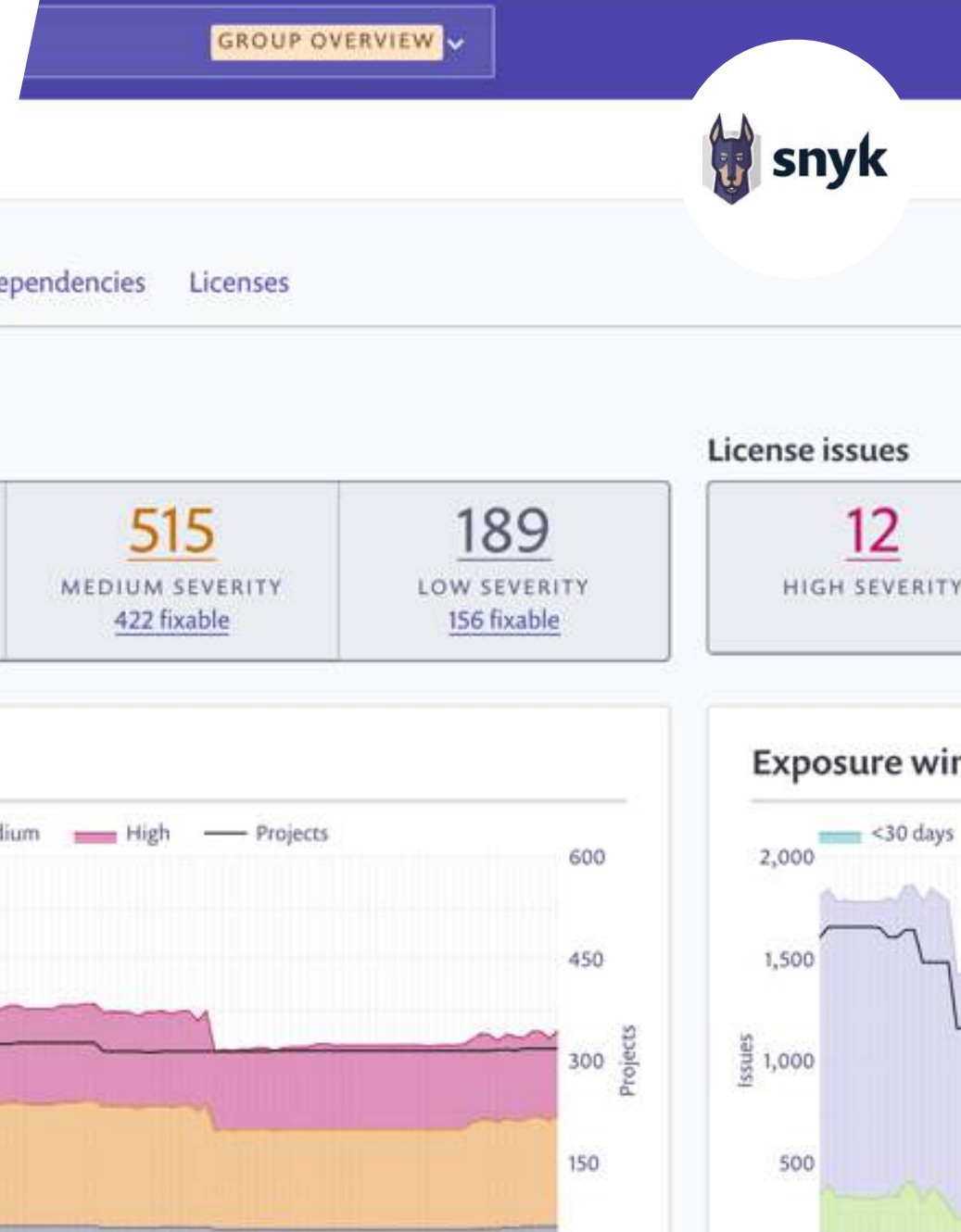
Snyk : A developer-first solution that automates finding & fixing vulnerabilities in your dependencies

WHAT ?

Snyk is a **developer-first solution** that **automates finding & fixing vulnerabilities in enterprise's dependencies**. It can detect open source software's threats.

WHAT IS THE POINT?

It can Map the full applications dependency tree, can add integrations or app to be tested and continuously for newly disclosed vulnerabilities. Today Snyk has 200 clients and 50.000 users. In 2018, the startup raises 22 million USD.



CATEGORY: B2C



Vinted : marketplace C2C for second-hand clothes

WHAT ?

Vinted in an **application for exchanging or selling second-hand clothes between users.**

WHAT IS THE POINT?

It gives **second life to clothes, avoids waste and creates a community of fashion lovers**. Created in 2008, vented has now 20 million users around 9 European countries and generates 1.4 billion euros business volume.



CATEGORY: DEEP TECH



Algolia : search engine with as-you-type feedback results

WHAT ?

Algolia is a **SAAS for boosting the search experience on websites and mobile application**. Thanks to a powerful algorithm, the solution can find and flash the best results from the user request with a typo and synonyms tolerance while typing in the website search box. As an API, it can be used on any kind of website and mobile application. Analytics report are also available in order to understand users behaviours and improve the results relevance.

WHAT IS THE POINT?

It provides **search results in less than 50 ms**. It has textual and business relevances from typo tolerance and synonyms to enabling custom ranking and conversation optimisation with business rankings. The solutions is mainly used by retail, media and software companies.

For a fashion brand (confidential) Algolia brought +150% sales contribution from search, and -88% bounce rate.

TYPE WHAT YOU'RE LOOKING FOR

🔍 Blue jeans on sale

VIVA TECHNOLOGY STARTED EARLY IN THE YEAR AND GETS MORE AND MORE INTERNATIONAL.

To promote the fourth edition, Viva Technology organized a worldwide tour with 40 meetups in 23 countries in order to access the most dynamic tech ecosystems.

This year, **19 country pavilions** came, like Germany, Belgium, Spain, the United Kingdom, Italy, Luxembourg and Switzerland, Algeria, Brazil, Morocco, Senegal, Taiwan and Tunisia... they all came with promising startups and key personalities. **60%** of media partners come from abroad to cover the event.

Light is particularly shed on two geographic areas : *AfricaTech* as last year, and Europe with the program *United Tech of Europe*.

Source: Viva technology



AN INTERNATIONAL EVENT GATHERING 19 COUNTRY PAVILIONS!



Source: Viva Technology

10 TRENDS TO WATCH AT VIVA TECHNOLOGY 2019

**TECH TO
WATCH**



GEOPOLITECH



TECH4GOOD



CARE



**MOBILITY &
SMART CITY**



INDUSTRIES



**CUSTOMER
EXPERIENCE**



**FINANCE,
BANKING &
INSURANCE**



**MEDIA &
ENTERTAINMENT**



**FUTURE OF
WORK**



DISCOVERY : A GREAT SELECTIONS OF INNOVATIVE STARTUPS BY EDF

TECH 4 GOOD



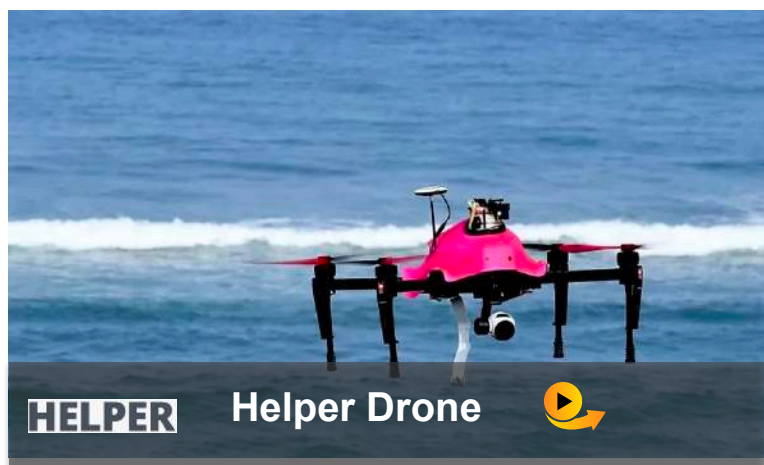
MOBILITY & SMART CITY



TECH TO WATCH



CARE



TECH TO WATCH



CARE

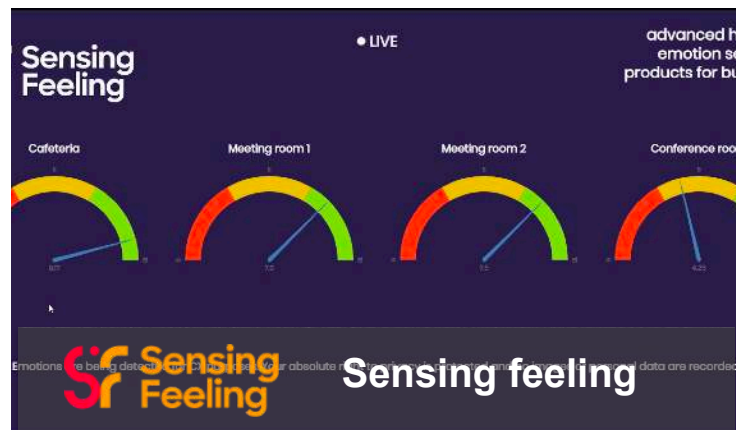


ROBOT / AI (ARTIFICIAL INTELLIGENCE) & XR (AUGMENTED & VIRTUAL REALITY) PARK

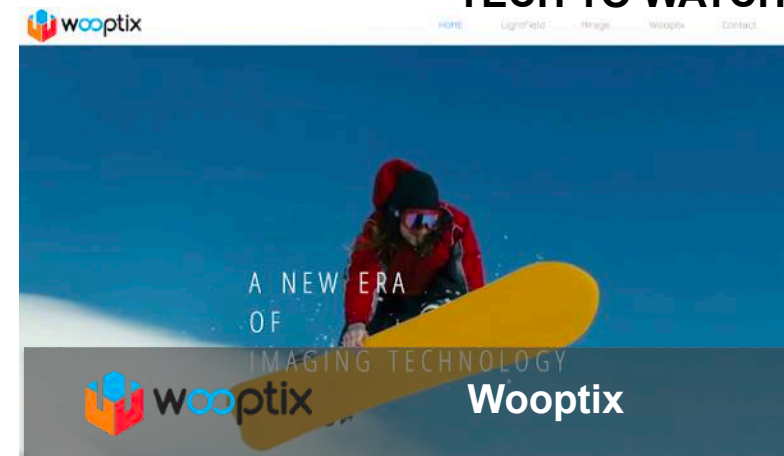
CUSTOMER EXPERIENCE



MARKETING & ENTERTAINMENT



TECH TO WATCH



INDUSTRY



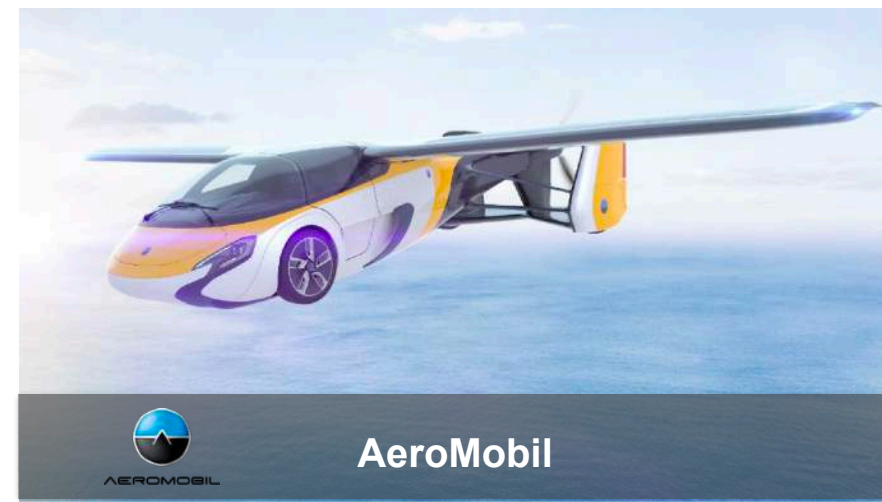
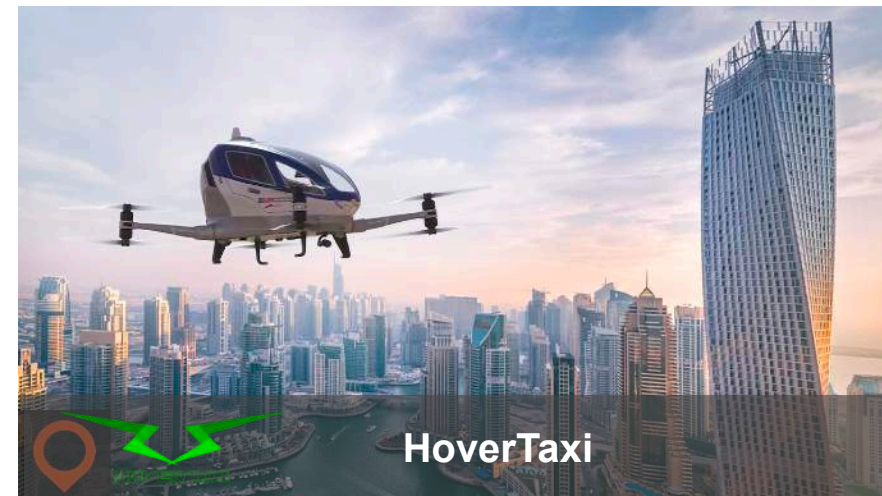
CARE



TECH TO WATCH



MOBILITY PARK : THE FUTURE OF MOBILITY



JACK MA'S 5 MANTRAS

1/2

Credit photo : Alizila News from Alibaba Group

1

« To be successful, spend your time on your customers because they believe in you. Don't spend your time on your investors. They invest in you when you're being successful as fast as they leave you when you're in trouble. **Believe me, get your attention on customers, if they're happy, your investors will be too.** »

2

« I've always been convinced that I had to leave the company at the moment it would survive without me. So I always worked to find people better than me and help them to use their talent. **My position as CEO of Alibaba was more something like Chief Education Officer.**»

3

« We have come through 99% of the problems that all the entrepreneurs are experiencing today. It's what make me extremely proud today. You have to be courageous to be able to get through this. You have no choice, or maybe you can cry each time you are in troubles. The only result will be an ocean of tears. **At Alibaba we don't cry, only our competitors cry.** »

4

« Governments love to make rules and regulations but remember that nobody is an expert about the future. We should spend more times to think about how these policies could change the future! **You can't do anything about yesterday, so few things about today, but a minor change in the present can have major effects on the future.** Policies have to be smart, and we must create them only by considering their long-term effects. »

5

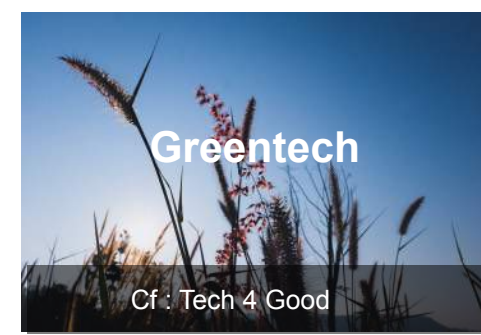
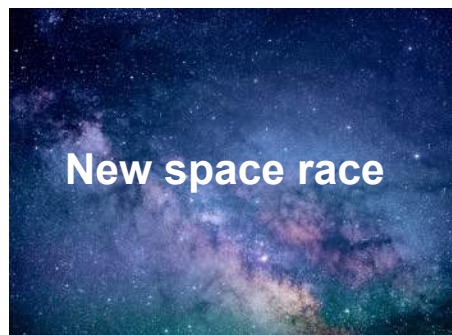
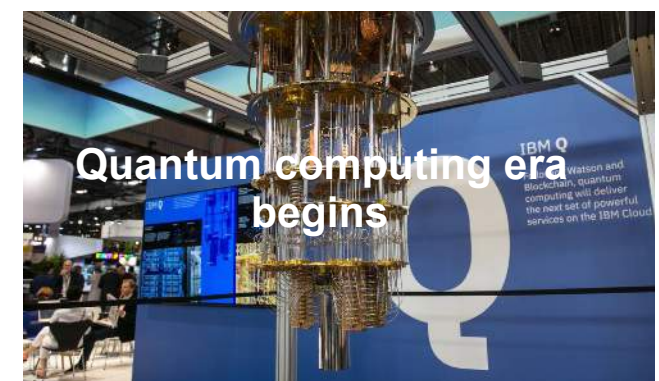
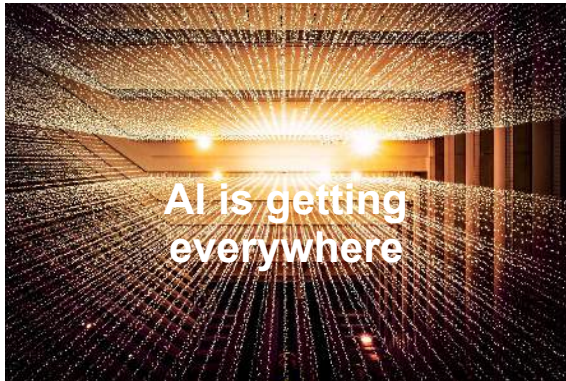
« I always hear the complains about the coming of Chinese and Americans in Europe. But you shouldn't have fear about us. For the coming century, **a good company has better chances to succeed than a powerful company.** I do believe that, no matter how strong an elephant is, if you are an ant, and you hide well, you will never be killed. But potentially, if someday you're in good position, and you learned throw your journey, you could kill the elephant.»

1

TECH TO WATCH

IOT, AI & DATA, AR/VR, 5G, BLOCKCHAIN,
CLOUD, QUANTUM COMPUTING

9 TOPICS WILL BE HIGHLIGHTED FOR THIS 2019 EDITION:



CONSUMERS ARE EMBRACING DIGITAL TECHNOLOGIES THAT KEEP THEM SAFE

Consumers are turning to digital services such as online platforms, apps and connected devices, to help them avoid and/or react to danger and **minimize personal risk**.

The democratization of information access also means for most organizations that threats are growing needing more awareness on the matter. Access to real-time information means **consumers' expectations around safety is increasing**, and local safety shortcomings can become global scandals.

Digital technologies drive the rise of concern, but they also **trigger new solutions**. Up-to-date and localized information, peer-to-peer connection, smart objects, instant access to expert advice, and personal alerts increasingly provide a safety net.



TO PROVIDE TRUST AND CERTIFIABLE AI TECHNOLOGIES

DAVID SADEK
VP RESEACH, TECH & INNOVATION
THALÈS



David Sadek

VP RESEARCH, TECH & INNOVATION - THALÈS



15 BUSINESS ACCELERATORS AROUND THE WORLD

BERTRAND ROJAT
OPERATIONAL DIRECTOR
ORANGE FAB

Bertrand Rojat

OPERATIONAL DIRECTOR - ORANGE FAB

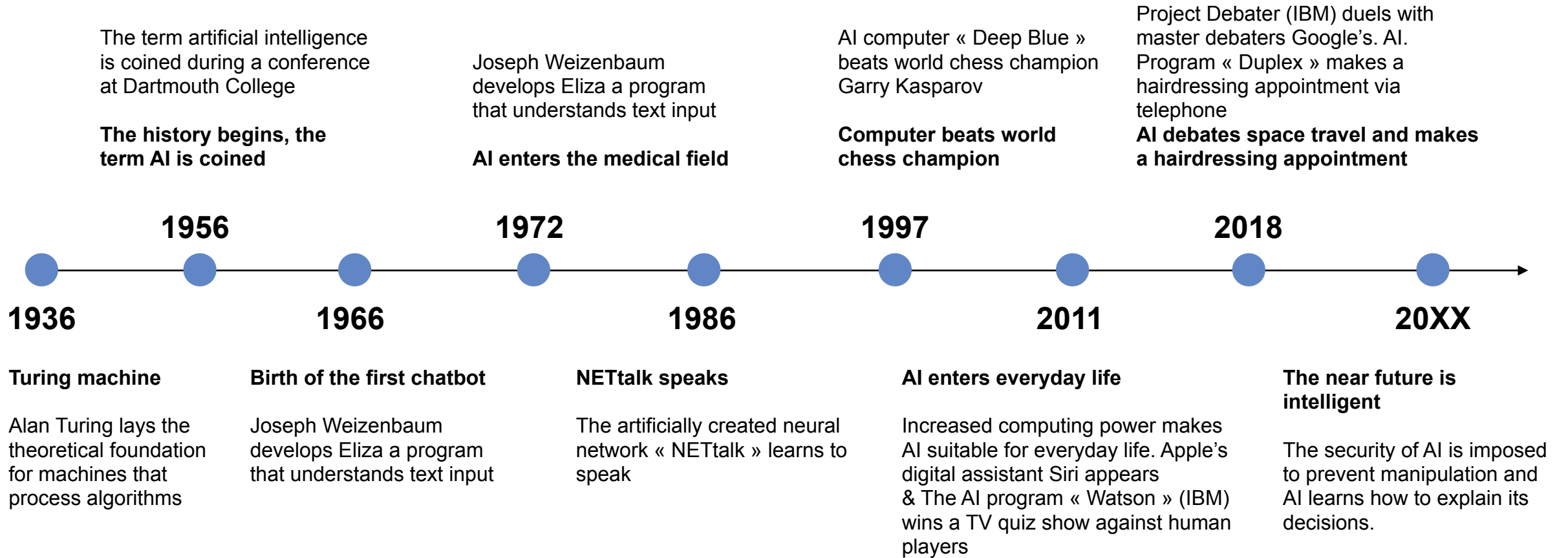
PLUS DE VIDÉOS



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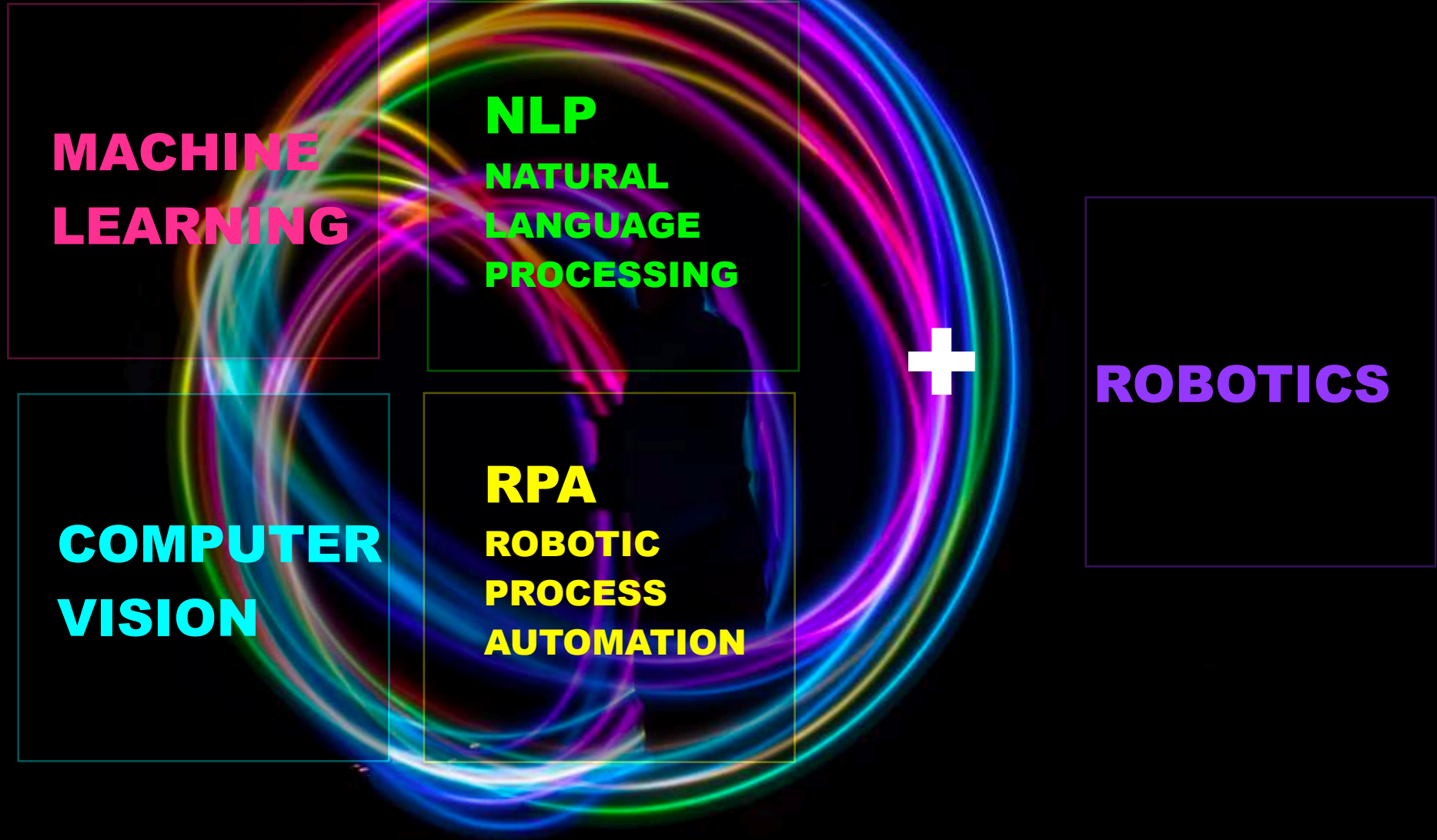
AI IS GETTING EVERYWHERE

FROM TURING TO WATSON: THE DEVELOPMENT OF THINKING SYSTEMS

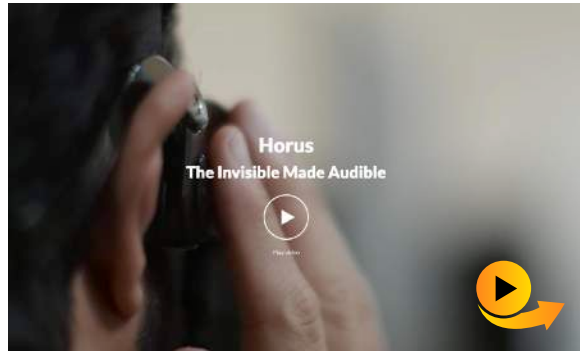


Source : The history of artificial intelligence From Turing to Watson : The development of thinking systems, Bosh 2018

AI : 5 BIG TYPES OF APPLICATIONS

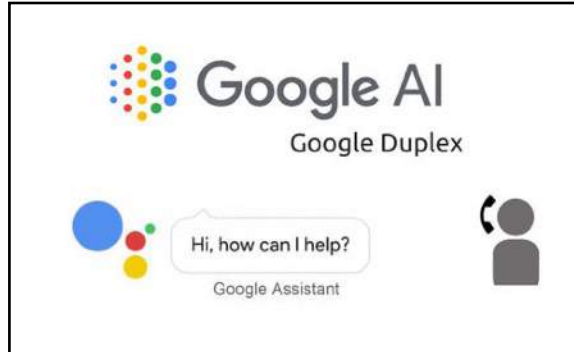


AI : APPLICATIONS



Machine learning

A wearable to help the visually impaired to see. **Horus is a wearable device that observes, understands and describes the environment to the person using it**, providing useful information with the right timing using bone conduction. Horus is able to read texts, recognize faces, objects and much more.



NLP

Google Duplex is **an assistant that can make phone calls and reservations in the user's name**. The agent can also interact with another conversation agent.



Computer vision

In January 2018, two Australian teens were saved thanks to a rescue drone. The Little Ripper drone got to the boys **in 70 seconds and dropped down an inflatable rescue pod**. The government of New South Wales has invested \$340,000 in drones.



RPA Millie, Twentybn

Powered by AI, **Millie is a life-size assistant which interacts with people while observing and understanding their actions and the environment**. This assistant offers personalized advices, from greeting customers and promoting products to personalized coaching.



AI IS GETTING EVERYWHERE

IT'S MORE THAN A TREND; IT'S A PROFOUND TRANSFORMATION OF OUR FUTURE WAY OF LIFE.

Artificial Intelligence (AI) is a major topic that will cause our daily lives to evolve significantly and transform entire sectors.

AI has already been at work for several years; however, it is now reaching the next level, due to 4 factors:

- 1 Increasingly powerful computers**
- 2 Less expensive and more efficient storage**
- 3 More data and investments in research**
- 4 Everything is getting connected (IOT, IIOT, 5G...)**

Today, the fundamentals of AI are already established, and this technology will be able to bring about new possibilities in every business sector.

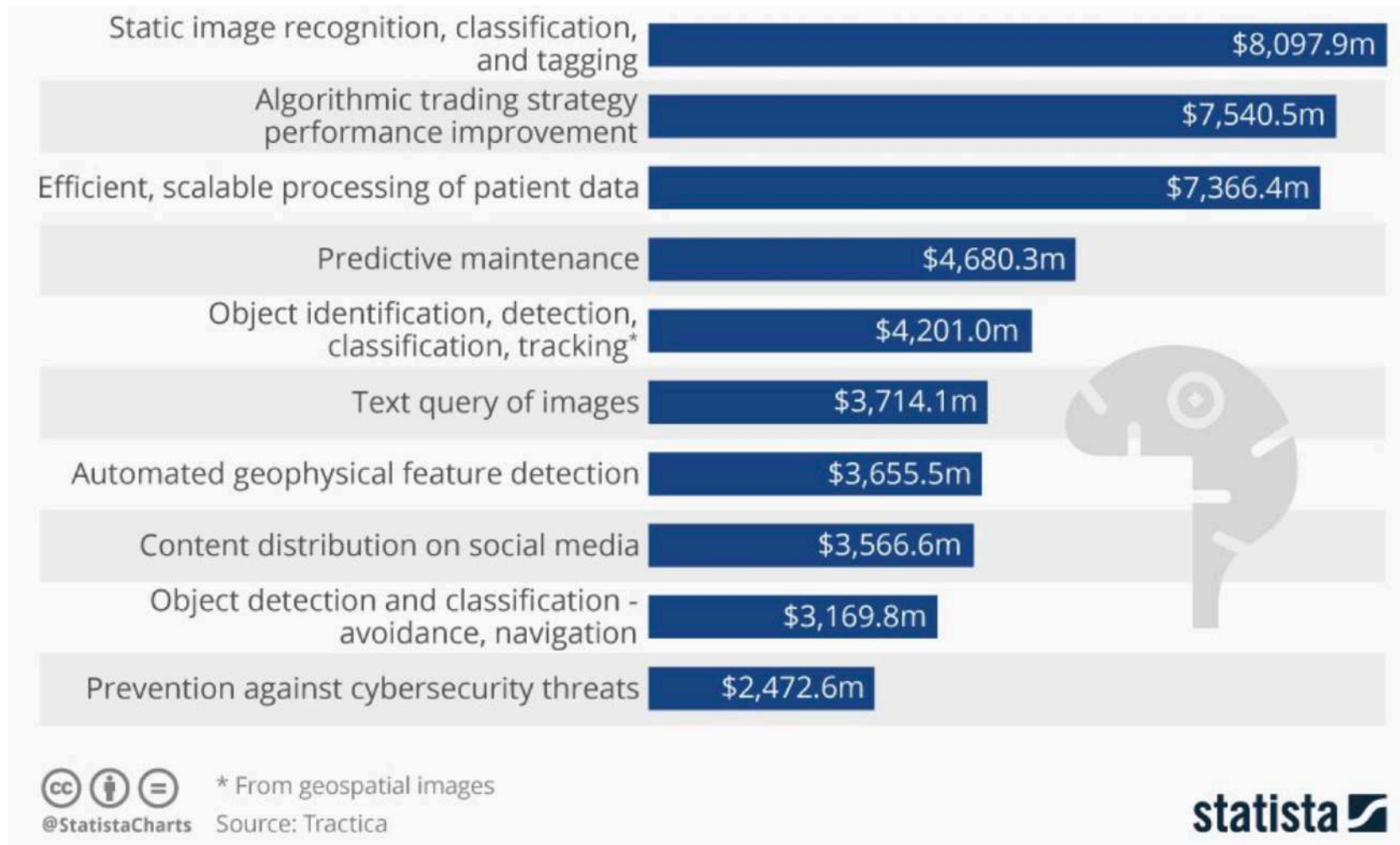
**The overall value of activities
derived from artificial
intelligence is expected to reach**

\$3.9 billion

**in 2022, compared to
\$1.2 billion in 2018**

Source : Gartner 2018

FORECASTED CUMULATIVE GLOBAL ARTIFICIAL INTELLIGENCE REVENUE 2016-2025, BY USE CASE



CONNECTIONS COGNITIVE SCIENCE AND AI TO ENHANCE HUMAN LEARNING

**DOMOSCIO**

LAB

 ManpowerGroup

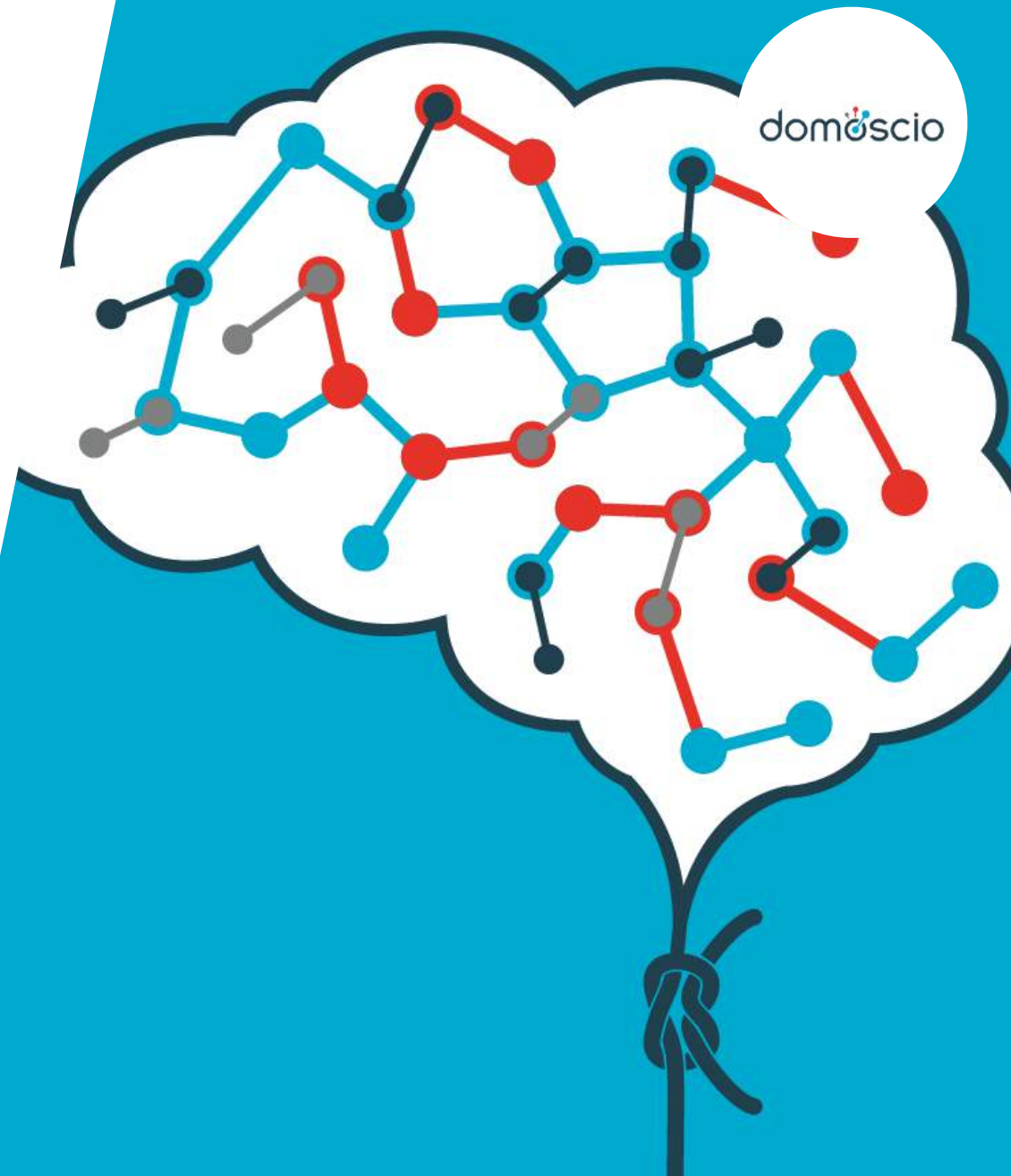
WHAT ?

Domoscio is an EdTech startup specialized in Big Data and artificial intelligence which operates in France, Spain, the UK and Switzerland. It **creates adaptive learning solutions and optimizes assimilation and consolidation to improve the impacts of learning.**



WHAT'S THE POINT ?

Corporate learning is based on a one-size-fits-all approach which does not consider each employee profile and needs. Domoscio connects cognitive science and AI to enhance human learning. Awarded in 2014 by the European Commission as one of the seven most innovative startups in the world of education and training, Domoscio has since won five awards, including the Trophée Europe 1 in the category "Education of tomorrow" in 2016. Since it was created, many influential actors have trusted Domoscio including educational publishers (Editions Didier, Edebé), higher education institutions (PSL, UPEM) and companies (Renault, Crédit Agricole, Enedis, Bouygues Telecom and more).



ANALYTICS FOR CHATBOT AND VOICEBOTS



ASKHUB



askhub

➤ WHAT ?

AskHub is an expert in Natural Language Processing (NLP) and artificial intelligence. **AskHub AI solution allows companies to drive the conversational metrics of their chatbots, voicebots and livechats** and to continuously improve their NLP capacities to increase their conversational ROI.

WHAT'S THE POINT ?

- - Conversational analysis : Track the key metrics of your bot and analyzes user behavior.
- Clustering to improve NLU (natural language understanding): Get insights into what your users are telling you to improve your NLU model.
- Dialog analysis : Understand how users interact with your bot to improve its KPIs and UX.



WHEN VISION AND AI MEET TO BOOST YOUR PERFORMANCE AT WORK



XXII

LAB

RATP
GROUPXXII
INSTITUTE

WHAT ?

Experts in Artificial Intelligence, Computer Vision, Virtual / Augmented Reality XXII allows to develop the tools of tomorrow to increase Man, his senses and his performances.

The services they provide can boost your need in analysis, training, simulation, and maintenance. XXII offers an algorithm suite for machine and deep learning specialized in Industry, security and retail.



WHAT'S THE POINT ?

AI boosted with AR and VR help you get a better control of your supply chain, managing your assets and fleet, quality control, secure your building and workers, manage the payment journey, manage your product flow and/or customer flow, enable to set up an autonomous store experience for a transparent and flowing customer experience.



A LANGUAGE BASED AI



WHAT ?

Golem.ai develops and sells solutions for automation and support of jobs thanks to a proprietary language analysis AI (emails, voices, documents...) :

- Customer relationship centers
- Specialised conversational assistant
- Document validation
- Chatbots

WHAT'S THE POINT ?

The Golem.ai AI is 100% proprietary based on language understanding. It can be installed on your infrastructure, and works offline.

The linguistics approach is explainable and auditable. It does not require data-sets to get started, which limits GDPR and confidentiality issues. The difference between a language technology and a statistical technology is the way it gives meaning to the text. Golem.ai provides the same solution for all languages. Thanks to its universal linguistics approach, it is easy to set up a product compatible with many languages.

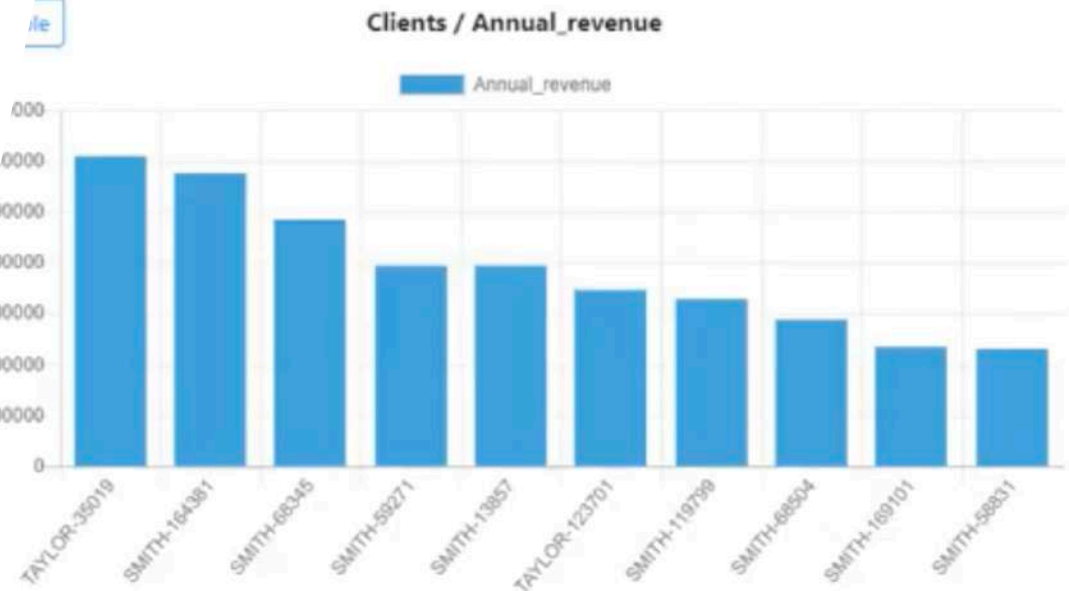
Linguistics, closer to human reasoning, offers high reliability. With this approach, continuous product improvement (functionality or understanding) is inexpensive.



Number of woman clients in France is 8 572 000

Income ratio for Turkey is 0.62

Show me my top 10 clients between 20 and 30 years



Here's the graph !

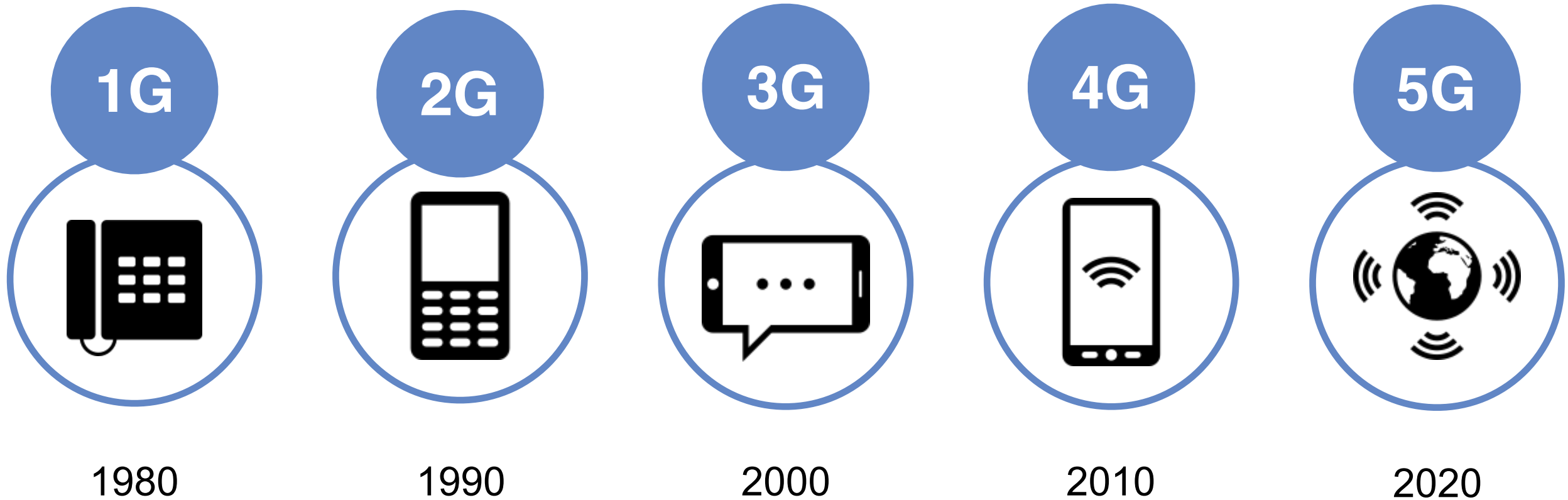
Filters

Age : Between 20 and 30

1.2

5G ROLLOUT

5G, THE UPCOMING REVOLUTION FOR NETWORKS



Source: CES Unveiled 2019

IN 2025, A HIGH GROWTH OF THE INTERNET OF OBJECTS

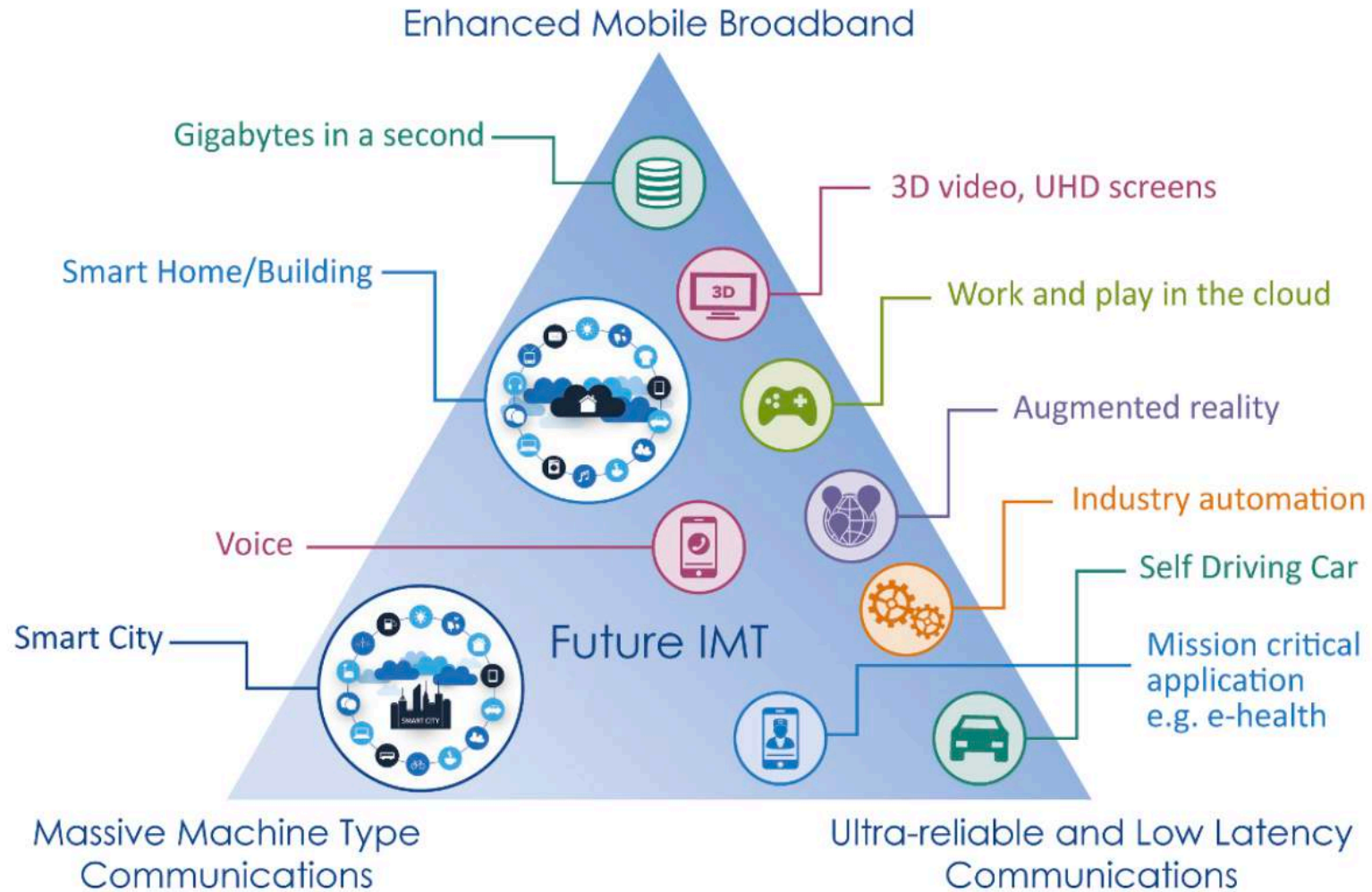
**25 billion connections
to connected objects in
the world**



- **10.9 billion** in Pacific Asia
- **5.8 billion** in North America
- **5.6 billion** in Europe
- **1.4 billion** in Africa & the Middle East
- **1.3 billion** in Latin America

Source: *The IoT Guide*, GSMA Intelligence, 2018

5G REVOLUTION, WHAT'S THE FUSS ABOUT ?



THE FIRST AUCTIONS FOR 5G FREQUENCIES BY STATES ARE TAKING PLACE IN EUROPE

Licenses must be granted to operators. This stage generally occurs with an auction stage. Conversations about the **birth of 5G started in 2013 when the European Commission decided to launch a private-public partnership.**

The European Union addressed the matter in order to **offer a solution that would be as uniform as possible for its member states.** It's a standardization that takes time and occasionally causes conflict.



The Italian government made a call for bids for local operators for more than 2.5 billion euros.



In Germany, nationwide operators that have their own networks are in conflict with the government, since the regulator wants to extend the call for bids to new players that don't have suitable infrastructures. While 5G frequencies should be issued in spring 2019, Berlin has actually required participants in the call for bids to open their infrastructures to their competitors who don't have their own networks.



Switzerland adopted 5G and will be the first European country to activate it by the end of the year, serving 90 % of the population.



In Finland, an operator has already begun to market the first subscriptions to a 5G network. Unlike Italy, the Finnish government has chosen to grant licenses for very low cost in exchange for broad coverage of the country.



For France, the auctions will take place in 2020.



Monaco entered into an agreement between Monaco Telecom and Huawei in order to cover the entire principality



WHAT CONSTRAINTS ARE THERE FOR 5G DEPLOYMENT?

NEW ANTENNAS



5G uses free millimetric waves comprised of 30 to 300 GHz, which have a shorter range than 4G. Its implementation therefore **requires more antennas to be installed, at significant cost.** Operators are currently making a profit from 4G investments, so some will take longer than others to switch to 5G.

NETWORK SLICING



The 5G network will be cut into slices to **favor certain services that need higher download speeds** (like autonomous cars), which poses a **security problem** and raises concerns about **net neutrality** (some brands or geographic areas could have an advantage).

IMPACT & COVERAGE



Manufacturers will need to reassure their future users regarding the **impact of these new waves on their health.** Moreover, when **several areas still aren't covered by 4G**, it's still difficult to view 5G as a viable technology.

Source: *Tout comprendre de la 5G, cette technologie qui s'apprête à changer nos vies*, Mashable, 2018



5G FOR RURAL AREAS



While a lot of lights are shed on Smart cities, Cisco exhibits its testbed project **5G Rural First in the Glasgow** area. This co-innovation project is led by Cisco and includes 29 members such as states (like the UK government), universities and companies. The main goal is to provide 5G in rural areas by finding an appropriate business model among 4 fields : AgriTech, energy, transportation and tourism. The Startups are part of journey as well : while Cisco provides the infrastructure, they provide solutions like sensors, AR/VR entertainment or agricultural drones.

For exemple, the startup **Afimilk** provide IOT devices for cows : **sensors collect datas about the health of each cows (temperature, heart rate, rumination cycles...) and enables remote veterinary intervention.** In Orkneys islands where internet is not a common thing, tourist buses are connected to 5G and provides AR (Augmented Reality) tourist guide in real time.



1.3

QUANTUM COMPUTING

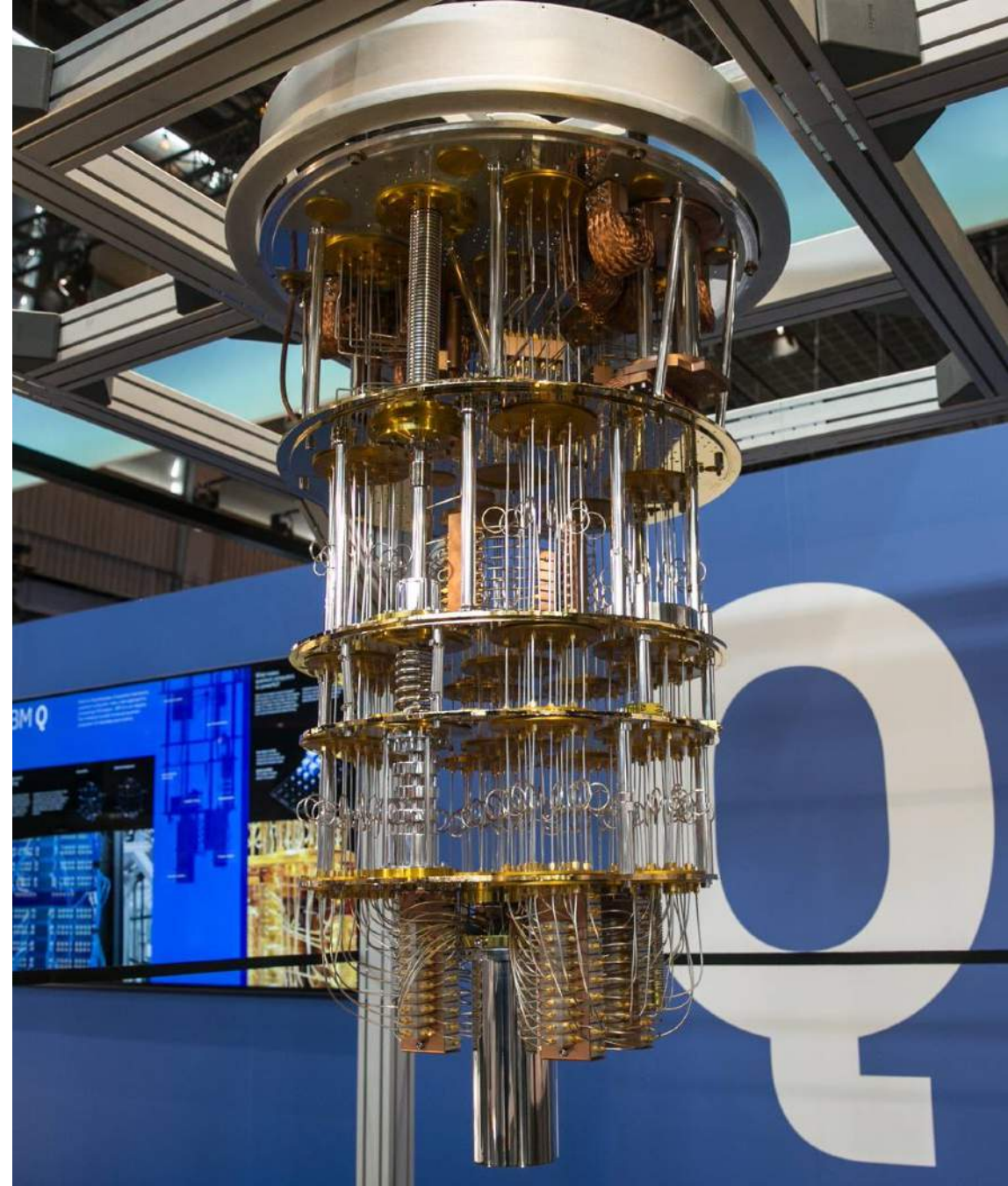
QUANTUM MIGHT POWER THE NEXT AI

There are challenges that classical computing's systems will never be able to solve. For problems above a certain size and complexity, we don't have enough computational power on Earth to tackle them.

To stand a chance at solving some of these problems, we need a new kind of computing. **Universal quantum computers leverage the quantum mechanical phenomena** of superposition and entanglement to create states that scale exponentially with number of qubits, or quantum bits.

All computing systems rely on a fundamental ability to store and manipulate information. Current computers manipulate individual bits, which store information as binary 0 and 1 states. Quantum computers leverage quantum mechanical phenomena to manipulate information. To do this, they rely on quantum bits, or qubits.

Shifting from bits to qubits will redefine many fields such as financial services, data security, drug development, supply chain logistics and even the weather.



3 POTENTIAL USE CASES



Improvement of security

Quantum technologies will allow the creation of private keys for crypted message so that hackers could **not secretly copy the key perfectly because of quantum uncertainty.**



Transformation of health care and medicine

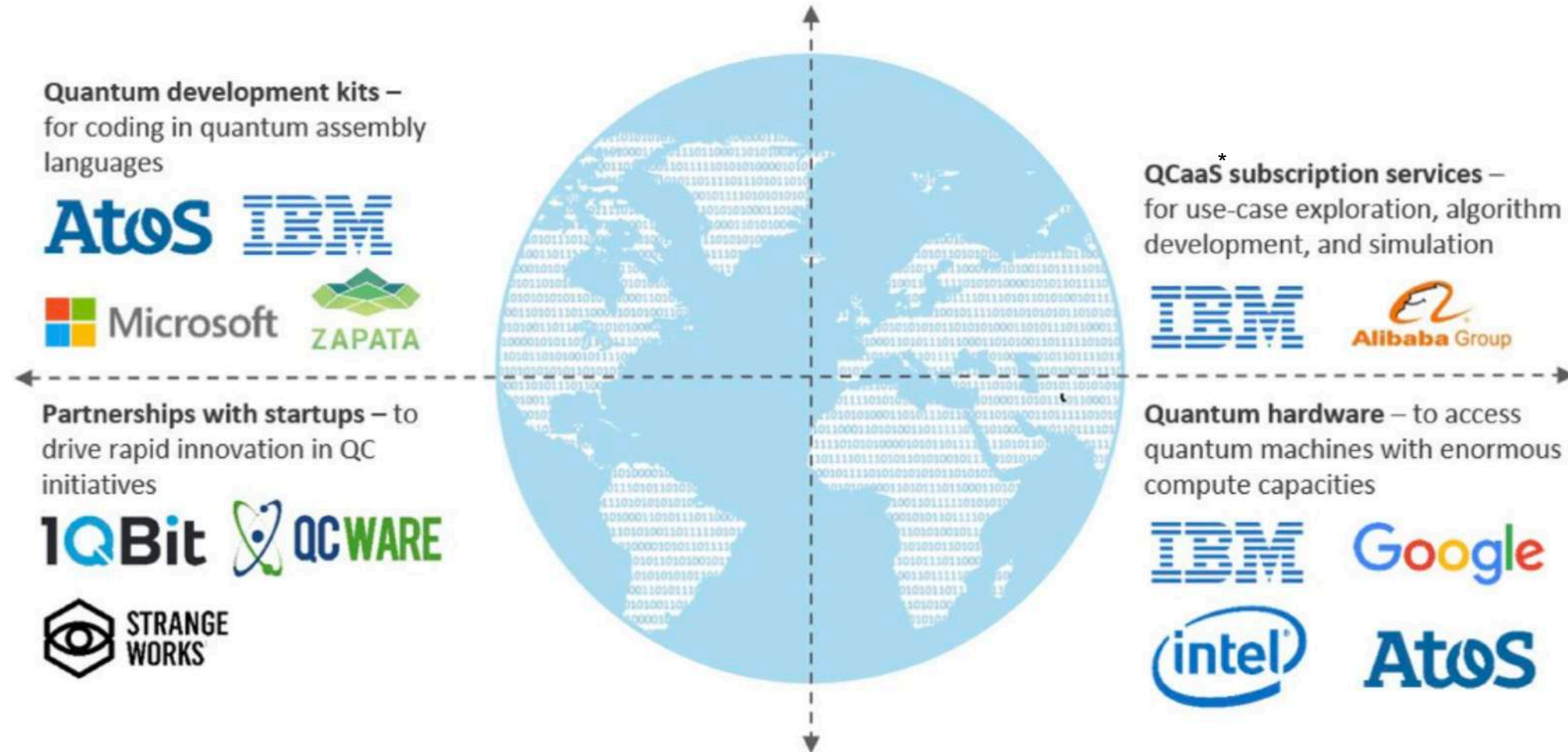
The design of molecules for drug development is a challenging problem today and that's because exactly describing and calculating all of the quantum properties of all the atoms in the molecule is a computationally difficult task



Teleportation of information

Quantum computing could allow the **teleportation of information from one location to another without physically transporting the information** because these fluid identities of the quantum particles can get entangled across space and time in such a way that when you change something about one particle it can impact the other and that creates a channel for teleportation

The quantum computing ecosystem



^{*}Quantum Computing as a service

Source : Quantum Computing in the Financial Services Industry – Infinite Possibilities or Extreme Chaos, Everest Group 2018



Talia Gershon
IBM
@DrTaliaGershon



Sophie Proust

THE QUEST FOR A QUANTUM ADVANTAGE



VIVATECH CONFERENCE

Talia Gershon, IBM
Sophie Proust, ATOS
Maud Vinet, CEA

If AI and big data are stated in all debates, big tech companies have only two words in their mouth : **quantum computing**. Does this new technology will really change the world ? Talia Gershon (IBM), Sophie Proust (ATOS) and Maud Vinet (CEA) were on stage to help us to understand this technology :

- « We need quantum computing for 2 reasons : first we arrive at the end of the Moore law. Second is that AI and Big Data will soon ask so many power that only quantum computing can help us” says Sophie Proust.
- Talia Gershon explains that the problem now is not anymore power. “We are near the 40 qubits. Now, we have to create standards!”
- For Maud Vinet, France has a very good ecosystem in terms of quantum computing. She insists on the capacity of the country to communicate and exchange on it's subject. “We won't do the Minitel again !” she says.



1.4

EDGE COMPUTING

EDGE COMPUTING, THE OTHER REVOLUTION

While a company's digital transformation is done primarily with cloud platforms, edge computing could really shake up the industrial world to make data processing faster and more fluid.

While cloud computing consists in recording processed data on centralized platform servers, edge computing, on the other hand, favors local processing performed by the nearest sensors, which can produce data.

McKinsey predicts that **by 2025, edge computing in hardware investments could reach somewhere between 175 and 215 billion dollars.**

HPE has already launched an offer for services based on edge computing, as has Schneider Electric, and Amazon Web Services too, although the latter provides edge services that are linked to existing cloud services.

Sources: Edge Computing Market Research Report—Global Forecast 2023, Market Research Future 2018
L'edge computing, nouveau terrain de bataille des géants du cloud computing, L'usine nouvelle 2018 IDC



**\$19.4
billion**

the value of the
edge computing
market by 2023

Temp Min	15.56 C	Date	XX-XX-XXXX	Customer	World
Temp Max	33.94 C	Time	XX:XX	Status	Work
Temp Ambient	32.13 C	Job	WW25D76	Scale	MAX

USING 5G FOR EDGE COMPUTING

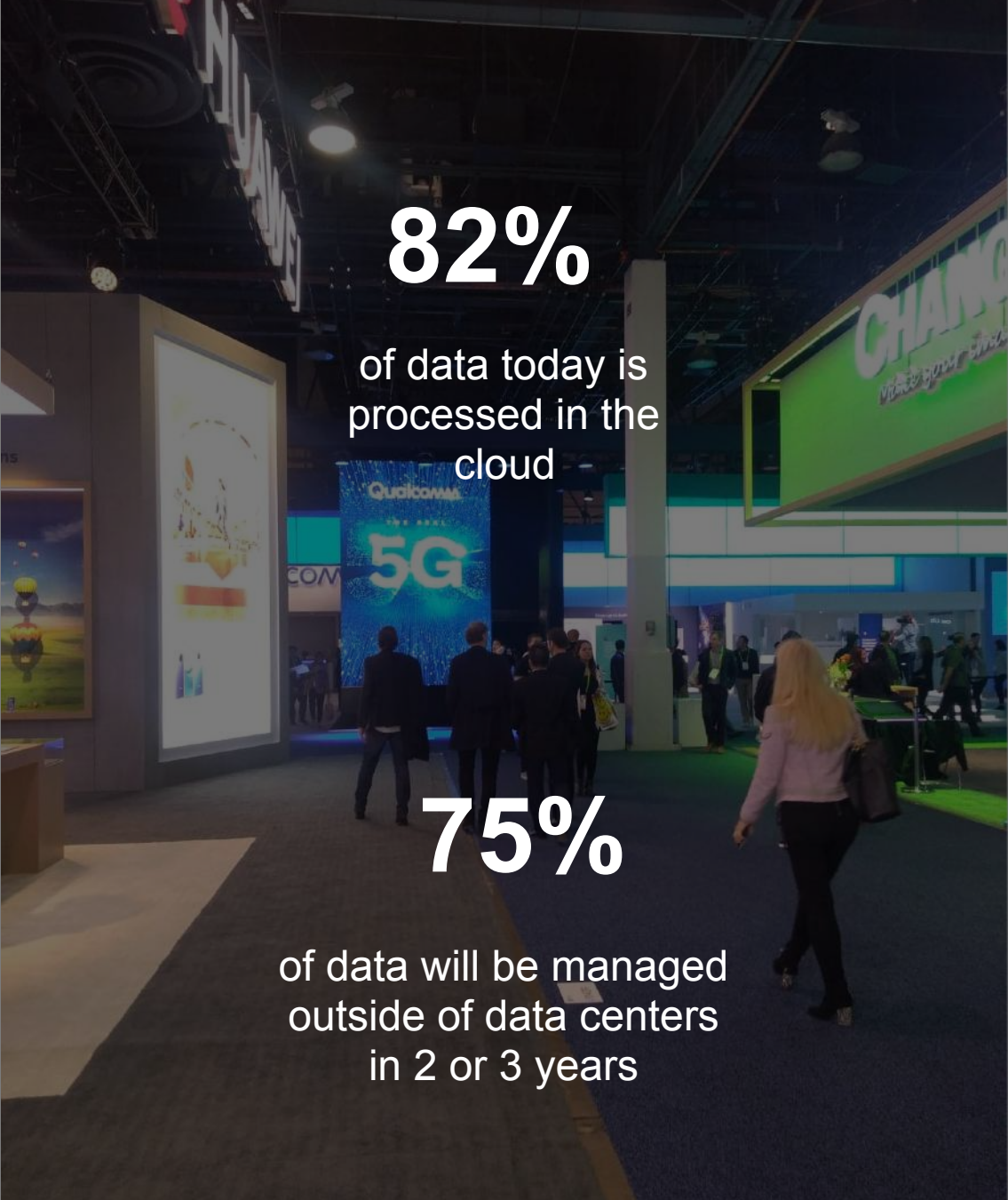
This more focused network can be activated in factories, cars, an embedded system, or even for meta-surveillance away from data centers. This more localized processing capacity could not only enhance data processing speeds, but especially prove to be much more fluid.

The purpose

- For low-level connected objects: avoiding perpetual connections to the central cloud
- Reducing latency of information processing
- Improving the client experience

What about 5G?

5G will **provide sufficient download speeds and connectivity for data processing**. Telecom operators will add more and more Micro Data Centers to their 5G antennas to allow their professional clientele to rent spaces inside these miniature data



82%

of data today is
processed in the
cloud

75%

of data will be managed
outside of data centers
in 2 or 3 years

Sources: Edge Computing Market Research Report—Global Forecast 2023, Market Research Future 2018
L'edge computing, nouveau terrain de bataille des géants du cloud computing, L'usine nouvelle 2018, IDC

1.5

CRISPR

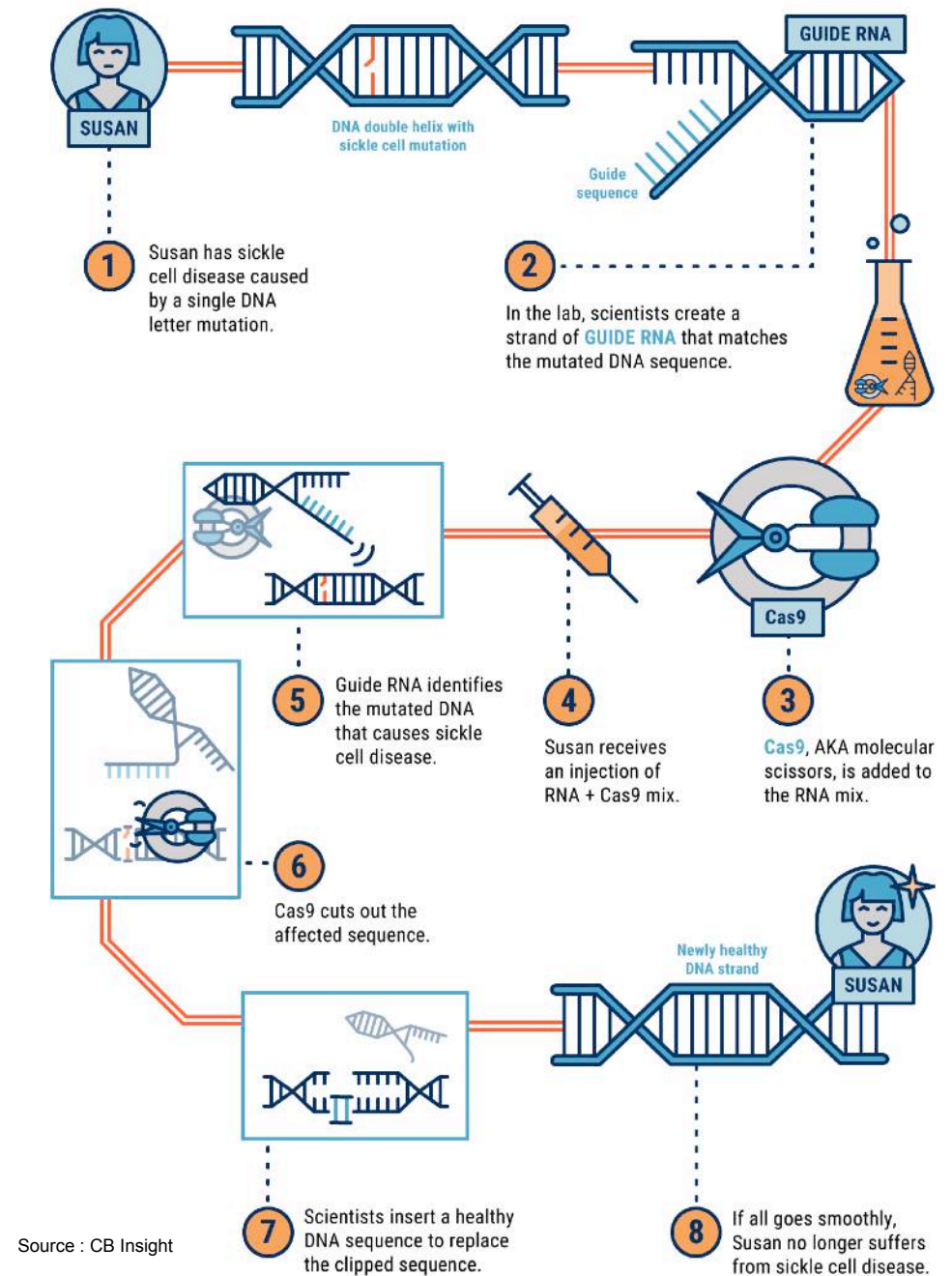
**CLUSTERED REGULARLY INTERSPACED
SHORT PALINDROMIC REPEATS**

CONNECTED AND MODIFIED GENETIC HEALTH

CRISPR technology is a simple yet powerful tool for **editing genomes**. It allows researchers to easily **alter DNA sequences** and **modify gene function**. Its many potential applications include correcting genetic defects, treating and preventing the spread of diseases and improving crops.

However, its promise also raises ethical concerns. Indeed, **safety** is one of the main concern, if edition is misplaced or issues arise with the cohabitation of edited and non edited genes. **Informed concern** is also a concern, linking embryo lack of free will at this stage, **justice and social equity**, editing creating more and more disparity, **religious and moral objections**.

In other words, concerns of transforming into a « Welcome to Gattaca » like society.



Source : CB Insight

1.6

THE CRYPTOS COLLAPSE AND THE BLOCKCHAIN TAKES OFF

THE WINTER OF CRYPTO

After the hysteria phase, the blockchain started its free-fall into the Trough of Disillusionment, where technologies go to die when they fail to match up to the expectations of the ecosystem. As for cryptocurrencies, they are right at the bottom of the hole.

Bitcoin has lost more than 85% , between December 2017 and January 2018, going from almost \$20,000 to \$3,800. But in 2018 it jumped back to a little over \$8000. So let's not be too cruel or dismissive: as is often the way, hype and counter-hype follow each other in rhythm as technologies and their uses grow, and the blockchain has clearly not had its day.

Gartner focuses particularly on targeted block technology applications, as in data security. The US banking group Citigroup continues for example to invest in startups in the area, ensuring that, more than the distributed registry technology which forms the blockchain, it will be "integration into existing systems, as well as adoption" that will be the major challenges to blockchain development.

Source : Gartner Top 10 Strategic Technology Trends for 2019, Gartner 2018



LOYALTY ON THE BLOCKCHAIN

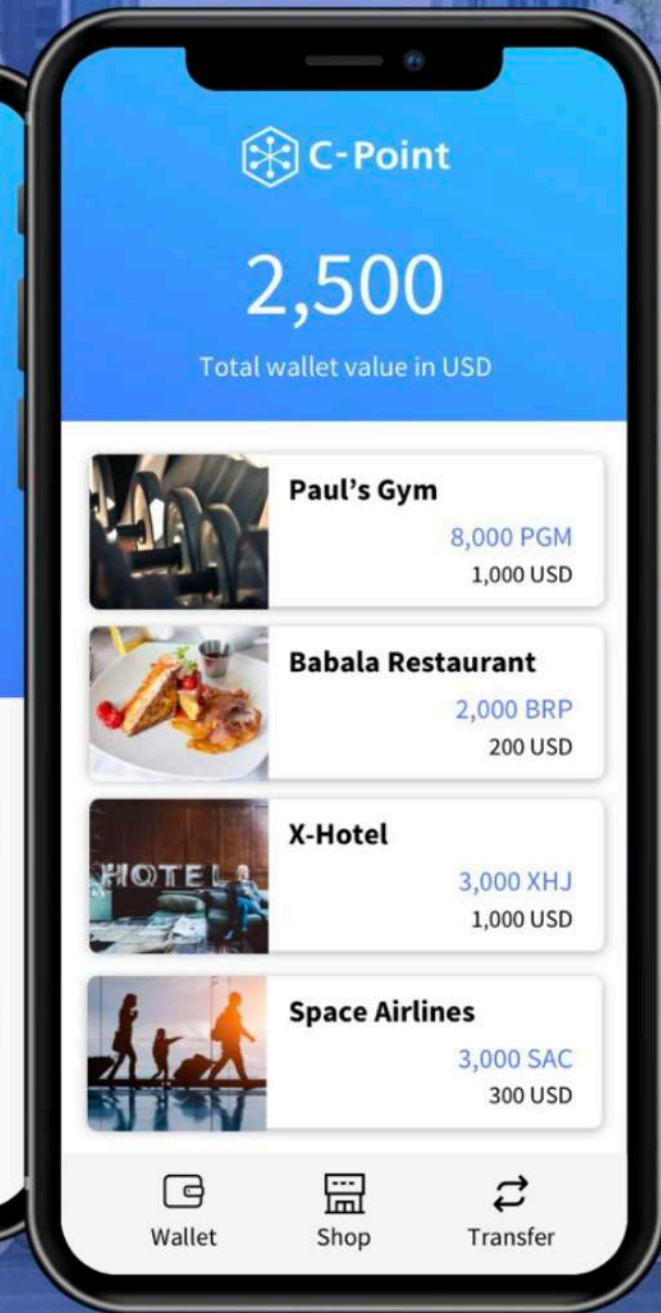


➤ WHAT ?

C-point is a SaaS blockchain solution for businesses to run their own loyalty program, and offer their users instant point transferability and convertibility.

➤ WHAT'S THE POINT ?

- Instant Convertibility
- Real Time Tracking
- Full Transparency and Auditing
- Simple Integration
- Low Cost



BUILDING MORE TRUST BY SAFEKEEPING THE DATA



PELLAR



WHAT ?

Pellar wants to empower enterprises and governments to adopt blockchain innovations. To do so, they have **developed state of the art algorithm and they accompany the organizations on the diverse applications** (wallet, banking, exchange, e-commerce, taxation, logistics, etc.)

WHAT IS THE POINT?

The point is to have **permanently secure and reliable data with blockchain** as Pellar takes care of the scalability, reliability and security of the role system. They store data and transactions on blockchain, they offer the possibility to tokenize assets, manage cryptocurrency, national ID. This will secure trust in your business, trust in the data and safety of the data.





1.7

NEW INTERFACES

INTERACTING WITH YOUR ENVIRONMENT MORE INTUITIVELY

For the most part, the technologies presented at VivaTechnology 2019 aim to help users interact more intuitively with their environment, be it through voice, gestures, or more intuitive interfaces.

Progressively, the technology aims to become more discrete.

Today, with the introduction of artificial intelligence, technology is becoming more and more intuitive. Centered on the use of speech, recognition of gestures, touch, and sight, they give users even more fluidity.

The novelties regarding interfaces were particularly present in the following categories:

Biometrics

Voice

AR/VR



BIOMETRICS



The term refers to technologies that allow identification by **biological** or **behavioral** characteristics. There are different ways to identify yourself :



Facial recognition



Fingerprint recognition



Voice recognition



Heart beats

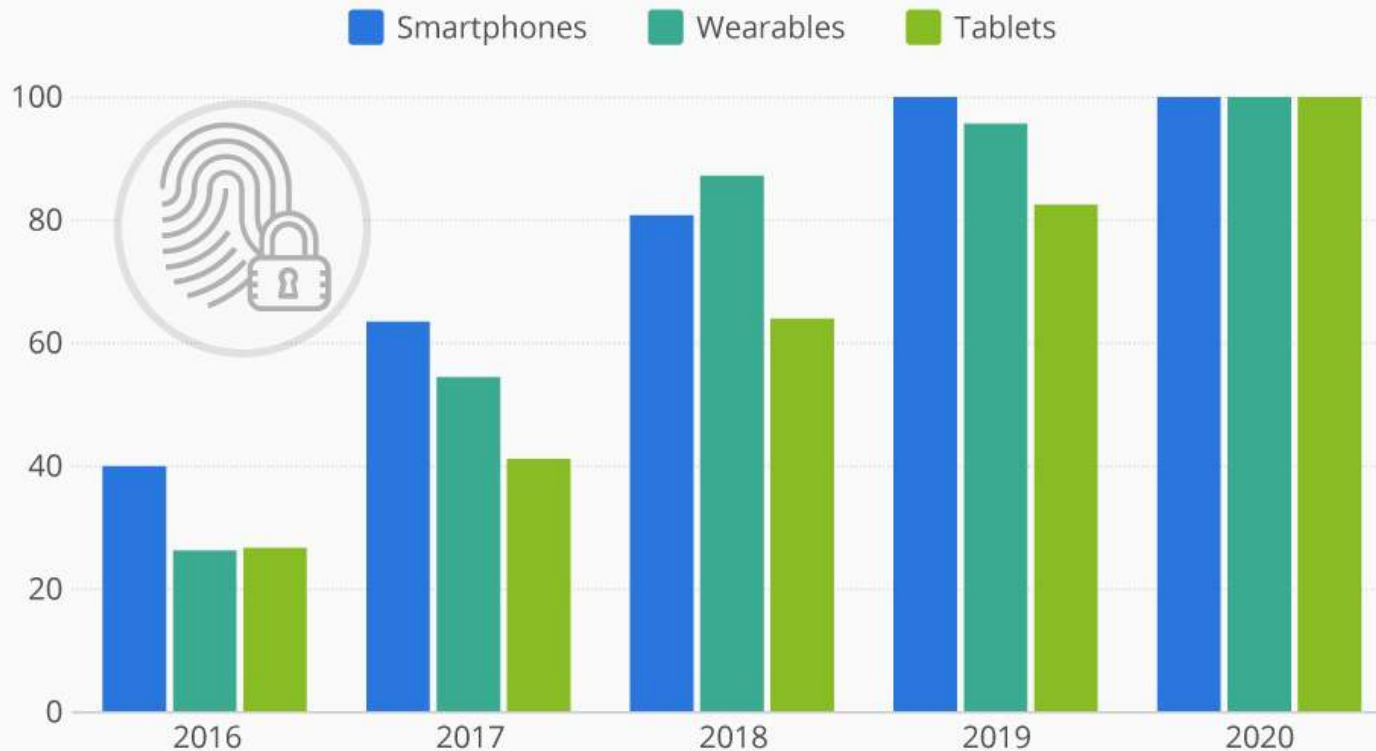


Veins

BIOMETRICS ON ALL MOBILES

The Future of Mobile Biometrics

Forecast share of devices sold worldwide with biometric technology, by type



@StatistaCharts

Source: Acuity Market Intelligence via eMarketer

statista

By the end of 2019, **100%** of smartphones on the market are expected to contain at least one biometric technology. In 2020, this is also expected to be the case for tablets and smartphones.

AUGMENTED BIOMETRICS FOR A SAFER WORKPLACE



> WHAT ?

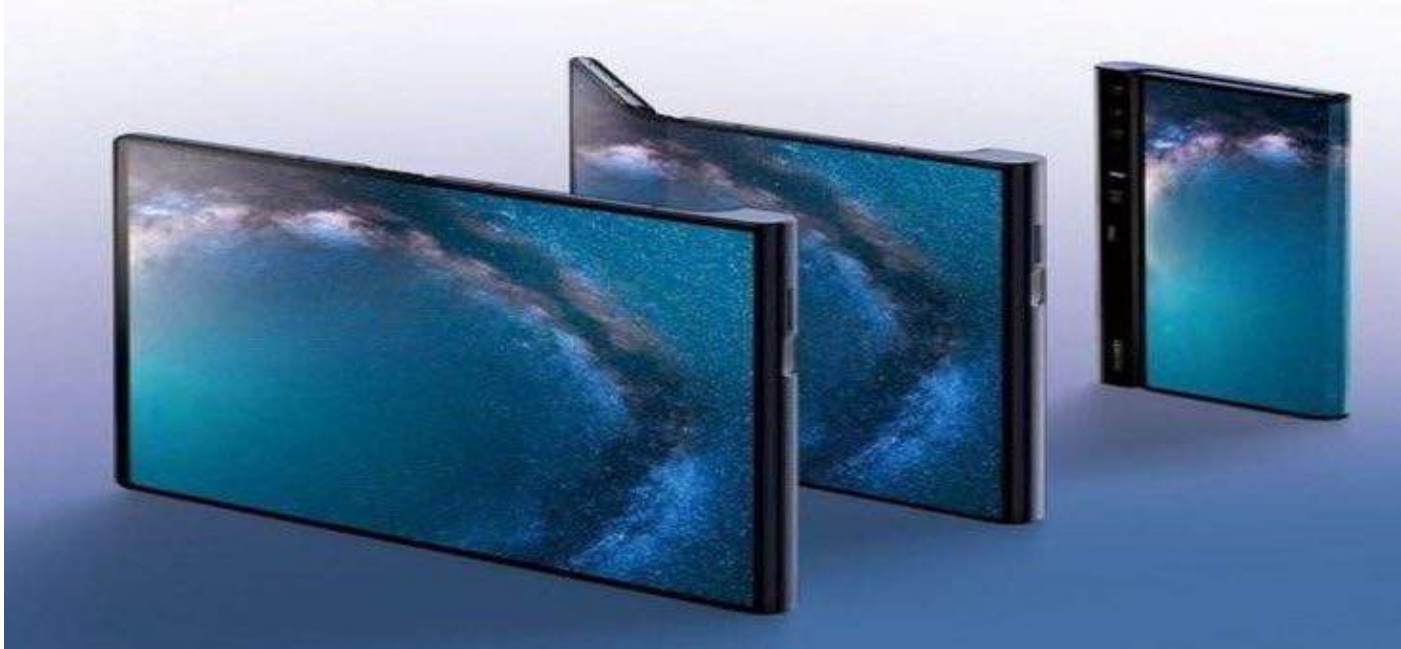
IONOSYS offers a cost efficient solution for the improvement of **Access Control** on sensitive sites and networks. It brings the ease of badges' use combined with the security of the best biometrics. The **monokey bracelet** continuously monitors and guarantees the identity of the person wearing it, thanks to its patented augmented Biometrics technology.

WHAT'S THE POINT ?

> Biometrics is an ideal solution to enhance security, especially since it also allows for: easy and economical deployment; good ergonomics and ease of use; efficient and fluid access control; and privacy protection.



A NEW GENERATION OF FOLDABLE PHONES: HUAWEI MATE X



It Huawei exposes the first world's fastest foldable 5G Phone : Huawei Mate X. Its design integrates a new era of communicative interaction. It allows to keep it compact for daily smartphone task or it. Can be unfold to reveal an experience in multitasking or entertainment. Huawei introduced its for the first time at Mobile World Congress 2019 and announced at VivaTechnology 2019 that it should **be launched for sale in France « very soon »**

VOICE, A FUTURE SALES CHANNEL?

Even though Deloitte predicted a **64% growth in the smart speaker market in the world in 2019**, voice assistants are now going well beyond the universe of connected speakers; they're integrated into smartphones, vehicle dashboards, TVs... and tomorrow, in light switches, refrigerators, and connected mirrors.

However, although the voice market is exploding, **voice commerce is still in its infancy**: making purchases via voice still isn't reflexive for consumers. The Information reported that only 2% of people who have an Amazon Alexa bought items using this channel in 2018.


Consumer reluctance can be explained by **frictions that come from payment** and interfaces that still need to be perfected. But developing **interfaces that combine voice and screens** could be a game changer.

Source :Smart speakers : Growth at a discount, Deloitte, 2018



51%
of consumers

already use voice assistants, mostly via their smartphones.



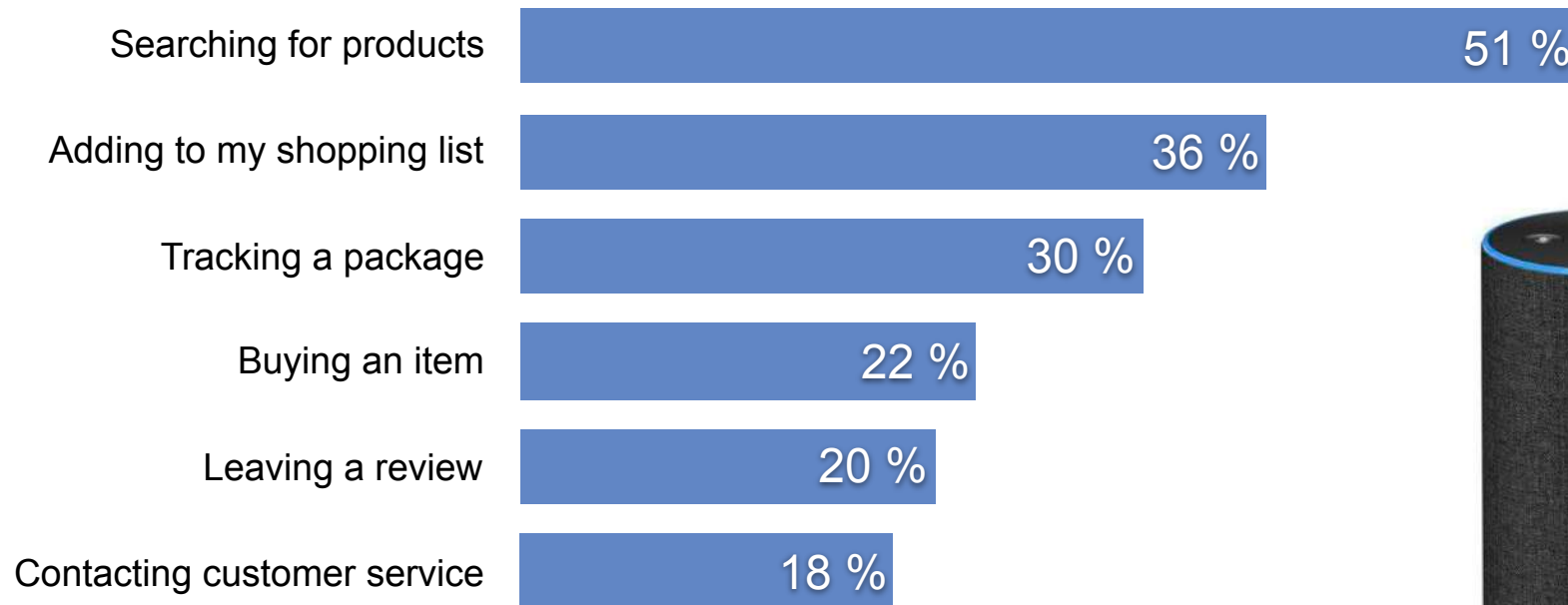
35%
of users

of voice assistants have already used them when making a purchase.

Source:Cap Gemini 2018

WHEN IT COMES TO PURCHASING, THE USE OF VOICE IS STILL LIMITED TO SEARCHES

Answers to the question “How do you use your voice assistant?” for smart speaker users in the United States.



Source : Voice in Retail, Business Insider, 2018

AN EMERGING E-COMMERCE TREND, WE'LL HAVE TO WAIT AND SEE

➤ Although smart speakers are playing an obvious role in the expansion of home automation, they also represent a huge opportunity for distributors. After stores, the E-commerce platform, and mobile, **voice** could become the 4th sales channel.

Among connected speaker users in the last year:

37% 

have **searched for an item** they wanted to buy

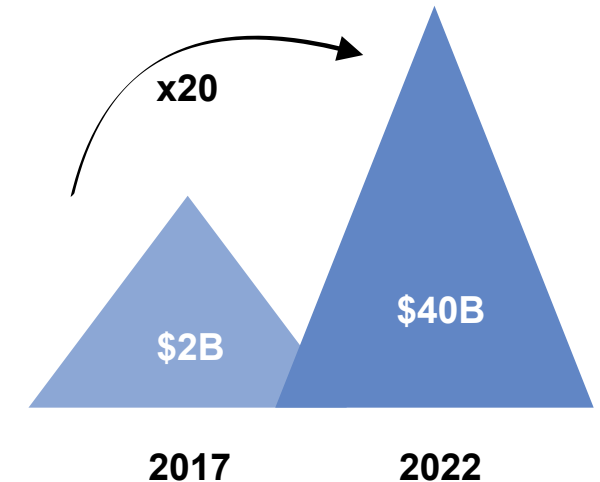
25% 

have **added a product to their basket** to buy later

16% 

have **repurchased a product** they'd already bought

Estimate of V-commerce market revenue in the United States



Source : OC&C Strategy Consultants, 2017
*Survey conducted on a panel of 1,500 Americans who own a connected speaker

Source : *The Smart Audio Report*, National Public Media et Edison Research, 2018
*Survey conducted on a panel of 909 Americans who are over 18

TOMORROW, CONNECTED SPEAKERS EVERYWHERE

In your
PC



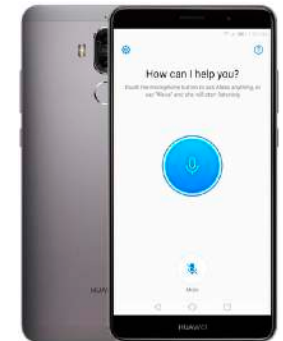
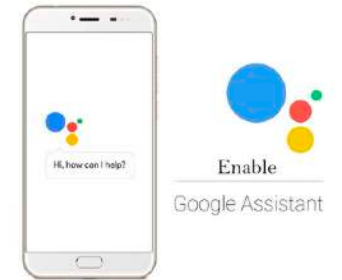
In your
headphones



In your car



In your
smartphone



THE XR, “EXTENDED REALITY” MARKET

➤ XR, or **Extended Reality**, is the superset that includes **virtual reality** (VR), **augmented reality** (AR) and **mixed reality** (MR).



Growth is projected to carry on by 198% per year on average.

2015



2016
6.1 billion €

2017
13.9 billion €

2020
143.3 billion €

Source : *Worldwide Semiannual Augmented and Virtual Reality Spending Guide*, IDC, 2017

AUGMENTED REALITY PLATFORM FOR THE DIGITAL WORKFORCE.



DAQRI



WHAT ?



DAQRI provides environmentally based data directly into the **user's field of vision in real time**. Combined to its AR technology **DAQRI Worksense**, it promises to make your workforce more effective on the field.

WHAT'S THE POINT ?



Boost your workforce efficiency in their **daily work and collaboration**. A better production with **fewer mistakes**, a better nicer way of working even if coworkers cannot be in the same space they have the experience of a next to real human to human interaction with a visual which is always better .



1.8

CYBERSECURITY A CROSS-INDUSTRY CONCERN

CYBERSECURITY TYPOLOGIES



SECURITY BY DESIGN

FROM THE DESIGN AND
THROUGHOUT THE LIFE OF THE
PRODUCT



CYBERSECURITY

PREVENTS INTRUSIONS AND
THE RISKS OF ATTACKS



CYBER RESILIENCE

FROM PREVENTION TO A « BACK
TO NORMAL » STATE

SECURITY BY DESIGN MEANS THAT YOU HAVE TO DEAL WITH SECURITY ISSUES FROM THE DESIGN STAGE. BY TAKING INTO ACCOUNT THE DYNAMIC NATURE OF THREATS AND THEIR EVOLUTION OVER TIME, IT IS A SECURITY THAT ADAPTES TO EACH OF THE PRODUCT'S LIFE CYCLES. IT BECOMES A COMPETITIVE ADVANTAGE.

MORE ATTACKS, BUT NONETHELESS BETTER MANAGED

Organizations are more and more victims of **targeted attacks**, but they are now better able to defend themselves, thanks to increasing budgets, but also thanks to new technologies such as AI.



+ 119%

MORE ATTACKS
BETWEEN 2017
AND 2018

12,5%

ATTACKS REACH
THEIR TARGET
AGAINST 33%
THE YEAR
FORMER

3 YRS

ON AVERAGE TO
INTEGRATE THE
CYBER
RESILIENCE

Sources : *Gaining Ground on The Cyber Attacker- 2018 State of Resilience*, Accenture, 2018, worldwide

3 MAIN CYBER RISKS

An increase in connected systems, with IoT and 5G, leads to an increase in cybersecurity risks.



USB KEYS

INFECTED BY A VIRUS AND SPREADING IN THE NETWORK



CAD/3D FILES

CORRUPTED AND ACTING AS A BACKDOOR



SCADA/HMI

NUMBER 1 TARGET OF HACKERS BY RANGED ATTACK

Sources :TrendMicro, [site](#), 2019

PROTECTING YOUR DATA BECOMES ESSENTIAL

We see more and more cyber attacks and piracy in the news. Not a day goes by without **systems being compromised** or a **leaked data** being reported in the press. Hackers clearly have an edge while firms are lacking the right skills to protect themselves. They are now actively seeking the right profiles of data scientist to develop technologies and strategy of cybersecurity.

Organizations are working on the resilience of their systems and products by seeking the best software and technology. They are opting for open, interoperable, audit-enabled systems that enable faster refurbishment as well as looking to secure by design approach that incorporates security right into the product itself.

Faced with the possibility of backdoors in hardware or the possibility that hackers are already present in the systems, many are **now systematically encrypting their most vital data**.

The case of the ransomware named Lockergaga that recently attacked the factories of Norsk Hydro, Hexion and Momentive forced Affected companies to curb production and acquire hundreds of new computers.

Sources : 134 milliards de dollars par an d'ici 2022 : le coût considérable de la cybersécurité, L'usine Nouvelle, 2018



Sources : Les entreprises se renforcent face aux cyber-menaces, Accenture, 2018



*"We need to empower
platforms and
governments to
restore citizens'
trust in
technologies. It's
time to move to
content regulation on
the net "*

JUSTIN TRUDEAU
PRIME MINISTER
CANADA



BALANCING PRIVACY AND CONVENIENCE IN THE AI AND IOT ERA

Garry Kasparov, AVAST
Vince Steckler, AVAST



VIVATECH CONFERENCE

If AI and IoT are becoming more and more important in our lives, are these technologies safe for their users? **Between security breaches and new hacking techniques, dangers are multiplying every day at the point of sometimes eclipsing the benefits of these technologies.** Vince Steckler, CEO of AVAST, and Garry Kasparov, AVAST Ambassador, share their views on this match between good and bad.

- The two speakers insist on the necessity for the consumer to understand the risks of using AI and IoT but also know all the benefits of these technology
- « The strength and the safety of a system are incarnate by its weakest device” explains Gary Kasparov
- Vince Steckler perfectly illustrate the importance of IoT in our lives. « Few years ago, the only problem we could have with our coffee machine was that it's mistaken espresso and americano. Today, we are more afraid of security breach which allows hackers to take the control of our entire house” he says.

ORANGE SHOW YOU HOW EASY IT IS TO GET HACKED, WILL YOU BE UP TO THE CHALLENGE?



During Viva Technology orange has set up a hacking room to show the public live session of **hacking and prove in real time how easy it can be to hack into a system and get strategic and confidential data.**

The goal is to improve awareness around cybersecurity and explain how important it is to have good security systems and strategies.

Note : In 2018 The HCG (Health Cooperation Group*) of Loire country had partnered with Orange to create an escape game aiming to improve **health infrastructures' awareness around cybersecurity.**

They created together what they called a « Sant'escape » ('health'Cape') around cybersecurity which had participant play the role of journalists who get into a meeting room of a medical institute. They then had 45 minutes to figure out if the security measure set in place are sufficient or if they manage to get access to classified informations about a renown patient to get a scoop.

The game ended with a debriefing session where the consequences of insufficient cybersecurity measures were highlighted and how badly they can impact your structure.

*HCG : Health Cooperation Group



SECURING THE ARMY COMMUNICATION

AtoS



VivaTech will display **Auxylum**, the communication solution developed by AtoS who just received the « defense restricted » certification.

The solution is essentially serving forces engaged in anti terrorist missions. It provides **encrypted exchange** to enable a fluid and ultra safe communication. Basically, this technology offers the simplicity and accessibility of common technology that is the smartphone combined with the level of security and encryption demanded of military equipment.

It is resistant, high speed connexion even on the move making it the leader in its field.

WHAT IF YOU CAN DETECT THE SHAPE OF AN ATTACK THAT YOU DIDN'T EVEN KNOW EXISTED?

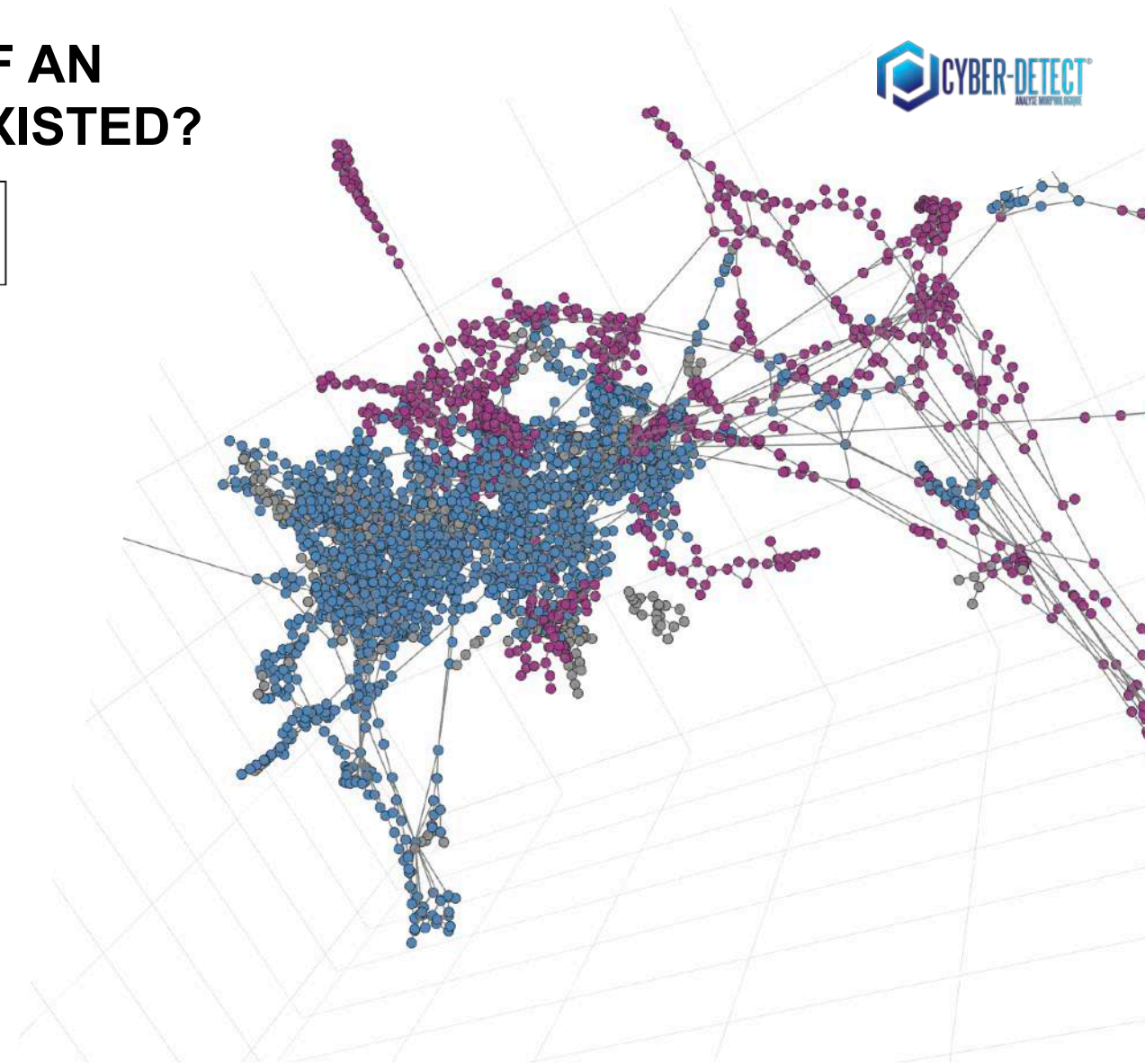


WHAT ?

Cyber-Detect is a morphological analysis tool that ascribes a shape and behavioral fingerprint to the cyber attacks features. Indeed, every attack is based on specific features that can be recognized via their signature. **Cyber-detect can recognize in real time the shape of any given attack as well as their variation to ID them, find them and stop them.** This way you can stop a malware that is not even known yet. Also Cyber-Detect highlight the weaknesses of your system.

WHAT IS THE POINT?

The point is to stop the attack before it happens even if the malware is unknown or brain new. It goes beyond protection of known malware it prevents new attack from happening and speeding. Typically, Cyber-Detect explains that their system would have been able to stop Wannacry in 2017 as well as its variation in 2018 even though this was a new type of malware it was still based on know recognizable features. **The main stake for Cyber-Detect today is to service beyond the military sector and offer its tool to firm in all sectors.**



2

GEOPOLITECH

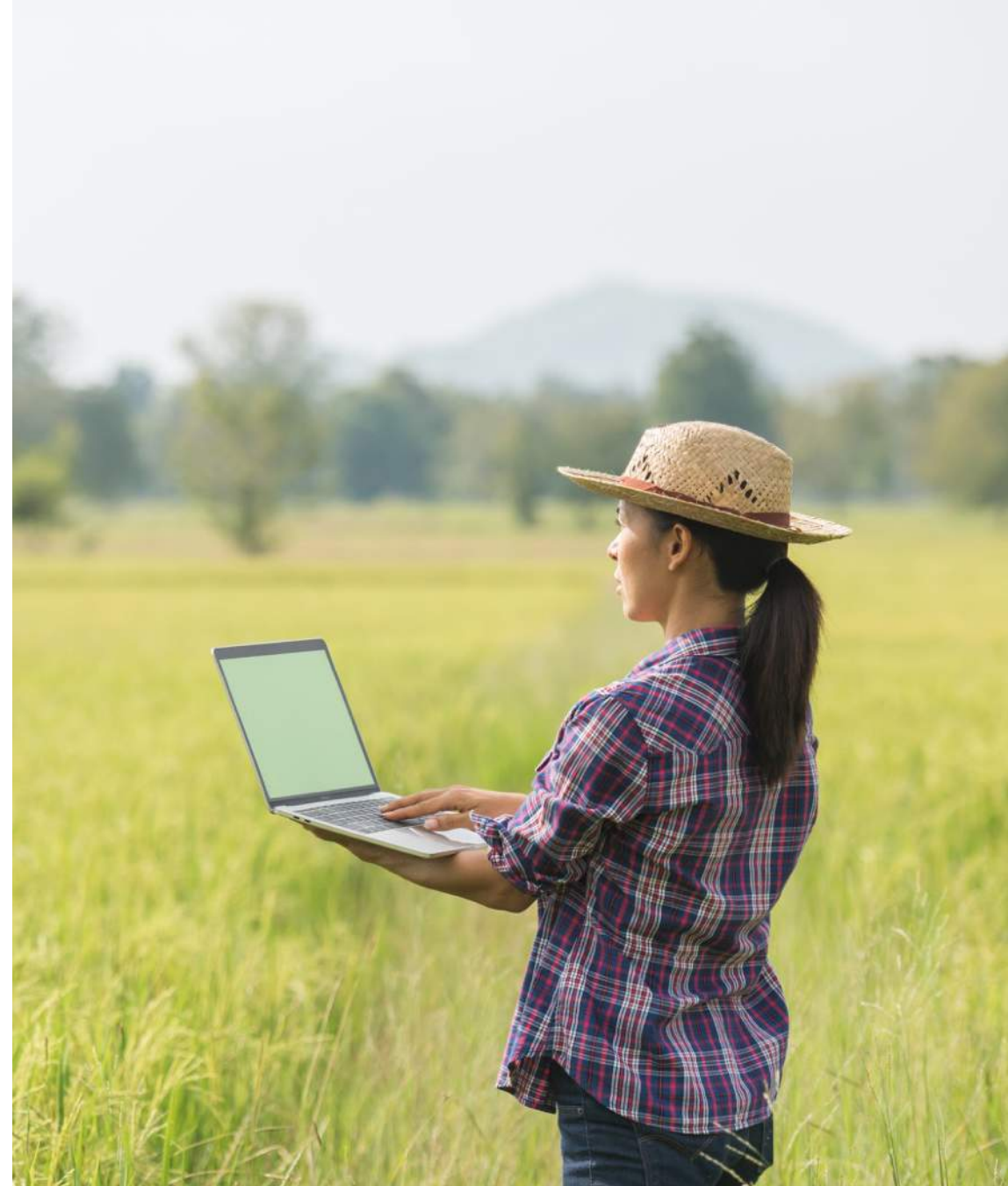
HERE WE WILL EXPOSE THE SOCIAL,
ECONOMICAL AND POLITICAL STAKES IMPACTED
BY NEW TECHNOLOGIES

- US & China : The New Tech Cold War
- The Pointed Finger At The GAFA
- The European Economy Wants Its Own Unicorns
- Africatech Strategic Decisions To Create Virtuous Partnerships

TECHNOLOGY AND SOCIOPOLITICAL STAKES

Many technologies are particularly promising in resolving socioeconomic issues. **Data analysis can help address major global problems, boost new scientific breakthroughs, advance human health and improve decision-making**, offering real-time information flows. The IoT can control and manage the state and behavior of connected objects and machines. **Governments should consider developing strategies to harness these technologies to grow their economies and territories.**

Access to energy is a major obstacle to improving access to ICTs, especially in rural areas. **There are deep and persistent disparities among countries.** New technologies can both perpetuate existing inequalities and create new ones. **To remedy these disparities, national strategies will need to be strengthened in developing countries, and additional international assistance will have to be offered**, to enable these countries to make effective use of new technologies and emerging technologies.






FRENCH UNICORNS = THE NEW FRENCH STRATEGY TO BOOST THE ECONOMY

France is late in the unicorn game and this has become a priority for the government to ensure the future of the country attractiveness and economy. **To tackle this priority, France is boosting training programs for its talents.** The French government is confident in their capacity to see about **20 unicorns by 2020/2025.**

So far, France only counts 4 established unicorns (with the newcomer Doctolib) making it the **7th most represented country of the world ranking.** In comparison the US counts 165 unicorns, China 90 and the UK 16. The top 3 unicorns are Toutiao in China with a valuation of 75 B\$, Uber with 72B* and Didi Chuxing with 56 B\$.

334 Worldwide

		
N°1	N° 2	N° 3
Valuation 75B\$	Valuation 72B\$	Valuation 56B\$

TOP 3 WORLDWIDE UNICORNS

4 France

TOP 4 FRENCH UNICORNS



N°151e
Valuation
1.6 B\$



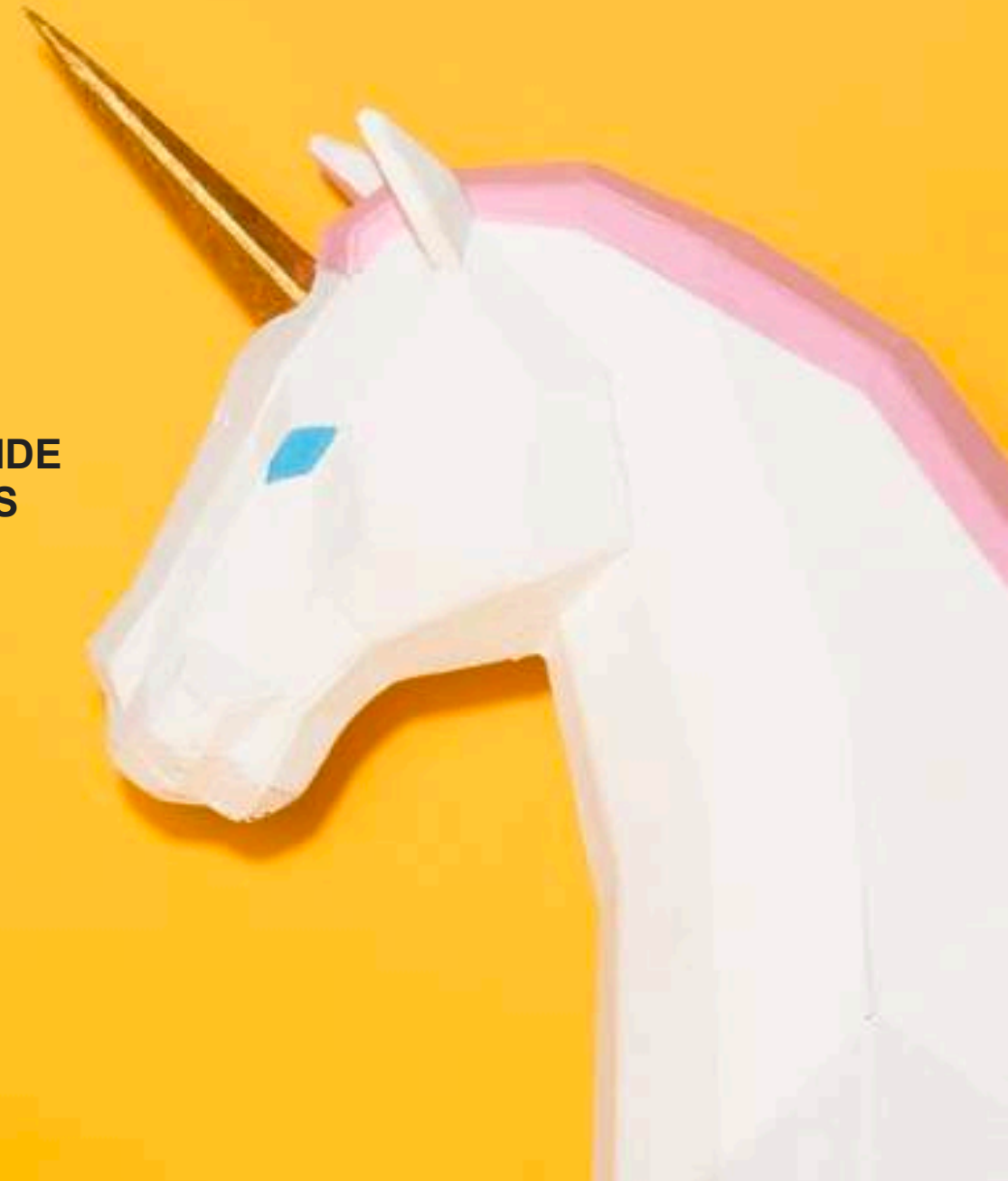
N° 223
Valuation
1.2 B\$



N° 209
Valuation
1.2 B\$



N°231
Valuation
1.1 B\$



Source : CB Insight, Unicorn Tracker

INNOVATIONS : STORIES OF PROMISE

Ken Hu Rotating CEO of Huawei

He was thrilled to talk in front of a French audience. Indeed, he reminds us that his company and France share a common vision of innovation.

- Huawei is focusing on three key technologies for the future : 5G (which will allow more than 100 billions connection by 2025), Cloud Computing (100% of companies will use clouds by 2025) and AI (77% of companies will be powered by 2025). **“These three considerably change the way the world do business: imagine an ecosystem which is able to predict and provide what you need?”**

- **“50% of the world population lack proper Internet access.** In Europe, 43% of citizens lack the basic digital skills they need to keep up in the future. The gap will become bigger if we don't take immediate actions.” **Huawei announces the opening of the Tech4ALL program that will provide to 500 million people around the world internet connection (especially in Africa).**

- **“It is at the core of our business model to share the vision we have about this ecosystem to all sectors.** That's why we created the Open Lab platform to share and build effective solutions with many companies, from telecom to cars markets. And we will invest in the next 5 years 35 million to develop the Open Lab in France. [...] **I strongly believe that France is in a good position to become the heart of innovation, not only in Europe, but in the whole world.**





« The number of startups is increasing in France with many new approaches. We need to open our minds to those thousands of new ideas to be fueled by them. »

JACQUES ASCHENBROICH
CHAIRMAN AND CEO
VALEO GROUP



BRINGING BACK TALENTS, VCS AND TECH IN FRANCE

Klaus Hommels
CEO of Lakestar

Despite its recent rise, Europe still struggles to compete with its American and Chinese competitors. It would have, according to her different actors, all the means to succeed. Hommels explained why the EU and its startups are struggling on the international stage.

- For the business angel, one of **Europe's major weaknesses is to underestimate its dependence on foreign technologies without succeeding in bringing out European solutions.**
- This incapacity comes in particular from the fact that VCs are much less present in Europe than in the USA or China where they play a leading role in the economy.
- Lastly, he points the inability of public authorities and European VCs to invest enough in European startups to the point that they go abroad and are now financed by foreign VC's.

DEPENDENCY ON DIGITAL PLATFORMS

Communication Buying behaviour Traffic flows Health behaviour Media consumption

TECHNOLOGY VIVA TECHNOLOGY TECHNOLOGY VIVA TECHNOLOGY VIVA TECHNOLOGY



EUROPE SPEEDING UP TO CATCH UP THE RACE

Frédéric Mazzella, CEO of Blablacar

Carlos Moedas, European Commissioner

Pauline Roux, Partner at Elaia & Martin Villig, Co-Founder of bolt.eu

While in the US, nearly 55% of vacant posts are filled by tech companies, Europe is struggling to compete and attract new talent. **But is it still possible to relaunch the European machine?**

- « *Startups and unicorns proved that they're able to seduce investors. It's now the turn of European Union to prove it !* » said Frederic Mazella. *“We took a bad departure. We have to strike back”*

- Martin Willig insists on the fact that **Europe has to create an ecosystem which will be able to attract new talents**. For Pauline Roux, this attraction passes by the creation of startup visa, shareholding plan...

- To the Eurosceptic, Carlos Moedas answers that nobody must quit the EU *“Tell me one thing that one country can do alone. Ecology ? No. Cybersecurity ? **No. We have to fight together**”*. He also insisted on the necessity to unify the taxation system for example.





« We miss some harmonization throughout Europe to grow fast. Nowadays, you have to create environment each time, because you have different taxes, different rules depending the country. »

FRÉDÉRIC MAZZELLA
CEO
BLABLACAR

« I believe much more in the empowerment of consumers and citizens than in protectionism »

EMMANUEL MACRON
FRENCH PRESIDENT
FRANCE



HOW FRANCE POSITIONS ITSELF BETWEEN ITS DESIRE FOR A STRONG ACCELERATION WHILST STILL RESPECTING PRIVACY

Emmanuel Macron
French president

Julia Bijaoui, cofounder of Frichti : « Should France be more protectionist toward foreign big companies such as Amazon or Alibaba in order to balance the chances between their strong economic ecosystems and ours? »

Emmanuel Macron : “We strongly believe that the balance doesn’t rely on protectionism but on equality, when it comes to face other rules and tax system. **Fiscal optimization is currently one of our major preoccupation and we’re able to make these foreign leaders respect the same rules as you, as a successful entrepreneur in France and Europe,** then you’ll have the chance to become an equal competitor to them.”

Thomas Platenga, Vinted : « How will we really make big steps to integrate regulation at the European scale and not only at a national level ? »

Emmanuel Macron : « You are raising a major question here : where reside the sovereignty about digital ? For many people, it’s 100% national. If we follow that kind of thoughts, we will have so many resistances to develop strong companies and economic ecosystem that we will have dozens of other Brexit. **That’s exactly why we do need an integrated European Union market and that’s something we work extremely hard on with my team and others European governments.** It will help us build equal regulations for all, including Chinese and Americans competitors. I do not wish to be oblivious or naive. »

Pierre Dubuc, OpenClassRoom : How can we create, educate and keep talents in France and Europe ?

Emmanuel Macron : We talked about the financial capital, but the other pillar of all the economy is the human capital. It is something that we know perfectly well in France since all companies around the world, including Chinese and American ones, are looking for our specialists. **I do believe that the best way to keep talents into our nation is having talents. Yes, talent brings talents. If you’re a successful entrepreneur, or very promising engineer, you want to be and work where your talent can be used at its full potential.** You do want to be challenged. That’s why in France we work with many like the BPI or Station F to create a strong incubator ecosystem and help our talents to achieve great objectives. **On the other hand, we have to provide an attractive tax system that won’t make successful entrepreneur lose half or more of the value of their hard work.** That’s why we managed to suppress the ISF and create the flat economic tax.





THE GAFA WERE SMALL AND THEY GREW BIG, LET'S HAVE EUROPEAN START UP BE BIG

Martin Klenk, CTO of Celonis
Laurence Lafont, CEO of Microsoft France

European and American ecosystems have never been so different! While in the USA, the **GAFA reign on the market and buy the newcomers** to acquire their technologies and their talents, European corporations seem determined to live with the startup as independent competitors.

- For Martin Klenk, CTO of Celonis, the shape doesn't matter. « **What is truly important is to grow fast** » he said.
- Laurence Lafont, CEO of Microsoft France, insists on the importance for big corporations to have the agility and the state of mind of a startup « **Be a startup or be disrupted** » she said. Showing that beyond monetarist standard, startup is also seen as a more global concept in terms of management and organization.
- All participants agreed to say that **Europe have to invest in the ecosystem** in order to help the European Tech to emerge, but also to form new talents.
- «**All the GAFA were born small. Why us, the europeans, couldn't do the same ?** » conclude Michel Paulin, CEO of OVH.



*“Governments love to make rules and regulations but remember that nobody is an expert about the future. We should spend more times to think about how these policies could change the future! **You can’t do anything about yesterday, so few things about today, but a minor change in the present can have major effects on the future.** Policies have to be smart, and we must create them only by considering their long-term effects.”*

JACK MA
CEO OF ALIBABA,
INTERVIEWED ON STAGE ONE
VIVA TECHNOLOGY 2019



SHANGHAI & NANJING JIANGNING BOOSTING THEIR INFRASTRUCTURES AND RESOURCES

This is the first year that China supports the exhibition VivaTech. And to do so they have a large pavilion featuring two innovative cities : Shanghai and Nanjing Jiangning.

Nanjing Jiangning

Nanjing Jiangning is a major science and education center anchored in innovations. It is also a transportation and logistic hub with a major airport to account for. It is one of the most innovative part of china.

The city is focused on building a smarter future and industry. So much so, that it has set up its own version of Hannover Messe as well as multiple competitions in innovation.

Shanghai

Shanghai is striving to become an international science and technology innovation center for economy, finance, trade and shipping. They have developed technology based services : Vouchers, little giant project, tax exemption for high tech enterprises, deduction of expenses for research and development.

They also boost talents by facilitating work visa obtention to foreign talents. They boost innovation platforms with 3 large scale scientific facilities with valuable and high end instruments, key laboratories, foreign research centers and over 500 incubators.

France benefiting from a partnership

OuiCrea is the first ecosystem for Franco-Chinese entrepreneurs. It facilitates processes of identifying selecting, promoting and financing Franco Chinese entrepreneurial projects. It generates over 300 projects a year, over 100 events, holds more than 80 incubees over more than 1000 meter square.



VIVATECH CONFERENCE

CANADA WANTS FAIR AND TRANSPARENT TECH THAT PEOPLE CAN TRUST

Justin Trudeau
Prime Minister of Canada

« **The gap between the virtual world and the real world is gone. We have to be sure that our values won't disappear the same way.** » Justin Trudeau Prime Minister of Canada

This year Canada is highlighted with a large and entire pavilion dedicated to Canadian start ups.

Justin Trudeau was also present at VivaTech and gave a speech stating that Canada will focus on individual wellbeing and personal data. To do so, they are launching a new digital charter to boost their digital policy. He wants transparency to lead this policy as well as boosting citizen protection. **Justin's Trudeau describes the position of the Canadian Government as strongly determined to take its responsibilities toward the protection of the citizen rights and privacy.** But, coming policies will certainly make sure to share these responsibilities with the tech leaders like Facebook.

He wants government and platform to work together to build more trust between consumers and digital stakeholders. **He believes that consumers are indeed losing trust in digital actors and technologies due to fake-news, taking stories and other fear driven information about them.**

He explained that : « Facebook is by far, the single largest news provider in Canada. But number of those news are rather seriously false or manipulative. More than 6 out of 10 Canadians admit they have been victims of these fake news. Moreover, half of the great democracies have seen their electoral process disrupted by foreign manipulations or cyberattack the passed year. **I can make the promise that in the future, Canadians and only Canadians will choose their government. We'll make sure of that.** »

GIVING REAL PRIVACY TO USERS



JAMI



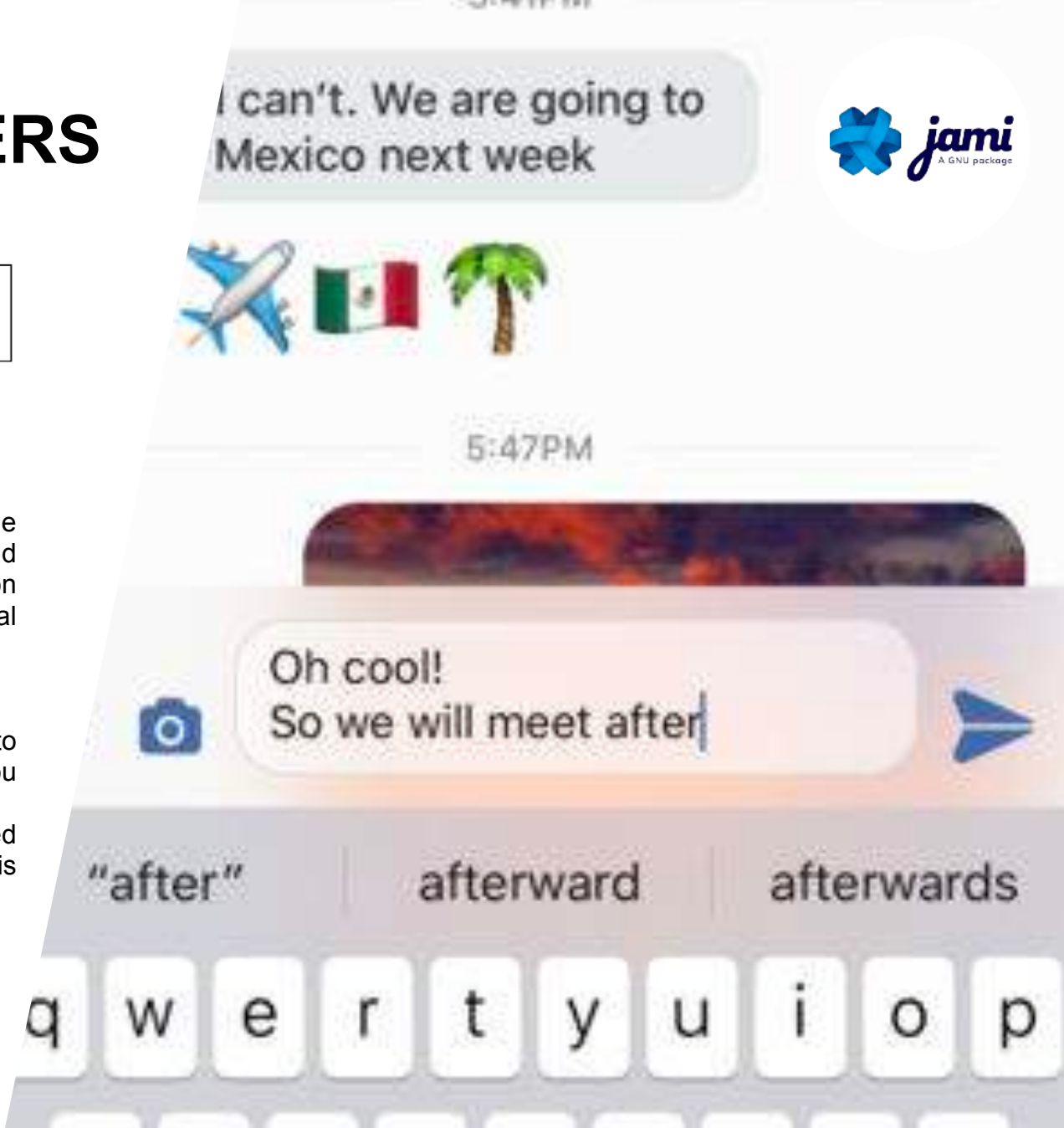
WHAT ?

Jami is a universal communication platform which preserves the users' privacy and freedom. Designed both for the general public and industry, Jami provides a free, secure and multi-platform communication device built on a distributed architecture requiring no authority or central server. It is a server-less architecture.



WHAT IS THE POINT?

Because privacy is important on the Internet, Jami allows you to communicate freely and will always maintain your privacy, whether you want to send a message, make an audio or video call, or share files. Consumers who want to correspond without having their data collected and then used for targeted advertisement can truly benefit from this technology.



AFRICATECH

In 2018 African startups have raised up to US\$ 1.163 B in equity. Representing a 4.2 time growth multiple over 36 months. The race is led by Kenya, Nigeria and South Africa, which have globally received 78% of the investments.

Those funding are important and even maybe necessary to Africa in order to keep up with new technology.

In Africa where there are remote villages where the population has near to no access to healthcare, education and other vital resources, new technologies such as AI, drones, robotic could significantly improve the situation. But the lack of connectivity makes it hard to deploy those technologies.

Therefore Africa needs to create strategic alliances. But at what cost?

The GAFAM are already supporting the country by setting different types of partnerships but they also gain control over the infrastructure and the data. Which means that Africa could catch up with the world-tech race but not truly benefit from it.

The choices Africa will make in terms or partnership, local or international investment, training, will be critical for its future in technology.

Is there something to learn in the famous saying : « **there is no use in running you need to leave on time** » ?

Connectivity



15%

Of Africans benefit from an internet connection at home.

Source : Etude de l'union internationale des télécommunications (UIT), 2017



FOCUS ON AFRICA TECH AND HEALTH STAKES

Jon Fairest CEO of Sanofi Africa

As African demography explodes, residents are facing new health challenges. Formerly plagued by epidemics of infectious diseases, diseases such as diabetes or hypertension are now threatening Africa. Jon Fairest, talks about the 3 challenges that Sanofi is about to face on the African continent :

What solutions can we find to manage disease such as diabetes?

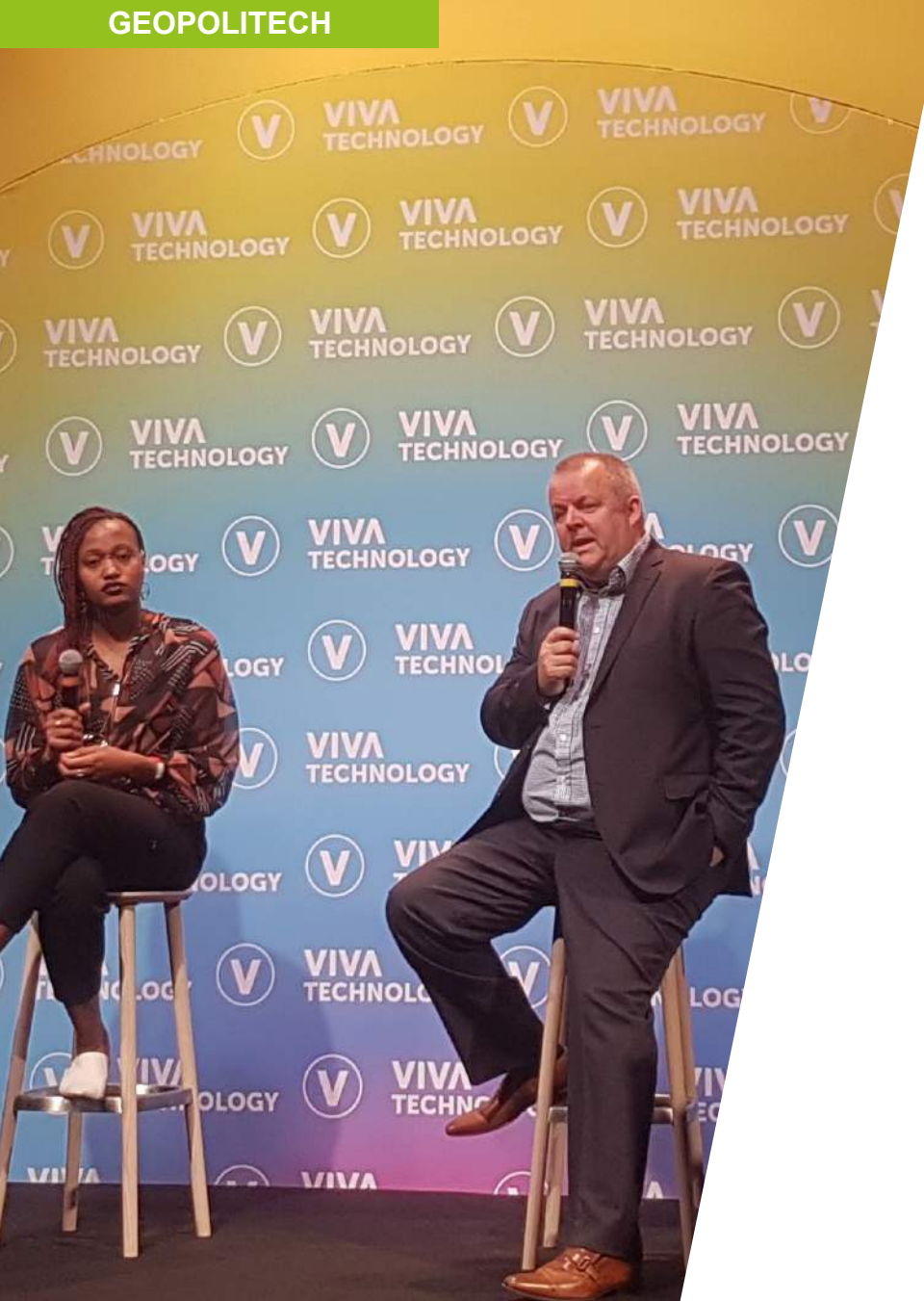
For Jon Fairest, **partnership with local startups is obviously the solution** « They have the ability to identify a problem, find a solution and to digitalize it very quickly” explain the CEO.

How can we collect and exploit data more efficiently?

If Sanofi already passed some deals with big hospital or insurance company, **the French group wants to go further and is searching new partners who will be able to collect data in rural area for instance.**

How can we be sure that de right person receive the right medicine at the right time?

Jon Fairest explains that Sanofi is entirely rethinking its supply chain and is very interested by the last mile delivery solution which are emerging.



TOWARD A MORE EFFICIENT WATER CONSUMPTION AND FOOD PRODUCTION



Seabex

LAB

orange™



WHAT ?

Seabex is a solution created to help farmers in every aspect of their crop monitoring to know exactly how to water them. In a country where water is not to be spared lightly and which produces a large part of our wheat worldwide. **Seabex enables farmers to monitor and control in real time the parameters of their farm and are then able to react accordingly.** The technology uses sensors on the grounds to collect the data which is then stocked in the cloud accessible in real time or later.

WHAT IS THE POINT?

The point is to save resources, increase agriculture production, save time and reduce costs. **Farmers have a better control over the amount of water they use and don't waste any. Also they use it at the right time increasing the quality of their watering system and the « happiness » of the crops if you will, leading to a better yield.**



CONNECTING AFRICAN PEOPLE TO SAFE AND EFFECTIVE PRODUCTS & SERVICES

**BWAM**

WHAT ?

Bwam is a digital solution that connects the Southern Africa's diaspora. This gives the network access to payment solutions, products of quality and a space to share between professionals. **It enables affected transfers for a lesser cost, having a space to solve more social issues, having access to clean and check products such as energy sources, accredited drugs.**

WHAT IS THE POINT?

BWAM **enables a secure and easy access to safe products.** It creates a network that adapts to the different means of payment and acting as a guarantor for the product.

**BWAM**
PROTECT THE ONES YOU LOVE

PROTECTING CLIENT DATA AND ENFORCING GDPR COMPLIANCE



BIGID's

LAB



WHAT ?

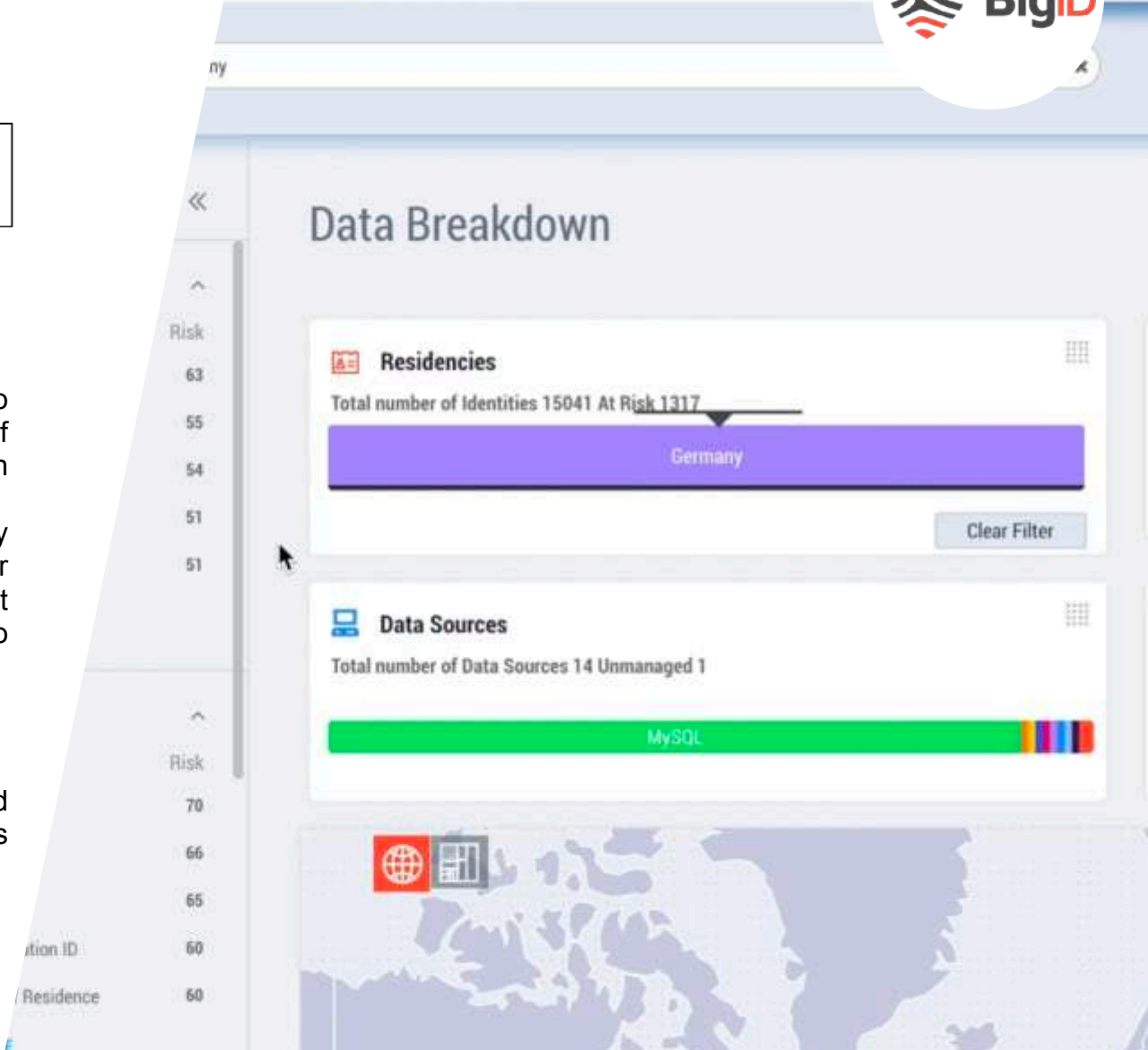
BigID's machine learning-driven data intelligence enables enterprises to understand their personal data at petabyte scale. Manage the privacy of their most sensitive data, reduce breach risk and operationalize European GDPR compliance.

Machine Learning and Identity Intelligence techniques provide the ability to find personal data within small or large amounts of structured or unstructured data, on-premises or in the cloud. The platform also makes it possible to highlight the connections between the personal data, and to detect any anomalies of quality.



WHAT IS THE POINT?

By enabling indexing of identity data by subject, country, application, and more, BigID's solution enables organizations to meet RGPD obligations such as the right to forget and the duty to respond.



1 EMISSIONS

2 POTENTIALS

3 INDICATORS

4 POLICIES

5 SUGGESTIONS

6 TECHNOLOGY

REALTIME DATA VISUALIZATION TO HELP GOVERNMENTS MONITOR THEIR ACTIONS

Tomer Shalit, founder of ClimateView, and **Stina Billinger**, from the Swedish Ministry of Enterprise and innovation, testified about their experience. Impulsing and sharing a climate change policy is complex because of multiple topics. This is what the Swedish action plan looks like :



ClimateView was created in 2017 to create a tool to share overview and detail in one view, and establish a tailored framework for driving collaboration and action. It allows nations, cities and organizations to visualize their climate roadmaps and turn them into action. The dashboard is available to all stakeholders. The visualization is based on real-time data, and combines 6 hierarchies :

1. Emissions per sector
2. Solution potential per sector
3. Leading indicators (KPIs)
4. Planned and taken actions and policies
5. Suggested policies (NGOs, corporations or any organization can submit reviews on the actions and policies in the hierarchy, and they can also be invited to make policy suggestions on their own behalves.
6. Technological solutions, as suggestions, in the same dashboard – to put them in the same context as policy suggestions.
7. Adaptive planning, according to the principles of Agile

3

TECH4GOOD

EDTECH, ENVIRONMENT, PUBLIC CARE,
CIVITECH, INCLUSION, DIVERSITY, REDUCING
INEQUALITIES...

GOOD BUSINESS IS ... GOOD FOR BUSINESS.

Consumers are proving themselves to be more and more sensitive to the **impact of their purchases on the planet**, on **society**, and on **their health**. Their **expectations are shifting away from the government** to companies, and they're requiring companies to adapt in response to these new mentalities and modes of consumption.

73%

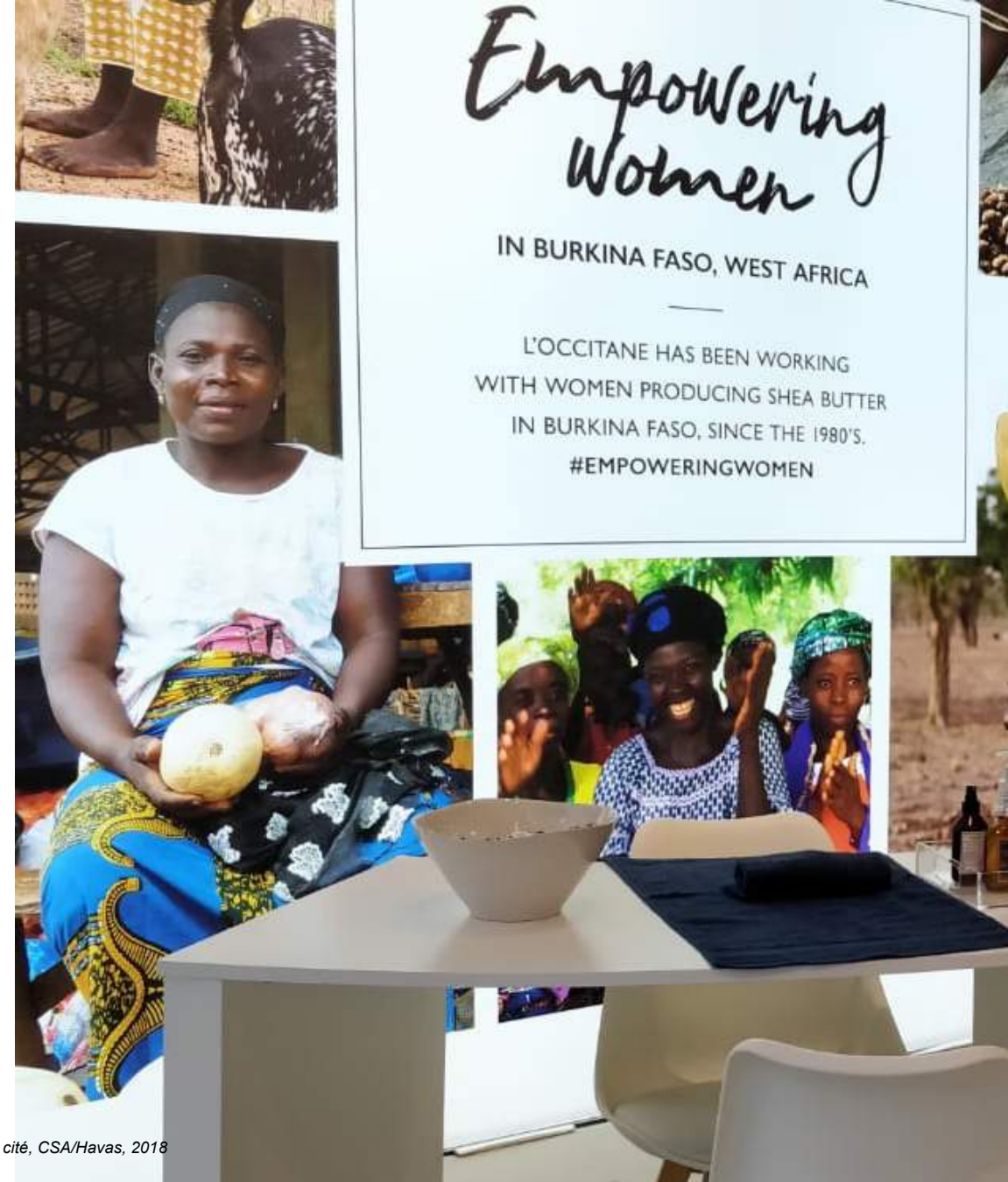
of French consumers think that **companies** have more power than ever to **transform society**

80%

think that companies that behave **ethically and responsibly** will have the **most economic success** in the future

*Study conducted on a national representative sample of 1,010 French people 18 years and older

Source : L'Observatoire des marques dans la cité, CSA/Havas, 2018



BRANDS ARE ENCOURAGED TO TAKE A STAND

French people are expecting more and more brands to get involved in politics.

Today, corporations have so much economic, technological, and human pull that they are seen as indispensable in solving societal problems, especially for matters concerning unemployment, youth integration, and gender equality.



56%

of French consumers want companies to take a position on **social and environmental issues**.

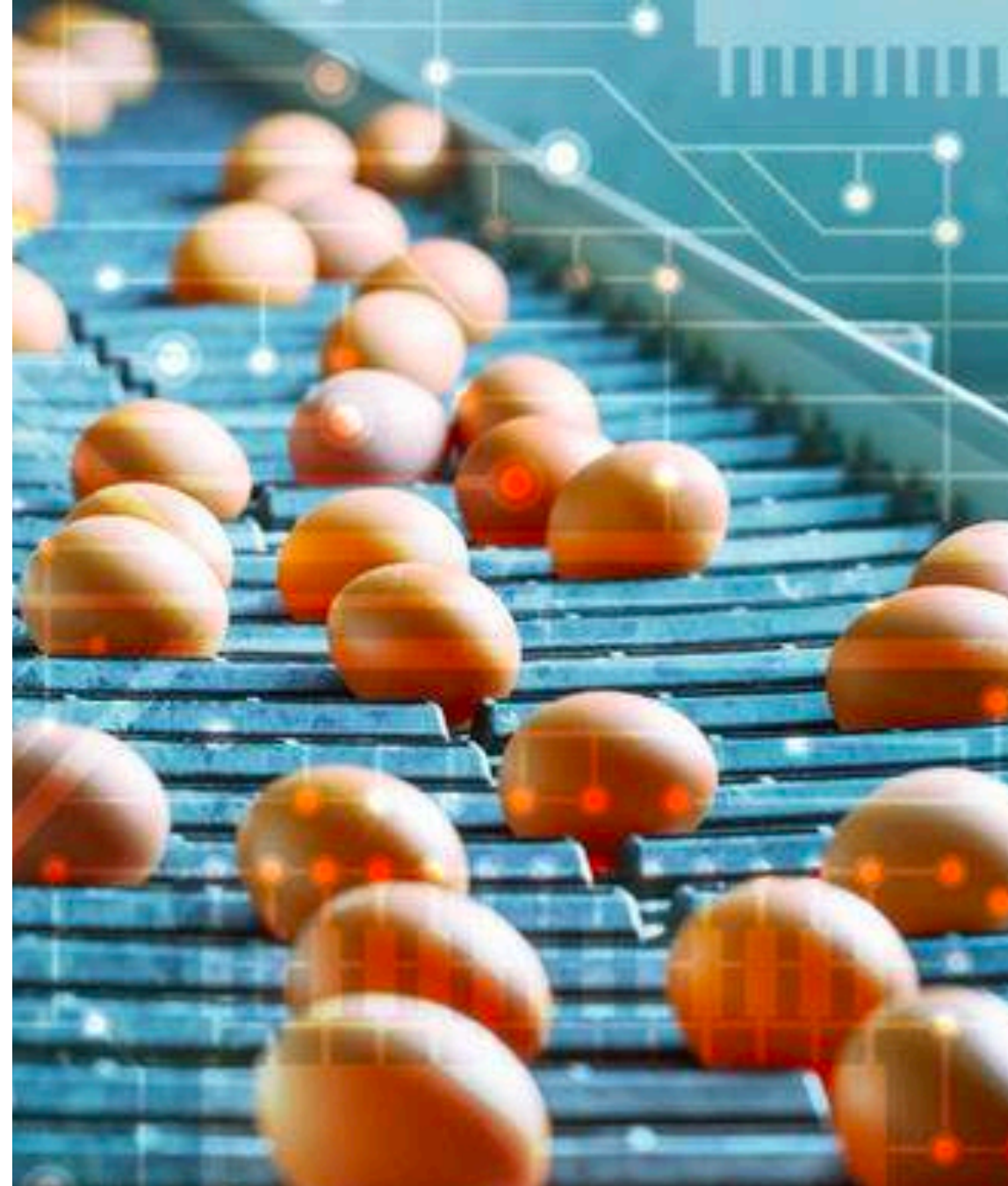
Source : Etude Accenture 2019

TRANSPARENCY! A NECESSITY FOR BRANDS

In a context where consumers are having a **crisis of trust**, especially regarding mass-market brands, companies will have to double down on their efforts to **reassure** customers and demonstrate the **quality of their products**, all while offering more **localized consumption solutions**.

Technology can help them do so, especially when it comes to **traceability**: with the **Internet of Objects** and **blockchain**, companies can give proof and guarantees of their reliability.

In some markets, like **China**, where counterfeiting is a problem, **the demand for transparency and reassurance is even stronger**, be it for food or luxury products.



AN IMPERATIVE FOR AUTHENTICITY

85%

of French people stated
that **authenticity** had a
positive influence on
their **behavior or**
attitude regarding a
brand



TECH 4 GOOD A PILLAR OF VIVA TECHNOLOGY

Today innovation is part of a wider reflection on a positive impact, particularly in the areas of education, environment, workplaces, and gender parity.

Tech4Good, a pillar of Viva Technology, explores ways that technology can be a positive force for the economy, society and humanity.

Today innovation is part of a wider reflection on a positive impact, particularly in the areas of education, the environment, the workplace, and gender parity.

A new space, **Better Life Avenue**, gathers positive impact initiatives.



VIVA
TECHNOLOGY

#TECH4GOOD
MEET THE GAME
CHANGERS
@VIVATECH

GREENTECH PARK - BETTER LIFE AVENUE - IMP
PITCH CONTESTS - FAMAE CHALLENGE - SID

THE TECH FOR GOOD SUMMIT

The **Tech For Good Summit**, on the eve of VivaTech's official opening, has been hosted, for the second year in a row, by French President Emmanuel Macron at the Élysée Palace.

The president hosted heads of state and more than 80 digital players with the presence of executives of major technology companies, including : Mark Zuckerberg (Facebook), Satya Nadella (Microsoft), Young K. Sohn (Samsung), Dara Khosrowshahi (Uber)...

The objective was to enrich the topics covered, and to review the commitments made in 2018 by tech giants.

3 main priorities were identified by the participants who have pledged to collaborate on :

- The use of AI in the interest of human beings and the reduction of inequalities
- Preventing online violence
- Research on the use and protection of digital data





TECH FOR GOOD SUMMIT : SAP IS COMMITTED TO INCREASE THE NUMBER OF FEMALE EXECUTIVES.



SAP is leading the « Tech for Diversity » Working Group in the company in collaboration with several other stakeholders. In 2019 the company is committing to more parity, diversity & training.

- Women in leadership : SAP has reaffirmed its 2018 promise to increase the number of women in management positions to 30% in 2022
- Leverage technology for diversity & inclusion : Signatory companies commit to pilot projects that use technology aimed to improve diversity and inclusion in their recruitment, evaluation, compensation and sourcing processes.

TECH FOR GOOD SUMMIT : ACCENTURE, HELPING AND SUPPORTING EMPLOYMENT AND NEW BUSINESSES



The Accenture group has supported 130,000 people towards employment or entrepreneurship in France through its "Skills to Succeed" initiative, moving closer to the initial target of 150,000 by 2020.

"Thanks to the mobilization of the summit and the efforts' mobilized of the companies involved, we can together multiply our impact tenfold", said Laurence Morvan, Director of Corporate Social Responsibility at Accenture.

Some 180 million euros will be invested by the group in this training objective by 2021.



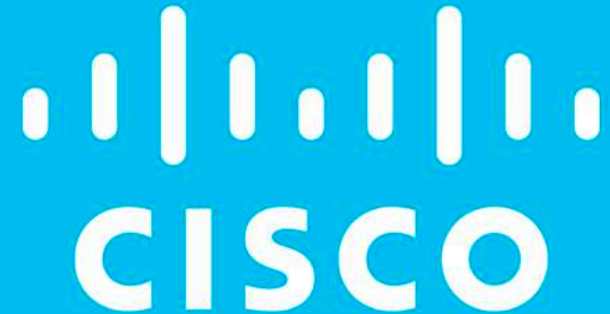
THE TECH FOR GOOD SUMMIT : CISCO GETS INVOLVE IN THE PRESERVATION OF NATIONAL HERITAGE.

In line with its commitment to invest **\$70 million in France**, Cisco confirms its commitment to use its technologies to address national priorities.

At the "Tech For Good" summit, Gerri Elliot, Executive Vice President and Chief Sales and Marketing Officer of Cisco, was able to discuss Cisco's intention to **renew its collaboration with the Ministry of National Education** as well as the provision of a program for the **protection of the French heritage**.

Since 2015, the **Cisco Networking Academy** has trained nearly **200.000 students, employees and job seekers in France** in the latest technologies in **cybersecurity, the Internet of Things and networking**. The initiative has also enabled 2,500 secondary school teachers to acculturate to digital and 1.200 Cisco academies to be created. This renewed collaboration with the Ministry of National Education will therefore aim to accelerate the digital transition of the education system and develop the professional qualification of the digital sector.

Cisco also wishes to make its **Cisco Sustainable Impact program** available to the French government. Its aim is to protect not only **people, animals and the environment, but also the world's iconic monuments**. By using technologies to serve major causes, including the preservation of natural areas and world heritage, Cisco France intends to **contribute to the reconstruction of Notre Dame de Paris Cathedral by working with the authorities to provide a digital security perimeter**.





THE TECH FOR GOOD SUMMIT : UBER TAKES ACTIONS TO IMPROVE THE WORKING CONDITIONS OF ITS EMPLOYEES..

Uber

The reputation of the company has been shaken by numerous scandals like the working conditions of its drivers.

At the Tech for Good Summit, Uber has announced a **common reference framework on "soft skills"**, the result of the working group co-managed with **Orange**.

The government wants to promote the **professional mobility of Uber drivers** to enable them to consider other trades, in driving or services such as **Deliveroo**.

A pilot project will be launched between **Uber and the Groupe RATP** based on this framework to "build bridges" between the two companies' businesses. Labeled applications from self-employed workers using the **Uber application will thus be valued to facilitate their professional mobility to the RATP Grou.**

*« Technology is not intrinsically good or bad, but it can produce **positive** or **negative** outcomes—and often both—depending on how it is used. »*

JACQUES BUGHIN
DIRECTOR
MCKINSEY & COMPANY

ARTIFICIAL
INTELLIGENCE:
THE NEXT DIGITAL
FRONTIER



GINNI ROMETTY DESCRIBES WHAT SHE CALLS THE “CHAPTER 2” OF THE GLOBAL DIGITAL TRANSFORMATION.

STAGE ONE

Ginni Rometty

CEO of IBM

Rometty wants a world **where AI and Hybrid cloud are scaling based on the needs of society**. It is also a good way for her to enforce some promises she made in 2018, especially making IBM a leader of the education and skilling of the workers of tomorrow.

“We are at chapter 2 of the global digital transformation. Tech like cloud will become hybrid. Not because we’ll mix technologies, but because **the world will change, and the tech will have to change with it.**” Ginni Rometty underline the numerous acts of regulation around the world to improve the security and the privacy of data and technology uses. Since so many services and apps are now able to run thanks to the cloud ecosystem, it means that **private clouds will become more valuable**. But since public clouds can’t disappear for many reasons, tech leaders of this ecosystem will have to hybrids these two approaches.

“Being trusted also means that you must prepare the society to work with your technologies. **I personally believe we have to adapt some new paradigms and think about new ways to get and provide good life.** Offering new jobs will be a necessity.” In 2018, Ginni Rometty made the promise to enforce the role of IBM in the education of the future workers all around the globe. **Since the “scaled AI” is a top priority for IBM** and many economic ecosystems around the world, the tech leader is working on the global accessibility of skills and soft skills that will be needed for the society in the coming decades.





VIVATECH CONFERENCE

P-TECH SCHOOLS ENCOURAGE INCLUSIVE EDUCATIONAL PROGRAMS.

Ginni Rometty, CEO of IBM
Stéphane Richard, CEO of Orange



They announced the opening of the **P-Tech program** in France. Several companies such as BNPP are joining their forces to offers new ways to get a qualifying degree in new technologies. **It targets students and pupils who didn't get chance (for several reasons and not only their personal results) to enter a private high school or university.** As Ginni Rometty said "You don't have to get a university degree to participate in this new world."

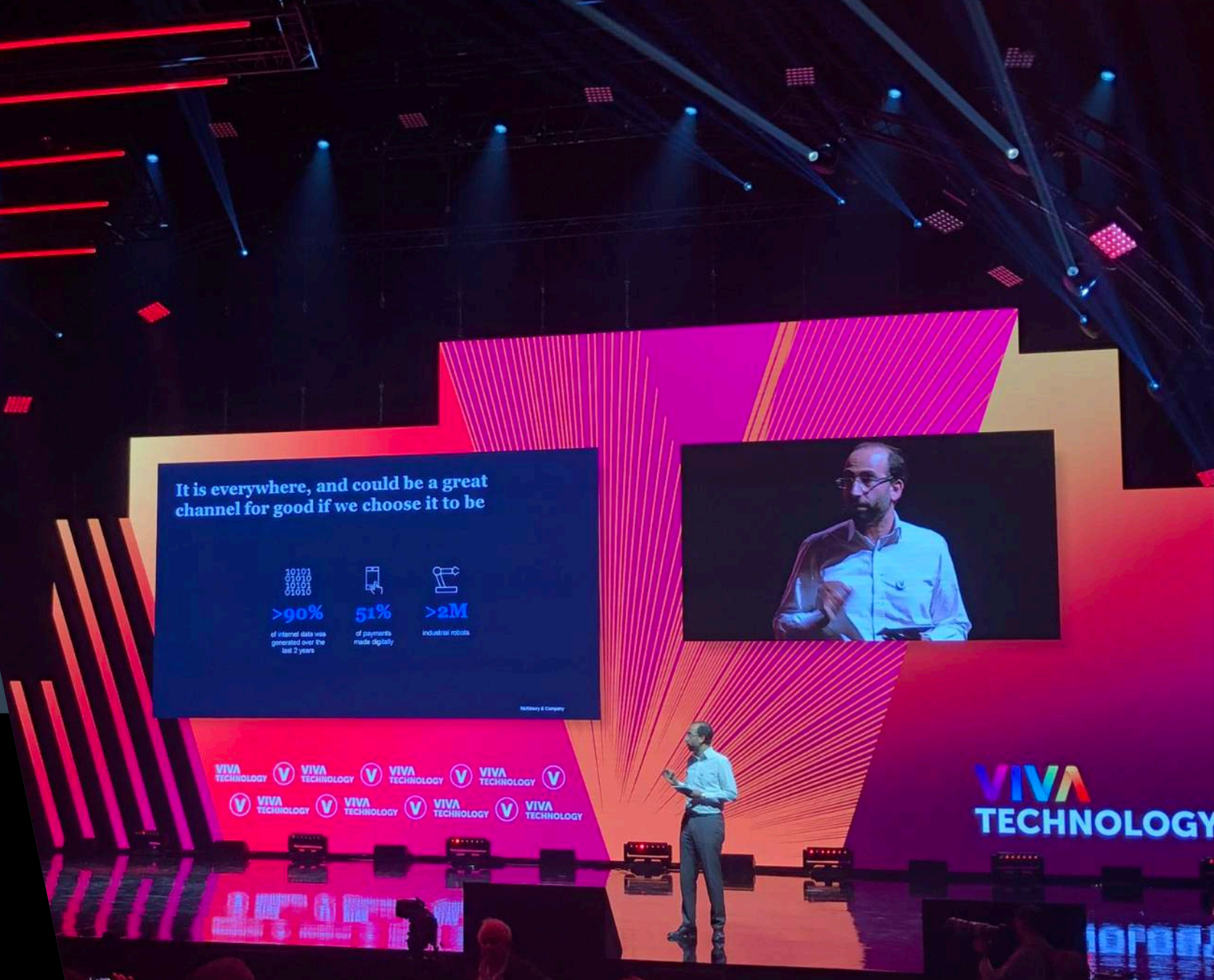
P-Tech is also about partnerships with schools like the Métiers de la Tournelle high school directed by **Alexandre Xerri** who often states the **necessity to build strong link between education centers and tech companies** *"to be able to understand the skills of the future workforce and to be able to teach them and prepare for for our future generations, we need help from the leaders to understand their own needs of skills. Together we can find new effective solutions to teach and learn what we all have to know to keep up as a workforce."*

Sanofi and Salesforce are expected to join the consortium in the coming weeks.



« It is necessary for governments and companies to carefully manage transitions so that technology can contribute to improving well-being in society. »

ERIC HAZAN
SENIOR PARTNER
MCKINSEY & COMPANY



MCKINSEY MEASURES THE SOCIAL IMPACT OF TECHNOLOGY



According to a McKinsey study, the impact of technological change in GDP and population well-being can be maximized if we do not use it to reduce costs.

McKinsey has been asked to organize the working day of the Tech for good summit at the Elysée. It published a dedicated report on Tech for Good.

« From a micro and macroeconomic point of view Tech for Good is beneficial for both companies and society ,» Eric Hazan, Senior Partner at McKinsey ;

It is possible to get both an economic increase and a better life.

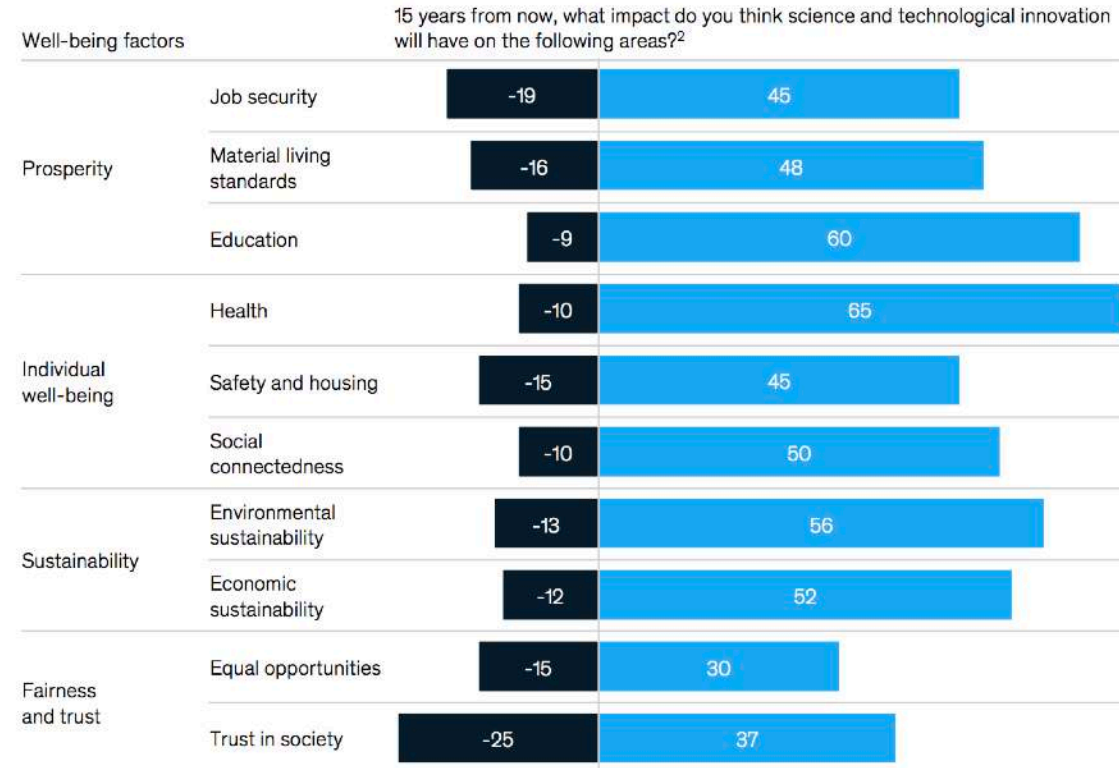
Beyond GDP McKinsey has created an index that measures the contribution of new technologies to social well-being After GDP, "GDP+", a social well-being index linked to new technologies and what to remember about them.

Exhibit 1

People's expectations of the future impact of technology are broadly positive, but with particular concerns around jobs, wages, safety, equality, and trust.

EU-28,¹
%

■ Negative impact ■ Positive impact



¹ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

² Questions mapped to the MGI societal well-being framework. Survey with 27,910 respondents across the 28 European Union countries, representative of the European Union population.

Source: Special Eurobarometer 419, Public perceptions of science, research and innovation, 2014; McKinsey Global Institute analysis

« The best way to do TechForGood is to involve users so that they have a right and a way to express themselves to build their future and that of their world. You have the power to change the world! »



SOHN YOUNG
CORPORATE PRESIDENT
SAMSUNG

AT VIVATECH, A NEW HALL “BETTER LIFE AVENUE” GATHERS POSITIVE IMPACT INITIATIVES.

GreenTech Park

For the first year Viva Technology has set up a dedicated area for innovative and positive solutions in the field of water and waste recycling or urban and connected agriculture.

+



BNP PARIBAS



MoëtHennessy



INNOVATIVE, WATER-SOLUBLE AND BIODEGRADABLE PLASTICS



WHAT ?

- Lactips produces a plastic free and soluble raw material for conditioning.

WHAT'S THE POINT ?

- The first applications of its water-soluble plastics are intended for detergent manufacturers to package powdered products or tablets. Forward-looking, these products will be used in several industry applications (Detergent, Food, Cosmetics, etc.).



AI-BASED SMART WASTE BIN

**BIN-E**

LAB

GREEN
TECH PARK

WHAT ?

Bin-e is an AI-based smart waste bin that **recognizes and sorts the waste automatically**. It combines most advanced technology to simplify recycling and facilitate the transition to a circular economy.



WHAT'S THE POINT ?

Bin-e is the ultimate tool for promoting green initiatives at your eco-friendly workplace. **Reach your company's sustainability goals while reducing costs and frequency of waste collections.**

The IoT platform delivers valuable insights into current waste operations and summary reports straight to your phone, including real-time information about the fill level of each bin. Use this data to make waste management more efficient.

Bin-e facilitates the transition to a resource efficient, climate-smart circular economy. It enables recovery of raw material, while data-driven waste management leads to optimized collection routes and lower CO2 emissions of waste transport.



Bin-e

Bin-e

MAKE VOLUNTARY EMISSIONS TRADING MORE TRANSPARENT

**CLIMATESEED**

LAB



BNP PARIBAS

WHAT ?

BNP Paribas Securities Services has launched **ClimateSeed**, a **voluntary carbon offsetting platform**. In order to limit CO2 emissions, a CO2 emissions trading scheme has been set up under international climate protocols. When buying allowances, companies must limit their emissions. But those who want to voluntarily offset their CO2 emissions can also buy emission allowances.

WHAT'S THE POINT ?

ClimateSeed, was developed with the support of the Grameen Creative Lab, a consulting firm co-founded by a Nobel Peace Prize winner, Professor Yunus. **In accordance with the principles of Social Business, ClimateSeed will reinvest all of its profits in its development to maximize its positive impact on society and the environment.**



FLOATING SOLAR POWER PLANT



LAB

Discovery by

 Heliorec
THE FLOATING SOLAR POWER PLANT

WHAT ?

Heliorec is building a floating solar power plant. **An innovative and cost-effective solution of green electricity** production, based on a circular economy approach.



WHAT'S THE POINT ?

This technology allows :

- Land scarcity reduction
- Low carbon footprint
- Competitive cost of electricity
- Green electricity production
- Better efficiency
- Rapid deployment



BRINGING POWER EVERYWHERE



> WHAT ?

O'sol builds smart, solar-capable batteries to power small and medium devices. Ideal for outdoor activities thanks to their simplicity, adaptability and design.

> WHAT'S THE POINT ?

O'sol is using innovation and technology to meet societal challenges.



O'SOL

C17

EDF

A PHOTOVOLTAIC TREE



ETREE BY SOLOGIC



WHAT ?



eTree is a social innovation. eTree is a fully autonomous solar intelligent powered tree. **eTree produces services for the public : Wifi connection, water, electricity charge, and much more.**

WHAT'S THE POINT ?

e-Trees are capable of producing 7 kilowatts of electricity per day, a precious potential in a very sunny country. **They are also designed to provide many services to city dwellers.**



eTree plans to act as a wifi terminal, communicate with other solar trees through a dedicated screen, offer charging points for smartphones **and provide fresh water for humans and their four-legged companions.** At night, it turns into a designer floor lamp.

Naturally intended for the urban environment, the designers of the eTree also intend to deploy it on hiking trails. Sologic intends to market it worldwide.



Source image : @LyronLA

PRODUCING CLEAN ELECTRICITY FROM OCEAN AND SEA WAVES



ECO WAVE POWER

LAB

Discovery by



WHAT ?

The Eco Wave Power company has developed an innovative patented technology for the production of clean electricity from ocean and sea waves. **The company is pioneering in its sector by operating the ONLY grid-connected wave energy array in the world.**



WHAT'S THE POINT ?

Such technology enables to deliver effective, sustainable, practical, **feasible, and affordable wave energy solutions, which are responsive to the needs of local communities, cities, and countries worldwide.**



THE NEW GENERATION OF WATER MANAGEMENT

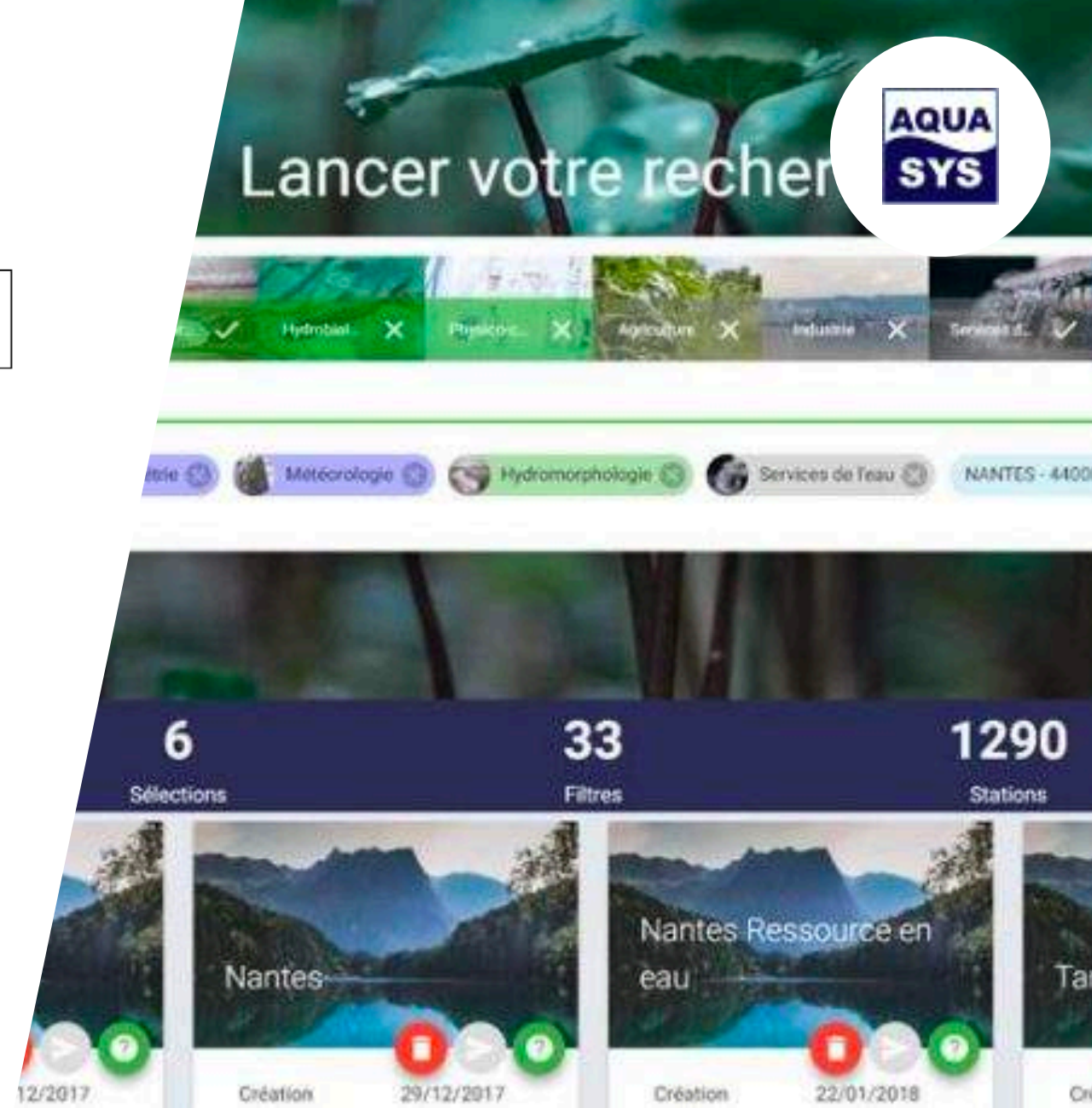


WHAT ?

The goal of Aquasys is to help with the climate transition with specialized solutions to manage the water resources. **They offer open sources specialized software with high performance. The solution collect, analyses, stock the data and centralize it in a platform. The data is then accessible in real time.**

WHAT IS THE POINT?

It helps manage the water resources, check the sanitary requirement in detail, it is also easier to manage the flooding risks by having a deep analysis of all the parameters of a given territory.



RECONNECTING PEOPLE TO NATURE THROUGH URBAN FARMING TECHNOLOGIES



> WHAT ?

Hexagro Urban Farming develops and manufactures modular, scalable and automated vertical gardens to produce healthy food in any indoor environment.

> WHAT'S THE POINT ?

Collaborative Urban Farming will be a regenerative solution to **decentralize food production, enhance its supply chain and increase food quality within cities.**

The main goal is the easiest-to-use and customizable systems to **enable people producing healthy food in any indoor space**, from a family living room to restaurants, offices and communal buildings.



INNOVATING TOOL FOR DIGITAL ACCESSIBILITY



FACIL'ITI



WHAT ?



FACIL'iti provides a significantly improved and customized web browsing experience for senior people and people with disabilities (visual, motor and/or cognitive).

WHAT'S THE POINT ?



It allows partners' websites to meet the needs of each individual's particular condition.



WOMEN IN TECH

A key issue is the gender gap in the areas of science, technology, women are also still a minority among computer science graduates, and are underrepresented among STI policy makers.

Women are also significantly underrepresented in the digital. Also, IT is often seen as an unwelcoming environment to women with poor work life balance. This poor environment is one of the main reasons why women quit their job.

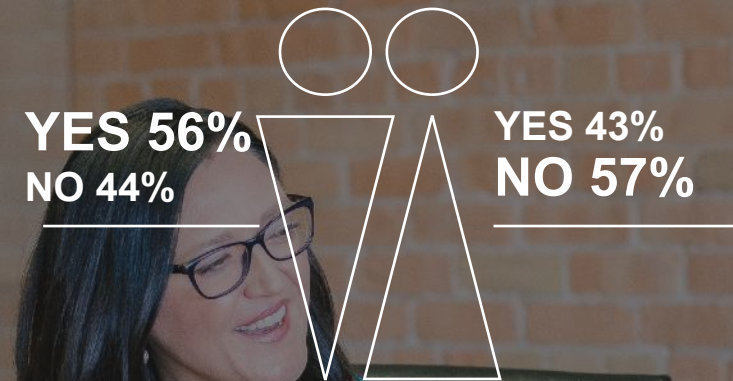
A US survey led by Harvey Nash in 2018 showed that only 23% of women were considering IT as a career at school compared to 50% of men. Showing that from the get go IT doesn't seem to even be an option as a woman.

This probably explains why 47% of women in the US believe that more programs and mentorship could help improve the situation. **More firm is launching such program to boost diversity and career development. But the question remains is it really effective** to actively change the situation and the social bias and mentalities?

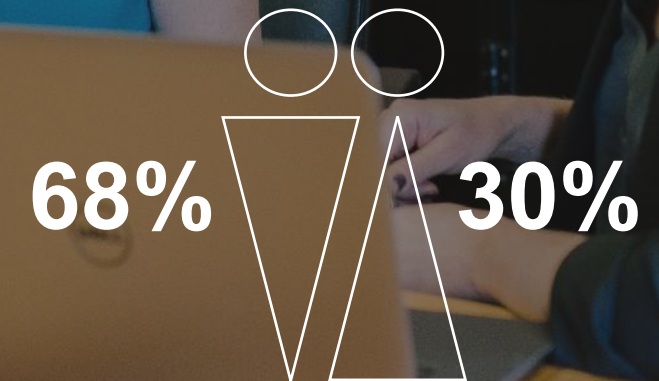
One of the big inequalities is also the salary, indeed, in the US women earn 79% of the men annual median salary.

Even if few things are starting to be done, women still believe that they are the one who has to take things in charge if they want to succeed in IT and there is still a long road ahead to improve the industry and its acceptance and inclusion of women.

Is #MEETOO making technology more welcoming to women ?



BIG PERCEPTION GAP
% who believe their company offers equal pay.



Source : 2018 Women in tech, building momentum, Harvey Nash, 2018



« Woman can bring and will bring a better vision of tech. That's why at VivaTech we want to make a great place for their expression. »

PIERRE LOUETTE
LES ECHOS- LE PARISIEN GROUP

Source image : @ArtBen

A FACEBOOK CHATBOT TO SUPPORT WOMEN WHO SUFFERED PHYSICAL OR MENTAL ABUSE

Elle caetera

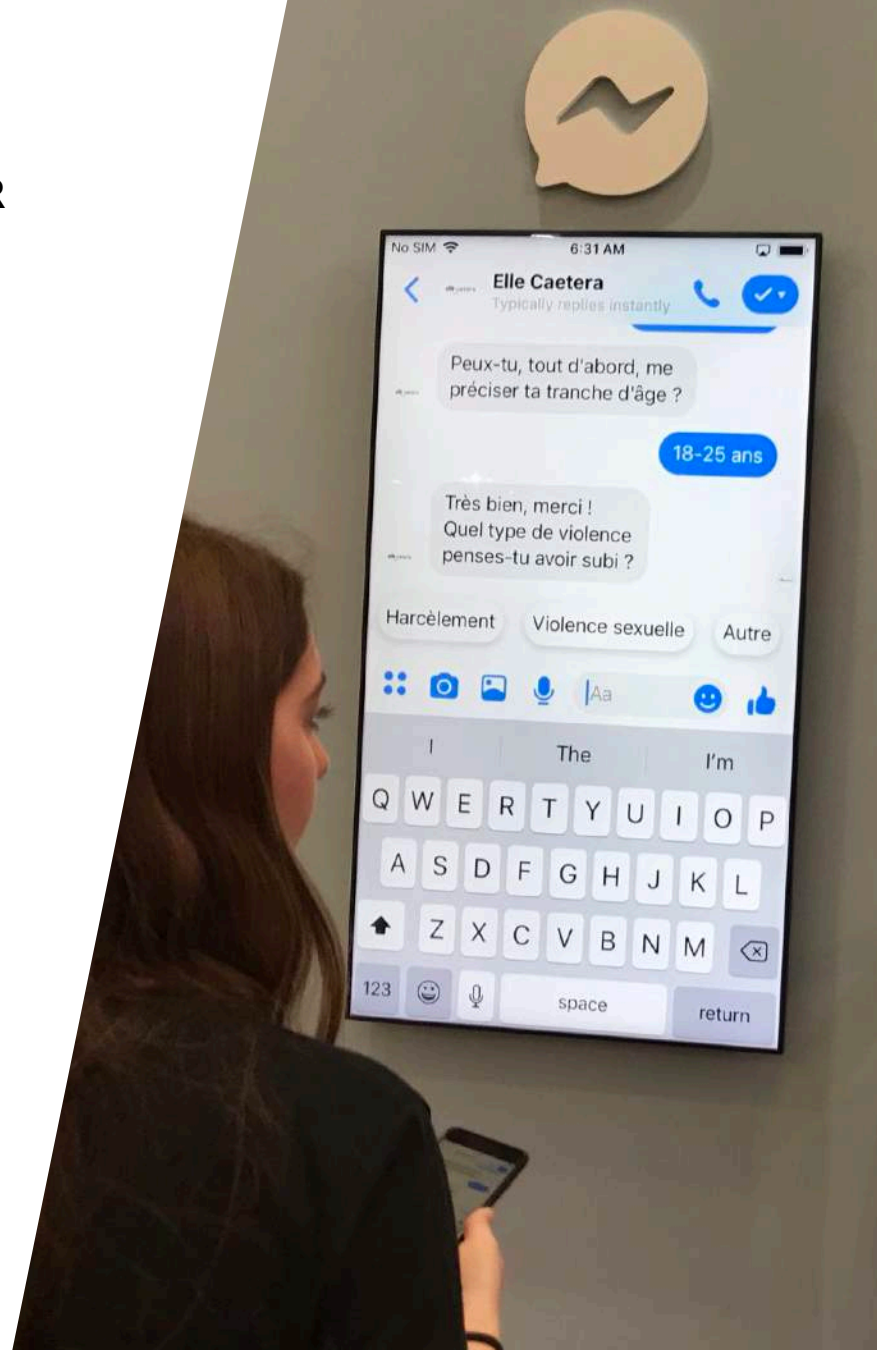
elle cætera
...

WHAT ?

The association Elle Caetera worked in collaboration with Facebook to set up a bot able to assist victims. The goal is to manage to provide rapid, effective and easy access for young women who are victims of violence. **The victim gives information, for example, its age range or the type of aggression it has suffered.** This dialogue is supposed to allow **the chatbot to identify the offense committed, and to direct the victim to an appropriate support structure.**

WHAT IS THE POINT?

It targets women between the ages of 15 and 25 because they find that women are not very receptive to traditional communication methods and are particularly afraid of judgment. **This chatbot is thus intended to help them to pass the milestone of the first speech.** For the moment, only the Net surfers living in Île-de-France can benefit from it, but Elle Caetera has for ambition to extend the availability of its chatbot to all France.



4

CARE

NEW TECHNOLOGY COULD CHANGE THE GAME

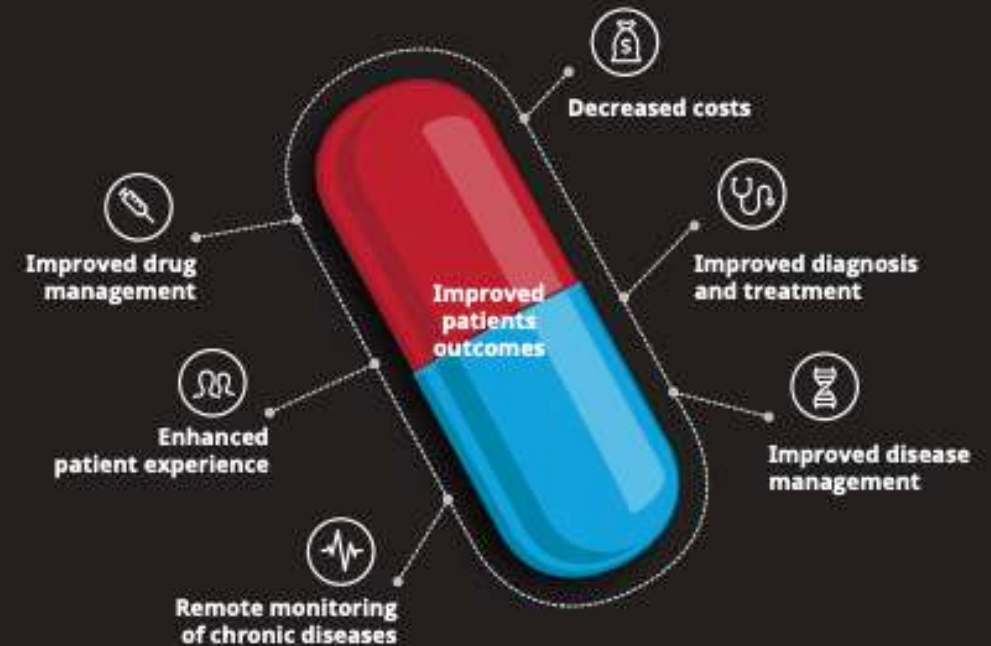
Health care industry could be transformed, streamlined and improve thanks to new technologies. They can assist, perform tasks that usually demands human intelligence and actually free practitioners to focus on high-value and more important demands.

As doctors and hospitals are crowded, countryside a doctor no man's land, new technologies could really help in improving access and healthcare journey for both practitioners and patients.

It will bring more accuracy and a better and earlier detection of diseases leading smaller and less expensive care than if the state of the disease was aggravated by a later diagnosis.

AI typically can be used as a first health coach and step to the patient, **lightening the load of doctors and saving patients time and money.** It will also help to prioritize patients' need and be more effective. **Robotics can improve drug compounding, sterilization, elderly assistance, etc.**

IoMT*, connects the entire ecosystem of patients, clinicians, data, processes, sensors and devices to **enable a better patient journey.** We see more and more connected devices capable of **collecting health data transformed into intelligent and measurable information.** It plays an important role in improving diagnosis accuracy and speed, to connect doctors and patients even remotely, to order and access to health care, advice and drugs, medication management and preventing care.



Source : Global health care outlook, shaping the future, Deloitte, 2019 *IoMT : Internet of Medical Things

GETTING OLDER AS WELL AS LIVING LONGER

The population is globally getting older, living longer and growing in number. **By 2050 the world population is projected to be 3.6 time larger than it was in 1950.** There is also a great **prevalence for chronic diseases**. If we also see a surge in innovation in the health sector, those exponential advances are still costly.

New technologies also change the needs and expectation of patients, as well as answering present issues such as access to healthcare, qualitative diagnostics, faster treatment, etc.



A worldwide historical rise of people over 60



22% of the world population will be 60 years old or over by 2050

Source : The aging population : Number and statistics, Silvereco.org



« We see age like a disease. And like all diseases it can be reversed. To achieve this goal, we need to assemble multidisciplinary teams composed with physicians and tech engineers. »

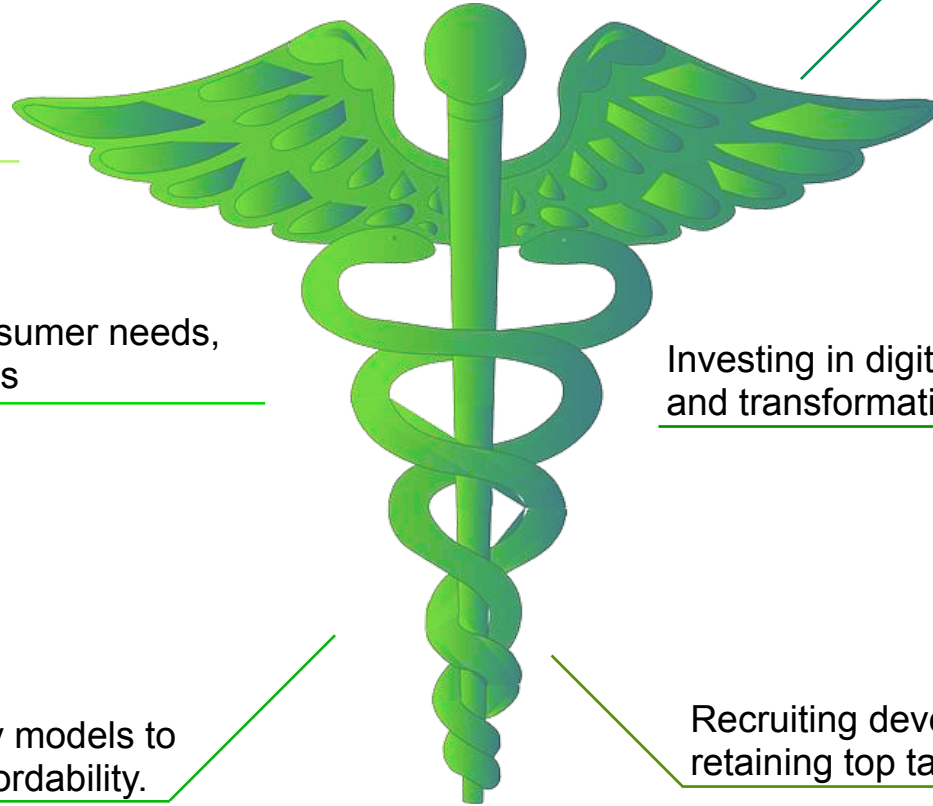
Dr SHAI EFRATI
MANAGING DIRECTOR
SAGOL CENTER FOR HYPERBARIC MEDICINE

HEALTH CARE STAKES

Creating financial sustainability in an uncertain health economy

Adapting to changing consumer needs, demands and expectations

Using new care delivery models to improve access and affordability.



Maintaining regulatory compliance and security

Investing in digital innovation and transformation

Recruiting developing and retaining top talent

Source : Global health care outlook, shaping the future, Deloitte, 2019

TECHNOLOGY ANSWERS

Clinicians use technology to more accurately diagnose and treat illness and deliver care

The correct individuals do the correct work

Appropriate treatment at the right time, right place and right patient

All care delivery stakeholders effectively and efficiently use data.

New, cost-effective delivery models bring health care to places and people that don't have it

Patients are informed and actively involved in their treatment plans.



Source : Global health care outlook, shaping the future, Deloitte, 2019



AXA AND DIGITAL: A MATTER OF PROXIMITY



Fireside Conversation Thomas Buberl, CEO AXA

For **Thomas Buberl, CEO of Axa**, being able to get close enough to customers has always been difficult for insurance sector but it is imperative. *“Health and Life insurances are very different, you die only once, but you get sick many times. The services you’ll need must fit with your reality.”*

*“Digital is a mean to an end, because if you want to be closer to customers you need touch points. So **digital is not about how you turn paper into screen, but how you redefine the relationship with customers.**”* Thomas Buberl explains how Axa invested nearly 1 billion euros in a startup incubator specifically designed to develop the necessary digital tools.

According to the CEO, the next step for health insurances would be to be able to address **social inclusion and climate in addition to health.** *“There is so much misery and self-inflicted misery. We want to become an orchestrator of services that help people to get a better life.”*



AXA AND DIGITAL: A MATTER OF PROXIMITY



VIVATECH CONFERENCE

Reimagining Medicine: The Promise of AI Vas Narasimhan, CEO Novartis

As a physician in North America, Vas Narasimhan wants to believe in a **fully digital and data driven medicine**. And as the CEO of Novartis he can now work to achieve this goal and to “**redefine the way we search and find new drugs**.”

- “One of the greatest achievements of humankind is how we managed to globally increase the longevity and the quality of life all around the world included the poorest places.”
- “Our body is composed of billions of cells which are composed of millions of molecules. On the top of that, we only understand a fraction of our genome or what it does. To create news drugs, we are probably facing the most extreme complexity.”
- For Vas Narasimhan the **next frontier of medicine will be marked when “100% of our knowledge will be digitalized, allowing unstructured Machine Learning to optimize and accelerate decision-making.”** The next big step would be to centralize and use all the medical knowledge around the world, including data from competitors.

PRINTING PILLS FOR PERSONALIZED MEDICINE



Sanofi Montpellier R&D exhibited a research phase project of **3D printing pills**. This technology could help doctors when it comes to **personalize dosing**, especially for cancer, pediatrics or rare diseases.

Thanks to the extrusion process, Sanofi is able to transform powder of drugs with active principle in a **filament adapted for 3D printing machines** without any chemical transformation.

Each pill can be rapidly designed with the right dosing for exemple 10mg. No need to balance treatments or cut pills as today.

TAKE CARE OF YOUR CELLS



WHAT ?

Alvéole's ambition is to **accelerate cell biology research by providing researchers with tools to create closer to real-life cellular in vitro environment**. Its solution: a bioengineering platform to create biomimetic cell environments in labs called Primo. **Primo enables researchers to create tailored environment for more accurate study.**

WHAT IS THE POINT?

The point is to **accelerate the research, have more reliable result, put an end to animal testing.**

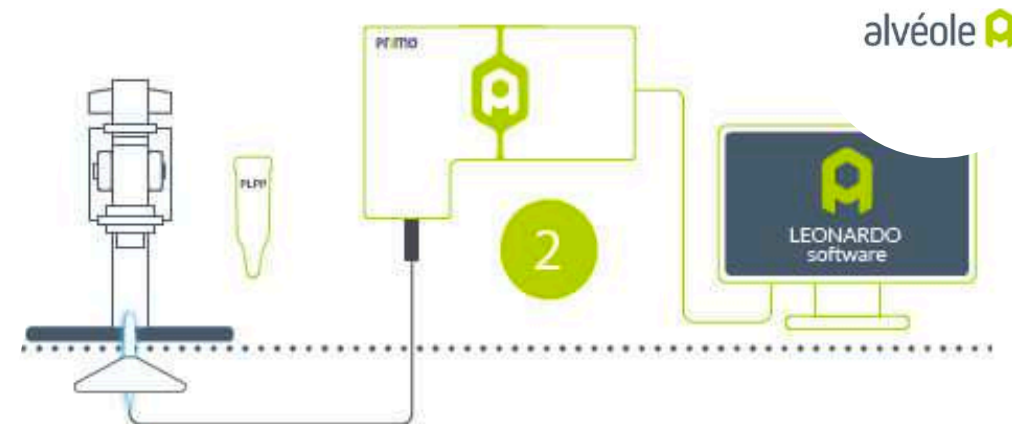
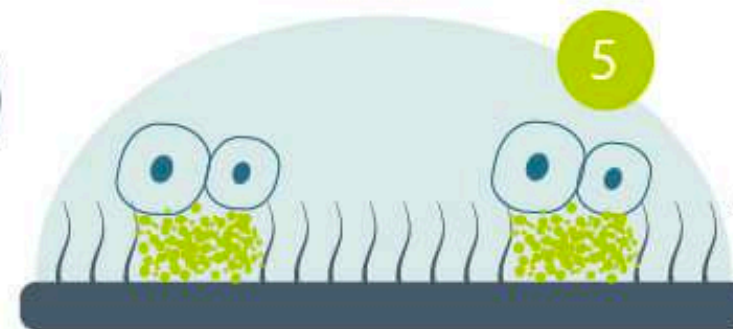


IMAGE LOADING
IN PRIMO SYSTEM



ITERATION

CELL ADHESION



ASSISTING RADIOLOGISTS



WHAT ?

The start up designed a platform to assist radiologists. The Deep Learning technology **enables the platform to detect abnormalities like in 0.2 seconds for osseous defects.**

WHAT IS THE POINT?

The point is to **detect abnormalities faster and in a more accurate way reducing errors** and being able to spot the smallest signal of an issue to treat it sooner than later. With caring sooner for something it will also cost less to the patient to treat something small that an aggravated issue. This assistance is particularly useful **in emergency situations** when radiologists don't have a lot of time for examining patient radio.

AZmed recently raised 1 million euros for its development.



MONITORING VITAL SIGNS THROUGH NATURAL SKIN MOTIONS



Neteera

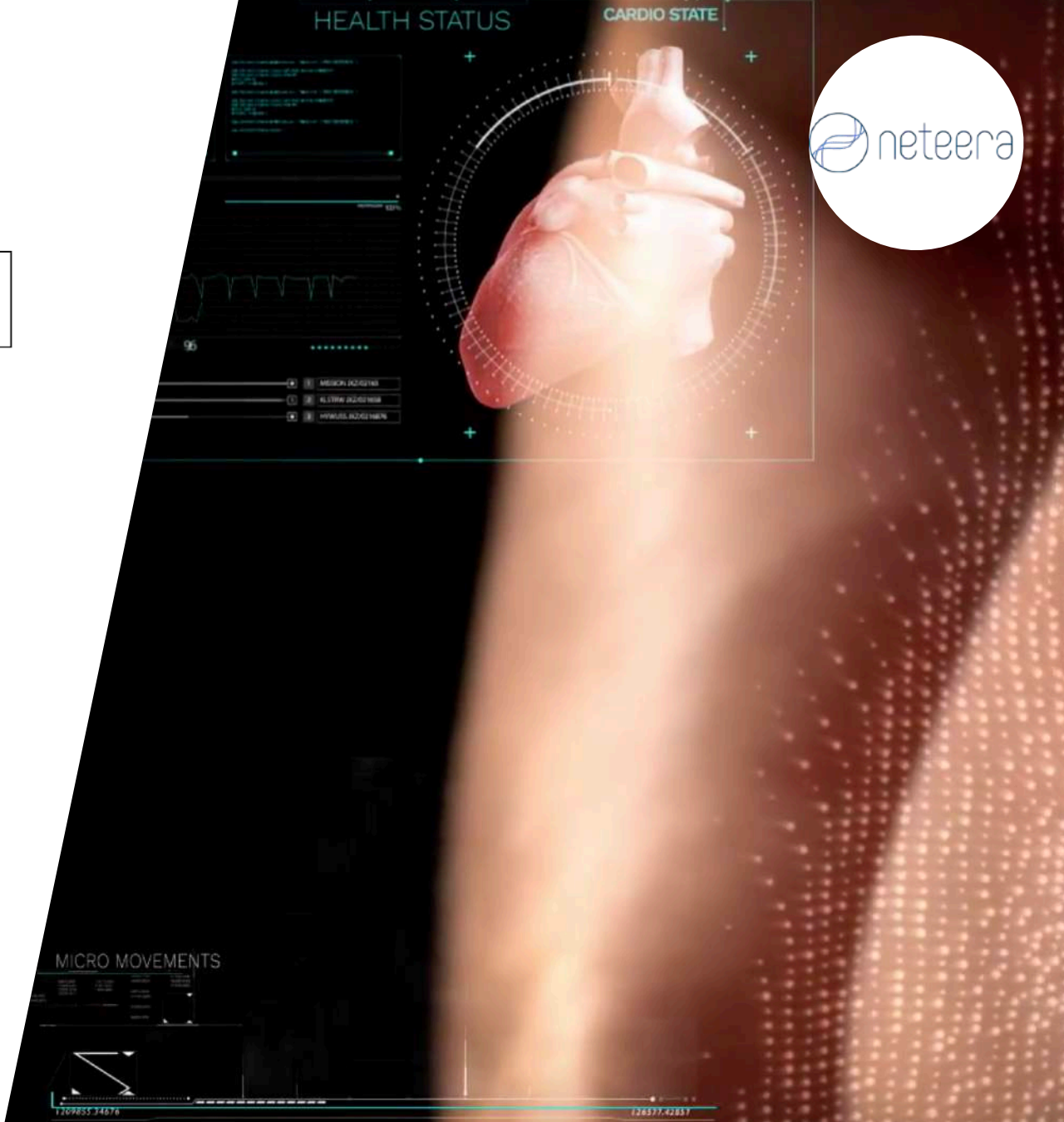


WHAT ?

Neteera is capable of monitoring vital signs through natural skin motions. In other words, it is a contact free sensor. Its application is wide but particularly useful when it comes to healthcare monitoring. Indeed, the micro radar is placed in a chip that will detect motions through clothing or furniture. **It monitors, heart rate, respiration amplitudes, etc.** Fed with Deep learning algorithms the chip can distinguish between body motion and external movement.

WHAT IS THE POINT?

The point is to improve the quality of vitals monitoring as well as having this monitoring available anywhere : Cars, hospital, your own home, baby's bed or stroller, anywhere you see fit. **The radar will detect any abnormalities and warn you to enable a faster detection of health issues and faster response.** The chip could be useful for private as well as public applications.



IMPROVING PATIENT JOURNEY



Advocor

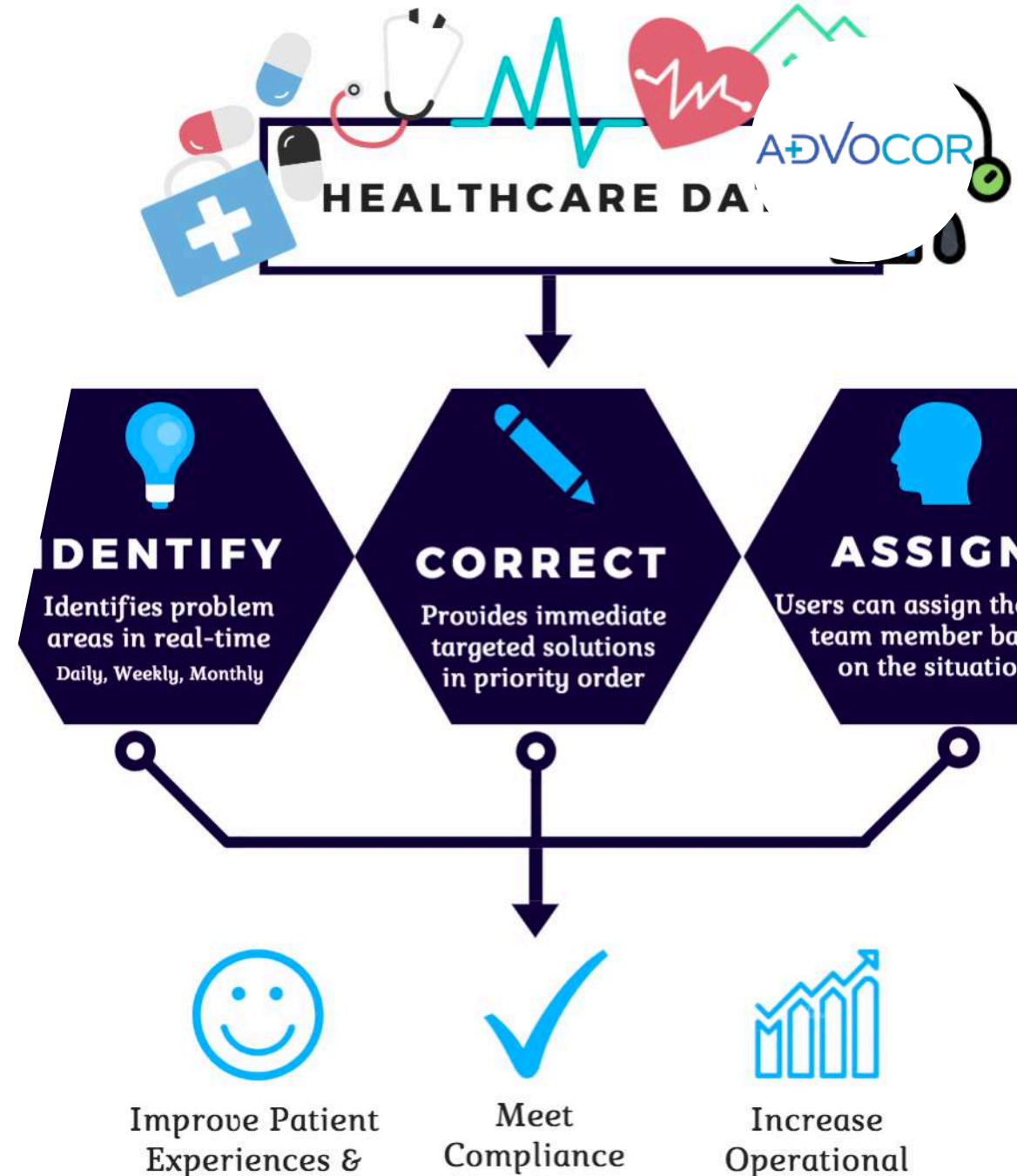


WHAT ?

Advocor is an augmented intelligent platform that manages the patient journey and assist doctors and medical teams in their work. In other words, **it boosts the medical team cognitive capabilities by gathering and giving access in seconds to all the data of all the patients.**

WHAT IS THE POINT?

The point is to **improve the quality of the patient experience and journey.** Indeed, by being able to access all the detailed knowledge of the patient's **doctors can prioritize better what they need to do and who they need to see** hence providing better healthcare, more effectively and improving the patient's experience.



HUMAN DIGITAL TWIN FOR THE SAFEST HEALTHCARE

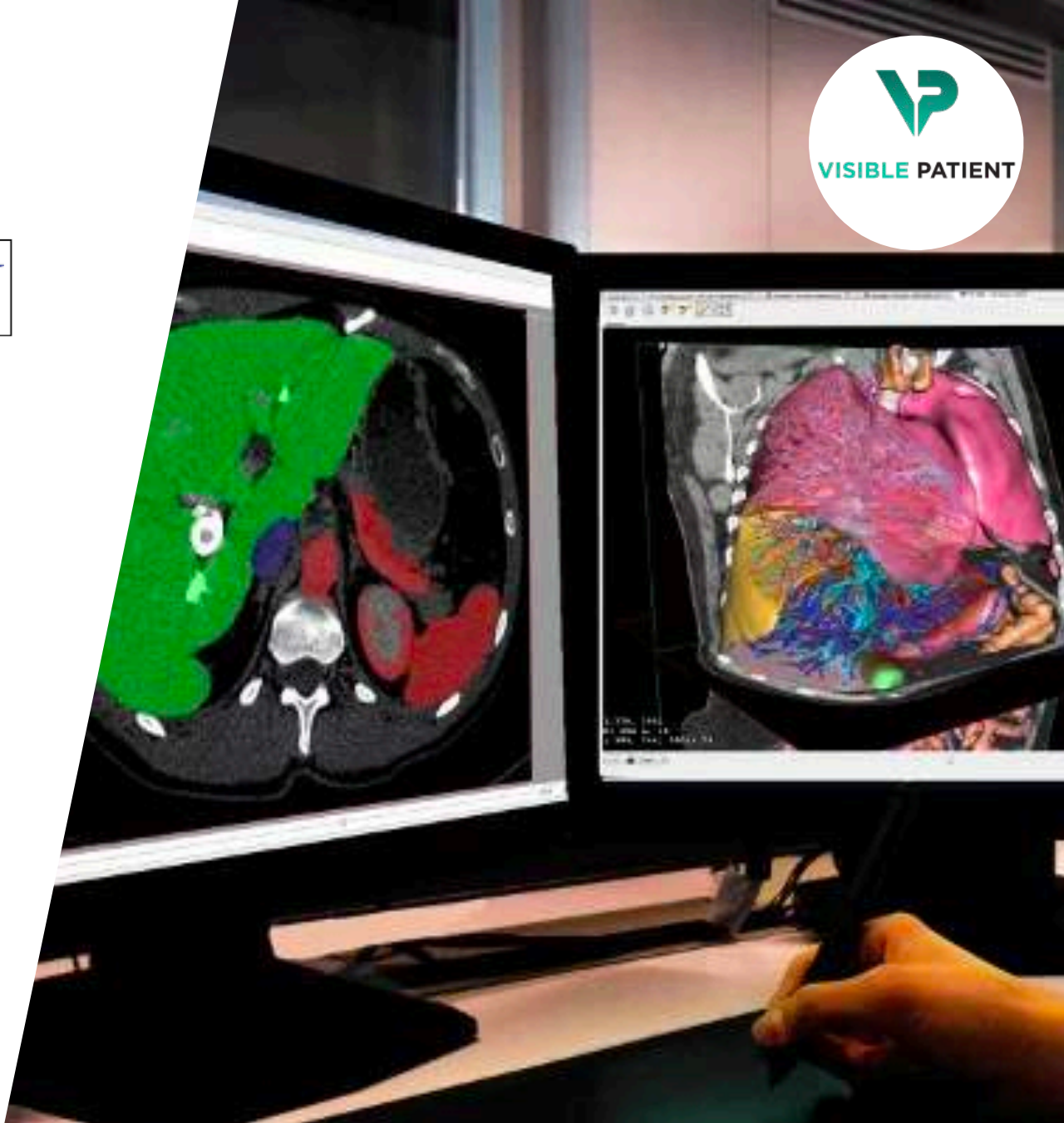


WHAT ?

Visible patient has developed a technology that enables the full digitalization of the human body, as a « **patient digital twin** ». The solution assists in guided surgical acts can create «3D anatomy cards » of each patient that are interactive.

WHAT IS THE POINT?

The point is to assist surgeons and doctors providing them with tools that can help them plan in a safe and detailed way their action and treatment for the most qualitative care.



MAKING MEDICAL REPORT PATIENT FRIENDLY



Medicus



WHAT ?

Medicus is an AI platform which automates interpretation and explanation of the biological test report and gives medical advice and solutions tailored to each situation and coaching for a healthier lifestyle. It is fed by AI able to analyze the results via a picture of the report and transliterate it in a comprehensive and clear explanation for the patient.

WHAT IS THE POINT?

The point is for patients to have access to knowledge about **their health report that is often obscure**, without having to go back to the doctor, **which reduces the private and/or public health costs**. Also it acts like a coach reducing future health issues. For doctors, it could lighten their load of sometimes small consultations and allow them to focus on more complicated cases.



MULTISENSOR MONITORING FOR TAILORED DIAGNOSIS



Alavita health

LAB

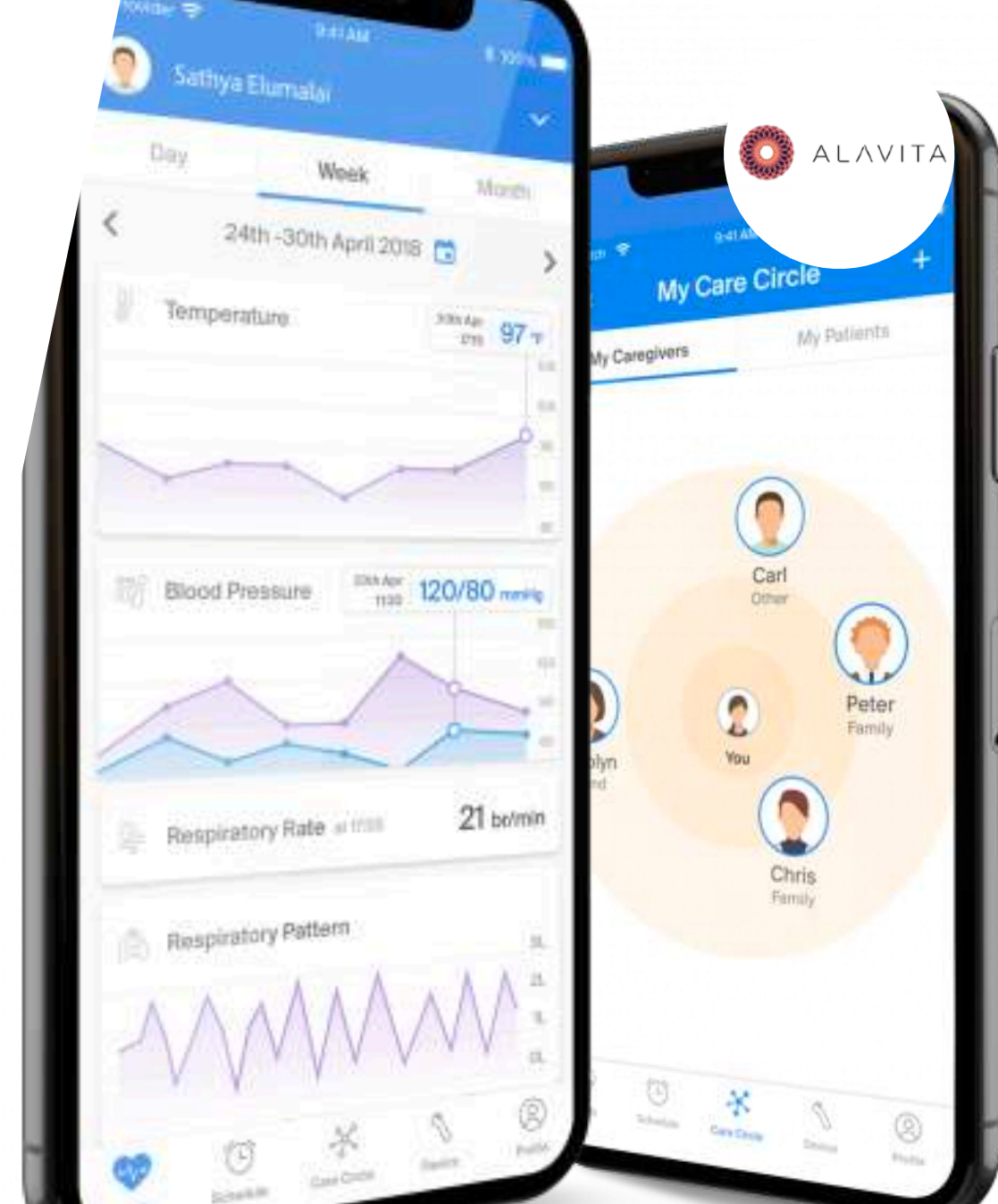


WHAT ?

The goal of Alavita Health is to empower patients with a technology based in multisensor diagnostics and monitoring. No two patients are the same and no one is in the same environment. : **The solution offers a tailored diagnosis with tailored solutions.** The Mouth Lab captures vital data under 60 seconds and aggregates them in Ditome, a cloud-based technology that analyzes and provides insights. **It also connects with the doctor and /or care giver if ever the results showed need for professional intervention.**

WHAT IS THE POINT?

The point is to **increase the accuracy and speed of the diagnosis and treatment as well as being able to take immediate action** on your behavior and change your health status.



SIMPLIFIED DRUG HOME DELIVERY



Yodawy

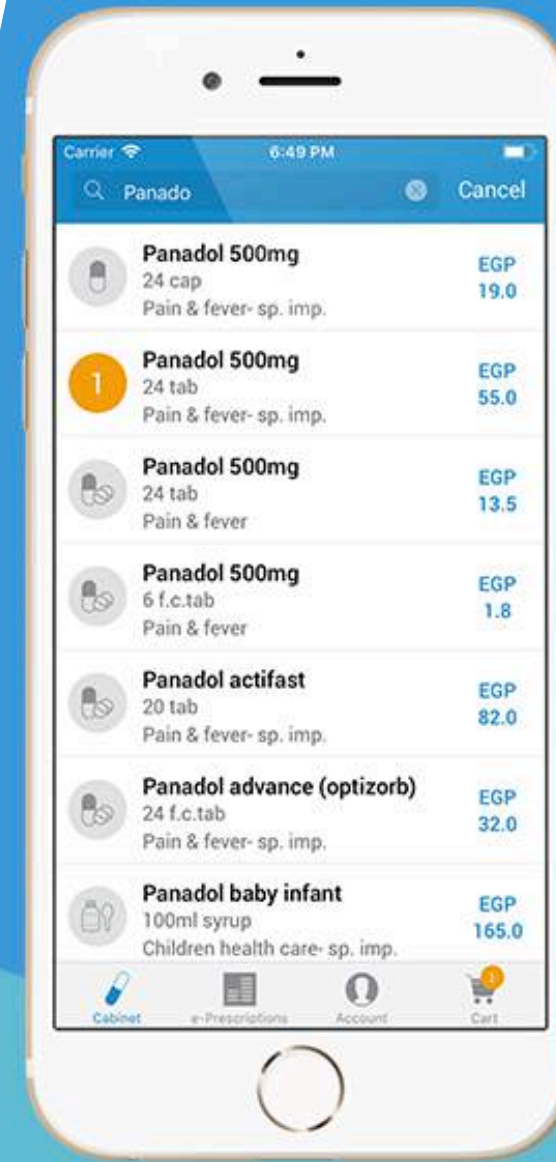


WHAT ?

Yodawy created an App for pharmacies to handle order and delivery just by uploading a picture. **Order via the App in an easy and fast way and have the drugs delivered to your home.** The orders are connected to your insurance making it easy to get your related reimbursement.

WHAT IS THE POINT?

For customers, it is an easy way to get their medicine-saving time and accessing drugs even when you are far away and might not be feeling good enough to go to the pharmacy. For pharmacies is to broaden their reach, for insurers it simplifies the approval process.



Yodawy

EASING ACCESS TO HEALTHCARE FOR PATIENTS WITH DIABETES AND HYPERTENSION



Baobab Circle

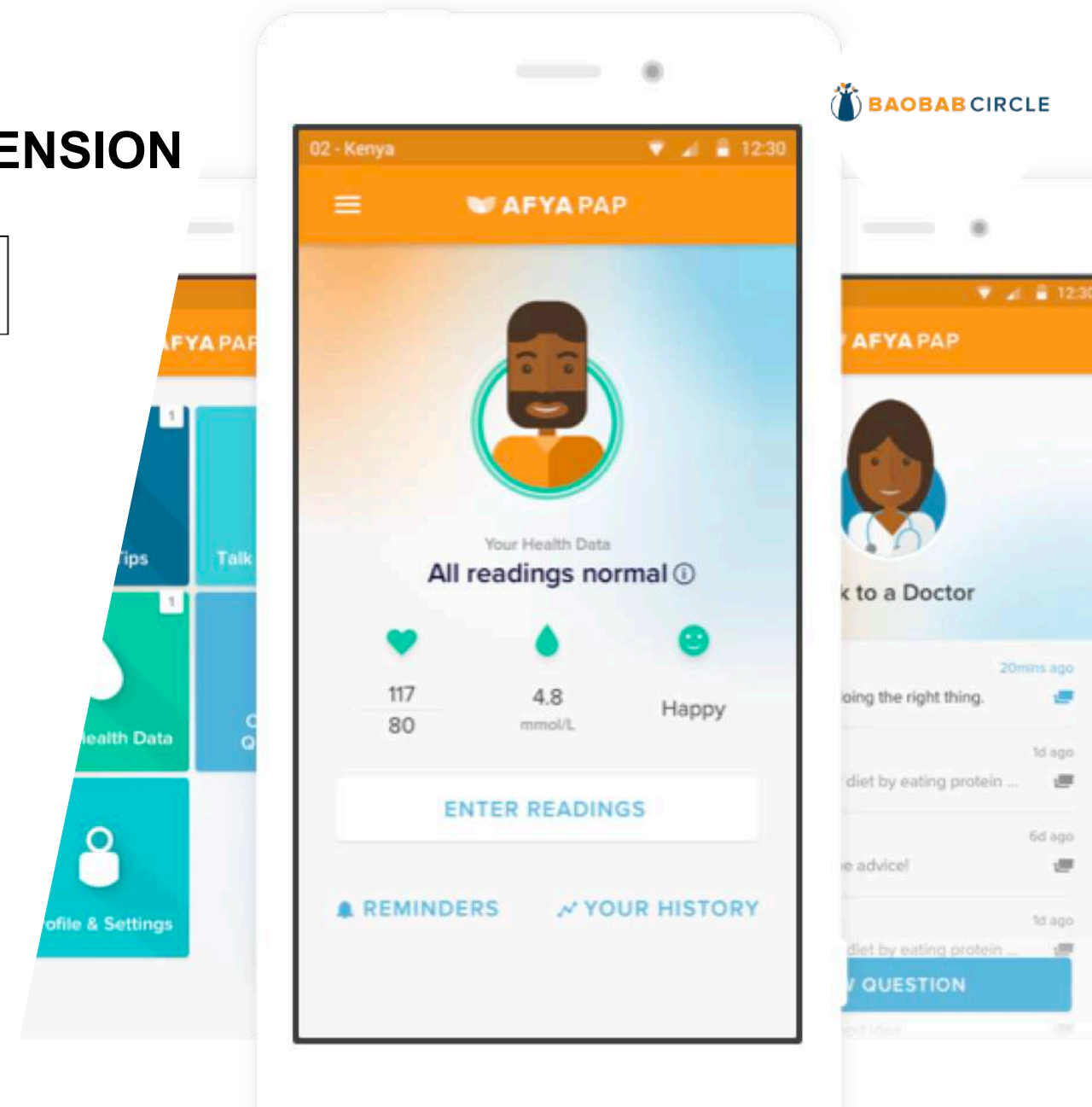


WHAT ?

Baobab Circle provides an App to help patients suffering from Diabetes and hypertension to **manage their health anywhere any time**. It delivers personalized education and coaching thanks to AI.

WHAT IS THE POINT?

The idea is to be able to reduce costs of going to the doctors by having the online coach for most of the issues than can be managed by the patient provided a little guidance. **The AI enables personalization which makes it custom advice and coaching.** Also the App can connect the patient with real life doctors when the AI cannot cop and when **remote council is possible**, hence **easing the acmes to healthcare**.



ROBOT FOR COMPLEX SURGERY



Da Vinci surgical system

LAB

Robot Parc

WHAT ?

The Da Vinci Surgical System is a surgical platform designed to enable **complex surgery using a minimally invasive approach**. With the integration of multi-faceted vision technologies, energy systems, stapling and instruments this **robot is flexible and can realize a large variety of surgery**.

WHAT IS THE POINT?

This last generation of Da Vinci system aims at **reducing variability in surgery and helping deliver better care**. Thanks to vision systems it's possible to realize surgery from another place or to teach while operating.

INTUITIVE



AN EXOSKELETON TO WALK AGAIN



TWIIICE



TWIIICE

WHAT ?

TWIIICE is a lower limb exoskeleton **that enables paraplegic people to stand up and walk again**. The exoskeleton is very light and can be honored by the walker from a watch.

WHAT IS THE POINT?

The exoskeleton is entirely adjustable and has, for now, a battery life of 3 hours. It's light weight of 16kg is easy to wear. **This solution could bring liberty and autonomy for people who need a high health surveillance.**



RESCUER DRONE



HELPER
Le drone sauveteur

WHAT ?

The HELPER is a drone #MadeInLandes destined to help with lifesaving at sea. **This drone is certified by the DGAC and allows the lifeguards to drop a self-inflating buoy in close proximity to the victim in danger.** The navigation information (GPS, compass, altitude. . .) helps to identify the exact location and the type of difficulty of the victim to help lifeguards, helicopters, jet skis and life boats

WHAT IS THE POINT?

The drone HELPER with its high quality video offers an excellent recognition and visual of the victim and their surroundings. **With its capacity to cover up to 2 kms, the drone will become a valuable asset for the lifeguards at the coast.** The drone is equipped with a first aid kit containing a buoy able to communicate with authorities. **It already has saved lives.**



HEART CONTROL WITH FACE RECOGNITION



FaceHeart.Inc



WHAT ?

This solution captures and **recognizes faces** and computes heart rate on this basis. Combined with Artificial Intelligence and computer vision technology, FaceHeart Inc. propose "**Face A-Ma Smart Healthcare System**", which monitors vital sign in a non-contact way through a camera. In addition to the heartbeat, it can monitor **HRV and blood pressure**, and the system can effectively take care remotely of patients or family. Alerts are sent in case of emergency.

WHAT IS THE POINT?

The growth of aging population will be a long-term phenomenon. This solution enables hospitals and doctors to use real-time remote monitoring and release medical stuff in hospital. **Daily reports** can also be recorded for doctors. It contributes to declutter hospitals and medical places.



3D PROTHESIS IN 48H



M3D

WHAT ?

M3D provides 3D scan on iPads and **personalized 3D printing prosthesis**. Following doctor's prescription, the scan can be realized in drugstores on iPads by an *orthesist*. As soon as the scan is made, it is automatically send to M3D database, the prosthesis can printed and delivered **within 48H**.

WHAT IS THE POINT?

When it comes to knee prosthesis, patients have only one alternative : standard and painful prosthesis or expensive tailor-made item. With the 3D printing, it is possible to create a tailor-made prosthesis delivered between 24h and 48h after the scan.



FACE RECOGNITION TO DETECT 10 PAIN LEVELS



HOOBOX

LAB

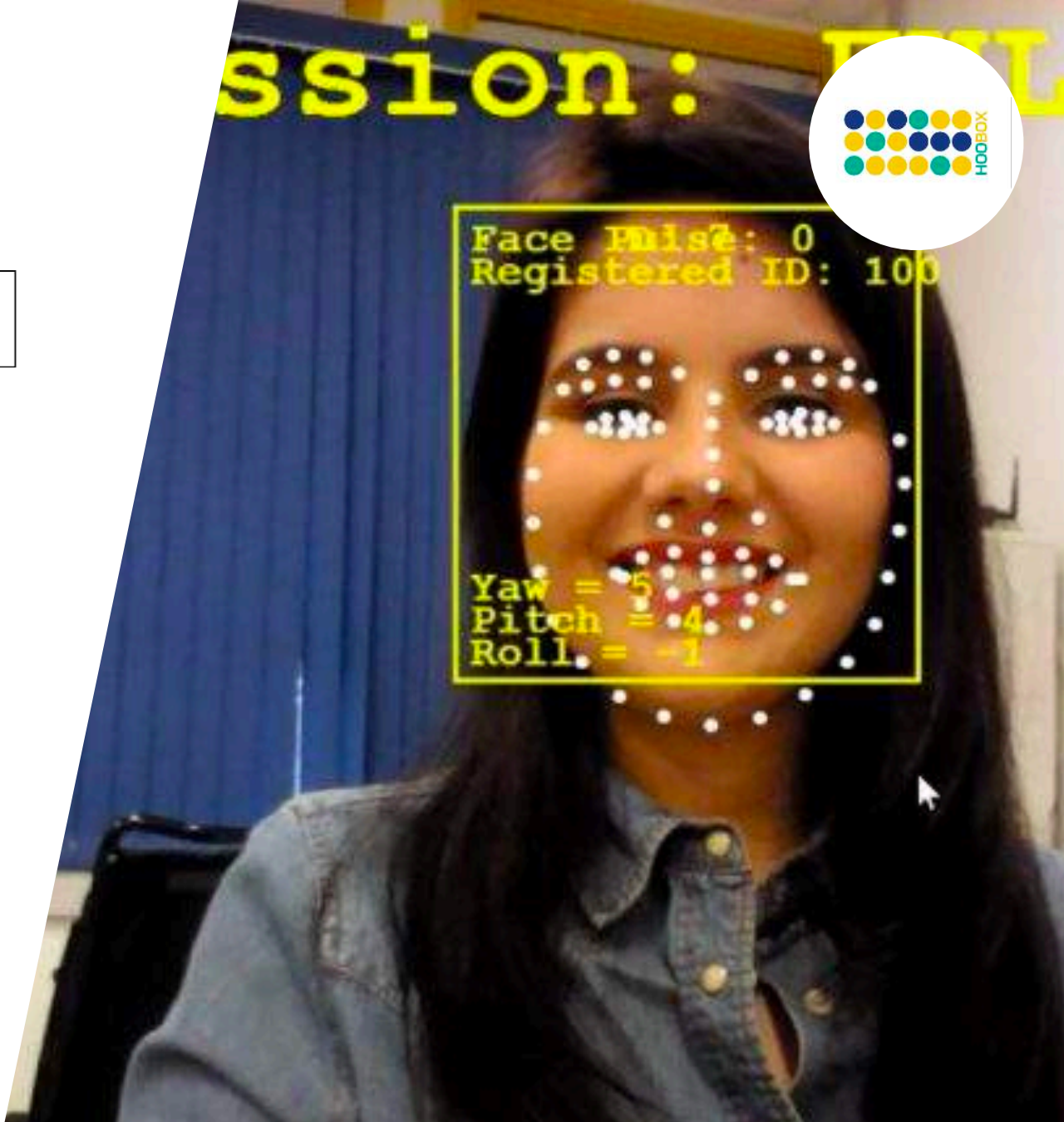


WHAT ?

A precise facial recognition software designed specifically for capturing human behaviors. Running in the background of any application, **HOOBOX's technology can monitor people**, capturing spasms, agitation and sedation levels as well as **10 pain levels**. The start-up also came up with the Wheelie, **a wheel chair combined with the technology enabling command with only a few movement of the face**. Patient who lost partially or completely arm movement and hands can still be autonomous in the command of their wheel chair.

WHAT IS THE POINT?

There are numerous possible applications, but it was originally specifically design for healthcare, helping medical staff monitor patients on ICU beds.



Face Mismatch: 0
Registered ID: 100

Yaw = 5
Pitch = 4
Roll = -1

PREVENTING AND DETECTING ATRIAL FIBRILLATION AT YOUR FINGERTIP



SKYLABS

LAB



Sky Labs

WHAT ?

Skylab launched CART's . Its heart rate measurement accuracy is over 98% when compared with ECG. **Its accuracy is due to the use of a finger ring which is close to the fingertip**, and this is known to be the best for measuring heart rate. The proprietary arrhythmia detection algorithm detects atrial fibrillation and normal sinus rhythm very accurately. **The device charges in 2h for 48h autonomy. Boosted with deep** learning algorithms it detects atrial fibrillation more accurately and faster but also anywhere with our cumbersome devices.

WHAT IS THE POINT?

- Knows instantly if your **heart rhythm** is normal or if atrial fibrillation is detected through the cardio tracker(CART)
- checks your **fitness level** with clinical grade health data on a regular basis
- finds accurate **quality of sleep** during the night whenever you like
- measures your **stress level and mental health** via the ring
- **prevents heart failure** or any other heart-related illnesses through early detection.



5

MOBILITY & SMART CITY

4.1

MOBILITY

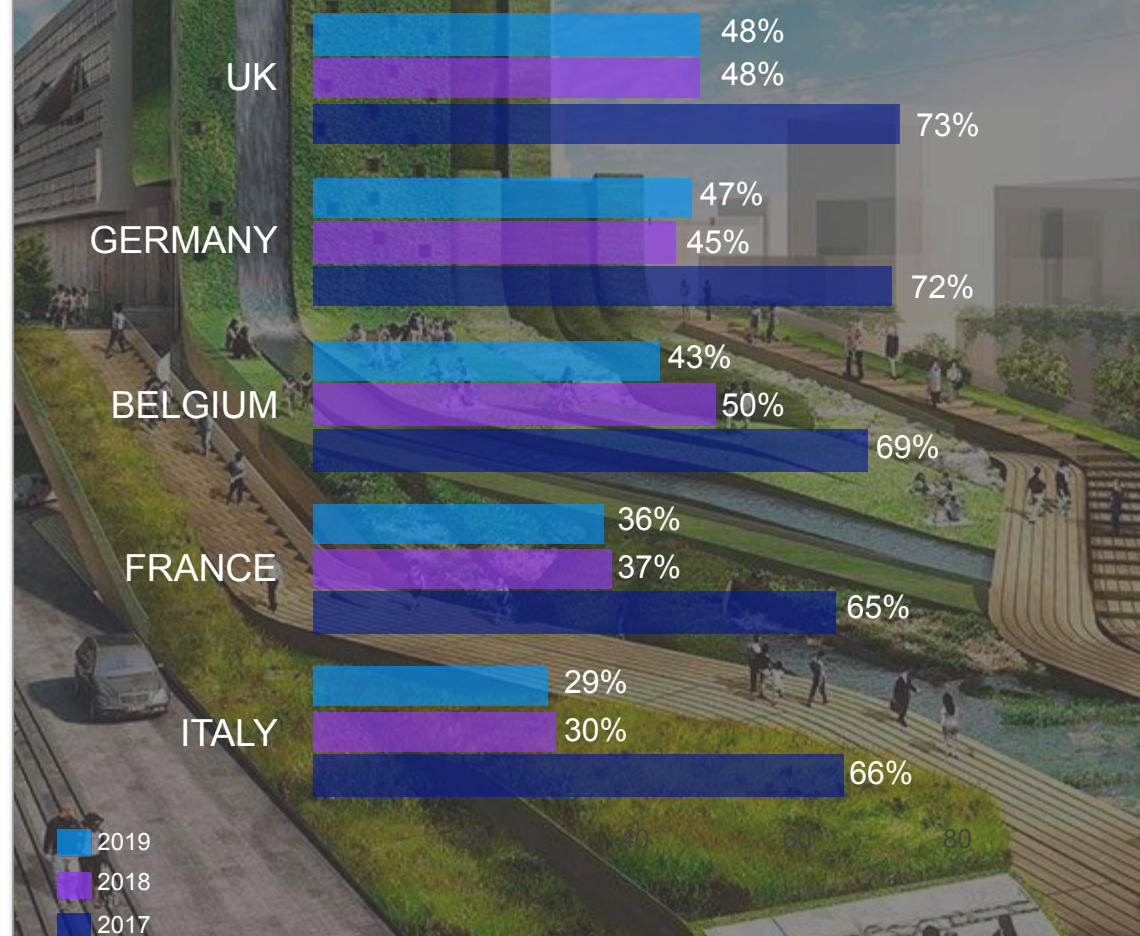
DATA SECURITY AND PEOPLE SAFETY ARE THE MAIN STAKES FOR THE FUTURE OF THE CITY AND MOBILITY

Consumers are very cautious when it comes to new technology. **Their main concern lies in the safety of the data they would have to share and how they would actually be used**, as well as the safety of the devices themselves. **Trust is a major stake since consumers and their data are the main key to unlock to smart city.** A Marsh & Milan study showed that 47% of **French people are still quite unwilling to share their data** with a provider to use a service in a more effective way and 23% of them would rather share it with no one.

Also, beyond trust, consumers have a hard time changing their habits. A study from Deloitte showed that in 2019 43% of French people use their car every day and this number will only decrease from 2 points in the next 3 years.

Younger generation though seems more open to new ways of moving around the city as well as sharing their data. The same study showed that 51% of the French consumers from the generation Y&Z are questioning the fact of owning a car VS 32% of the baby boomers. **The younger generation are also less scared to share their data showing that they really are the one to target to embrace and pioneer the new technology** while effort of reassurance should target older generations. Those results apply for most of Europe.

% of consumers who agree that autonomous vehicles will not be safe



Source: Mobility 2040 the quest for smart mobility, Marsh & McLennan Companies, 2018

Source: European Advanced vehicle technologies and multimodal transportation, Deloitte, 2019

SCARED MAYBE BUT NOT UNCONCERNED : FROM ECO-FRIENDLY OPTION TO SHARING THERE IS STILL SOME WAY TO GO.

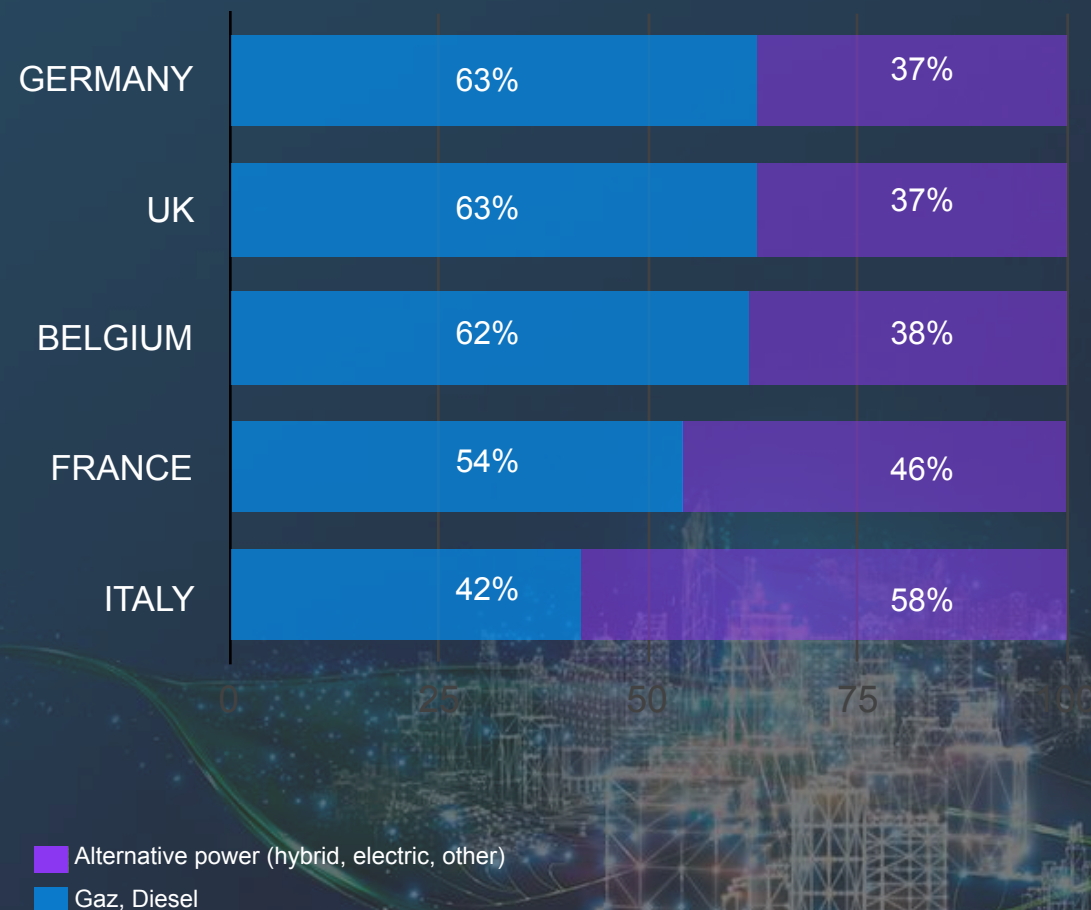
If consumers are skeptical and cautious, it does not mean that they are not concerned about the main problematic such as pollution, traffic, noise. **They also want to live in a better environment they are just waiting for actionable safe and practical solutions** that ease their journey, save them commute time and is safe.

If using different types of transportation, public ones or sharing is still not the norm (only 20% of the French consumers combine different means of transportation for 1 trip, Per the Marsh & McLennan study) **interest in alternative powertrain is growing. Consumers are looking for environmentally friendly option in transportation to reduce their impact.**

We could be led to believe that if mobility can be really convenient, easy to access and cost friendly consumer could be willing to rethink individual means of transportation often chosen for its freedom more than anything else.

But for now, electrical options will definitely see a boom in interest.

Interest in alternative powertrain technology : Consumers powertrain preferences for their next vehicles



Source: Mobility 2040 the quest for smart mobility, Marsh & McLennan Companies, 2018

OPTIMIZING YOUR URBAN JOURNEY



OpenCapacity

LAB

RATP
GROUP

WHAT ?

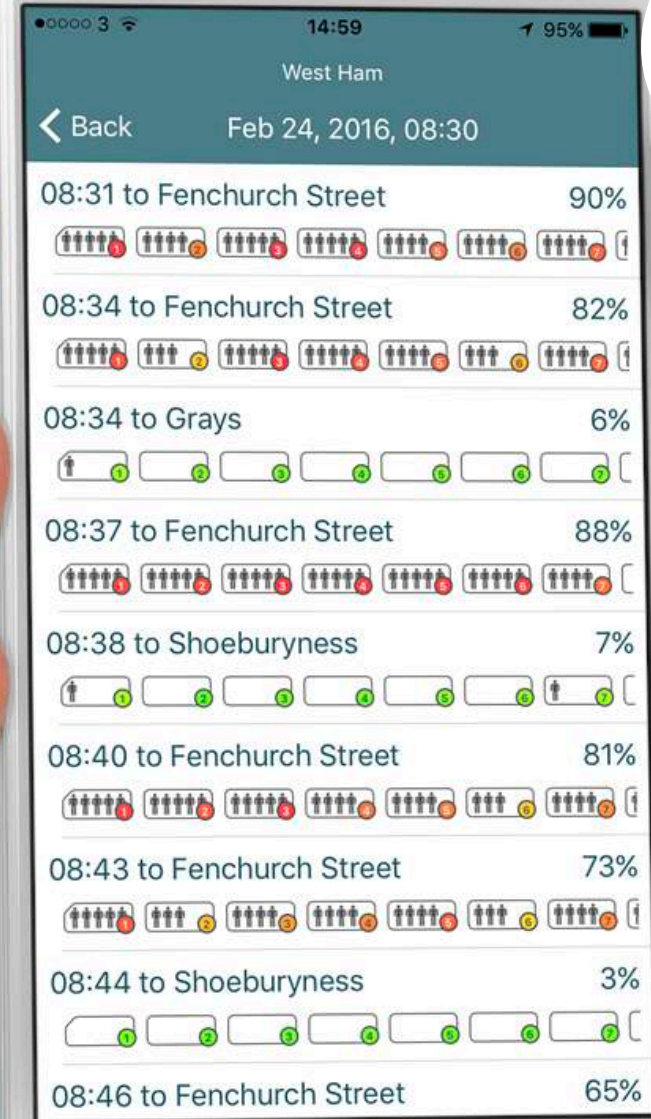
OpenCapacityOpen is a Start up which collect, analyzes, predicts and displays the occupancy, accessibility and performance of public transport. **With the help of cameras and machine learning software is capable of predicting the percentage of people alighting and get on the train.** To do so, the platform is fed not only with passenger data but also with external data such as weather, events to predict the flow.

WHAT IS THE POINT?

The goal is to better manage the passengers' flow global and for each train hence leading to improved customer service and satisfaction. The data displays real time occupancy for any public transport from the subway to buses accessible via an app. **Thus passengers can choose an optimized solution to travel.**



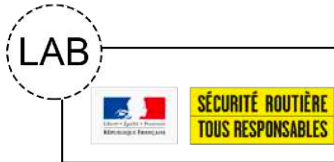
OpenCapacity



WHEN DATA SAVES LIVES



Liberty Rider

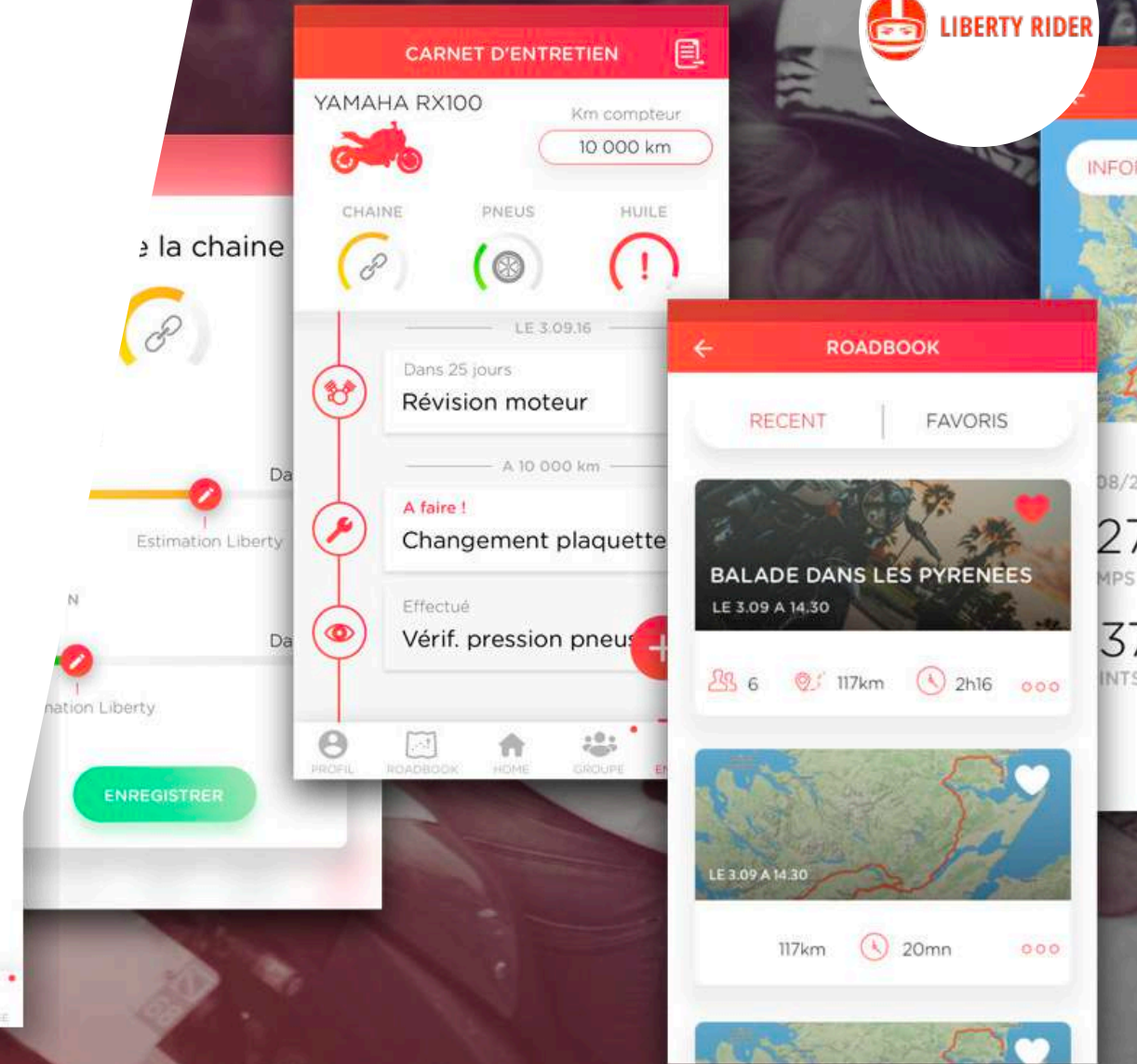


WHAT ?

Liberty rider is an app that uses primarily globalization and deep learning to detect motorbike accidents. Technically what it does is analyze where you are, the speed, the strength of the impact and the time of inactivity. It does make the difference between breaking evenly and stopping. **If an accident is detected a strong alarms ring and assistance is called** if the call is not answered. As well as its safety purpose, the app also guide you through the les dangerous road or with the less traffic, etc. It also has a maintenance feature.

WHAT IS THE POINT?

This application enables users to **get assistance** even when they are unable to ask for it. Thanks to its features on safe and less crowded itinerary it also helps **reduce the probability of an accident**. With more connexions developing in the cities those type of apps will get more and more accurate and beneficial.



PREDICTIVE MAINTENANCE FOR YOUR FLEET

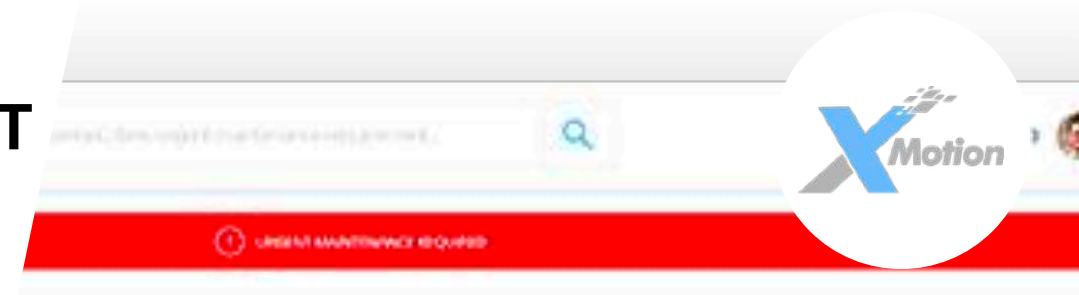


WHAT ?

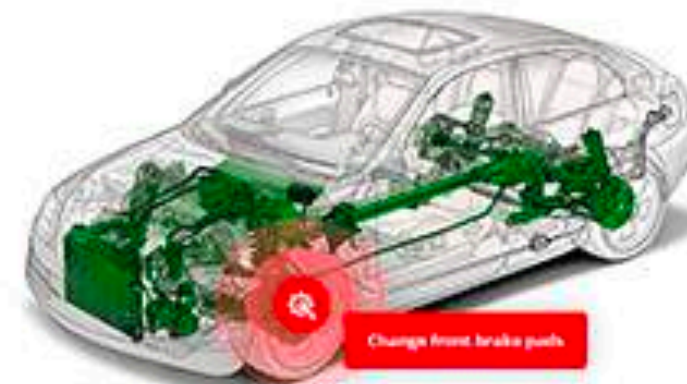
XMotion is a software that manages the maintenance of your vehicle fleet. Thanks to data analytics and AI your vehicles will be well tended. **The software connects to a sensor on the car to collect data and analyze and predict potential upcoming issues or need for revision.** It set ups automated reminders, monitors the global vehicle health, schedule appointments and manage the budget and cost.

WHAT IS THE POINT?

We can often be lost when it comes to car maintenance and even more so when we have a whole fleet. **We have to trust the garage without any true knowledge.** With Xmotion gain in knowledge but also know when to tend to your car to prevent major break down and save cost in car repair as well as time in checking the car and managing the maintenance schedule.



od 21 342 km
il 49 L
Fuel: 11.8 V
Fuel cost: 5.2 / 100 Km



Brake pads



Tires



REVOLUTIONIZE URBAN TRANSPORT FROM THE SKY



HOVERTAXI



WHAT ?

An innovative global concept to **address urban and peri-urban transport issues with new 100% French aeromobility** services, using a new type of electric aircraft.



WHAT'S THE POINT ?

Operational logistics and a unique concept: compact, fully modular and adaptable all-in-one stations / real-time flight monitoring / professional pilots... **The objective is to offer turnkey solutions that provides a real alternative to our current travel habits.**



ULTRA HIGH-SPEED RAILWAY



HYPER POLAND



HYPER
POLAND



WHAT ?

Hyper Poland is developing a disruptive upgrade for the railway industry : **fully autonomous, electric vehicles for goods and passengers that can travel at ultra-high speeds on specially designed infrastructure** using magnetic levitation and low pressure.



WHAT'S THE POINT ?

Ultra-fast, safe and on-demand mode of transportation that will revolutionize the way goods are transported. Subsequently, the company will also focus on developing innovative vacuum tube infrastructure, which will allow for increasing the cargo system speeds and finally introducing a passenger version.



AN INTELLIGENT PLATFORM TO BOOST FLEET MAINTENANCE AND DRIVE COLLABORATION BETWEEN MOBILITY STAKEHOLDER



3DRENS


WHAT ?

3drens is a mobility platform that boosts industries by providing them **useful data and information collected from vehicles**. They provide software that enables you to :


- Map a trajectory
- Geofence a perimeter of action
- Manage your fleet
- Generate speed report
- Monitor the driver



WHAT'S THE POINT ?

Thanks to 3drens, you not only **get information about the car but also about the driver and his pattern**, the application go beyond just fleet maintenance. It gives data about the users. **Rental businesses for instance can get information on many different tours or locals itinerary**. By crossing this data they can first better service their client by giving them **strategic information about the road** and the drive ahead but also **partner with other business or place strategic advertisements**.



A photograph showing two men unveiling a car on a stage. The man on the right, Usain Bolt, is wearing a dark polo shirt and jeans, and is pulling a black cloth off the car. The man on the left is wearing a blue suit. The car is yellow and black. The background is a stage with blue and purple lighting and a large blue screen.

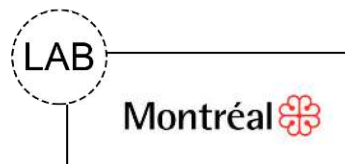
« I always want to be the best at what I do it is the same when I support Bolt. Together we step up to address several issues about urban mobility. And we will succeed in it. »

USAIN BOLT
ATHLETE
BOLT AMBASSADOR

IMPROVING QUALITY OF LIFE FOR CITIZEN



DIMONOFF



WHAT ?

Diminof is a **connected solution that optimize operational processes and improve the quality of life for every citizen**. It can indicate occupied space (parking or instance), monitor river level and send alert when abnormalities arise, distinguish sounds such as car accident, gunshot or explosion to communicate the location and the event. It can perceive air quality, recognize the presence of gaz.

WHAT IS THE POINT?

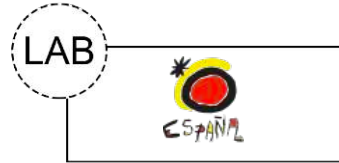
To create a **4D digital twin of the city**. A **live monitoring map, capable of detecting sounds and images** to keep citizens safe and fluidify their experience of the city thanks to connectivity.



MOVE SMARTER AND QUICKER WITH MEEP



MEEP



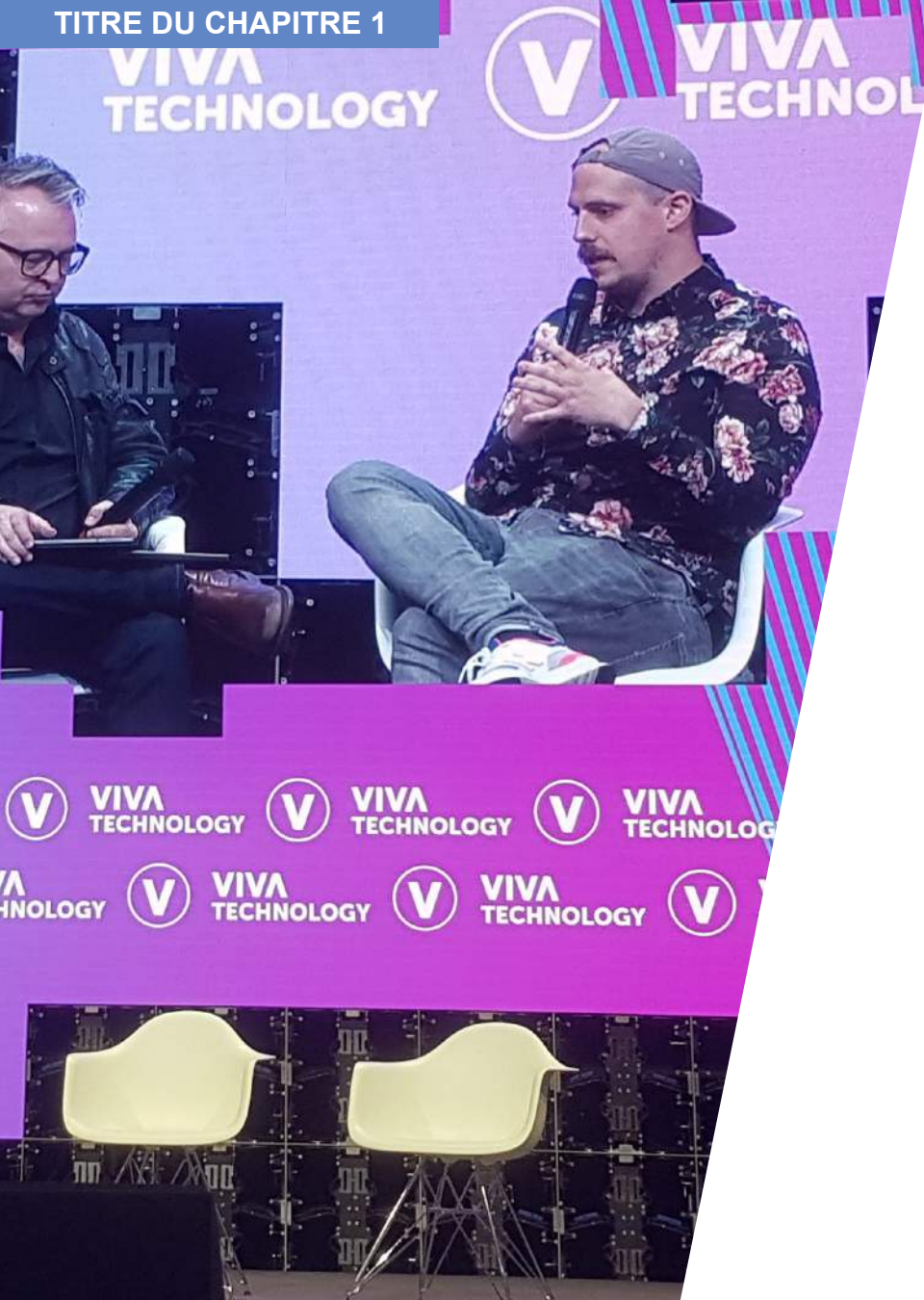
WHAT ?

Meep is an app that enables citizen to monitor and track all types of transportation. It **chooses the best option for its journey depending on the route, the congestion level, his timing and deadline**. All of this into a single platform. Users can search, reserve and pay for trips within 1 transaction.

WHAT IS THE POINT?

The users can save a lot of time by using only one app and tailor their journey and mode of transportation. The app can also lead users to change their mode of transportation to more sharing and more environmentally friendly options as they **will see they can actually save time rather than using their individual car**.





PATRICK NATHEN FROM LILIUM SHARE IS CRAZY PROMISE OF A PRIVATE ELECTRIC JET

Patrick Nathen
Co-Founder of Lilium

While people are looking to the US for the arrival of the first new forms of mobility, the solution could come from Europe! For his first appearance at VivaTech Patrick Nathen, co-founder of LILIUM, **talks about the crazy promise of his company and tells us more about the future.**

« We will be the new private jet. Except that we don't want to stay private" says Patrick Nathen, clarifying the **company's will to be open to the mass market by creating deals with the private and public sectors of many countries.**

LILIUM broke through a critical step by successfully flying off a prototype few days ago. Next step : **a first tour with a pilot. The service could be operational in 2025 according to Patrick Nathen.**

Electric flying jet will be able to host 1 pilot and 3 passengers for a trip of 300 km that it will be made in only 1 hour.

« We have two priorities concerning the development of this project : security and user experience," confide Patrick Nathen

PLATFORM TO POWER A MOBILITY REVOLUTION



SHARING OS

SHARINGOS
OPERATING SYSTEM

WHAT ?

The aim of sharingOS is to provide the best last mile experience. It is a plug and play software and hardware solution for mobility operators in the mobility sharing market. **It is a turnkey solution providing connectivity through a cloud server, the app and back-end solution** to power the software and finally the vehicles fleet. Users rent the vehicles, can interact with each other and the brand. **Thus boosting engagement and feedback for more data and personalization.**

WHAT IS THE POINT?

The point is to give an easy access to consumer to different type of mobility to improve fluidity and city experience. Also collecting data on users enable sharingOS to gain valuable insight on how to improve their offer and mobility overall, to come up with new ideas.



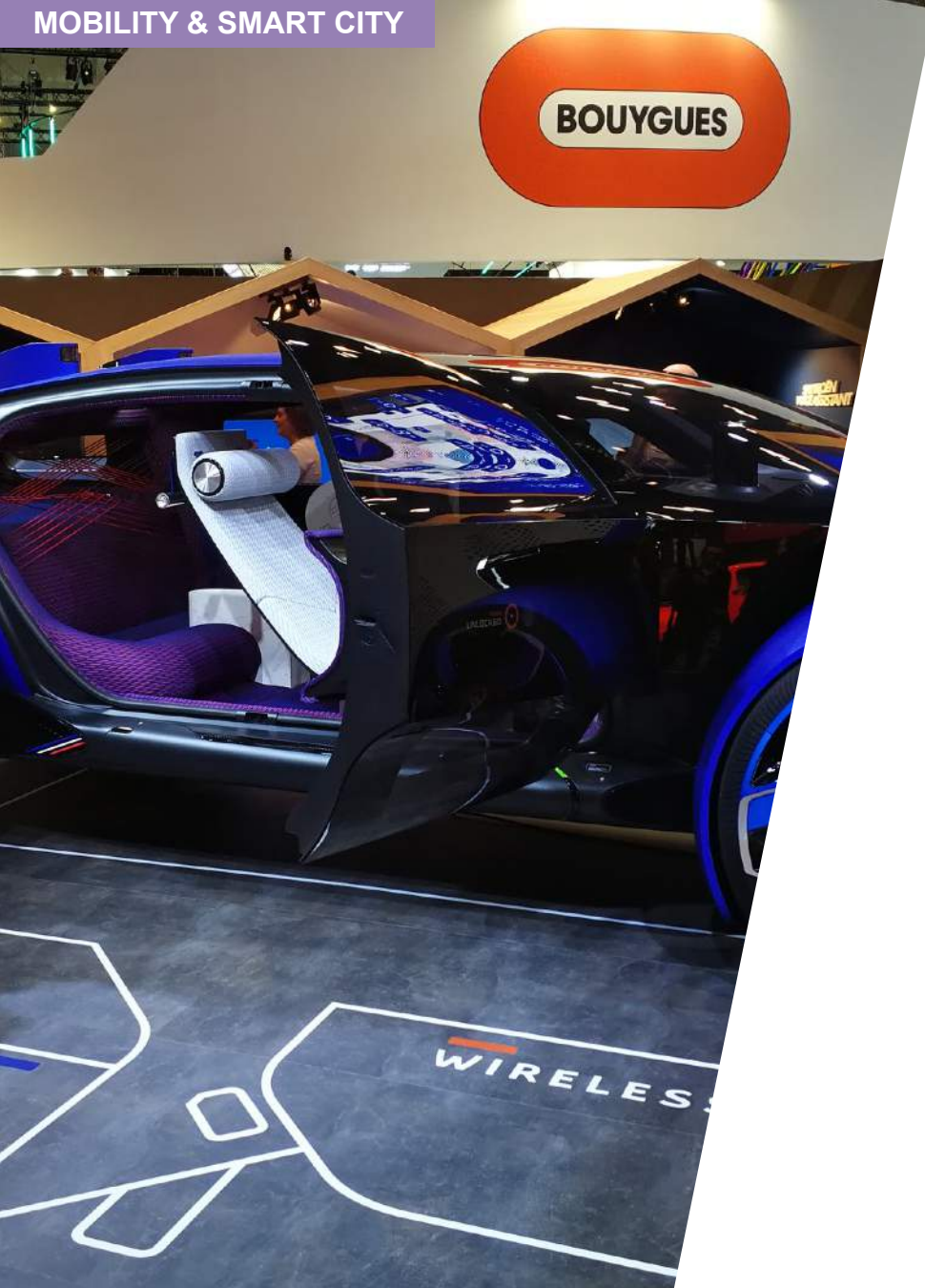
FLIGHT WITH VERTICAL TAKE-OFF LANDING



To comply with a future urban and suburban aerial mobility, ascendace designed a cutting-edge vertical take-off and landing aircraft. **Thanks to a hybrid propulsion system, the aircraft fit with existing infrastructure, produces very low noise.** No need to revolutionize the urban landscape to launch such a plane in the air.

In order to fly people as soon as possible, safety and performance have been controlled, the VTOL aircraft is certified to be market-ready by 2024. **This flying taxi for urban use is aimed at the tourism market and can take up to 3 passengers.** The goal of this project is to offer new mobility and the ability to travel at a greater distance with hybrid technology.





CITROËN CONCEPT CAR



For the 100th anniversary of Citroën, the Brand launches two new concept cars. **The first is the Ami One Concept, a 100% electric urban mobility solution, and the second was unveiled at Viva Technology : ultra-comfort and full electric.** Exceptional styling, it **symbolizes ultra-comfort and brings motorists a unique travelling experience** on board a 100% electric and autonomous object featuring artificial intelligence.

The aerodynamic car has blow-out proportions (3,31m wheelbase) and has an autonomy of 800 kilometers. This concept car is **equipped with a personal assistant integrated into the dashboard** that includes **autonomous driving technologies and advanced voice functions thanks to a sophisticated artificial intelligence.** With a power of 340 Kw, the vehicle is capable of reaching 100km / h in 5 seconds.

REVOLUTIONIZING PERSONAL TRANSPORTATION WITH FLYING CARS



AEROMOBIL

LAB

Discovery by



WHAT ?

AeroMobil introduces the most capable, flexible and **cost-efficient aerial vehicles designed for intra-urban** and inter-city travel for private use and shared transportation.

WHAT'S THE POINT ?



The company aims to make **personal transportation** vastly more efficient and environmentally friendly by helping to **overcome traffic jams** in large areas and by allowing significantly faster door-to-door travel for medium distances or in areas with limited road infrastructure.



SMART SOLUTION FOR MOBILITY PROVIDERS



➤ WHAT ?

Mov'InBlue offers smart solutions to turn your vehicles physical key into a **digital key**. It offers a **secure and scalable product**, and **quality after sales service**.

➤ WHAT'S THE POINT ?

This solution provides **car sharing and mobility services 100% digitalized**. The customer can feel safe with the assistance that Mov'InBlue offers and can **also benefit of self-service car rental and logistic services**.



FLYING VEHICLES IN URBAN TRANSPORT

RATP & AIRBUS



➤ WHAT ?

Airbus and RATP have joined forces in a futuristic project, an air travel offer for public transport. The vehicle takes off vertically like a helicopter.

➤ WHAT'S THE POINT ?

Enrich the already existing mobility offer and work on urban integration to **make the flying vehicle accessible to as many people as possible**. Also gain ground space as well as decongesting traffic down below. Before this actually become part of our day-to-day habit a « air governanc » should be organized.



WELCOME IN THE FUTURE OF MOBILITY



➤ WHAT ?

Starbolt offers a turnkey solution to provide shared electric bicycles, electric vespa and electric scooters to corporate travelers.

➤ WHAT'S THE POINT ?

This solution allows a **drastic reduction in the bill related to employee travel and offers much faster and more efficient travel alternatives.** This allows the company to embark on an eco-environmental approach, which creates meaning for the employee.



4.2

SMART CITY

SMART CITY THE CATALYST OF TOMORROW'S STAKES

Smart city is the catalysts for many stakes: citizen safety, health and way of life, mobility, environment, economy. It reaches to everyone and every sector, citizens, governance, industry and constructions, business.

It will answer in the long run major problematic such as traffic, pollution, safety & health, water, community & inclusivity, security, etc.

Smart city and mobility often work hand in hand since the cities are the nerve center of transportation and transportation are one of the major issue cities are facing since it impacts a lot of the problematic previously mentioned.

But smart city is facing challenges of its own if it wants to be exploited to its full potential. The need of data and its safe access and usage, the need for **5G to accelerate and enable the number of interactions** it requires and finally the need for trust from the community that it can be beneficial and not detrimental.

If communities and cities manage to unlock this key component, smart city could really deeply change and reshape our lives as we know it for the better.



AI & TERRITORIAL MANAGEMENT

Some cities are already defined as « smart ». Some are investing more and more in the connection of their infrastructure and already formulate needs of artificial intelligence to manage very large data sets. The perspective of 5G equipment accelerates these needs even more, and already the major players in hardware and some operators are on the spot.

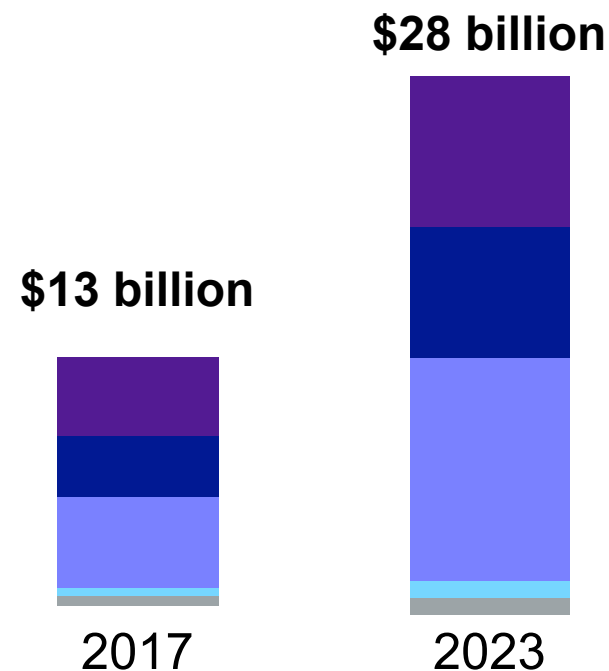
Rural territories are also equipped, with computer vision including to monitor agriculture.

At the building level, we speak of BIM (Building Information System), a kind of building health log that can update the data of the equipment from its design to its maintenance.

Finally, the house is smart also by connecting more and more devices. Voice assistants are entering homes increasingly and will soon be able to control the entire house.



Global market of solutions dedicated to smart cities



Source : Research: Smart Cities Tech Will Improve Urban Life, CTA 2018

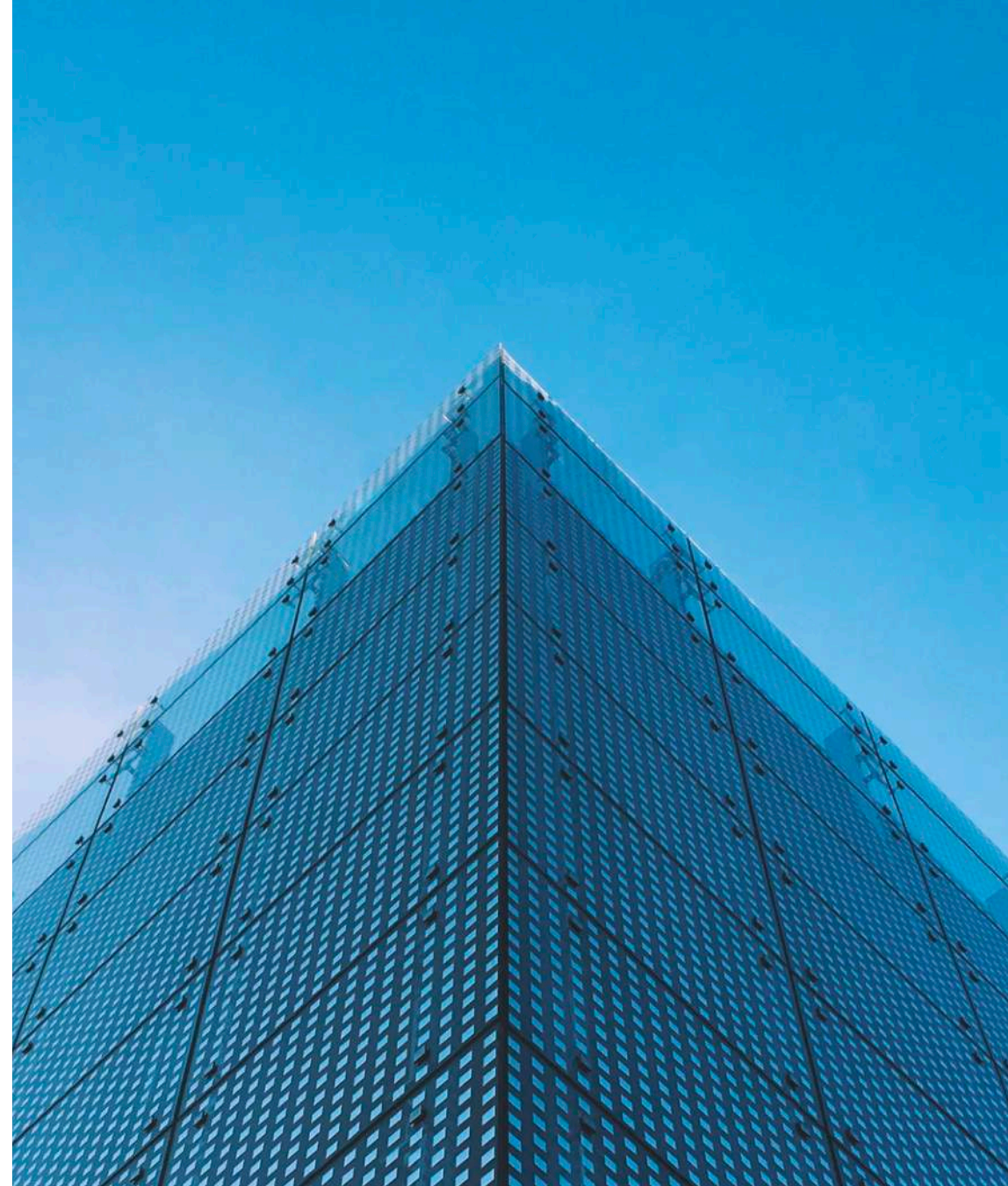
QUICK FOCUS ON BIM : FROM BIM TO CIM

Considered a true digital revolution, BIM (Building Information Modeling) deeply changes the way buildings are designed and built today. **Its urban version, the CIM, could well meanwhile redefine the outlines of the cities of tomorrow.**

CIM is a digital scale model for a given neighborhood or territory. Where the BIM modeled a 3D building structure, **the CIM offers the possibility of modeling an entire urban space, integrating all the information that compose it.**

In association with the Internet of Things (IoT), the CIM can undeniably modify the urban life in depth and bring interesting elements of the answer to the major stakes that the concentration of the population in the big cities and the control energy consumption. **While the concept of smart city - or smart city - is on the rise, the CIM appears as a solid solution to participate in its growth.**

If the interest of the CIM in new urban development projects appears indisputable, we are already turning to the TIM (Town Information Modeling). **This digital model, whose role is to network different CIM, could indeed allow access to an additional dimension in terms of urban innovation ...**





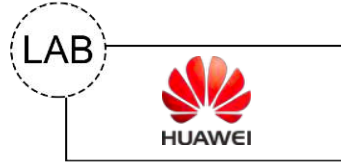
SMART CITY ENLIGHTENMENT

BOUYGUES

Bouygues Group is involved in the Smart City project of Dijon, and presents two intelligent urban equipment :

- **Flowell**, a floor light signage experimented in Mandelieu (Colas)
- **Citybox** a street lighting lamp with a remote-controlled polyvalent equipment (wifi, video protection, sound and et lightning...), making digital in the city less expensive to implement (Bouygues Construction)

FROM SMART BUILDINGS TO SMART CITY, A GLOBAL ECOSYSTEM



WHAT ?

Panga is a smart building solution who aims to be the support of the smart cities of tomorrow. They deliver various services that enhance your building former autonomy, economy and connectivity. **They impact every type of building in many aspects from the interphone to the thermostat as well as its internal communication and energy consumption.** Smarter, cleaner and safer buildings overall.

WHAT IS THE POINT?

The point is for the user of the solution to improve the connexion within the building, if you take an office for instance, improving the connexion between your employee within the building. **Make some economy by having a smart and automated management of electricity, paper, water through smart lighting, heating, tap, etc.**

In a more macro vision for the city, this means a potential of public data to connect the whole city together, meaning all of the building. **This will enable a smart management of the city leading to more efficient maintenance,** yet again leading to economy, safer buildings decrease of incident or accident but this time on the town level.



A SMART CITY IS A CLEAN CITY



Cortexia

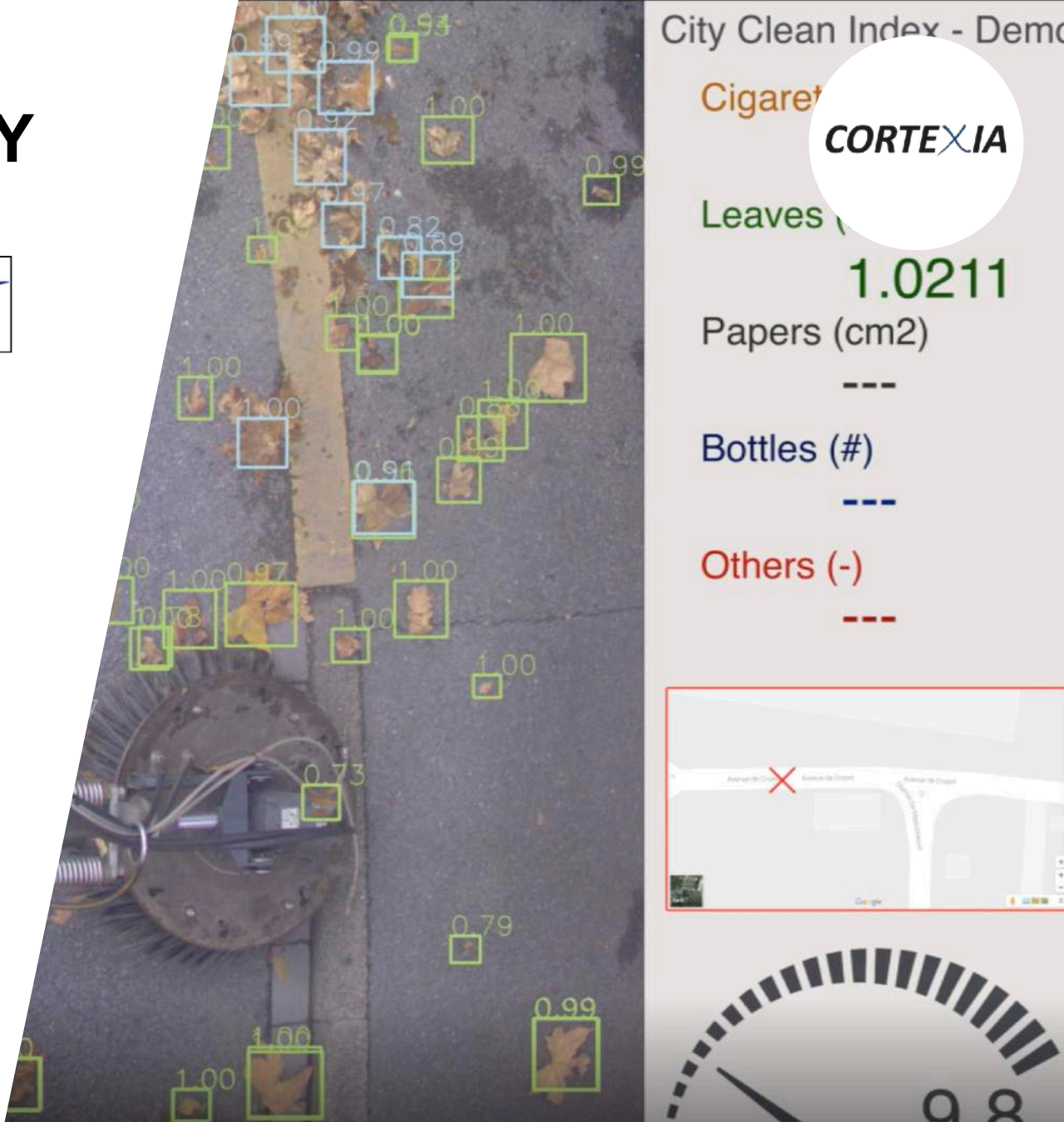


WHAT ?

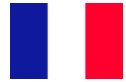
Cortexia developed a clean indexed based on the volume of littering detected with cameras. **What they do is that they monitor the cleanliness of the street through cameras and smart vision** that are integrated on city infrastructure or cleaning trucks.

WHAT IS THE POINT?

The point is to be able to know in real time which parts of the city needs to be prioritized in terms of cleaning. On top of the attractiveness of the place the amount of litter could now be factored. **This will lead to deploy less team to clean and deploy them in a more effective way leading to reduce in cost of maintenance**, raising the happiness level of residents and tourists and also leaving a better ecological footprint. Finally, by studying the typology of littering the city could adapt to infrastructure depending on each neighborhood and the habits of the residents. For instance, more dog owners near the park could mean more bins dedicated for dog littering, more smokers would mean more sand spot, etc.



WHEN CONCRETE SPEAKS



360 SC (Smart Connect)

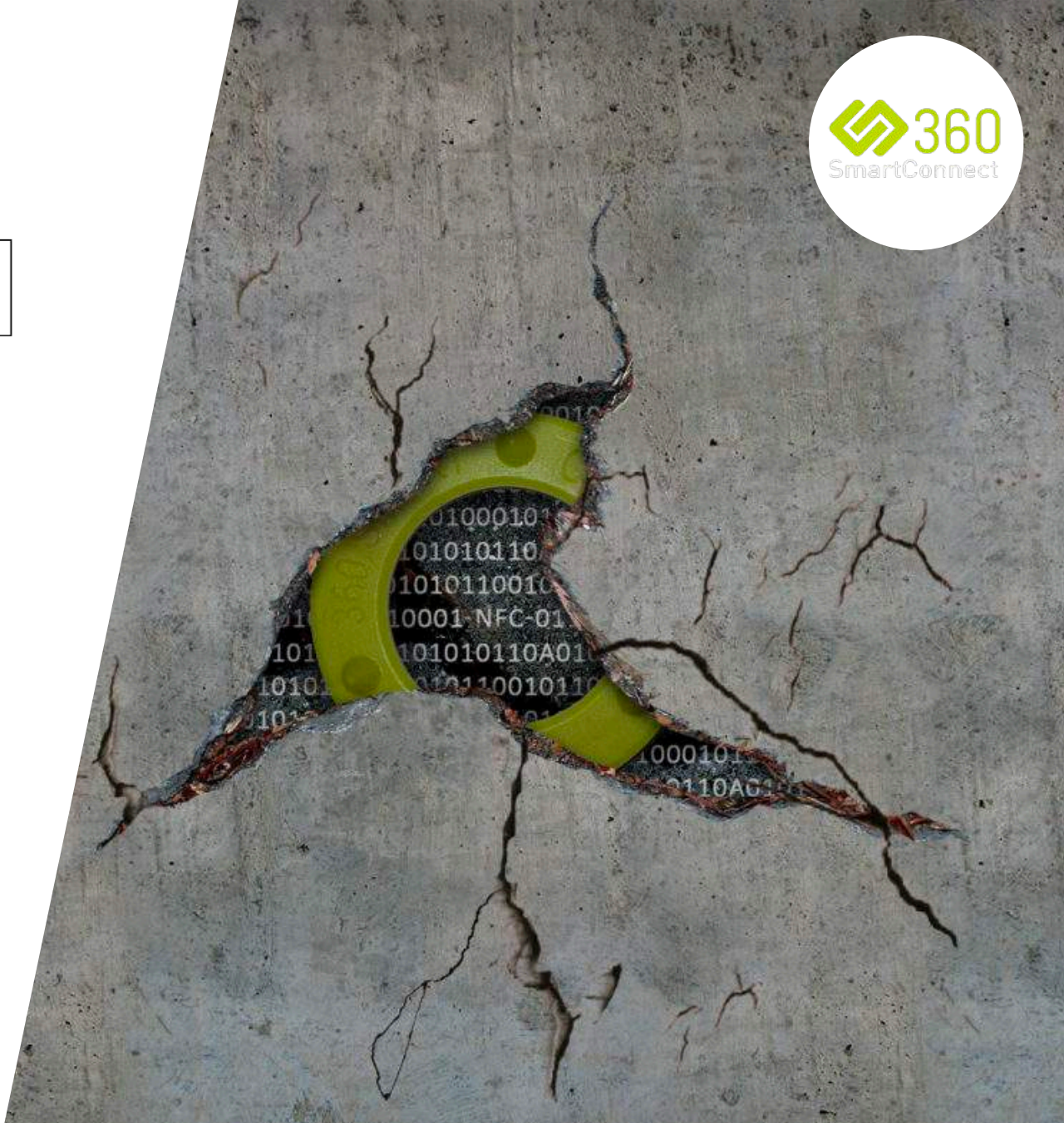


WHAT ?

360 SC sells concrete with a digital add on. Basically they add digital component to their concrete product to have them carry connected and digital information.

WHAT IS THE POINT?

The point is to be able to access any set of data directly from the building, at anytime to gain in productivity, efficacy and make economy of scale. **The data incorporated can have public, private or semi-public access depending on who manages and owned the piece of infrastructure.** For instance, strategic part of a building could house its digital twin accessible to a policeman and fireman. On an all other level, a wall in the printer room could give you access to the stock for the employee, while the cleaning lady could have access to which toilet is actually out of toilet paper. For the city it could be on road signs for instance or bus stop.



FUNCTIONAL, SENSORY AND INTERACTIVE WALLS



Marianka



WHAT ?

Marianka creates tactile, sensorial and luminous surface by enabling any surface to light up to the touch.



WHAT IS THE POINT?

If Marianka is at the moment focused on home designed selling luminous bed frames and other home decor that light up to the touch, **we can imagine the technology spreading into our cities and transports. Hotel rooms, trains, school, hospitals, park benches, sidewalks, crosswalks, bus stops, this technology could scale up in a multitude of way** to revolutionize the way we lit our cities in maybe be more economical, respectful way of the environment and neighbors as well as safer options. Indeed cities are already studying ground traffic light to avoid smombie accidents.



BOOST YOUR ROAD AND INFRASTRUCTURE MAINTENANCE WITH ALTAROAD



WHAT ?

Altaroad collects traffic data in real time thanks to a sensor network. The sensor is embedded in the road. **On top of traffic data it also captures data about the road's state to manage its maintenance.** Traffic-wise, it garners data about speed, weight, type of vehicle, footprints and trajectory. The data is analyzed and a report is sent with strategic insights to help adjust and take care of the infrastructure.

WHAT IS THE POINT?

The point is to **avoid any major issues on the road as well has been able to rethink the infrastructure according to traffic data.** In the long run it is healthier road, safer roads, improved traffic flow.

ALTAROAD
optimize transport and logistics

SMART ENERGY PLATFORM

**OMNIFLOW**

WHAT ?

Omniflow developed a smart energy platform powered by wind and solar with integrated energy storage for IoT applications.

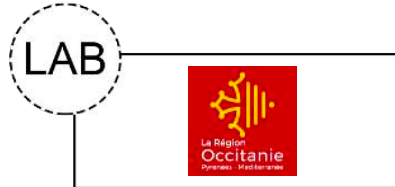


WHAT'S THE POINT ?

It aggregates multiple service layers capable of generating revenues like Lighting, 5G, security, edge computing, wifi.



OPTIMIZATION OF PARKING SPACES



> WHAT ?

MyCarSpot has developed a **collaborative digital service**. Marketed in the form of a **subscription based on the number of places managed**, the web platform and the mobile application dynamically distribute the parking spaces.

> WHAT'S THE POINT ?

Through its collaborative digital solution, MyCarSpot now accompanies **key accounts** and **simplifies the life of the company's parking users and communities**.



6

INDUSTRY 4.0

WHEN DATA COMES INTO THE FACTORY...

Industry 4.0, or the “smart industry,” corresponds to the 4th Industrial Revolution. After mechanization, electrification and computerization, make way for **digitized means of production, to assure more flexibility and personalization.**

IoT, robotics, augmented reality, 3D printing, artificial intelligence; all these technological innovations are put to good use to **optimize production time and costs for manufacturers and equipment providers.**

Several players are positioning themselves in this field, with **data collection and processing as their main focus in order to make some practices easier**, such as modular production, predictive maintenance, automated quality control, and logistics tracking.



**\$115.7
BILLION**

**WILL BE INVESTED
IN DRONES AND
ROBOTICS IN 2019**

+17.6%

**COMPARED TO 2018
IN THE WHOLE
WORLD**

Source: Worldwide Spendings on Robotics Systems and Drones, IDC Spending Guide 2018

DATA, THE DRIVING FORCE OF PREDICTIVE MAINTENANCE

Up to now, maintenance intersected several degrees of reactivity, to which predictive maintenance will now be added. It could possibly reduce, or even replace other degrees of maintenance.



1/ Corrective/reactive maintenance: intervention after a breakdown



2/ Preventive maintenance: planning based on a timeline or statistics (ex: replacing a car part after driving a certain number of miles)

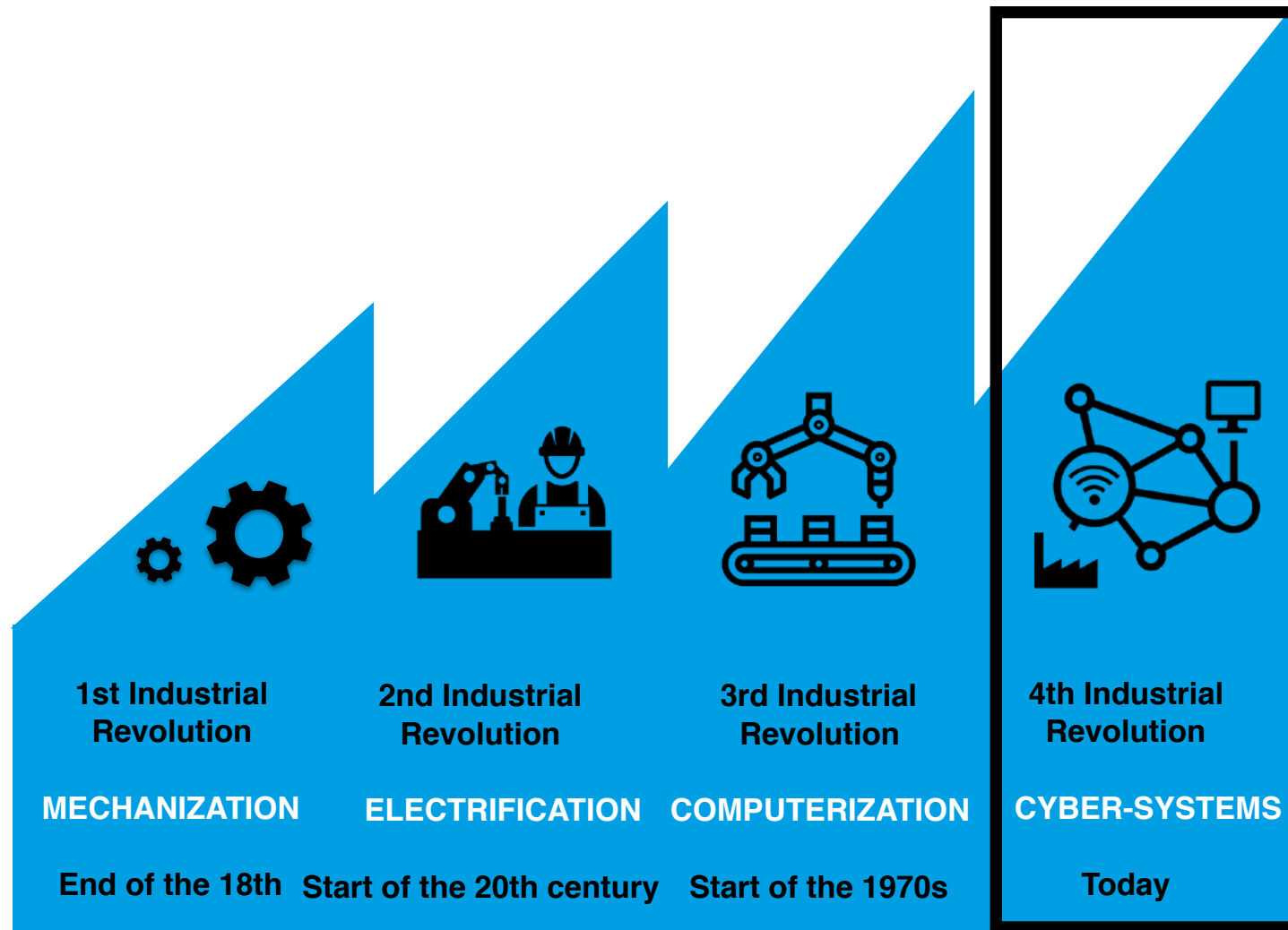


3/ Predictive maintenance: intervention only if necessary, as identified by data collected from sensors and breakdown prediction algorithms.

With 24/7 sensors and mobilization only when necessary, equipped industries will be able to save a significant amount of money, as well as time.



FOUR REVOLUTIONS THAT HAVE TRANSFORMED INDUSTRY



Sources : Capgemini Digital transformation Institute Smart Factory Survey 2017-2018, Capgemini, April 2018



**WE WORK WITH
MORE THAN 900
STARTUPS IN
THE WORLD**

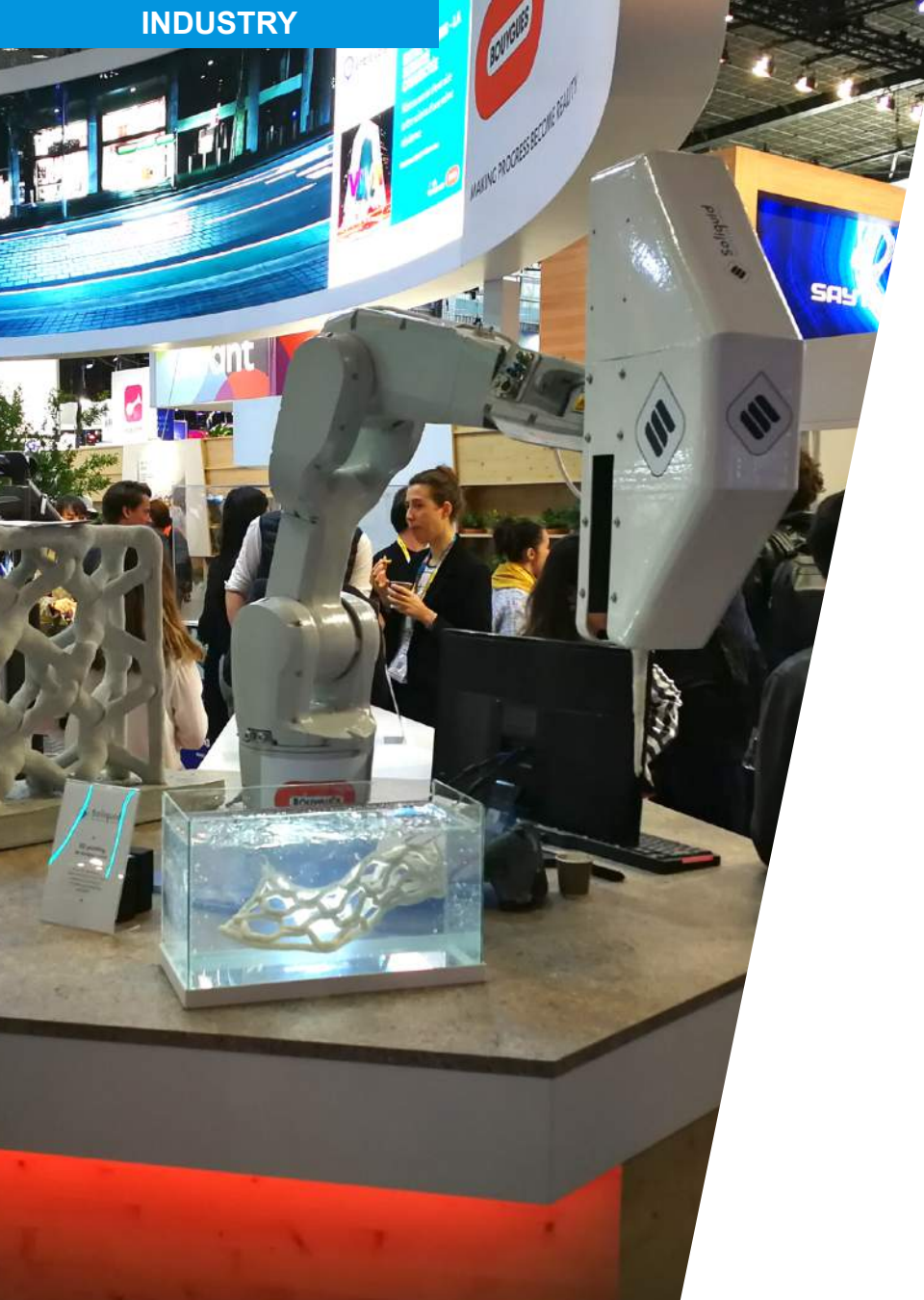
FREDERIC MONTAGNARD
DIRECTOR TECHNOLOGY INTELLIGENCE
THALÈS



Frédéric Montagnard

DIRECTOR TECHNOLOGY INTELLIGENCE - THALES





3D PRINTING IN SUSPENSION



Soliquid is developing a unique **process for large-scale suspension 3D printing in a reusable and long-lasting gel matrix.**

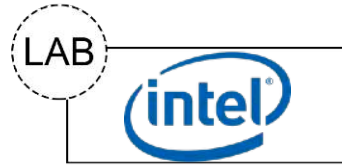
Construction sector faces financial cost issues when it comes to **casing**. On the other side 3D impression is less expensive but can't easily realize with **high gravity parameters**. Soliquid mixed the two methods by creating a 3D impression **in suspension thanks to a neutral and robust gel that can hold the material in the design until it dries up.**

This process enables to create and produce **a large scale quickly of designs**, with complex elements without any support and accelerate the prefabrication step. The design imagined on PAO software can be extract to **track automatically the 3D printer robot's path in the gel**. A lot of material are compatible with this method, from Bfup (high performance concrete) to composites.

FLYING OVER THE FUTURE OF INDUSTRY



DELAIR AERIAL
INTELLIGENCE



WHAT ?



Delair provides aerial imagery based data to assist industry in their decision-making process. The platform is cloud-based and works for various industries from agriculture to mining. What it does is that **it creates a digital twin of your landscape via the drones as well as computing imagery and analyzing this data.**

WHAT'S THE POINT ?



With Delair, not only do you get a **digital playground to test ideas** with, but because of the data set also injected it makes it possible to **visualize more than just the setting but also the evolution through time** with weather conditions, ground evolution, etc. More data are available, in a quicker way and by testing the landscape it maximizes gain in productivity, efficiency and cost when starting the project for real. It avoids several technical and environmental risks.



FULLY AUTOMATED DRONE MISSIONS



WHAT ?

DroneHive has developed drones that can live on site in **their own hive** which is a protected and technological box that store them and charge them. The drones are fully automated and can be controlled remotely and/or automatically if programed so. Dronehives will program the drones depending on the needs. The drone will leave the Hive (its base) go do the mission (film, analyze data, store it on a private cloud, etc.) and come back to base. You can then access the data in real time or later.

WHAT'S THE POINT ?

The main point is to **save time, increase productivity**, faster and more accurate patrol, ubiquity of some sort. DroneHive enables to launch missions without **any human on site**, which can be great for night patrols for instance or other very early or late mission. Also whiles staff can do more valuable task the drones can patrol the area and alert if human intervention is needed.



SHARE WHAT YOU SEE



WHAT ?

Tikaway provides a solution of connected glasses that enable **its wearer to communicate in a remote way more efficiently with his co-worker**. The start up created a pair of connected glasses, with built-in cameras to enable coworkers to share their view point and work hands-free. The glasses can also help you create a tutorial via a recording feature. An app enable you to control the camera if needed. The device can manage videoconferences, photos, filing, messaging, etc.

WHAT'S THE POINT ?

The point is to ease the interactions and collaboration between **engineers on site and the ones in the office**. When confronted to a question or an issue with infrastructure, the engineer on site can share in life what he sees and get guidance and help while working and testing hand free the solutions. If the applications make a lot of sense for the industry, we can imagine many more applications in tourism, private spaces or marketing.



MAKING SENSE OF NOISE



WHAT ?

➤ Wavely analyzes the sounds **emitted by the infrastructure and the machines thanks to connected acoustic sensors equipped with an embedded intelligence**. They can be programmed to identify anomalies and report the malfunction.

WHAT'S THE POINT ?

➤ The point is to **foresee the potential breakdown and reduce maintenance cost by preventing downtime due to breaks**. Why acoustic would you ask if you can have a protective software? Acoustic is recognized as one of the most reliable sources in terms of maintenance. The innovation can be applied in many other fields such as cities to predict the acoustic environment or reduce the acoustic level of a construction site.



WHEN VISION MEETS DEEP LEARNING

**DEVISIONX**

WHAT ?

➤ DivisionX crosses Machine vision and data management to offer a complete **solution of quality checks**. The vision side of the solution enables the machine to see, inspect, analyze the element. The deep learning algorithm enables it to determine if the element is viable or defective. The cameras integrated enables the machine to really inspect in a very detailed way (more accurately than human eyes) if everything is in order.

WHAT'S THE POINT ?

➤ Thanks to a solution such as divisionX you can improve the efficacy and efficiency of your quality check on any given product for any given industry. You also do it faster, improving your productivity. Finally, you can insure your end customers of the quality of your product and reduce the number of faulty products.

VR TO TRAIN, TEST AND SHARE

**SKY REAL**

LAB

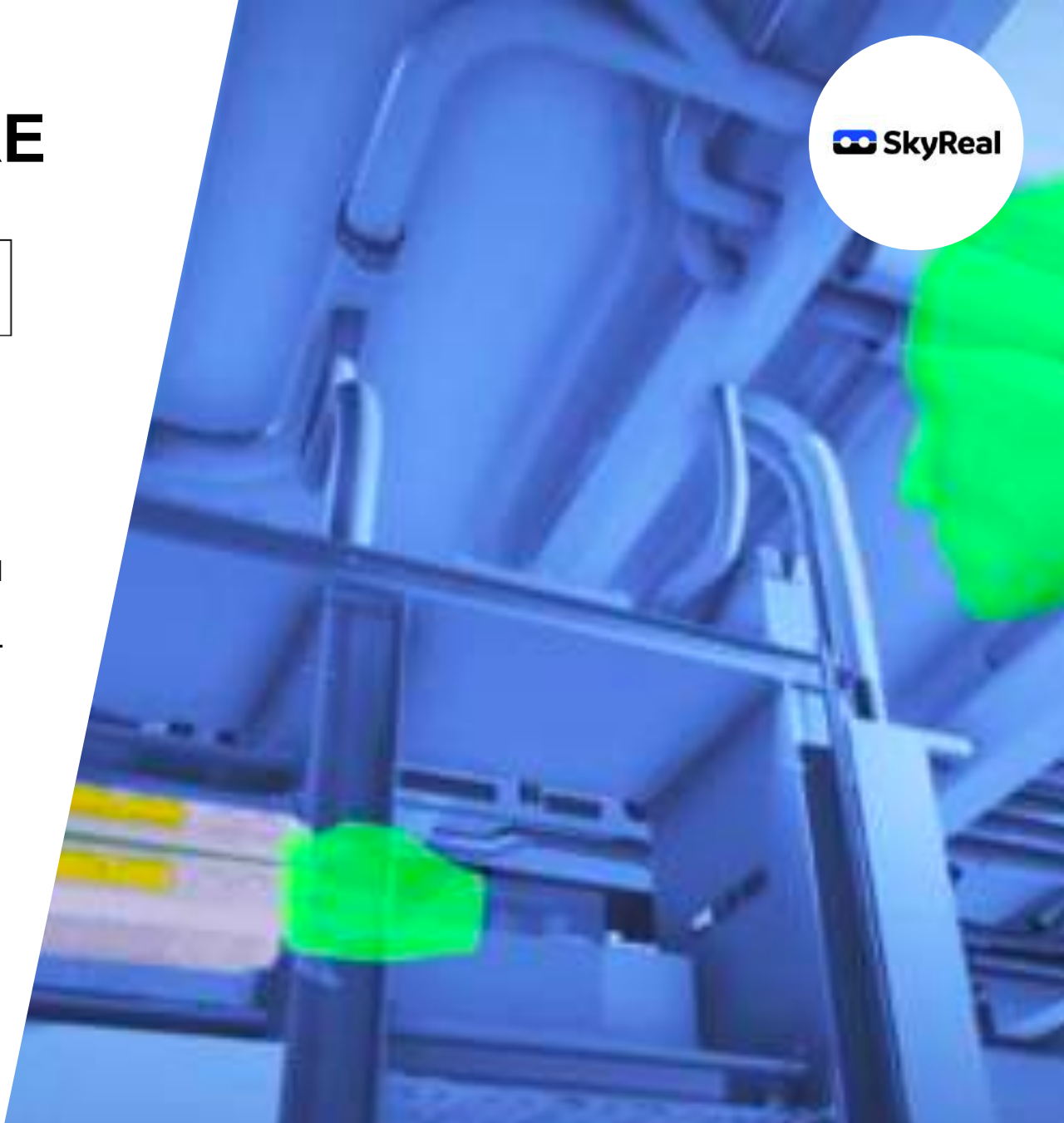

Hewlett Packard
Enterprise SkyReal

WHAT ?

➤ SkyReal provides **VR solution that enables employees** to be immersed working together remotely as if they were in the same room together. Skyreal offer two things, sharing an immersive experience and working on the digital twin of your blueprint or product to prepare, train, brainstorm, around a product before working on the final project for real.

WHAT'S THE POINT ?

➤ The point is to save time and avoid mistakes and down the road issues once working on the real project, thanks to the training but also to a detailed **vision and analysis of the elements**. Enable experts to work together from different places, which offers more freedom to the employees but also saves time and cost for international collaboration for instance.



REDUCE DOWN TIME AND BOOST PRODUCTIVITY WITH PREDICTIVE MAINTENANCE



WHAT ?

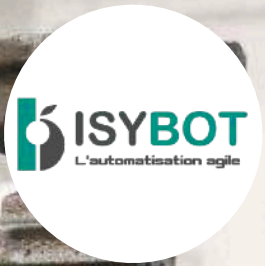
➤ Amiral technologies has developed a **smart predictive maintenance solution**. Its technology generates discriminatory features automatically from the data feed. From this the deep learning algorithm create a predictive model. The software can manage the predictive maintenance of a site as well as the energetic supervision.

WHAT'S THE POINT ?

➤ The point is to know when a machine may present an issue or is getting closer to its lifespan in order to avoid down time due to a broken machine. This leads to a gain in time, costs and productivity.



HUMAN AND ROBOTS WORKING HAND IN HAND

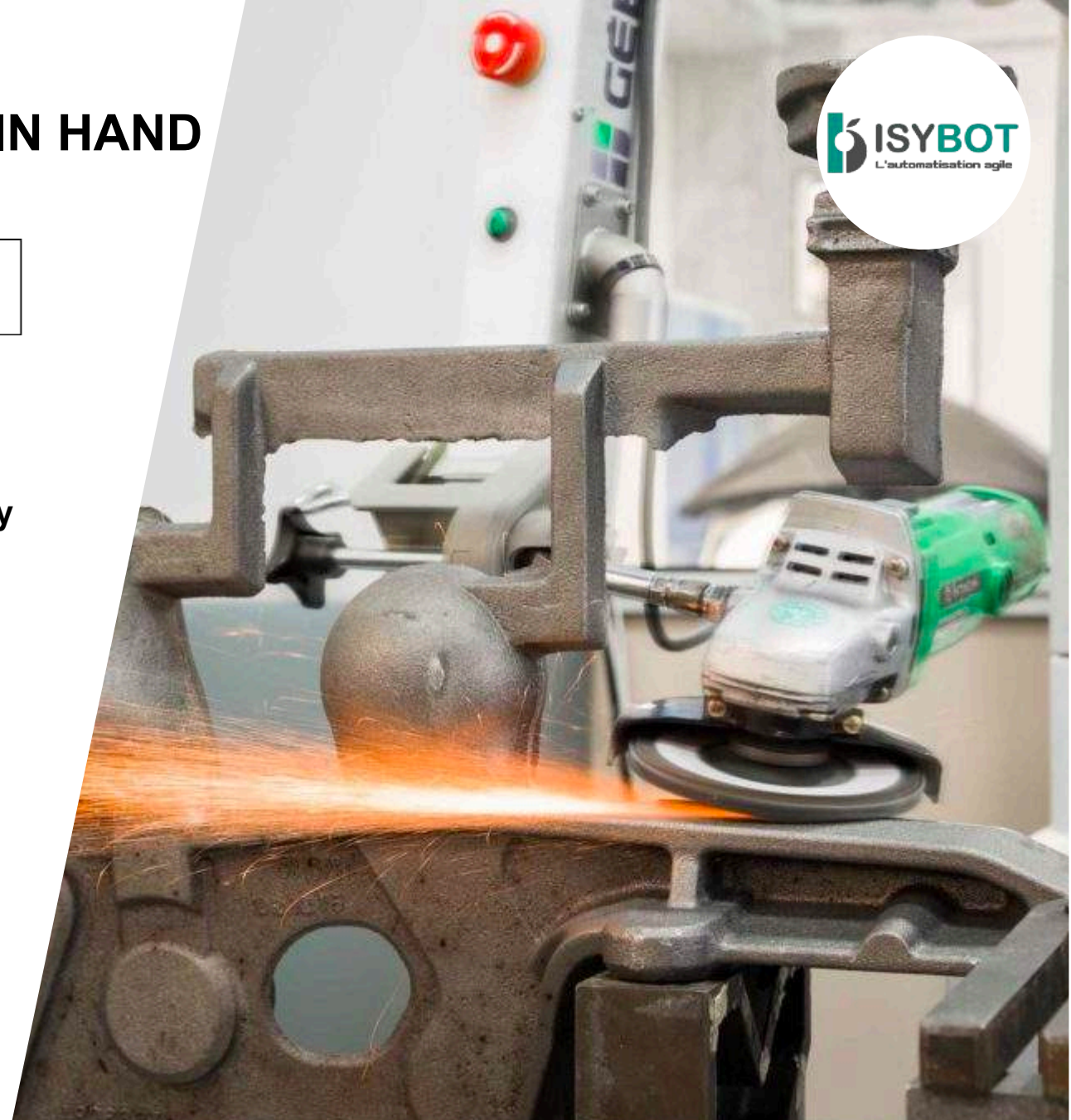


WHAT ?

➤ IsyBot builds Cobots (Collaborative robot) able to **work safely around humans**. Isybot can handle many of the different tasks making a versatile tool. The Cobot has multiple modes, it can work independently, as an assistant to humans .

WHAT'S THE POINT ?

➤ The point is to is to reduce work effort and pain, to replace repetitive tasks leaving human handling the high-value work, boost productivity and give a more modern twist to some of the manual jobs.



GOING WHERE HUMAN CAN'T GO



ANYbotics

LAB

Robot Parc



WHAT ?

ANYmal is a four-legged robot with extreme mobility and full autonomy for work in complex, potentially dangerous, dirty, and remote environments. It provides **visual inspection, thermal inspection, auditory inspection and 3D mapping**.

WHAT IS THE POINT?

Robust and lightweight (30kg) it **can go everywhere human can't**. In dangerous situations, like harsh and outdoor environment. This powerful and flexible robot meet especially industrial, and surveillance & first response needs, but also agricultural and research issues.



ANYbotics

ANYmal

ULTRASOUND CAMERA DETECTING LEAKS OF GAS



DISTRAN



WHAT ?



This ultrasound camera is able to **pinpoint leaks of any gas in real time from a safe distance up to 40m**. Thanks to 128 sensors, the device precisely detect gas leaks, where exactly it is and how much is coming out.

WHAT'S THE POINT ?



Working with any kind of gas, the operator does not take any risk, he can stay **40 meters away from the leak**. An integrated reporting system is available, and contributing to the predictive maintenance of materials. This new Distran's camera is about to be launched on the industrial market.



ULTRASOUND CAMERA DETECTING LEAKS OF GAS



THE TACTIGON



WHAT ?



The Tactigon Skin is a wearable known as a **man-machine interface with a gesture recognition A.I.** The operator can wear it like a glove, and register 4 types of manual actions, each matching a command on a machine. Every machine, littler big with connectivity can be commanded by the device remotely.

WHAT'S THE POINT ?



The wearable is at final prototype stage. It enables the industrial operator to command machines remotely with a very natural interface based on his gesture. The device is **5G compatible**, and has already realized an action commanded in Paris and realized in Marseilles, in real time.



IIOT FULL PACKAGE FOR PREDICTIVE MAINTENANCE



ASYSTOM



WHAT ?

Asystom provides a **comprehensive predictive maintenance solution**, from measurement to visualization including analysis and secure data transmission. This IIOT system is pluggable on any machine. Every module is capable of collecting datas as sensible as **vibration, ultrasound, temperature, humidity...**

WHAT'S THE POINT ?

Machine does not need to be connected to work this system : each module learns how any machine work and Asystom deploys its own network. Industrials can have a **real time predictive maintenance with a large scale of datas analyzed**. Module has also a long autonomy : it can work 5 years with only 2 AA batteries.

ASYSTOM



THE INFLATABLE DRONE



DIODON

LAB

Atos

WHAT ?

> Diodon is a drone with an **inflatable structure**. It's guided by a handset waterproof. The guidance and all the datas collected by the drone (image recognition for exemple) are **encrypted**.

WHAT'S THE POINT ?

> Thanks to its inflatable structure, the Diodon drone can land on any surface, like rocks, sea or snow where other drones could not resist, and **has also a smooth take off wherever it can be**. The inflatable structure makes it really compact and easy to carry out. The encrypted guidance **makes it inconspicuous**. Today it benefits to defense and army forces, but it also targets industries.



DIODON
SMART TECHNOLOGY

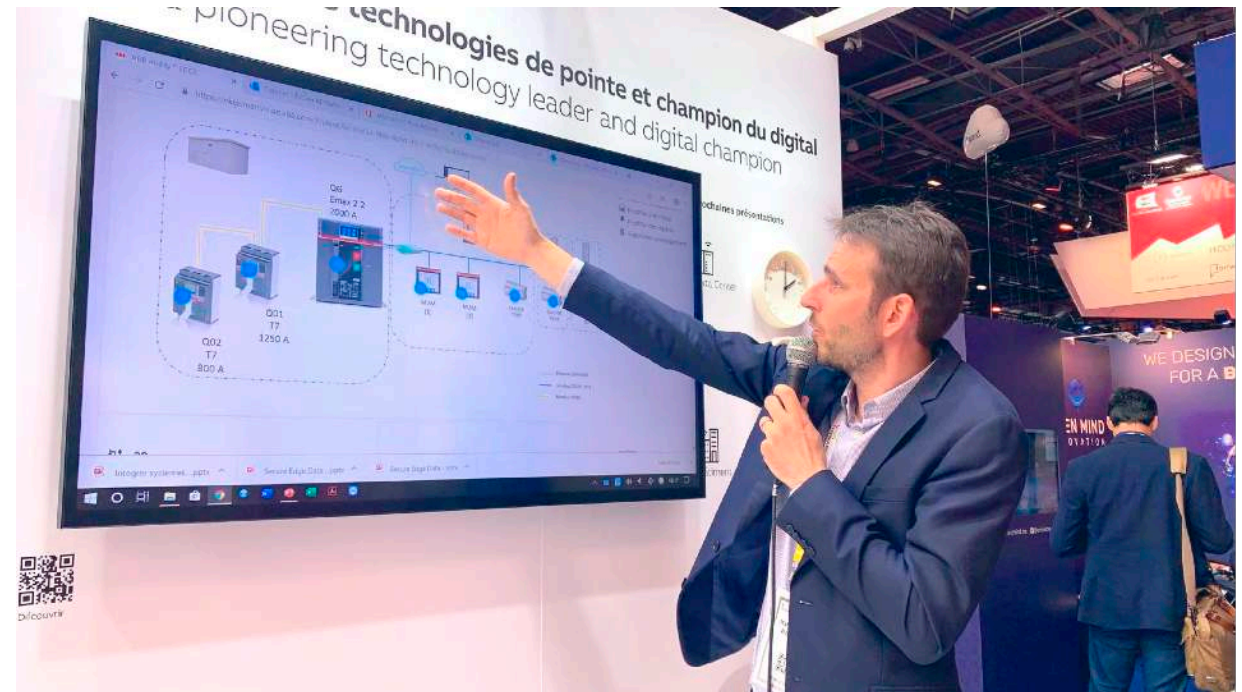
EXOSKELETON



REDUCE WORK EFFORTS

Work smarter, not harder. Since 2013, [EXHAUSS®](#) is one of very few companies in the world, to design, manufacture, stock and sell exoskeletons every day to everyday workers.

SMART FACTORY



INDUSTRY BECOMES SMARTER

Energy savings in smart buildings, “Secure edge”, a data center for industry, cloud and Industrial IOT (Internet Of Things), robot and virtual reality, sustainable mobility,... ABB is one of the key actor reinventing Industrie to make it smart and connected.

7

CUSTOMER EXPERIENCE

RETAIL LUXURY TRAVEL PAYMENT

Toward more personalization & immediacy in a connected world

Smartphones, apps, machine & deep learning, automation, vocal commands, VR, AR, XR and much more now enable **customers to get what they want when they want it or need it almost in real time.** Those new technologies strongly impact the customer journey and their expectations when they purchase goods and services as well as when they experience them.

Today, customers are looking for immediacy, transparency and flexibility. In other words, they want a personalized product and service, accessible any time, anywhere and true to its words.

This impacts every type of journey. Retail, Travel & hospitality, luxury, etc. From the benchmarking phase, to buying through to customer service and experiencing the product and/or service. **Technology is changing customers' perception, blurring the frontier between online and offline experiences,** especially in areas such as payment, check in and check out and visualization of products and places.



75 %

Of customers are more likely to buy from a company who knows their name and purchase history.

83 %

Of customers are willing to share their data to enable personalized experience.

Source : Making IT personal pulse check 2018, Accenture, North America and European respondent

6.1

RETAIL



“We need to completely change the way we interact with our customers, by building a strong omnichannel environment.”

AMÉLIE OUDÉA-CASTERA
HEAD OF E-COMMERCE, DATA AND DIGITAL
CARREFOUR



"Our mission is to bring personalization to retail by seamless connection between consumers and brands.."

VADIM ROGOVSKIY
FOUNDER
3D LOOK



DATA-DRIVEN MARKETING : A BUSINESS ACCELERATOR

Henri Leon
Principal at BCG

“Don’t follow your instinct, follow your data” this is the new mojo of company. Data-driven marketing took a very big part in the business, **but some companies don’t realize the importance of this approach.** In order to convince the reticent, Henry Leon, principal at BCG, gives some example of how important is data-driven marketing:

Based on a BCG survey, **only 2% of the brands are capable of matching their full potential by having a dynamic customer journey.**

In terms of technical factors, company which succeed are those which have the ability to connect the data, to automate & integrate technology and have actionable measurement.

In terms of organizational factor, the key is to set up strategic partnership (technical or skills), to have specialist skills and the ability to have both agility and a fail fast culture.

The combination of human and automated campaigns lead to an average increase of 15% of the efficiency compared to an automated campaign only.





Marc Pritchard
PROCTER & GAMBLE
@ProcterGamble



Moderator
Lauren DeLisa Coleman
FORBES
@ultra_lauren



A CONVERSATION WITH MARC PRITCHARD 1/2



VIVATECH CONFERENCE

Marc Pritchard

Chief Brand officer at Procter & Gamble

At the McKinsey & Nielsen CMO Forum on Stage X, Marc Pritchard shared his views on the future of brands and marketing. He focused on how to truly innovate as a CMO. To him :

1. CMOs have to pass from the mass market to the mass targeted reach, using the **precision of data / algorithms / analytics**.
2. Reinvent advertising which is no longer **useful, relevant of entertaining** according to 9 out of 10 consumers.
3. Reinvent the **customer experience** by combining digital and physical experience
4. Be part of the **citizenship values such as diversity, inclusion, environment**, etc. mentioning the actions of 'Always' (towards girls who miss school because of the cost of pads/tampons during their periods), and the recent controversial Gillette campaign on new masculinity.



Marc Pritchard
PROCTER & GAMBLE
@ProcterGamble



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A CONVERSATION WITH MARC PRITCHARD 2/2



VIVATECH CONFERENCE

Marc Pritchard

Chief Brand officer at Procter & Gamble

*"Gender equality is not about women. **We managed to create a conversation about how to help men to adopt good behaviors and educate their boys. We measure the impact a follows : was the campaign seen, shared, and also who is searching your brand again ?** For Gillette we reached 30 Million viewed, and the search increased by 18%", he explained.*

Marc Pritchard also detailed how P&G tries to get involved in content creation such as music, fiction and series : **"Millenials no longer watch television"**, we go to them, like we used to with radio soap operas, but with the idea to be more involved in the ecosystem of content creation", with 2 examples : a collaboration with Queen Latifa to inspire talented young female film directors, another with NatGeo for a docu-series about citizenship.

Last item, about innovation : **"Innovation is about being useful to others. It means that we have to act as entrepreneurs : identify a problem for the consumer, try to solve it, and experiment this solution over and over. We try to work this way at P&G with 130 projects led by small group within the company"**. Among the last tech innovation, VR is one of the most exciting, he estimated. *"The difficulty is to choose the right problem to address in a mass of creativity"*, he concluded.



MY NEXT MOVE FOR THE NEXT BIG THING

Stephanie Buscemi, EVP & Chief Marketing Officer, Salesforce
Marc Mathieu, CMO Samsung

Lubomina Rochet, General Manager in charge of digital at L'Oréal
Julie Woods-Moss, CMO at dunnhumby

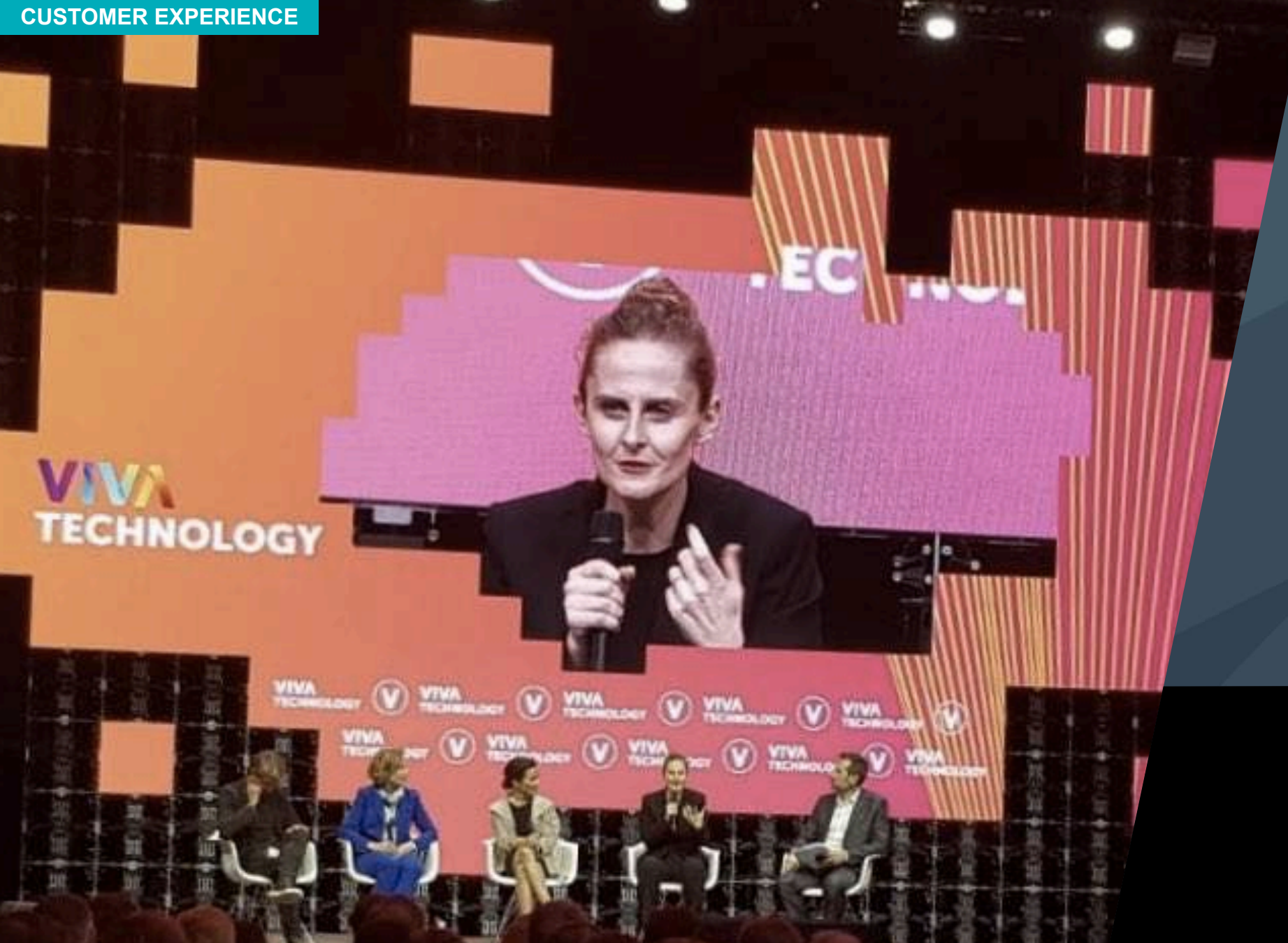
The world changed. A lot. New technologies are creating new businesses and new opportunities. But in a world where things move fast, what will be the next big things that will really impact the business ?

"We are now in a work where consumers are phygitals. And we have to be too" says Lubomira Rochet

Stephanie Buscemi shows that company's communication changed a lot *"If you compare 5 years ago and now, **those who succeed are those who collaborate with the public [...]** Today, mark doesn't decide anymore the « branding construction ». Influencers do. Trust and engagement are the key."*

Marc Matthieu wants AdTech to take its responsibility **"Some people received more than 4000 advertising message per day, even kids. We are destroying them"** he says.

"AR is, for me, the most exciting technology for the future. It will allow the emergence of a new physical ecosystem and company can retire a real business value from this" said Julie Woods-Moss.



*“The consumer experience is changing especially in the beauty industry. Services, augmented reality, #voice and #AI are the key. **The difference lies in personalized experiences**”*

LUBOMIRA ROCHET
CDO
L'OREAL

KLÉPIERRE INTRODUCES THE MALL OF THE FUTURE..



Designed as a real shopping center, the Klépierre stand recreates all the stages of the customer journey with new experiences in partnership with major brands.



H&M offers to virtually try on clothes in order to appreciate their size and shape thanks to a VR projection. It allowed to create a digital avatar from a face and body scan.



Lacoste and Klépierre designed a **customizing sneakers experience using a robot**. Visitors can choose between three drawings from "La Main Gauche" and could participate to a competition to win their pair.



Maison du Monde offered a shopping experience based on reinvented decoration. An immersive experience using 3D, called "Door". On a screen, **visitors could virtually enter a room and discover the various possible layouts**. A good way to project yourself into your future home.

CONNECTING YOUR SMARTPHONE TO RESTAURANT TABLES AND MORE



> WHAT ?

Pop'n Link offers a solution to connect your smartphone to any device thanks to a "pop" button (Proof Of Presence). **The button allows restaurant customers to access the menu, order and pay directly from their smartphones.** The pop button generates a unique and dynamic code per user, which remains active only for the duration of the experience lived on the site.

> WHAT'S THE POINT ?

Add a layer of intelligence to connected objects to save waiters' time. It allows to **remove the pain point of the queue bread to settle or order or waiting for the bill,** allowing hotel and restaurant managers to achieve additional sales. **Also a way to track the behavior of a particular consumer.**



POPSQUARE X UNIBAIL RODAMCO WESTFIELD, AN AI POWERED POPUP EXPERIENCE



➤ The Hong Kong based startup Popsquare partnered with Unibail Rodamco Westfield to create a new product experience . Cameras monitor the environment and follow what the customer does in the store. **AI and analytics analyze which product they may like in order to display a video of the product to them on an interactive screen.** They can buy it using the screen or get a coupon if they want to buy the product online later. **It allows an effective branding, to leverage latest technologies for more insights of unknown market, an optimized location and market, lower risk and managed cost.**

THE CHILL TASTING COUNTER IMMERSE VISITORS IN THE FUTURE OF THE MOËT HENNESSY CONSUMER EXPERIENCE.



Kuantom presents Orchestra, the very first online, turnkey and patented **solution which automates the creation of cocktails by connecting the ingredients via smart flasks**. The cocktails are mixed upon request and in a few seconds. The results are truly faithful to the creations of the partner mixologists.



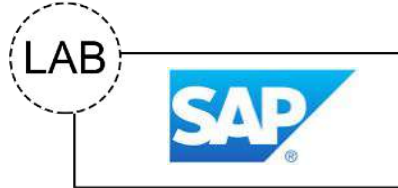
Moët & Chandon offers visitors the opportunity to familiarize themselves with **the retail of the future, thanks to Spoon, a virtual consultant**.



Chandon unveiled its new cocktail customization experience in The Chill space: an innovation that enables infinite cocktail customization. To name a few : with a mousse printing, using a new natural dye developed from carrot extracts you can add character to your cocktails. Thanks to the Chandon Facebook Messenger Bot, visitors can send images to the Ripples Maker to quickly and easily create a custom cocktail.

RETAIL SHELF SPACE MANAGEMENT

Qopius



WHAT ?

➤ It offers a multi-source ray monitoring platform that relies on image recognition through cameras, robots and others to improve product availability and optimal execution in order to maximize sales.

WHAT'S THE POINT ?

➤ Unlike most robot-based service providers in the US today, **Qopius provides a solution that focuses on the A.I. that analyzes the point of sale and the business intelligence behind it** to correlate and increase productivity and revenue regardless of the medium used for capture. Using shelf images, they are able to improve store execution by 50%.



SES IMAGOTAG, FRENCH LEADER OF E-LABELLING



The **electronic label pioneers** in the digitization of stores. Owned by a Chinese group (BOE), it holds a 50% market share in Europe. They are represented in 62 countries

The company offers **electronic labels**, controlled by radio from a computer, which allows the price list to be updated every hour.

At VivaTech they presented their **VUSION cloud platform solution** that **increases responsiveness, accuracy and quality through the digitalization and automation of shelf price display**. It allows stores to manage their prices in real time and **eliminate display errors (-100%)**, reduce label management time (-80%) and improve price image and customer confidence.

The new **VUSION Rail** is a new rail with bigger screens that allow to bring emotion to your shelves with dynamic content powered by the cloud solution



SES-IMAGOTAG, BOE ET JD DIGITS ANNOUNCED A JOINT VENTURE IN ORDER TO DEVELOP DIGITIZATION OF RETAIL IN CHINA

SES-imagotag, the world's leading provider of electronic labels and IoT solutions for retailers, BOE Technology, the world leader in semiconductor displays and providers of intelligent interfaces, and JD Digits, the Chinese leader in digital technologies, **announced today that they have signed an agreement to finalize a joint venture whose objective will be to develop and accelerate the digitalization of physical commerce, especially in China.**

The three companies will combine their expertise and technologies to **develop solutions to improve point-of-sale efficiency, merchandizing and collaboration between manufacturers and retailers.** With these technologies, the physical point of sale will become a **connected, data-enhanced and interactive environment** with customers, both an interactive digital media and an optimized environment in terms of inventory management, linear availability and end-to-end supply chain efficiency.

BOE | ses imagotag

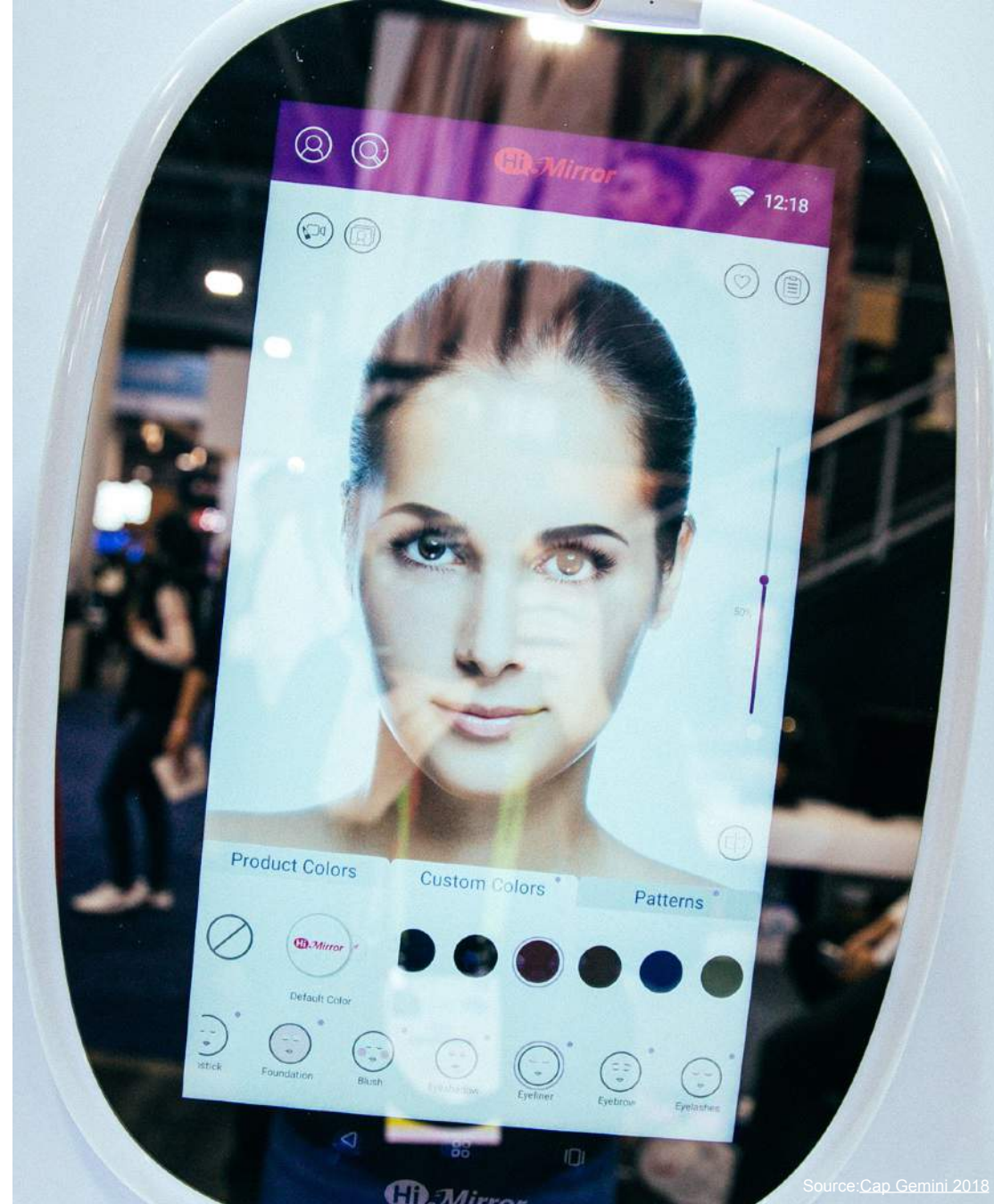


PERSONALIZATION, THE HOLY GRAIL FOR BRANDS AND CHAINS

Mass commerce had its time; consumers now expect brands and chains to provide **more personalized relationships**, and even **unique products** corresponding to them perfectly. This is now possible thanks to **data** and **new technologies**.

The first step is **collecting behavioral and personal data**: although the practice has long been in effect online, it's now being applied in the real world with the help of sensors. This data can help personalize the relationship with brands on an **individual level**, with advice and targeted offers, or **on a more general level**, with ranges and products which are a better match with local specifications.

Vendors, who are **better informed**, can thus make sure that their advice component is reinforced. But at the same time, western consumers are increasingly **informed and demanding** on how their personal data is processed: brands and chains therefore have to handle these matters **with care**, or else risk breaking the trust they've built with their customers.



Source: Cap Gemini 2018

A PERSONAL SHOPPING ASSISTANT THAT GUIDES YOU TOWARDS A PRODUCT



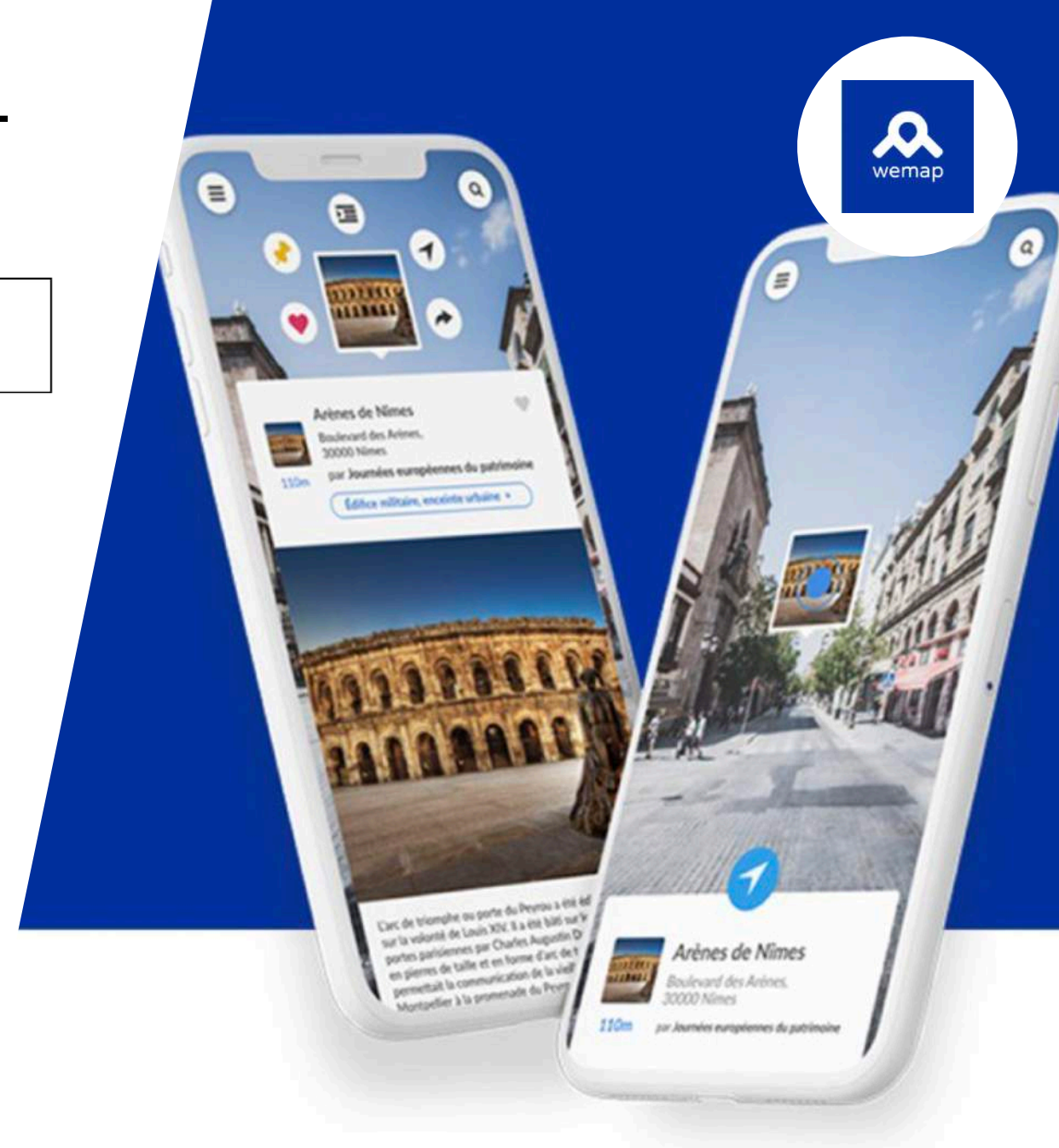
WHAT ?

Wemap unveils a preview at VivaTech of a **solution that combines map and augmented reality to enable a real-world exploration experience** as well as the innovative services created by its customers. The startup has chosen an open solution and therefore works on most smartphones without downloading applications. **It allows guidance both indoors and outdoors.**



WHAT'S THE POINT ?

The **solution can be customized to suit customers, allowing them to invent new services for the general public.** It can be applied to retail to become a shopping assistant by offering a supermarket guidance experience to facilitate discovery and orientation in store towards a specific product.





YOUR SELFIES WON'T JUST BE USED FOR YOUR INSTAGRAM ACCOUNT ANYMORE! L'ORÉAL WILL GIVE YOU A DETAILED SKIN DIAGNOSIS USING YOUR PHOTOGRAPH.

L'ORÉAL
PARIS

MODIFACE

During VVT L'Oréal presents AI skin consult. This technology was created in collaboration with Modiface who manages the AI algorithm that enable the **skin aging diagnosis**.

Women access in just one selfie a personal and detailed diagnosis of their skin along with tips to improve their skin condition : routine to follow, product to try.

The tool is based on scientific research on skin aging that was led by L'Oreal research and innovation department. **They acquired modi face to boost their research with AI and create the tool.** The algorithm was trained on 6000 clinical images as well knowledge from their skin aging atlases. It then added up 4500 smartphone selfies of « types of women and ' different lightning conditions.

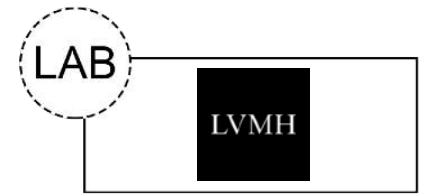
The results were validated by dermatologist and the tool is capable of a high level of easement of the different conditions.

The first application of AI Skin consult is with Vichy, names Vichy Skin Consult which launch in January 2019 in Canada, and later this year worldwide.

The tool work online. **Women upload their selfies on the online platform which will give them a diagnosis of their skin** focused on aging signs. **Then they will receive tailored advice and routine** to follow. They will know what type of products they should use, where on their face and when as well as the area where they should pay more attention.

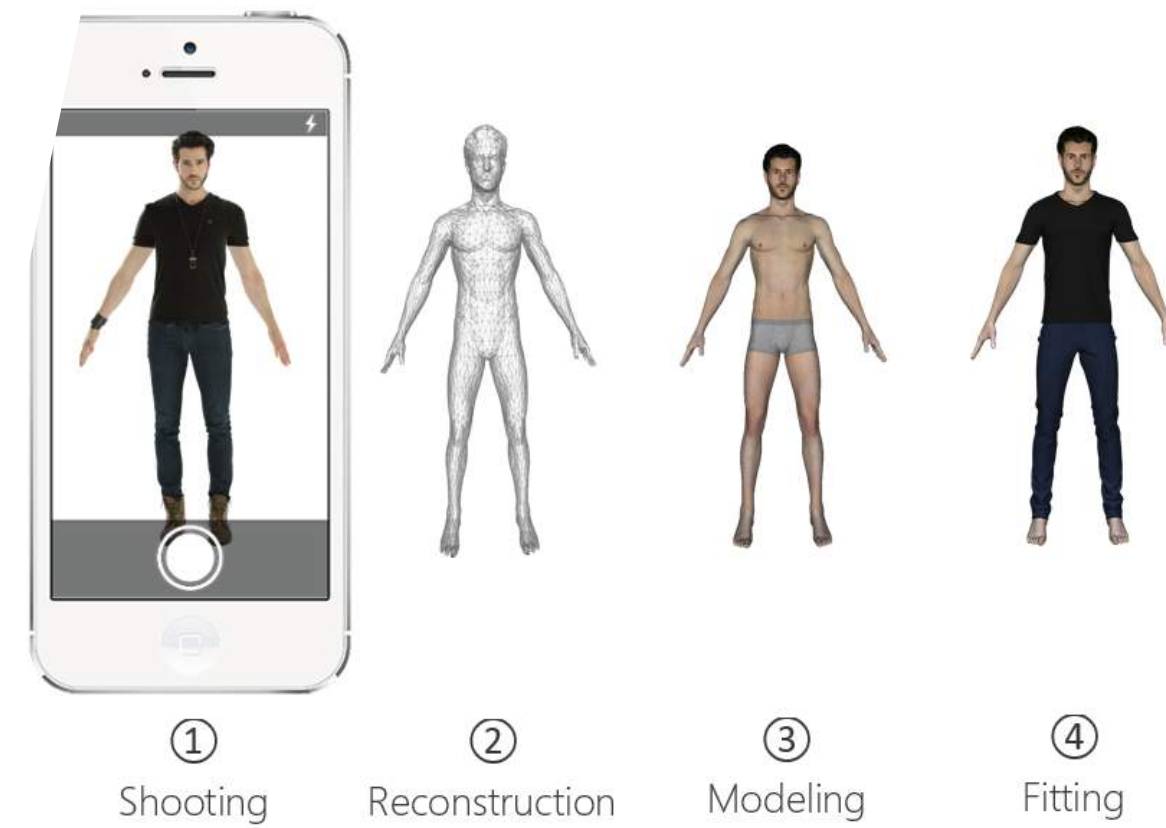
SIZE RECOMMENDATION PLUGIN FOR FASHION E-SHOPS

F I T L E



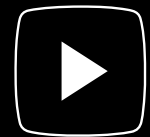
WHAT ?
 Fitle develops cutting edge algorithms that **predict the most suitable size for every e-shopper** according to the sizing chart of every brand.

WHAT'S THE POINT ?
 Sizes often vary from one brand to another, and it is impossible to try the items when buying online. Fitle solves this problem providing a solution directly implemented on its partner sites which allows to increase conversions.





MODIFACE SKIN DIAGNOSIS DEMO



THE PAYMENT REVOLUTION

- While it is now possible to pay with only a smile in China, mobile and contactless payment are still developing in Europe, especially via smartphones and “**wearable**” tech.
- In France, **contactless payment** surpassed 1 billion transactions in 2017. **For 2019, it is projected to surpass 2 billion.**
- Digital startups and major players alike have understood **consumers’ frustrations** (as well as the benefit of collecting transaction data) and are developing **innovative payment services that combine security and fluidity.**





**A SOLUTION TO
ALLOW CHINESE
TOURISTS TO EASILY
PAY WITH ALIPAY AND
WECHAT PAY IN ANY
SHOP IN EUROPE**

DAMIANO RINALDI
CTO & GENERAL MANAGER
SILKPAY



Damiano Rinaldi
CTO & GENERAL MANAGER - SILKPAY



AUTOMATED PRICE MONITORING SOLUTION

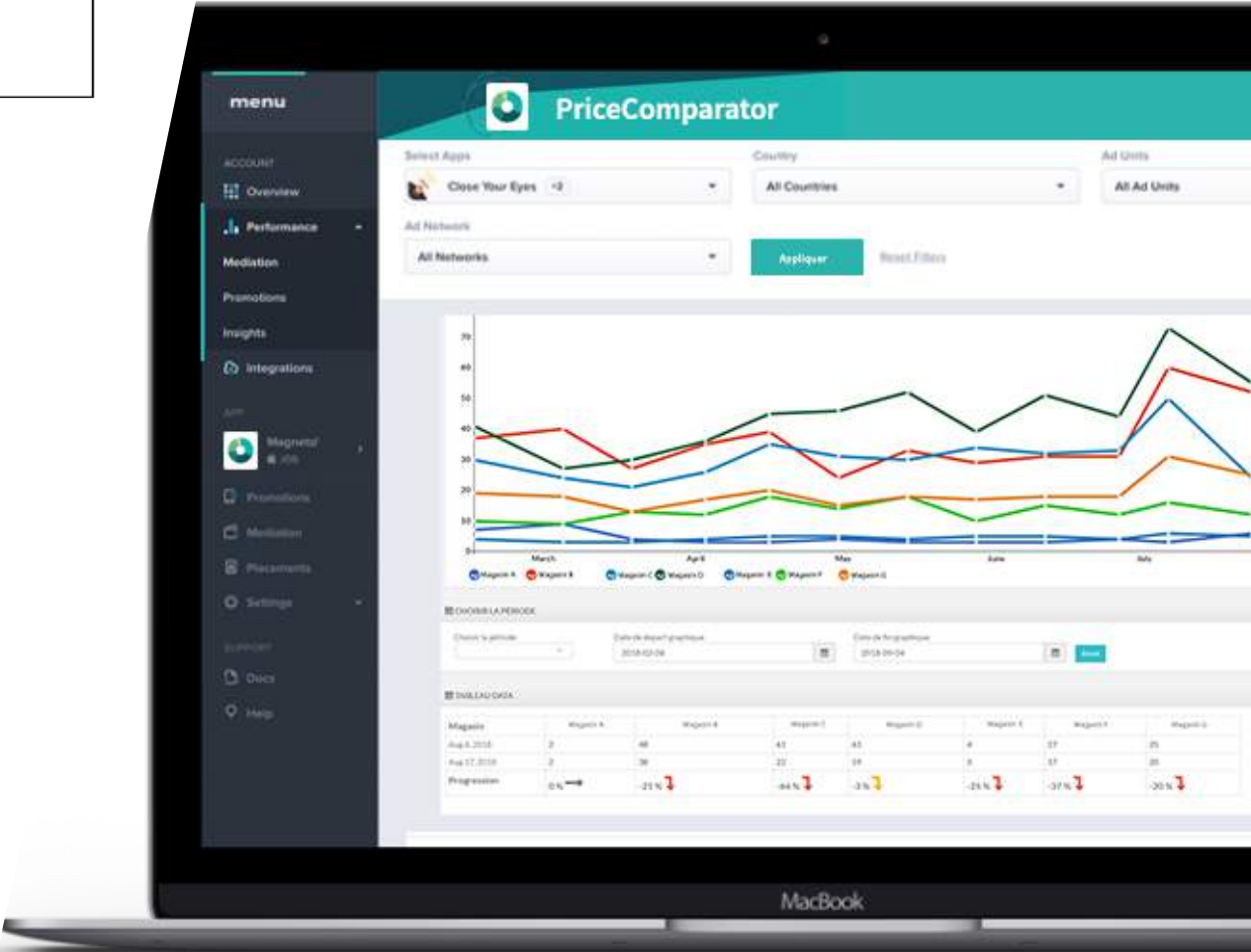


WHAT ?

➤ PriceComparator is a price monitoring software designed for retailers and suppliers. **The easiest way to monitor your competitor's prices, products and so on in real time**

WHAT'S THE POINT ?

➤ It allows companies operating in markets with aggressive pricing policies and strong competition to be **informed in real time of price changes**, new products, inventories, but also new promotions launched by competitors.



SOCIAL NETWORKS CLAIM TO BE MOVING CLOSER AND CLOSER TO THE ACT OF PURCHASING

Throughout all of 2018, **Instagram, WhatsApp, Twitter and Pinterest** reinforced their efforts to orient their features and innovations toward **payment and purchasing**, so they can transform **attention and inspiration into actions**, and thus stand as an alternative to search engines.

For all that, they haven't fully made the leap from social networks to E-commerce, like **in Asia**, where WeChat (in China) and Line (in Japan) are directly integrating **E-commerce features** and payment solutions.

On the other hand, Instagram and Pinterest remain limited to an **advertising model**, ensuring traffic redirection toward third-party platforms, and managing sales, logistics, and customer services.



**\$165
billion**

⚡ The value of social commerce by 2021, according to Technavio

**66%
of brands**

have embedded social shopping features, according to Gartner L2

Source: Technavio, Gartner L2

REWARDING SOCIAL MEDIA ENGAGEMENT WITH BRANDS



PUKKET

LAB



WHAT ?

Pukket is an app that **allows users to get rewarded with vouchers when they engage with brands on social medias**. Connect your Instagram, share your experience about one of the featured brands with the right hashtag, and start collecting Pukkets. **You can also share your experiences about any other cafes or restaurants, but in that case you need to include "Rewarded by @thePukket" instead**, so Pukket can reward you itself.

WHAT'S THE POINT ?

Pukket enables brands to create **authentic word-of-mouth at scale through their customers on social media**



LOGISTIC : A TRUE PART OF CUSTOMER EXPERIENCE

In response to the need for **personalization** and **fluidity** in the customer experience, distribution has to count on **optimizing and automating its entire logistical chain**.

With the explosion of e-commerce flows (live or via marketplaces), the development of “click-and-collect” and same-day delivery, **processes are becoming more complex**.

These changes are especially visible in the two sectors which show the highest ambition to adopt automation over the next three years: **supply chain** and **in-store operations**.

Stock management is particularly strategic: it goes from monitoring **stocks in the aisles** to implementing **predictive models**, by way of **automating restocks**.



+10%

annual increase of revenue, anticipated by directors of retail sectors and mass retail products thanks to automation.

85 %

of distributors are preparing to use automation for their supply chain planning.

Source: Étude IBM 2018

BUILDING ORGANIC CUSTOMER RELATIONSHIPS



WHAT ?

➤ Advalo is an individualized predictive marketing platform. **It allows you to address each consumer at moments that most influence their purchasing decision.** By combining offline/online marketing data and artificial intelligence, the platform allows you to operate on every touch point and **deploy relevant, compliant and individualized omnichannel campaigns.**

WHAT'S THE POINT ?

➤ The platform allows brands to switch from a polluting mass marketing to an individualized marketing that intervenes at the right time taking into account each individuality of consumers. **Brands get immediate results, increased consumer value, they get to control their acquisition budget and to increase productivity of their marketing teams.**

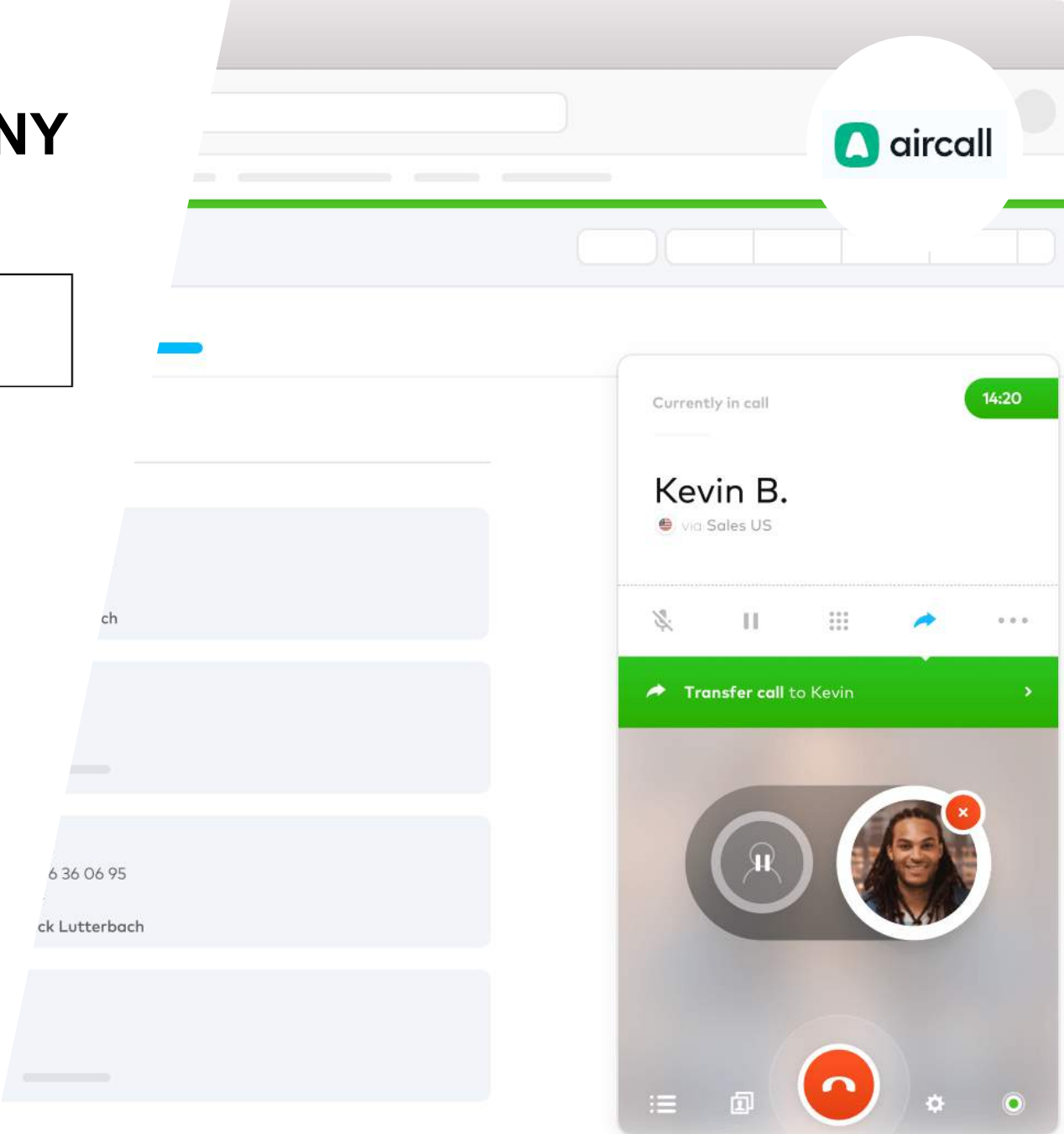


INTEGRATE ENTERPRISE TELEPHONY INTO THE CLOUD



➤ **WHAT ?**
 Aircall is the specialist in telephony in the cloud. **They replace employees' fixed phones with an application available on their phones.**

➤ **WHAT'S THE POINT ?**
 The service can be deployed instantly. **The startup has established partnerships with some fifteen SaaS tools such as Salesforce or Zendesk in which the solution is integrated.** Their objective is to have more than a hundred by the end of 2019. **This allows calls to be transcribed directly into these tools.**





D2C: THE NEW SECRET SAUCE

Amélie Oudéa-Castera,
Head of e-commerce, data and digital at Carrefour
Nigel Vaz,
CEO of Publicis Sapient.

Is it the end of food retailer as we know them ? **While Amazon and Monoprix teams up to create a real D2C strategy, other actors such as Auchan are heavily closing stores.** Amélie Oudéa-Castera and Nigel Vaz were present at Viva Tech to talk about D2C and the importance of customer experience.

The customer experience is also **about diversification. If Carrefour is historically a food retailer, it tries now to invent new food solutions** such as the “Dej Box” a corner with ready made meal for workers.

“What happen after the order is really important” says Amélie Oudéa-Castera who precise the determinant role of the supply chain in the customer experience.

The future for Carrefour ? **“We launch an app this morning where people can shop more than 50 000 goods and be delivered the next day. Next step is to share moment of life with the customer. [...] To be capable to inspire the customer with our suggestion”** said together Amélie Oudéa-Castera and Nigel Vaz.



6.2

LUXURY

PERSONALIZATION AT SCALE

Luxury is often seen as the left out child of technology. The idea of handmade, custom made were for a long time **incompatible with the idea of scalability** linked to new technologies. Luxury is first and foremost a status.

But today, AI, VR, AR, XR, new speed, robots are changing this status quo. You could wonder, **if luxury meant the pinnacle of personalization how can IT revolutionized and improve it? The answer is, with scalability and the multiplication of personalized choices.**

Indeed, luxury brands can now offer a **personalized experience online with custom made interactions even online.** There are now online tools enabling customers to **create their own luxury personalized item**, choosing colors, materials, adding notes or names, etc. **Soon AR will even enable them to visualize their creation** to make sure it's the perfect fit.

Finally, they can personalize interaction with chatbots, dedicated mailing list, adds, targeted to the one who spent the most, or have been loyal for the longest, giving them access to special products, events or offers or even personalized products celebrating an anniversary for instance (10 years customers)



Source: Cap Gemini 2018



VIVATECH CONFERENCE

OPPORTUNITIES AND CHALLENGES OF DIGITAL FOR LUXURY BRANDS

Maria Vonscheelplessen,
Global Media Manager of Montblanc
Anne-Veronique Baylac,
Industry Director Luxury, Auto & Mobility at Google

If luxury brands are historically known to be different, the advent of the digital era oblige the maison to evolve in their ways to communicate and to think the relationships with their clients. **Maria Vonscheelplessen, Global Media Manager of Montblanc** discussed with us about this revolution:

“Digital is simultaneously an opportunity and a threat. It gives us new tools but can also put out brand image in peril very quickly.” says Maria Vonscheelplessen

Digital change the way to consume but also the way to design new products. Montblanc now integrates it in their product in a way to combine luxury goods and new touchpoints with the consumer.

“We interact with our customers in a very personalized way by segmenting our message in function of needs, ages but also country” says Maria Vonscheelplessen.

For her, the biggest challenge is to succeed at monitoring the performance of a luxury brand in all the environments where it evolve and in an omnichannel way.

LVMH : « CRAFTING THE EXPERIENCE OF TOMORROW »



LVMH's Luxury Lab is organized around **the eight key stages that make up the customer's journey:**

- 1 : Awareness,**
- 2 : Exploration,**
- 3 : Storytelling,**
- 4 : Omnichannel,**
- 5 : Product,**
- 6 : Trial Experience,**
- 7 : Payment,**
- 8 : CRM.**

From communication around a product to after-sales service, with one ambition: to provide customers with innovations that make their shopping experience unique and fluid.

Augmented reality, machine learning or artificial intelligence feed a new experience of luxury based on virtual fittings, immersion in the world of Houses and the facilitation of the payment act.



30 Startups

24 Companies of the Group



THE INNOVATION AWARD OF LVMH, DRUMROLL FOR THE WINNER



After a very successful Launch in 2017, the LVMH Innovation Award was presented again this year on Friday 17 May, 2019. It is one of the highlight of Viva Technology.

Among the hundreds of applications, LVMH selected **30 finalists** and 5 got the chance to present their start up live on stage during VivaTech.

This year, the theme was « **Crafting the customer experience of tomorrow** ». The winning startup benefits from the financial support of LVMH Group as well as counseling and mentoring during one year, and get to work at **Station F**.

5 START UP WERE SELECTED TO PITCH THEIR CONCEPT ON STAGE DURING

Crafting the customer experience of tomorrow

30 startups



Develops mobile body scan technologies for the retail sale of clothing, among others. The app is able to measure the size and measurements of the client from two photos, on any background, for online or in-store purchases.



Allows customer service to be managed automatically: conversations are understood and automated repetitive processes.



offers a connected mannequin that revolutionizes the process of prototyping and clothing design. The solution adapts as much as possible to the evolution of the human body.



is a connected products platform that gives a digital identity to physical objects.



is a visual search and image recognition technology for retailers and brands. It allows users to identify an object when they see it

63%

of international solutions

ONE WINNER : 3D LOOK



3D LOOK



WHAT ?

The solutions empower brands, retailers, and e-commerce businesses to deliver hyper-personalized customer experiences across all channels. **The user only need two picture for the tool to compute his measurements and body shape.** It then generates an accurate 3D model of the user body. This creates for the customer a shopping experience which is a hyper-personalized, intuitive, and available anywhere.



WHAT IS THE POINT?

Letting the customers see how product fits their actual body size and shape thanks to the Virtual Try-On solution. **Which ultimately eliminates the time and expenses needed to manually measure customers or deal with returns.** The tool generates up to 24 measurements along with real time, enriched and customer physiometric data giving the brand a **holistic view of their customer which can down the road inform your design and creation** as well as the marketing campaigns to encourage repeat purchases and **drive more revenue.**



LOUIS VUITTON LIGHTING PRODUCT



- The latest innovation at the LVMH Luxury Lab, two emblematic bags from Louis Vuitton, the Duffle and the Speedy, have been equipped with LED screens.
- This novelty required two years of research. The fabric was developed with the technology of the Chinese "Royole", known for its flexible screens.



3 LUXURY INNOVATIONS IN THE LVMH LAB

LVMH



An augmented reality experience designed as an escape game



A pop-up store offering many personalized services without any human intervention such as jewelry distribution.



An immersive experience to discover a selection of Baguette bags

A CONNECTED AND ADAPTIVE MANNEQUIN



WHAT ?



Designed for model makers and the textile industry professionals **Eueka is the very first smart mannequin based on the biomimetic process.** It allows you to customize models to exact size.

WHAT'S THE POINT ?



By limiting technical constraints, **this mannequin saves time and precision for professionals** in the field who can then show more creativity.



CUSTOM-MADE HOME FRAGRANCE

**ARTIRIS**

WHAT ?



Artiris exposes COMPOZ, a natural, smart and 100% tailor-made home fragrance composer. A patented innovation combining high perfumery, technology and French luxury.

WHAT'S THE POINT ?



By making it possible to create customized home fragrances, Artiris can be adapted to each person's olfactory heritage in order to improve everyone's mood;





6.3

TRAVEL & HOSPITALITY

The digitalization of the travel industry : between threat and opportunities

Thanks to Artificial Intelligence, possibilities of personalization and optimization multiply at all stages of the traveler's journey.

This is an opportunity for industry players to strengthen their value proposition and better serve their customers, thanks to the alliance of people and technology.

But it is also a threat, with the arrival of new actors on the subject. **In fact, thanks to their mastery of data and user experience, digital platforms are now positioned as aggregators**, connecting transport, hosting and on-site experiences, to offer integrated and customized packages.



71 %

of business travelers think that Artificial Intelligence will revolutionize travel.

53 %

of tourism decision makers in France consider that conversational internet (chatbot, voice assistants) will have a decisive impact on their activity.

Source : Dans la tête des voyageurs d'affaires, FCM Travel Solutions, 2018
Observatoire de l'e-tourisme, KPMG/Next Content 2018

AI IN TRAVEL: A POTENTIAL IMPACT ON THE ENTIRE JOURNEY OF THE TRAVELER



Before the journey

AI is helping to discover, purchase and planning.

- Inspire and guide
- Anticipate traveler's needs
- Suggest tailor-made solutions
- Book quickly



During the transport

AI is at the service of operational excellence and traveler information.

- Ensure the security
- Facilitate flows
- Manage luggage
- Inform



To destination

AI transforms the experience of the tourist arriving at their destination.

- Facilitate the Experiments
- To discover activities



Customer service

The AI facilitates customer service and even anticipates problems.

- Anticipate problems
- Respond proactively
- Automate customer service

Mobile changes the deal...

With the rise of smartphones, the development of the mobile Internet and the fall in roaming prices, **travelers' behavior has been profoundly transformed**, whether in the preparation phase or during a trip.

Today, for almost all consumers, the web is the first step in preparing their trips, to inquire or book.

The rise of the mobile in the tourist experience brings in its wake new business models and new expectations from travelers who use their phone to reduce journey pain points and have a **stronger sensation of freedom and spontaneity**. **With cities getting smarter** we can only imagine the infinite number of possibilities that will open up for travel and leisure businesses.



60 %

of French tourists say that the smartphone has changed the way they travel

31 %

feel more informed about their destination through their phone

Source : Kayak Mobile Travel Report 2018

DEVELOPING ONLINE SALES OF ACTIVITIES FOR TOURISM PROFESSIONALS



WHAT ?



Activator is developing a tourism sales ecosystem. **Its solution allows tourist offices to connect with leisure professionals in order to create an online platform for selling tourist activities. The final customer will be able to consult on a tablet available at the reception desk of a hotel or on his smartphone the list of activities proposed around him.** Hoteliers can also market the hotel's products on this platform. The app is available in 10 languages.

WHAT'S THE POINT ?



Activator is in line with the B2B2C trend. The startup promotes the 80,000 activities in France. It also allows tourist offices to digitize tourism professionals in their sector.



ELIMINATE PAIN POINTS RELATED TO LUGGAGE TRANSPORTATION

**EELWAY**

WHAT ?

EELWAY gives hotels and their customers access to a list of 5*services :

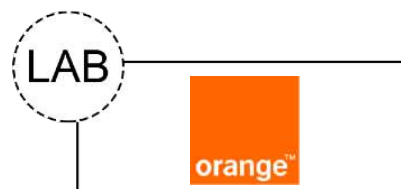
- **Luggage carrying freedom** : delivery to airport, train stations and hotels before and after a stay
- **Luggage storage anywhere in the world** : hotels open their storage space to travelers, which is a great opportunity to bring in potential customers and therefore increase revenue.
- **Lost&Found objects delivery** to ensure post-stay satisfaction despite a stressful experience

WHAT'S THE POINT ?

EELWAY helps hotels to retain and acquire new customers by offering services around recurring and stressful challenges such as luggage storage or lost objects.



OFFERING PERSONALIZED TRAVELERS' HEALTH ADVICE THROUGH A WEB AND MOBILE APPLICATION



WHAT ?

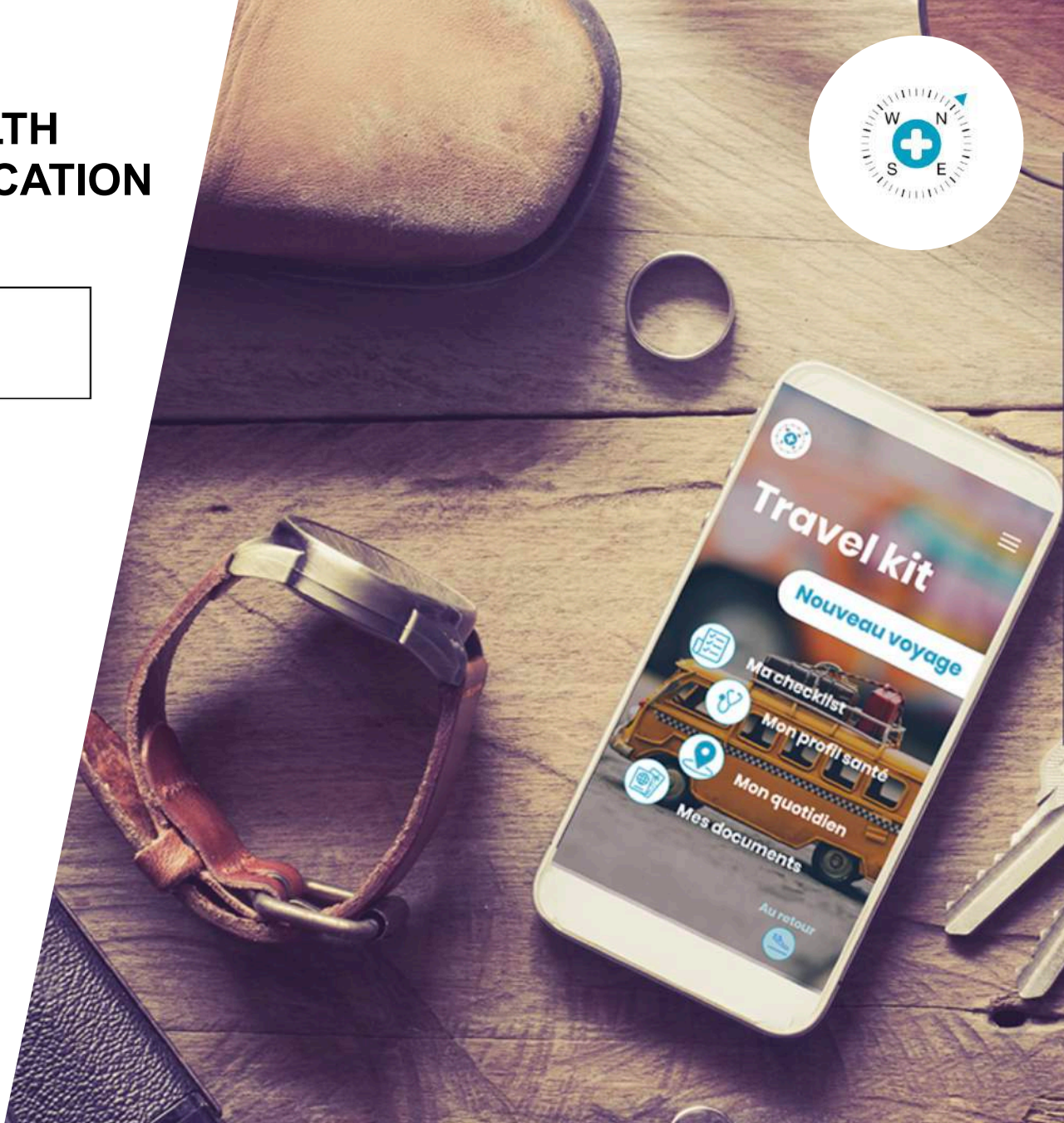


Travel kit is an innovative travel health solution, offering personalized travelers' health advice through a web and mobile application. Our technology lies on a unique algorithm combining data about the destination, season, health status, age, etc... to provide an answer to the questions many travelers ask themselves when preparing for a journey.

WHAT'S THE POINT ?



Travel kit takes care of answering all the questions you ask yourself before you leave, only, but not only! They offer you a complete tool to organize your trip: a personalized checklist, general information about the destination,... All these features make Travel kit a travel companion.



MAKING DONATION EASY ANYWHERE



TIPSmeee



WHAT ?

Since no one has cash anymore it has become very difficult to leave a tip or simple hat donation. TIPSmeee came up with a solution that enables user to leave a digital tip. **You don't need an app, just a QR code.** The user creates a profile and receive a QR code and then just need to present it to its customer or have it accessible to them.

WHAT IS THE POINT?

During charity events, for the museum, foundation or association, instead of having a little jar on a counter which is really limiting **you can now have a QR code in the street, on an add, on a bus stop, on Instagram, literally anywhere making it super easy for people to donate and to add to support any given initiative by adding it to their communication plan.**

The goal of TIPSmeee is not to replace cash. The solution simplifies the collection of donations or tips by using familiar technologies, such as smartphones and QR Code. With this new channel, they are proposing a way to rejuvenate the regular donor base, also secure the donation eliminating the risk of fraud.



MAKE YOUR TRAVELERS YOUR BEST BRAND AMBASSADORS



CLAPNCLIP

LAB



WHAT ?

CLAPNCLIP transforms traveler's souvenir videos into rich, authentic and relevant marketing content. CLAPNCLIP negotiates unique plans with Youtubers, curating their content and creating video stock. More than 150 destinations are now available. The startup also offers 4K quality shootings for hotels, compatible with the future generation of screens. **The client also benefits from tutorials to master the Art of shooting videos.**

WHAT'S THE POINT ?

CLAPNCLIP offers the Travel & Hospitality professionals' a **professionally edited souvenir video**, to captivate the audience with more commitment than the usual publications. **Increases SEO with 50 times more chance to boost the ranking** with youtube. Builds trust : 97% of travelers trust those who traveled before them and will trust more a content that was authentically filmed.



8

FINANCE, INSURANCE & BANKING

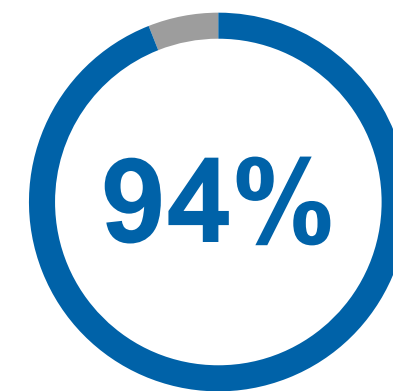
ONLINE BANK IS A MAJOR GAME CHANGER

French consumers go more and more often online to check their account, and often use their mobile to do so. Also, more and more of them are tempted to change bank for online ones and are often satisfied with the new services. **4.4 millions of them have an account with an online bank.** This growing satisfaction is due to flexibility, gain of control the client has as well as unlimited access to some features.

Online bank concretely offers more fluidity, accessibility and personalization to consumers.



Satisfaction of online bank



94% of French people are satisfied with their online bank

Nevertheless, note that **only 4.5% of French people using a Neo bank have closed their traditional account.**

Source : *Relation banques & clients 8 e édition*, Deloitte, 2018

PAYMENT REVOLUTION

Mobile and contactless payment methods are growing in Europe. In France, contactless payment could exceed 2 billion transactions.

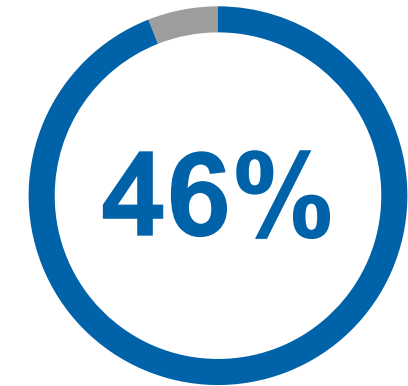
At the same time, money transfer applications are gaining popularity, whereas in a traditional bank, making a transfer require more time, up to several days.

With online services, consumers are getting used to real-time and frictionless experiences.

Start-ups as well as major digital players have understood the frustration of consumers and are trying to bring solutions that combine fluidity and security. **Traditional banks do not want to be outdone ...**



Money Transfer

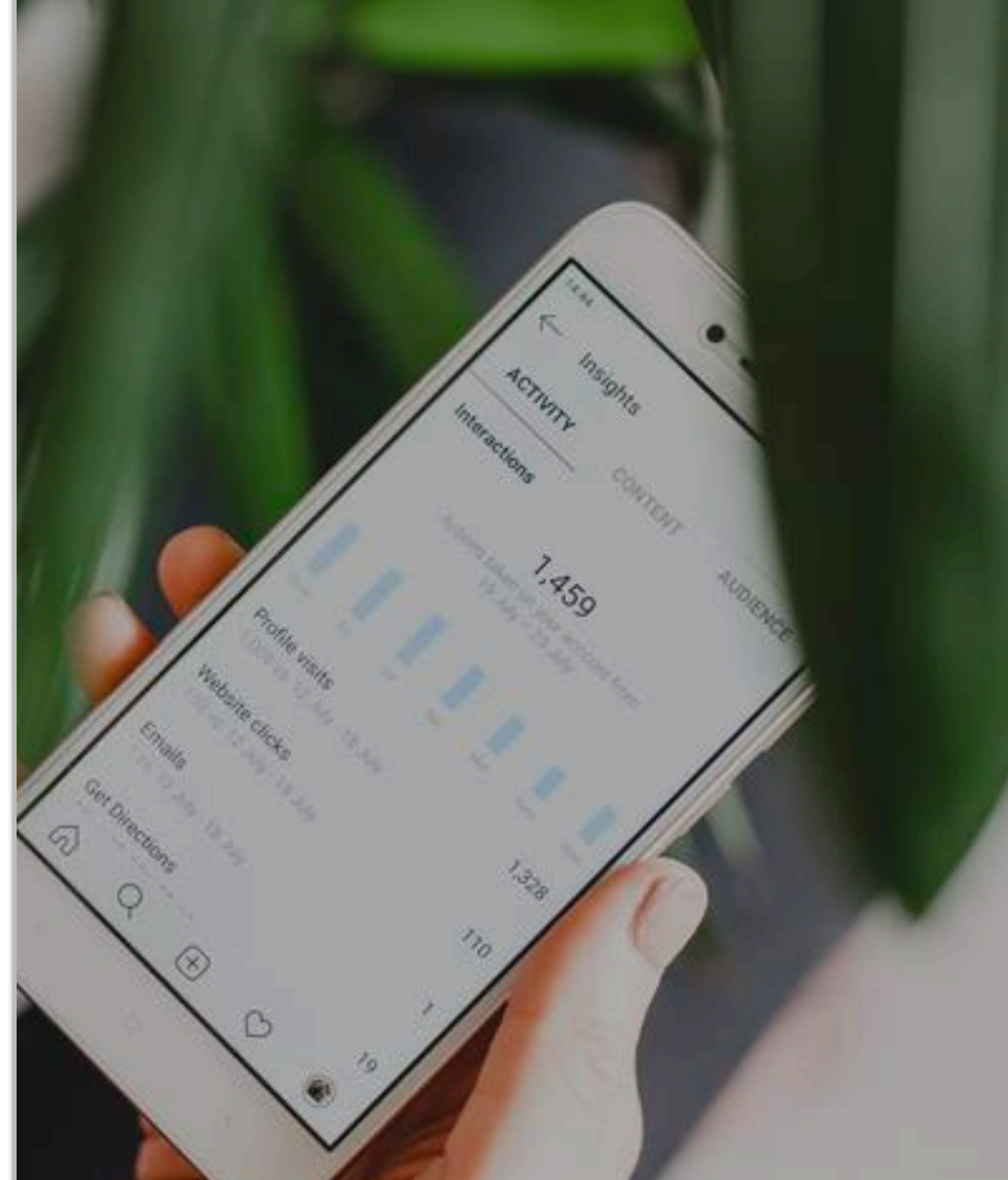


46% of French consumers between 18-34 years old use mobile payment to transfer money to their friends. (30% national average)

Source : *Digital Payments Study*, Visa, 2017

3 MAIN CLIENT EXPECTATIONS IN INSURANCE

- 1** **Customized** promotional offers accessible from my insurer area and allowing me to limit my risks.
- 2** The possibility to make my claims **directly from my mobile**, including photos taken from my smartphone.
- 3** **Advice and information** of prevention more **personalized** and better adapted to my situation, my profile and my behavior.



Source : *Expérience client et nouveaux services numériques dans l'assurance*, GMC Software & Next Content, juillet 2017

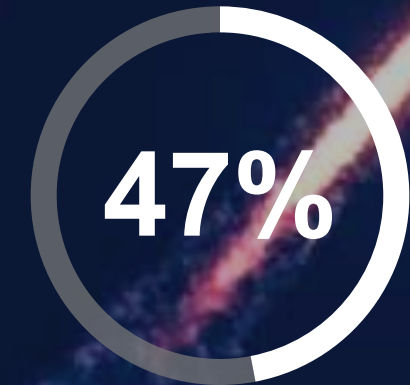
BETWEEN SECURITY & SPEED

In both banking and insurance sectors, the actors must answer the requirements of "compliance" and implement procedures of "KYC" ("Know Your Customer") during the subscription. For this, **they must obtain many pieces and regulatory information from their customers.** Often complex, the underwriting phase becomes an issue for the customer experience.

If new market players do not hesitate to innovate or even take risks, to simplify the subscription phase as much as possible, **traditional players are not necessarily ready for it.**

Thanks to technology based solution, **they can already leverage and capitalize on their users' data** and the trust they have developed with them as well. **GAFA, with Amazon in the lead, are best positioned to capture some of the value,** through personalized underwriting and simplified services that attract consumers.

Online account



47% of French people are ready to open an online account

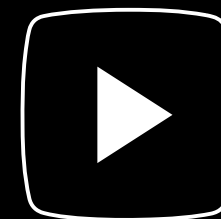
Source : *Relation banques & clients 8 e édition*, Deloitte, 2018



INTRODUCING PLATFORME 58, THE BANKING INCUBATOR OF LA BANQUE POSTALE

FABIEN MONSALLIER
INNOVATION DIRECTOR
LA BANQUE POSTALE

(IN FRENCH)



MAKING DIGITAL BANKING PERSONAL



Meniga

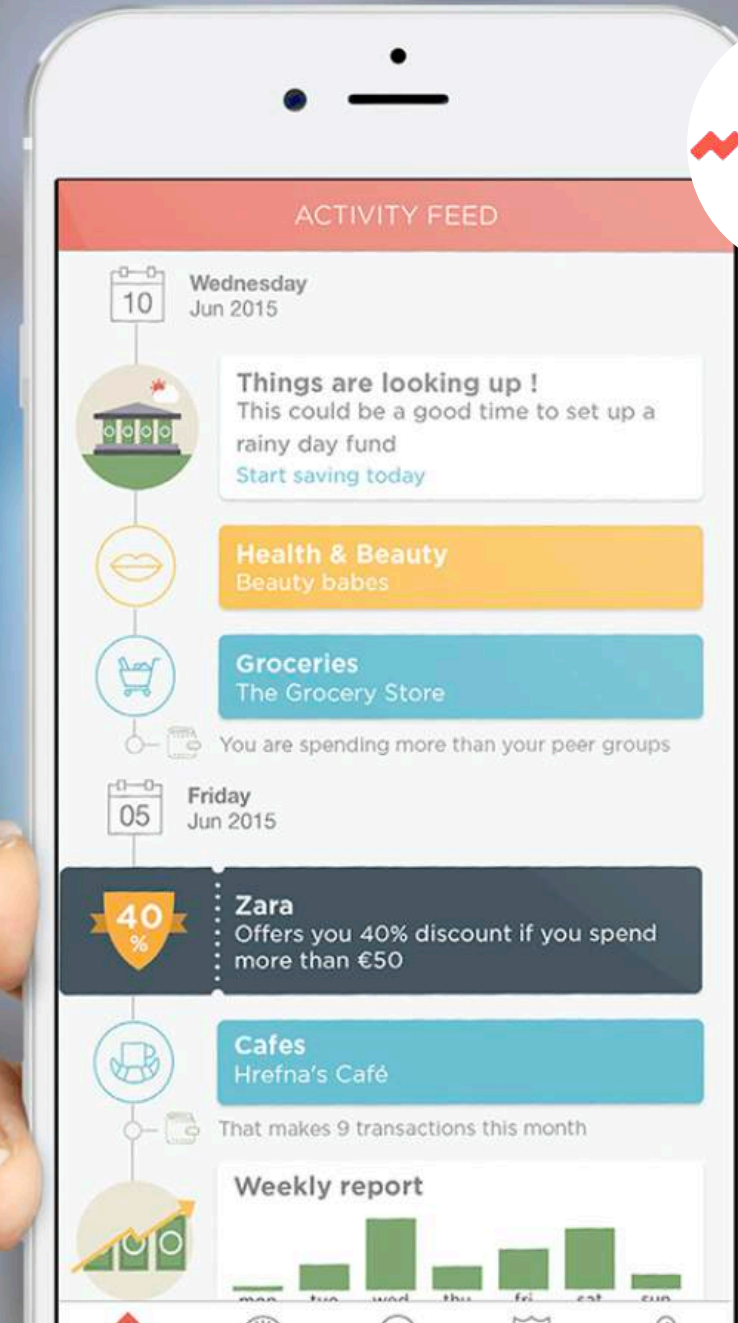


WHAT ?

The Icelandic platform combines different sources of data and insights to **personalize the customer experience and offer adapted banking offers**. It gives customer access to financial activity feed, spend reporting, goal setting, peer-comparison and cash-flow projections. **As they understand their clients pattern better, banks are also capable of building new revenue streams.**

WHAT IS THE POINT?

The point is to be able to **consolidate & enrich accounts and transaction with large sets of data that are fed into a single repository**. This data then not only allows the bank to tailor its offer and generate new revenue stream, but also the clients to better monitor their revenue and spending.



AUGMENTED CONSELOR



Gambit

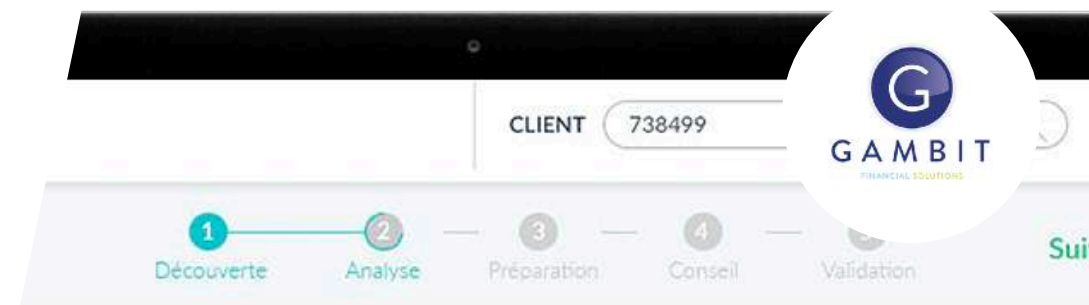


WHAT ?

Gambit is driven by the idea that customer should be placed at the center of investment advising. **They have developed software for customer profiling, portfolio optimization and risk management.** The solution enables advisor to **better understand their clients' expectations and goal in terms of investment.** Also the digitalization of the service enables **remote recommendations and a more personalized offer.** Clients can choose a guided expertise or self guided one.

WHAT IS THE POINT?

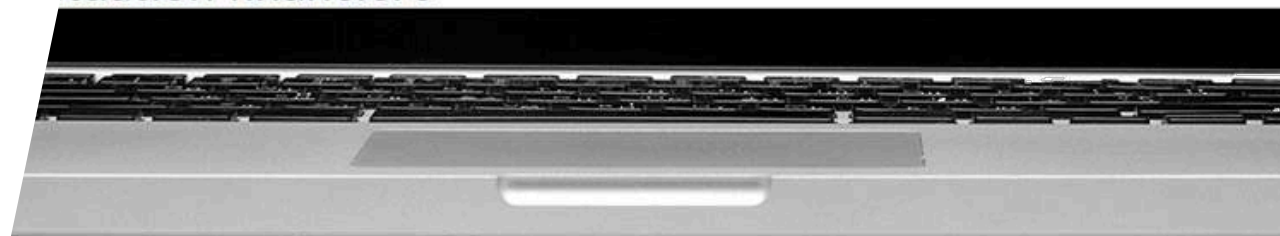
Boosted with algorithm and AI, the solution **helps the advisor to access more information and knowledge about his customer.** **Therefore he is able to be more reactive and offer personalized and effective solutions.** The tools also enables a far more powerful capacity of processing data and calculation than a human being and can assess risk more effectively and accurately.

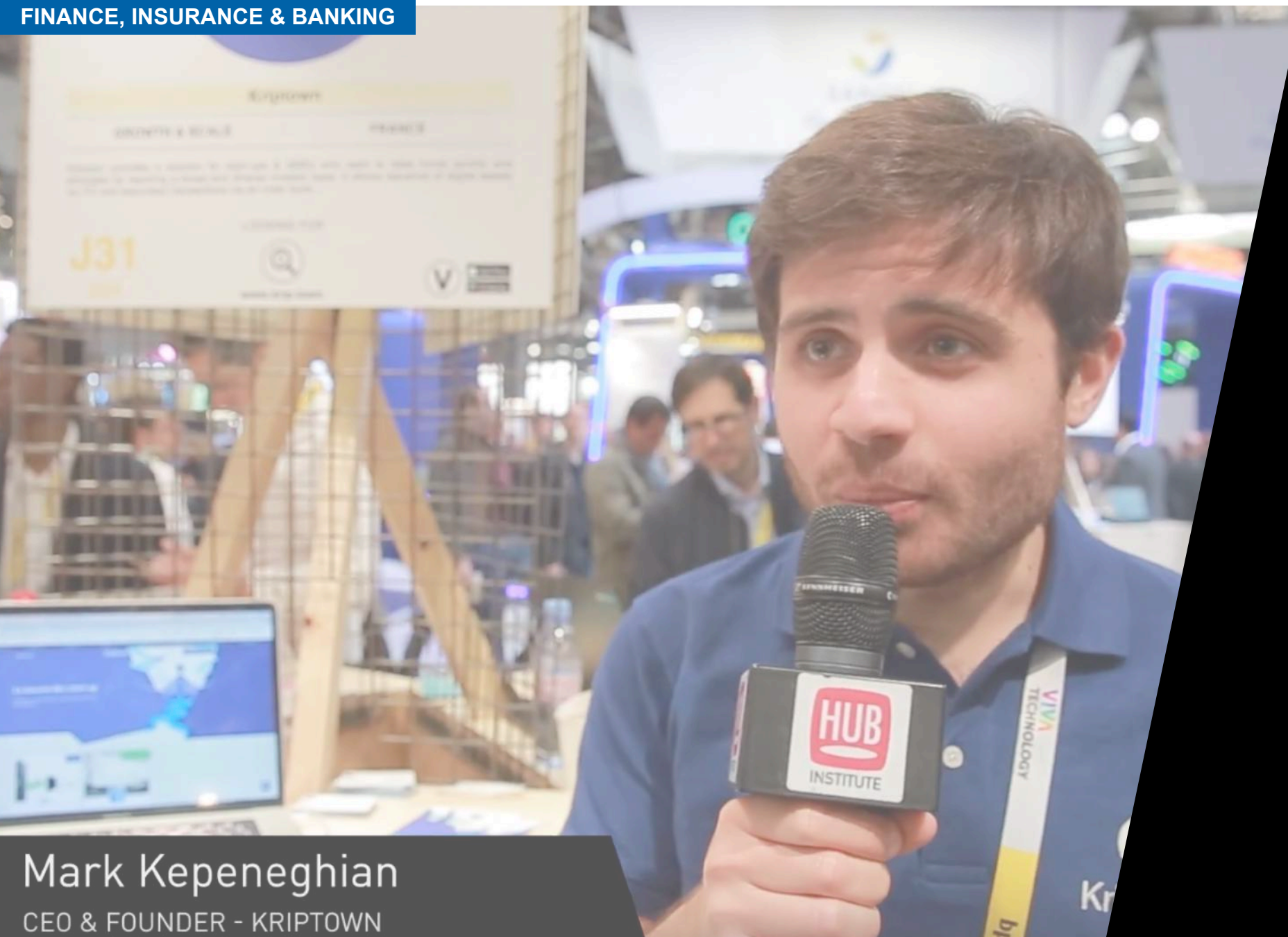


is d'investissement



tuation financière





AN NEW TYPE OF INVESTMENTS' MARKETPLACE

MARK KEPENEGHIAN
CEO & FOUNDER
KRIPTOWN

(IN FRENCH)



Mark Kepeneghian
CEO & FOUNDER - KRIPTOWN

SMARTER CONTRACTS WITH HYPERLEX



WHAT ?

Hyperlex is an online collaborative software for **analyzing and managing contract**. It is based on an AI that analyzes imported documents and produces a report and or a notification.

WHAT IS THE POINT?

On top of saving some time in allaying the numerous documents, the solution also brings safety to the stocked data. The solution **helps to manage contracts, realize audit, keep up with conformity of the documents, it can also help with your financial follow up**. Finally, it helps you to keep track of your document accessing the information much faster and make sure you honor the different contracts you might have or engagement.



EASY CLAIM EASY GO



WHAT ?

Iwe uses new technology to manage claims in a more efficient way. It essentially addresses insurers, bankers and brokers. **The platform centralizes all the data and documents and then analyzes it all to provide the best solution in a short amount of time.** Also everything is saved and registered enabling the advisor to keep track of everything very easily.

WHAT IS THE POINT?

The point is to **improve performance and satisfaction by reducing the downtime between the claim and the solution.**





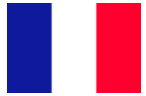
AN ELECTRONIC WALLET FOR CHILDREN TO REPLACE CASH

MAXIME PERDU
CO-FOUNDER
JAAB

(IN FRENCH)



BUILDING TRUST WITH CRYPTOGRAPHY AND BLOCKCHAIN



Stratumn



STRĀTUMN

WHAT ?

The company aims to revolutionize trust thanks to technology. It leverages blockchain and cryptography and has developed its own proof of concept to insure higher efficiency and security. **It offers capacity to track the data knowing who did what, when, where and why.**

WHAT IS THE POINT?

The point is that **thanks to the traceability, the data can be collected automatically and safely whilst respecting the privacy.** With AI growing and problematic such as deep fake emerging, **trusting the data and its usage will become paramount.**



AUTHENTICATION BOOSTED TO A HIGHER LEVEL



WHAT ?

A system that uses, sensor, human behavior data and smartphones to secure and simplify authentication process. **The platform used the behavioral data pertaining to the use of smartphones and other wearable to recognize the person.** The sensor collect the data which is analyzed thanks to machine learning leading to the recognition and validation needed to grant access.

WHAT IS THE POINT?

Enabling higher degree of authentication in an easier and faster way. When before you were suggested to create longer and more complicated password, **this solution does the contrary, it simplifies the access with more security thanks to AI and technology.**



PAY ANYONE, ANYWHERE IN EUROPE WITH JUST A PHONE NUMBER OR EMAIL



WHAT ?

Plick is a mobile payment solution that enables users to pay anything to anyone in Europe regardless of their application or payment tool. **All you need is the payee's mobile number or email. You then pay directly or schedule a date.** The payee receives your payment request via a text or email, enters its IBAN (just once for all) and gets the payment. The App notifies both parties when the transaction is made. If the bank of the user is a member of Plick it is even faster and the transfer is in real time. Note that the payee does not need to be a place member.

WHAT IS THE POINT?

Make transfer easy with anyone without having to add them to your bank beneficiary and get their bank info or have them download a specific payment tool to make it work. The next step for Plick is to broaden its scope beyond Europe.



QUALIFY DAMAGES TO MAKE THE CLAIM PROCESS EASY AND RELIABLE



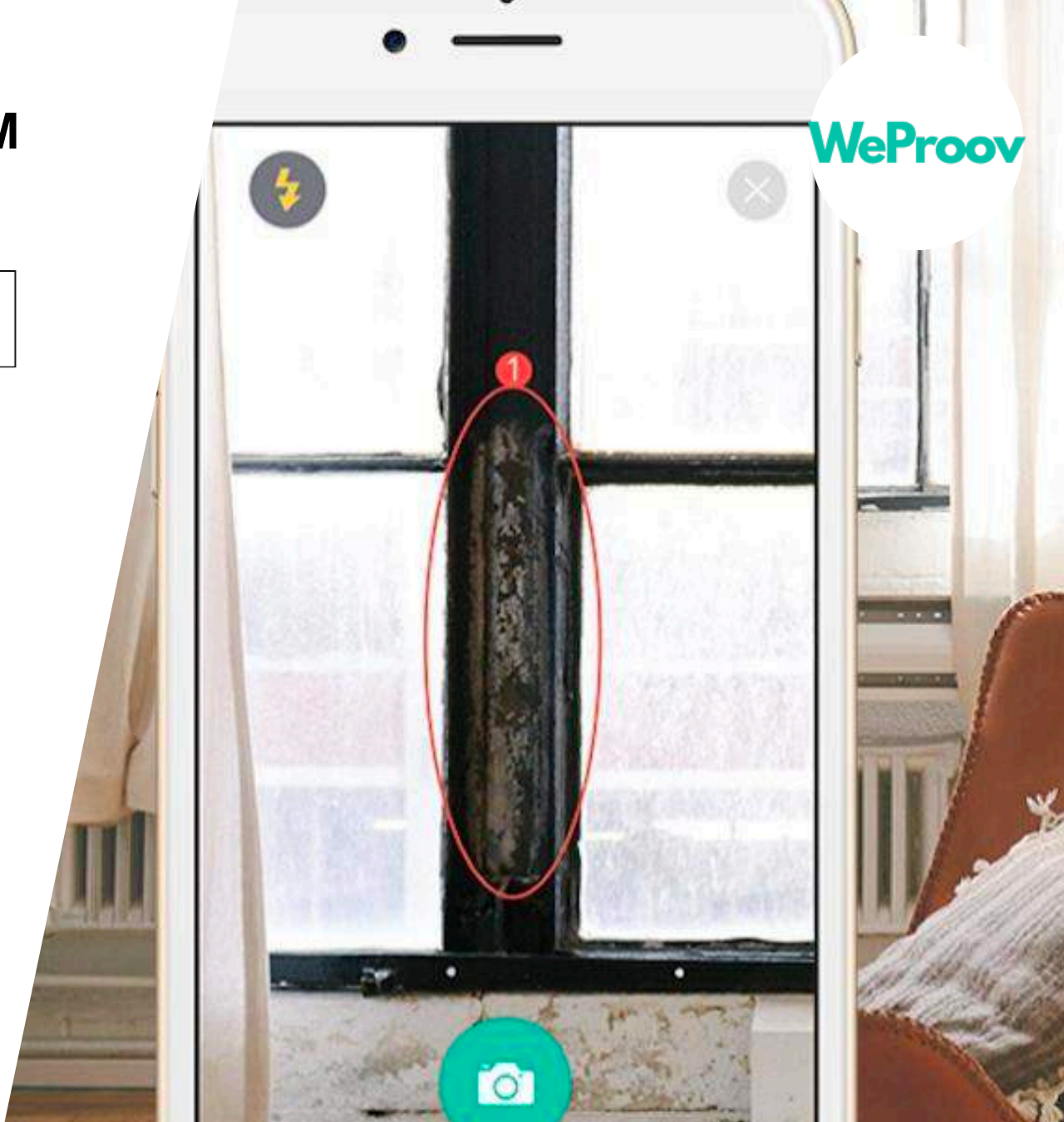
WeProov

WHAT ?

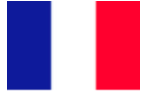
Weproov is a solution to detect & qualify risks and automate claims procedures. **It allows you to assess or have certified the damage of your vehicle, apartment, equipment, etc. from your mobile phone or tablet, anywhere, anytime and very quickly.** Weproov also offers additional services such as expert intervention, online quotation and behavior analysis.

WHAT IS THE POINT?

Because you can beforehand certify the states of your belongings on the App via your phone, it makes the insurance claim process **safer, easier and faster.**



ALL IN ONE 100% MOBILE INSURANCE



Leocare

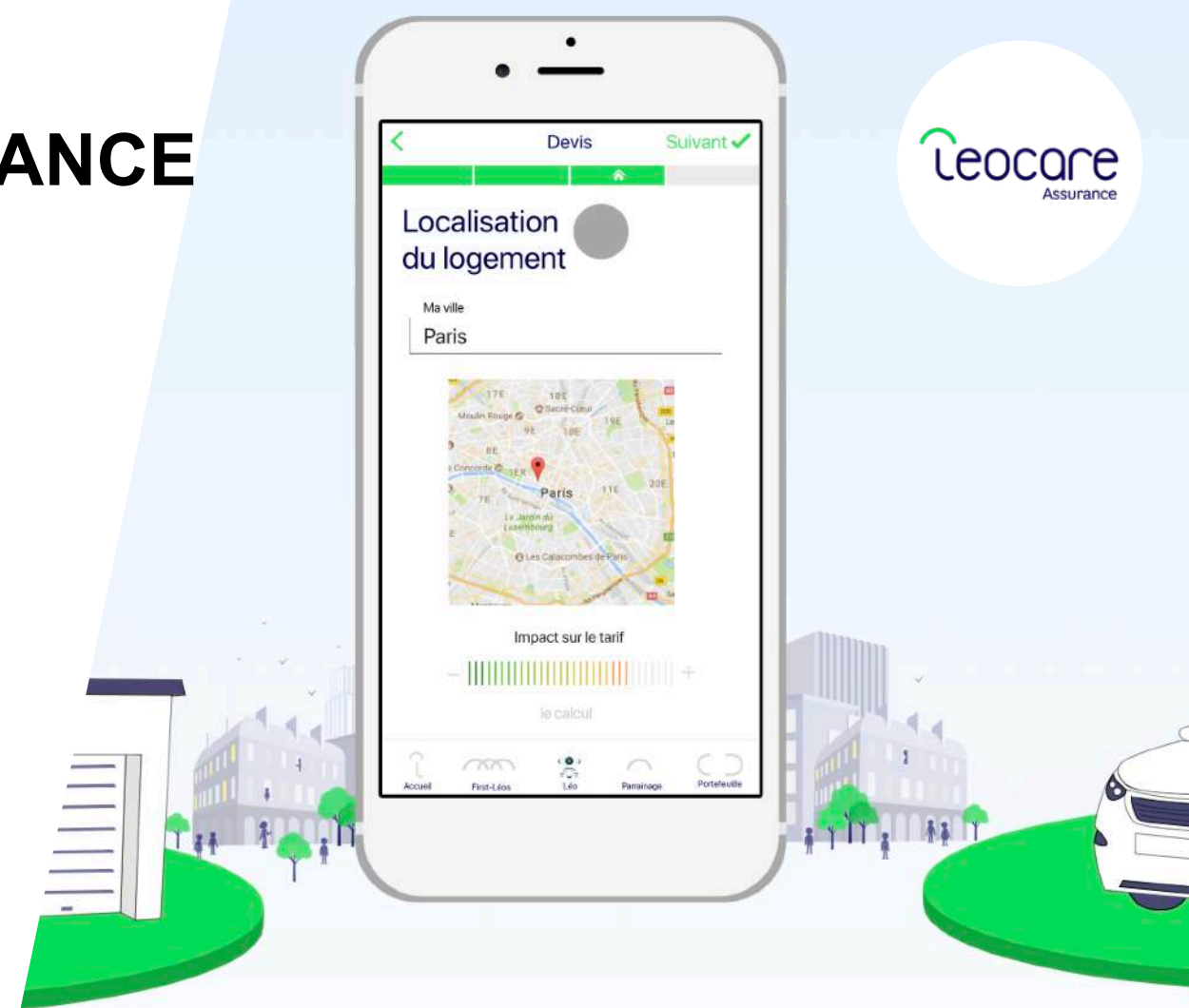


WHAT ?

100% mobile Car and home insurance. Leocare is one of the very rare online insurance to cover cars and home (launching motorbikes and vespa next October). **Their goal is to be a, all in 1 service. The offer is : no engagement, transparency**, you know which components of your car or home cost you the most, **strong customer service with a real support** connecting you with experts, repairmen, new itinerary on dangerous road, visio-call, etc. Leocare business model is anchored in honesty this is why they offer a more detailed range of pricing to their user depending on many different features and component.

WHAT IS THE POINT?

The main advantage is that **you gain time to register**, with no **intrusive question** and just the information legally required and necessary to establish a price. **You gain time when you have to make your claim with visio call, pictures etc. But you still benefit from a solid support and customer service when you have an issue.** With the platform using AI to advise you on the road, or if there are weather conditions you should be aware of, you have an ongoing contact with your insurer, **built a history and facilitate present and future interactions.**

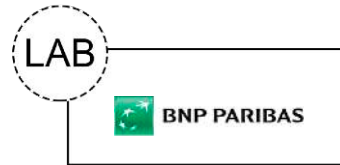


Accédez à nos offres d'assurance

Habitation et **Auto**

en téléchargeant notre application sur les stores

FACILITATING POST TRADING TRANSACTIONS

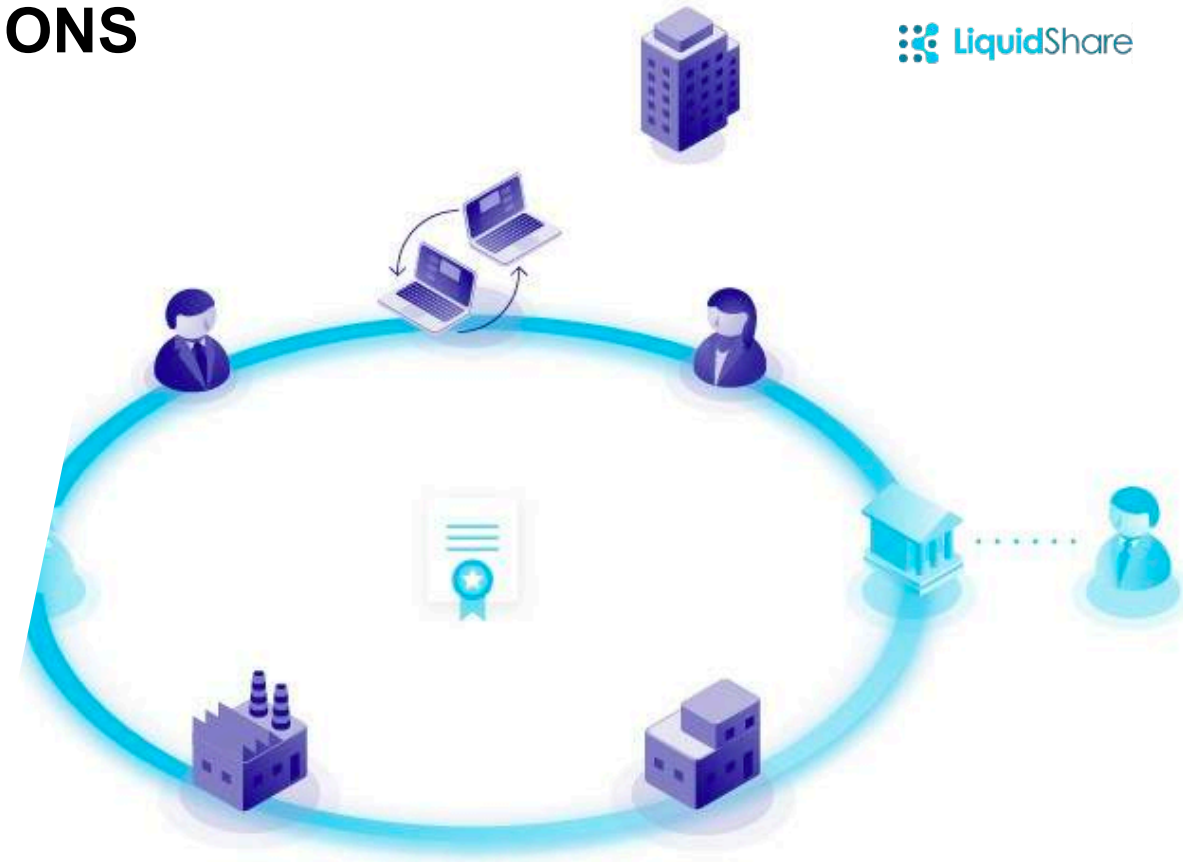


WHAT ?

This platform relies on a private version of the Blockchain Ethereum. **Its goal is to simplify the "post-trading" operations on the actions of European Small & Mid-Caps that are the subject of few exchanges and less liquid.** Until now, small firm had to go through the same process as big entities taking about 2 days.

WHAT IS THE POINT?

LiquidShare should facilitate the consolidation of transactions and improve timeliness, **with near-real-time settlement of these transactions using the blockchain to secure them.**



FACILITATING INVOICE PAYMENT



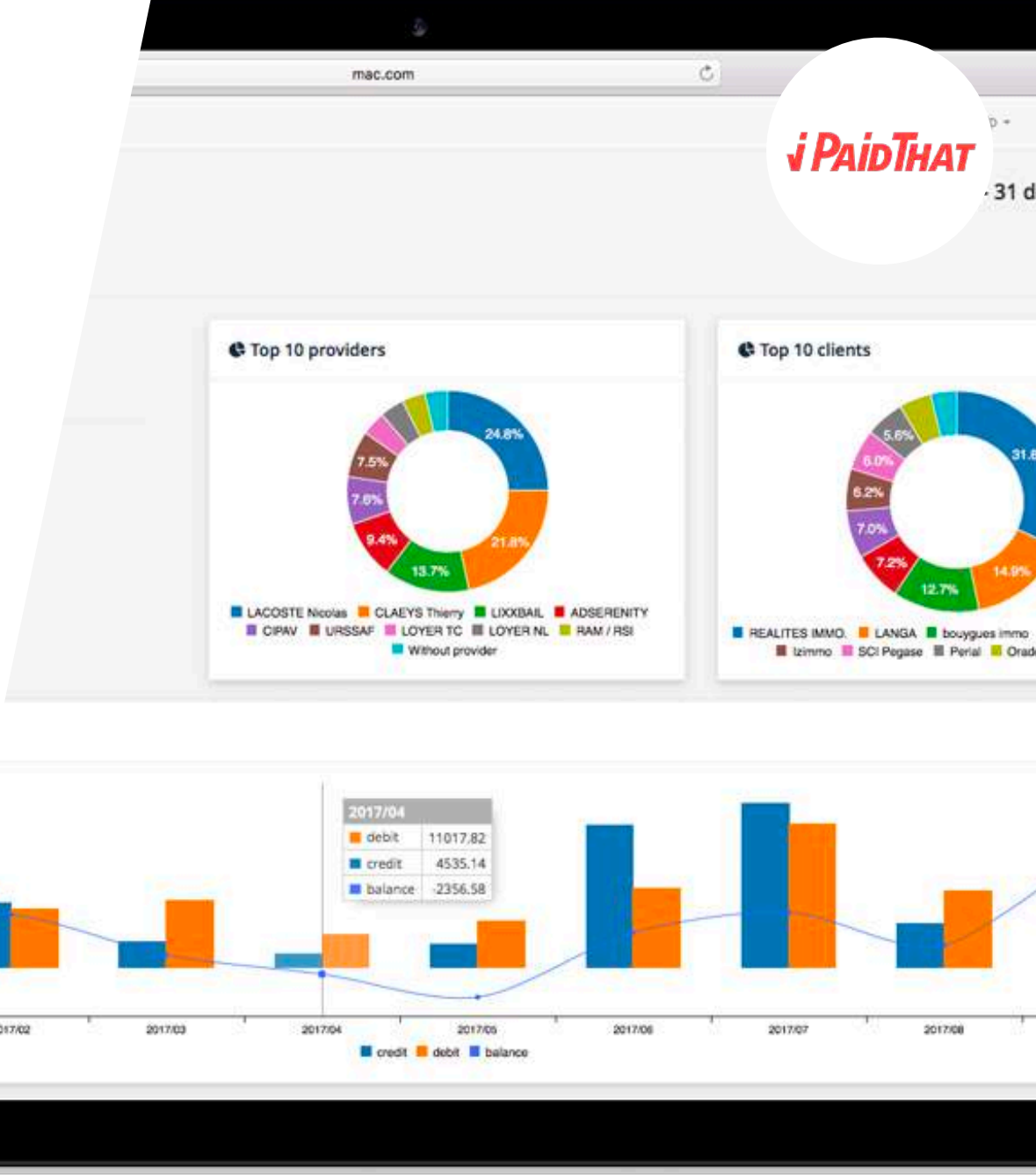
WHAT ?

IPaidThat is a software using artificial intelligence and machine learning to collect all invoices automatically from the mail boxes and providers websites. **All invoices are match to their own bank operations and compared with your bank transactions, to make sure no payment is forgotten.**



WHAT IS THE POINT?

Not forgetting payment anymore and risk late fees.



UNDERSTAND CLIENT BEHAVIOR FOR TAILORED ADVICE



WHAT ?

Odonatech is a technology from a Behavioral Finance laboratory, inspired by « Dragonfly's eyes », to see everything. **The algorithm measures each facet of the investor's personality to render a 360 ° vision of their needs.**

The algorithm helps financial advisors understand the personality, emotions and cognitive and emotional biases of their clients.

WHAT IS THE POINT?

They provide their clients with a toolbox that allows them to customize their advice by adapting it to the psychology of each of their clients, creating "the enhanced advisor ».



9

MEDIA & ENTERTAINMENT

TARGETING WITH RESPECT, THE NEW CHALLENGE FOR MARKETERS

Online advertising on the internet is now outspending TV advertising. **This growth is mainly driven by social media (21%) and video display ads (19%),** 42% of total spending remains to search ads, especially on Google.

An online audiences implies new challenges : **it needs more targeting, so more data. More data means being well equipped with efficient digital tools and A.I.**

So, marketers have to deal with social media, media display and search engine's policy, as well as country legislation.

Meanwhile technology goes on, and is now able to write an article or create a video spot to please a particular target alone, thanks to I.A.

The CMO Forum at Viva Technology aims at discussing those marketers' and media's challenges, in order, **« to keep creativity alive in the age of algorithms ».**

Viva Technology

Credits @Zoeholling

40 billion \$

more than in TV advertising
are spent in online
advertising in 2018

Which means :

40%

of the global ad spending
were online

Source : Advertisers will spend \$40 billion more on internet ads than on TV ads this year (Zenith datas), vox 2019

AI GETS CREATIVE : IS THE FUTURE OF CONTENT AUTOMATED ?

GANs, **Generative Adversarial Networks**, consist of programming devoted to creative **generative** models, meaning that they can construct unique and feasible productions from the data in their original collection. **This clever combination of two neural networks is similar to the process of human creation** in all formats. Ending Schubert's 8th symphony, creating a new Rembrandt (without Rembrandt) or even writing a novel is possible for GANs...

Though we don't see many business applications in the Art world yet, this innovation could change the **future of advertising creations** and **journalism**. Basically, the first **written advertisements** by artificial intelligence have surfaced, and some **newspaper articles** can be completely written based on a simple editorial lead-in.

Capable of creating **coherent stories** in the fields of painting, audio, video, or writing, **the danger of GANs lies in the credible creation of materials that they can generate**. **Identity theft, fake news, imitations...** Some professionals have announced that it could possibly involve the most powerful example of Artificial Intelligence yet, but it could totally redefine advertising and media creation.





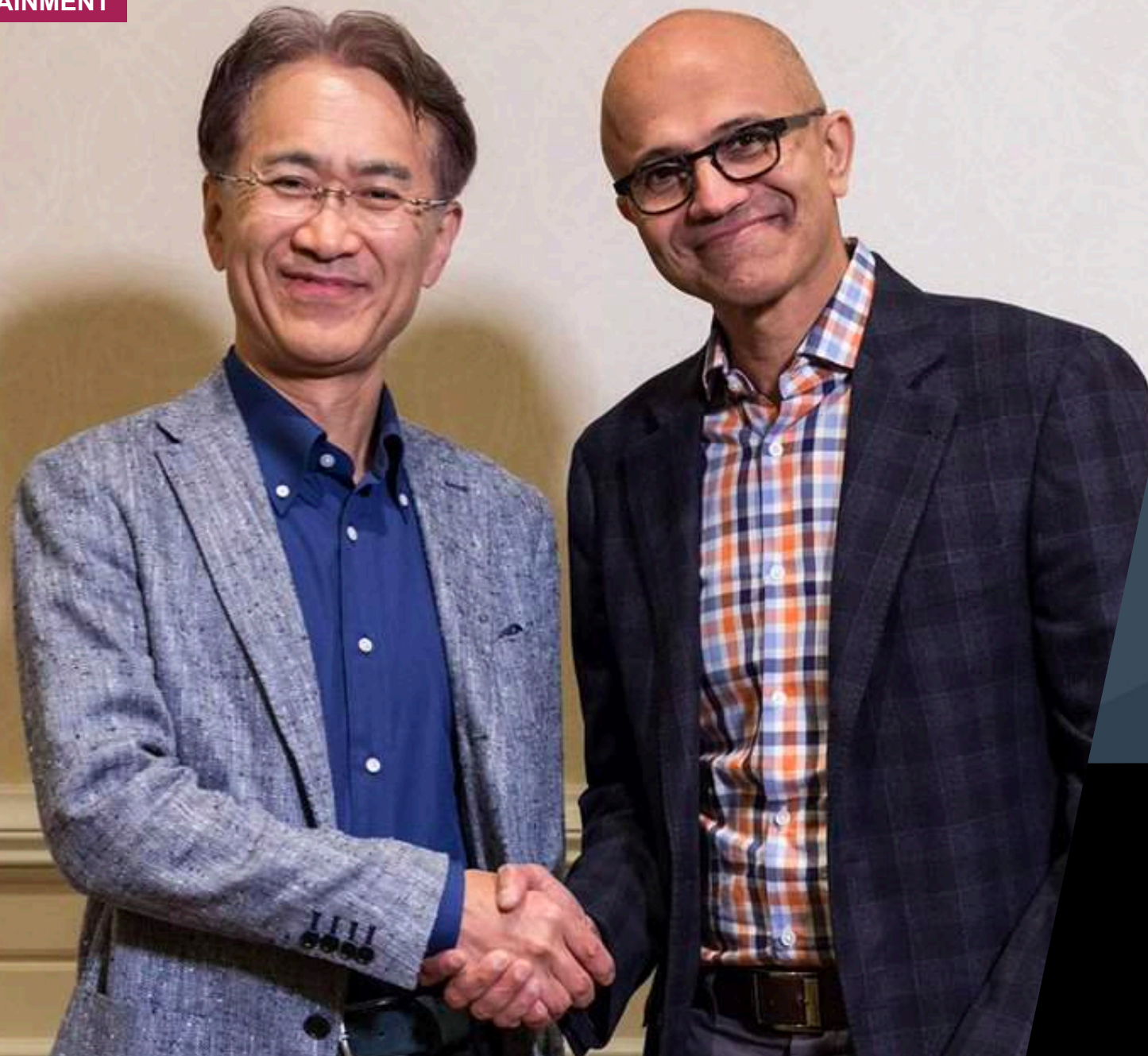
XBOX ONE

COLLABORATION SONY & MICROSOFT



VivaTech CONFERENCE

1. **Sony and Microsoft are collaborating** to launch new innovations to enhance their customer experience.
2. This collaboration will explore new cloud solutions for content and game streaming experiences built on Microsoft Azure.
3. The two companies will explore the **implementation of Microsoft AI in Sony Consumer products** and the development of new intelligent image sensor solutions.



« Microsoft has been for many years an important trading partner for us, although the two companies have, of course, also been competing in some areas »

KENICHIRO YOSHIDA
PRESIDENT & CEO
SONY CORPORATION

**ABOUT THE PARTNERSHIP BETWEEN
MICROSOFT AND SONY ON CLOUD GAMING
ANNOUNCED DURING VIVATECH**

Microsoft ❤️ Linux



"Our partnership with Microsoft brings the power of Azure and Azure AI to Sony to bring new gaming and entertainment experiences to customers. "

SATYA NADELLA
CEO
MICROSOFT



PUBLICIS ET RENAULT LAUNCH THE CONTENT PLATFORM AEX TARGETED FOR AUTONOMOUS CARS.



VivaTech CONFERENCE

The French car manufacturer Renault and the Communication group Publicis announced on Thursday, May 16, 2019 at VivaTech **their partnership to develop an editorial platform combining content and mobility.**

The goal is to provide **"high-quality media content"** to the future **driver of autonomous cars who will be free from the constraints of driving** and will be able to entertain themselves during this new found free time while commuting.

The ambition of this partnership is to offer users **an immersive experience for car drivers enriched by an editorial and personalized content** that will make a true purchase vector and differentiation.

*GROUPE RENAULT DONNE UNE NOUVELLE DIMENSION A SA PLATEFORME DE CONTENU EDITORIAL EMBARQUE ET NOUE UN ACCORD STRATEGIQUE AVEC PUBLICIS GROUPE

HELPING BRANDS TO ENGAGE WITH THEIR COMMUNITIES BY CO-CREATING VIDEOS



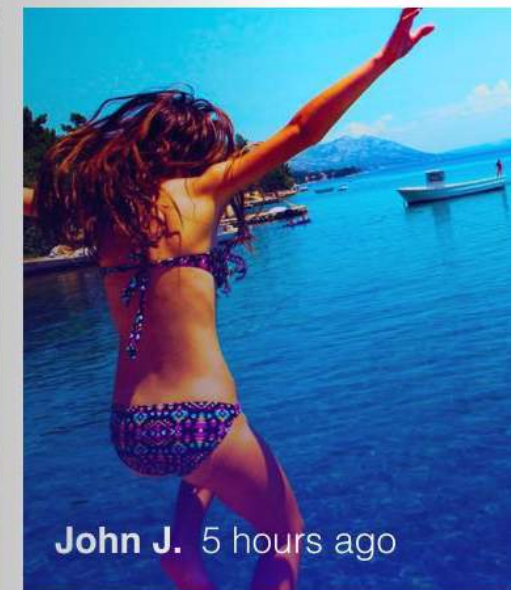
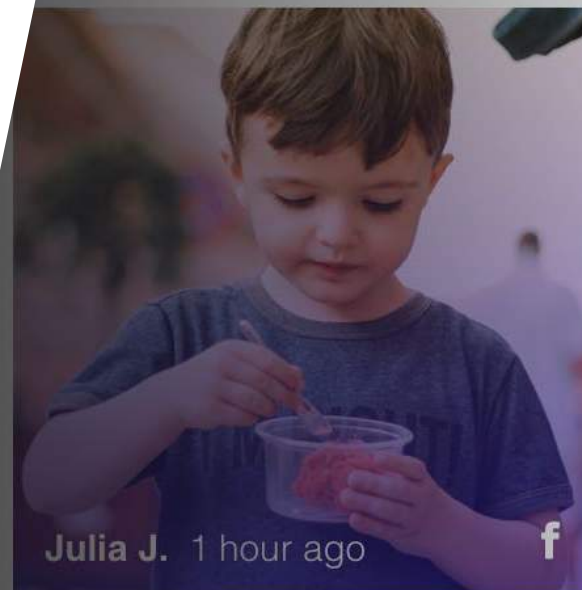
WHAT ?

➤ AdAlong allows brands to **automatically co-create authentic content with their fans, employees and consumers** to engage them further and develop communities. AdAlong has developed a web app that **automates the curation, collection and creation of content from fans, customers and employees publications on social networks**, thanks to its indexing system, based on AI and social data.

WHAT'S THE POINT ?

➤ In a few minutes, brands can create and share a wide range of engaging content, and also **build stronger loyalty in their communities and accelerate their development**.

#YourBrand



MEASURING IMPACT OF TV ADS IN REAL TIME



WHAT ?

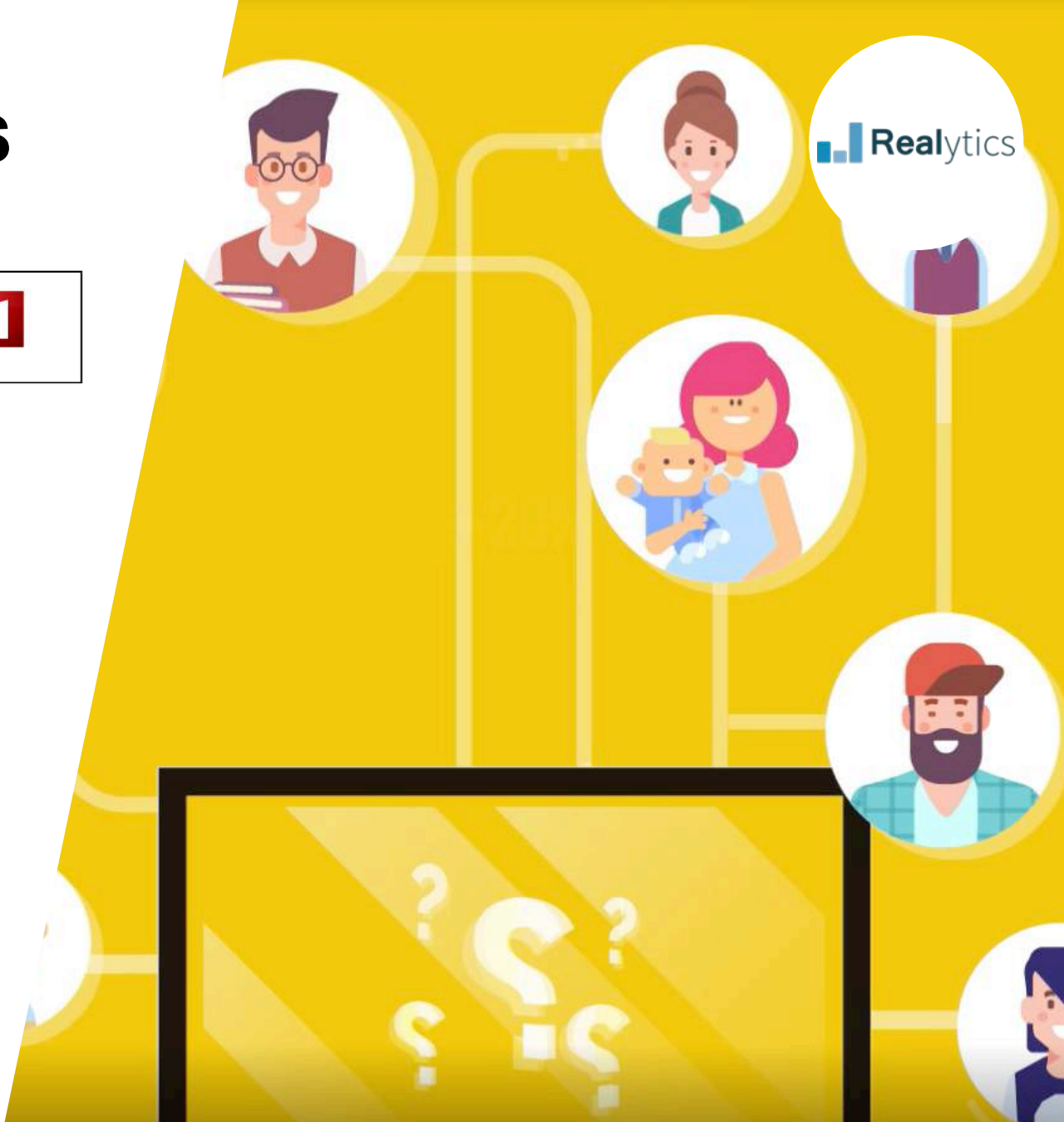


As the 1st real-time TV analytics platform, the startup allows its clients to **measure the direct and indirect impact of a TV Ad on their digital channels** (websites, mobile apps, call centers), **and delivers the data they need to optimize their media plans** according to their business or branding KPIs.

WHAT'S THE POINT ?



Television is the most powerful media. It's worst enemy is preconceived ideas. **These preconceived ideas have led Realytics to support the advertising practice of « brandformance » which makes « Branding » and « Performance ».**



FORECASTING TRENDS FOR BRANDS

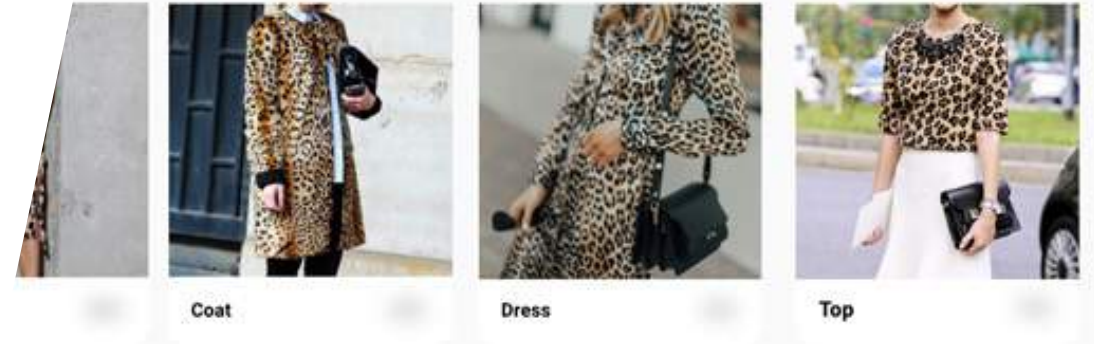


WHAT ?

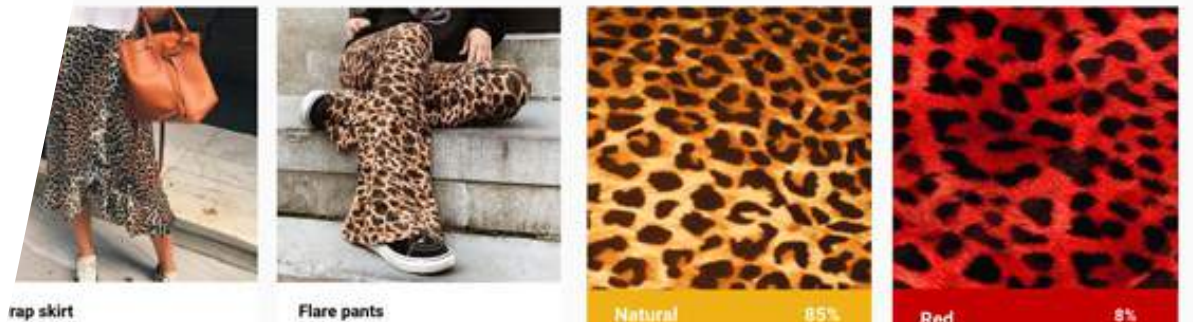
Heuritech empowers brands to forecast demand and trends more accurately, produce more sustainably, and achieve unprecedented competitive advantage and comprehensive data. Heuritech's visual processing detects and predicts **what's coming next. Products, brands, colors, patterns, shapes: Heuritech captures and communicates it all.** From spotting the next big trend to creating more accurate demand and sales forecasts, **Heuritech informs and improves every step of the fashion lifecycle.**

WHAT'S THE POINT ?

In the era of social media, influence has shifted to real-world influencers through millions of images on Instagram and other visual platforms. **This presents a tremendous opportunity for brands to better understand the state of the market and tap into future trends.**



COLORS



FACEBOOK DEVELOPS A NEW VOICE FEATURE : THE 'VOICE SNAPSHOT EQUIVALENT'

FAIR'S : Parrot AI

WHAT ?

➤ Facebook has developed a new voice features based on an **AI system that transforms any voice or humming into classical music.** hum, talk or sing and whatever the sound you make will be translated into classical music.

WHAT IS THE POINT?

Creating a fun and entertaining universe with voice, as snapchat did with image.

➤ **On a tech point of view, it is one of the first AI capable of working with a low volume of data and minimal training.** Also this show that the power of AI could be extended to being capable of creating an entire song out of a quick Hum.

Facebook has no specific plans for an actual product or feature based on this work yet, but FAIR's research is a strong indicator of how AI could soon power human creativity. This feature could simplify the access to songwriting, and music production.



A WHOLE ROOM BECOMES A DIGITAL INTERFACE



WHAT ?

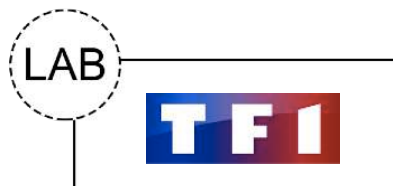
Pixminds is specialized in creating new digital interfaces which provide lifelike sensations with more accuracy. Piwminds just developed a new technology called **ARKTOUCH**. This project consists in a cube simulating a room inside. **Each wall is transformed into a large screen incorporating ARKTOUCH technology.** This allows to live interactive situations in complete visual, auditory and tactile immersion.

WHAT'S THE POINT ?

The point is to explore new ways of working or learning. **This technology immerses the user in a totally interactive world**, whether in the field of education, entertainment, sports or telecommunication. Thanks to ARKTOUCH it is now possible to live new experiences of learning game and physical activities.



AN EMOTIONALLY INTELLIGENT ADVERTISING



WHAT ?

Mirriad offers a unique technology solution that delivers scalable advertising modules integrated **inside existing premium content**. The concept is based on an emotionally intelligent advertising powered by AI. **The AI analyzes when and where it is most conducive to place an advertising campaign inside the programm**, according to several criteria such as the nature of the scene, the visibility, etc.

WHAT'S THE POINT ?

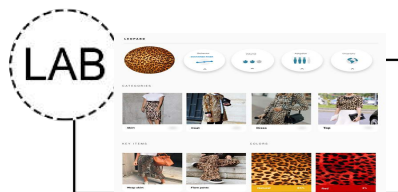
The point is to give the brand more **awareness (+26%)**, **consideration (+20%)** and **creative likability (+88% vs classic video Ad)**. The frequency of exposure enhances campaigns performance and reaches **audiences across all TV platforms**. The Mirriad In-Videos campaigns create value for the brand and connects it to the viewers engaged in a TV, fiction or movie content.



FLY OVER PARIS



MK2 AGENCY



WHAT ?

MK2 Agency developed together with Paris Saint-Germain a new VR experience with the device **Birdly**. This time it immerses the user into an integral **flying experience within the Parc des Princes** which allows all the fans to discover the mythical enclosure of the Porte de St Cloud.



WHAT'S THE POINT ?

Discover a famous place from a surprising and fun perspective, experiencing with the whole body a new flying sensation.



10

FUTURE OF WORK

HR, WORKPLACE, TALENT, STARTUP LIFE

A TWO-TIER JOB MARKET...

The job market is facing new contradictions; on the one hand, companies are facing a **lack of certain profiles**, while at the same time, **structural unemployment is affecting the least qualified candidates**.

In 2018, in France, the number of job-seekers is on the rise, but more worrying is the increased amount of time spent at the unemployment office (- 1,2% of people who got a job through the office in 1 year).

This phenomenon is also affecting people in the gig economy: **their precarious work contracts don't assure them the necessary financial stability**, or provide wages that are too low to survive.

Paradoxically, companies are facing a lack of qualified candidates in certain sectors and for certain profiles. This conflict between supply and demand has grown more severe over time.

Source : Pôle Emploi 2018



83%



of SMEs have
difficulty recruiting
people

72%

believe that these
difficulties are
slowing their growth

46%

have “serious”
recruitment
problems

Source : Attirer les talents dans les PME et les ETI, BPI France 2018

THE IMPORTANCE OF EMPLOYER BRANDING AND HR MARKETING

Given the shortage of certain candidate profiles, companies have to work twice as hard to attract candidates and stand out from their competition.

Moreover, **job seekers today are more informed than ever about the companies they're applying to.**

They now do more than read the job posting; **they also research everything about the company**, its working environment and atmosphere, the opinions of other employees, etc.

Companies must therefore express what makes them unique: their values and their story. **This process must be transparent in order to be credible and lasting.**

It requires a structured HR marketing process with defined action plans.



Etude Indeed 2018 , 509 salariés français interrogés

IS AI A THREAT TO RECRUITERS AND/OR SOME CANDIDATES?

In the professional world, the arrival of artificial intelligence is generally defined as the automation of certain tasks.

AI can analyze much more data than humans are capable of, which allows them to concentrate on analysis and decision-making. **AI can analyze complex situations, and let humans know when to step in.**

In this context, some occupations could eventually disappear, leading to more automation. **But at this stage, in most cases, artificial intelligence will be used to supplement tasks performed by humans.**

Maintaining employee marketability **involves teaching them how to work with AI**, or to work in areas where AI is not applicable.

On the other side of the table, **some wonder if AI would actually accentuate bias learned during its programming?** This repetitive bias process would lead to a clone profile which is not a good thing for a company. Other people acknowledge the bias risk but also say that **AI can also be used to avoid bias.** For instance **selecting candidates based on their soft skills thanks to the power of AI** enabling to analyze more profiles than just human selection often based on school names due to a lack of time.

According to CEO, AI will have beneficial effects on the work performed by employees.

70%

of CEO in France in 2018 have a positive opinion of AI

Source : Étude IA et Capital humain : quel
Source : Comment l'intelligence artificielle va réinventer les RH, Journal du Net 2018

TALENT CENTER : TALENTS AT THE HEART OF THE DIGITAL TRANSITION



Talent Center was a resource area in the heart of the Better Life Avenue at Viva Technology this year. It had been designed to host recruitment interviews, coaching sessions, online tests for all profiles and a conference program dedicated to career guidance.





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3 TRENDS TO WATCH IN HR : TALENTS ACQUISITION, ON BOARDING AND HR ANALYTICS

GWENAËLLE DE LA ROCHE
MARKET & PROSPECTIVE DIRECTOR
MANPOWERGROUP



Gwenaëlle de la Roche

MARKET. & PROSPECTIVE DIRECTOR - MANPOWERGROUP

PROGRAMMATIC RECRUITMENT



WHAT ?



Golden Bees is a programmatic media buying solution, specialized in recruitment and HR communication. Their business expertise is mainly focused on web marketing solutions, sourcing and Big Data.

WHAT'S THE POINT ?



They help human resources professionals recruit more quickly and efficiently. They provide an advertising solution that allows to invest only in an audience that matches the profile(s) you are looking for.

CLOUD SOLUTION HELP TO AUTOMATE THE RECRUITMENT PROCESS?



WHAT ?

Fabskill is a web platform offering an innovative recruitment process based on artificial intelligence, video, interviewing and collaborative candidate rating. **All candidates will have the same chances of being selected since they will answer the interviews under the same conditions** (remote + same questions + same duration of the answer). **On the recruiter side, the candidate's choice is made thanks to the collaborative rating** (HR team, managers and various stakeholders in the recruitment process).

WHAT'S THE POINT ?

Fabskill aims at addressing the issues related to job interviews:

On the candidate side because **it allows a better orientation of candidates** based on artificial intelligence, to offer the same opportunities for candidates, to **get them a "fair" and equitable process**. But also on the recruiter side, **because it allows them to digitize the recruitment process**, to reduce spam applications and to facilitate the selection of the right profiles thanks to artificial intelligence, etc.



ENHANCE THE VALUE OF YOUR EMPLOYEES TO ANTICIPATE TOMORROW'S CAREERS



CRAFTY.IM

LAB

LeLab
RHUS

WHAT ?

Crafty.im is specialized in talent management with an approach **focused on spotting the skills of employees**. It is a SaaS platform, available from your phone or computer enabling a very flexible use anywhere any time.

The tool enable managers to map their team skills, highlight specific talent, boost carrier and inspire your team for mobility, training, etc.

WHAT'S THE POINT ?

This is particularly good to have a fairer approach towards employees, when some of them can be very efficient in one field but will never dare or think of speaking up.



TRAINING EMPLOYEES THROUGH VIRTUAL REALITY



WHAT ?

- Evaveo is a French company that develops applications using technologies such as virtual reality, augmented reality, artificial intelligence, video (motion capture, stereoscopy, 360°). Evaveo also offers its own systems such as "Vorta" to facilitate the creation of virtual worlds, or Formaveo, an interactive video editor.

WHAT'S THE POINT ?

- **The startup provides relevant information on the state of the art of technologies** and equipment in order to facilitate decision-making on their prototyping, adaptation and deployment.



A SUITE OF TOOLS TO DEVELOP THE EMPLOYEE COMMITMENT AND THE POTENTIAL OF YOUR TEAMS

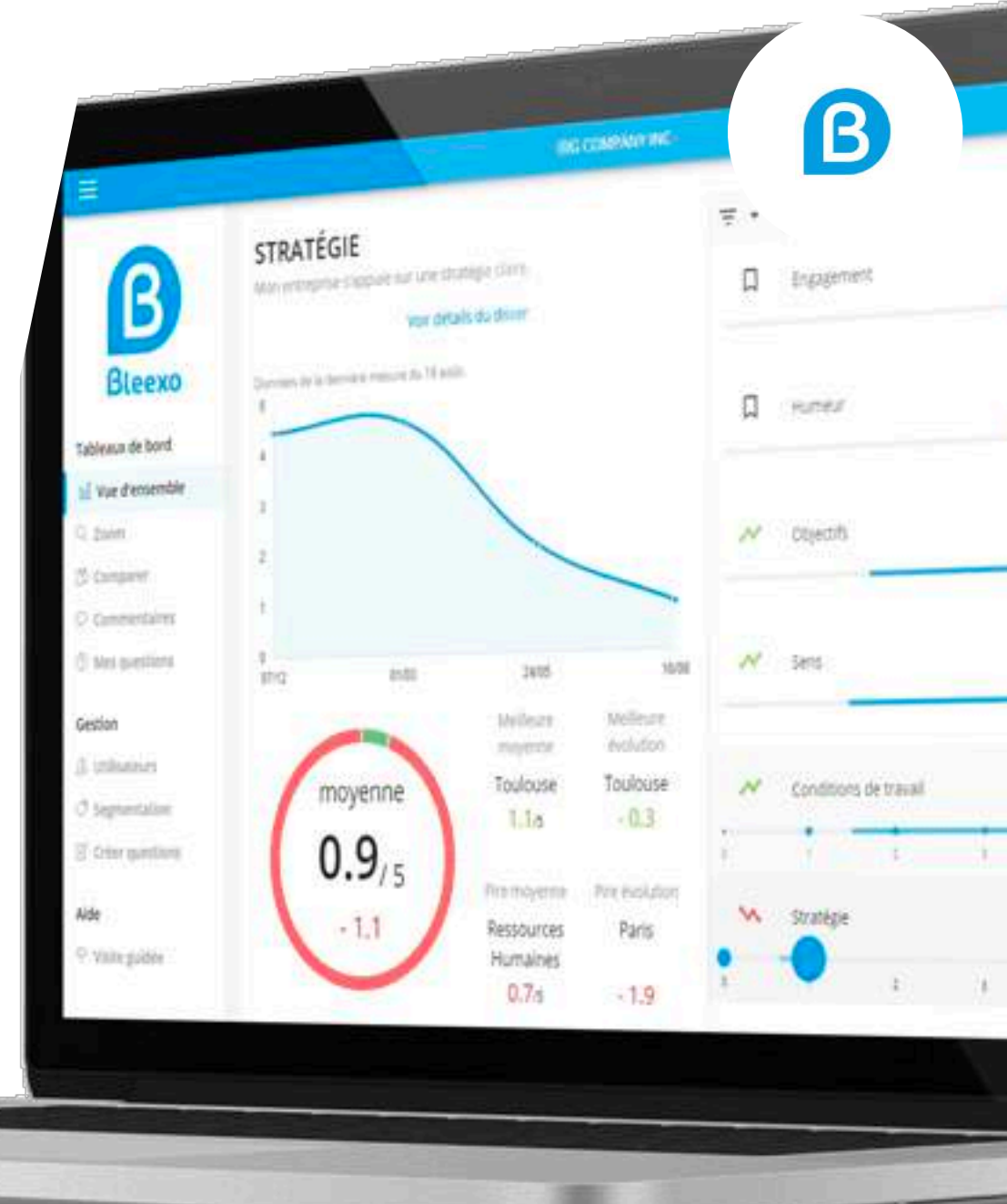


WHAT ?

➤ Bleexo is a HR leading suite of tools to boost employee engagement and teams' potential. **Indeed the start up describe itself as the HRTECH of soft skills.** It measures in real time, compares, lead deep analyses, creates data visualization. It also offers coaching tools and feedback space.

WHAT'S THE POINT ?

➤ Make your life easier with the intuitive, integrated solution and getting the **data directly from your employee to be closer to them and reach them all** easily being able to **leverage the data to offer the best solutions for all.**



CLOUD BASED HR SOFTWARE SOLUTIONS



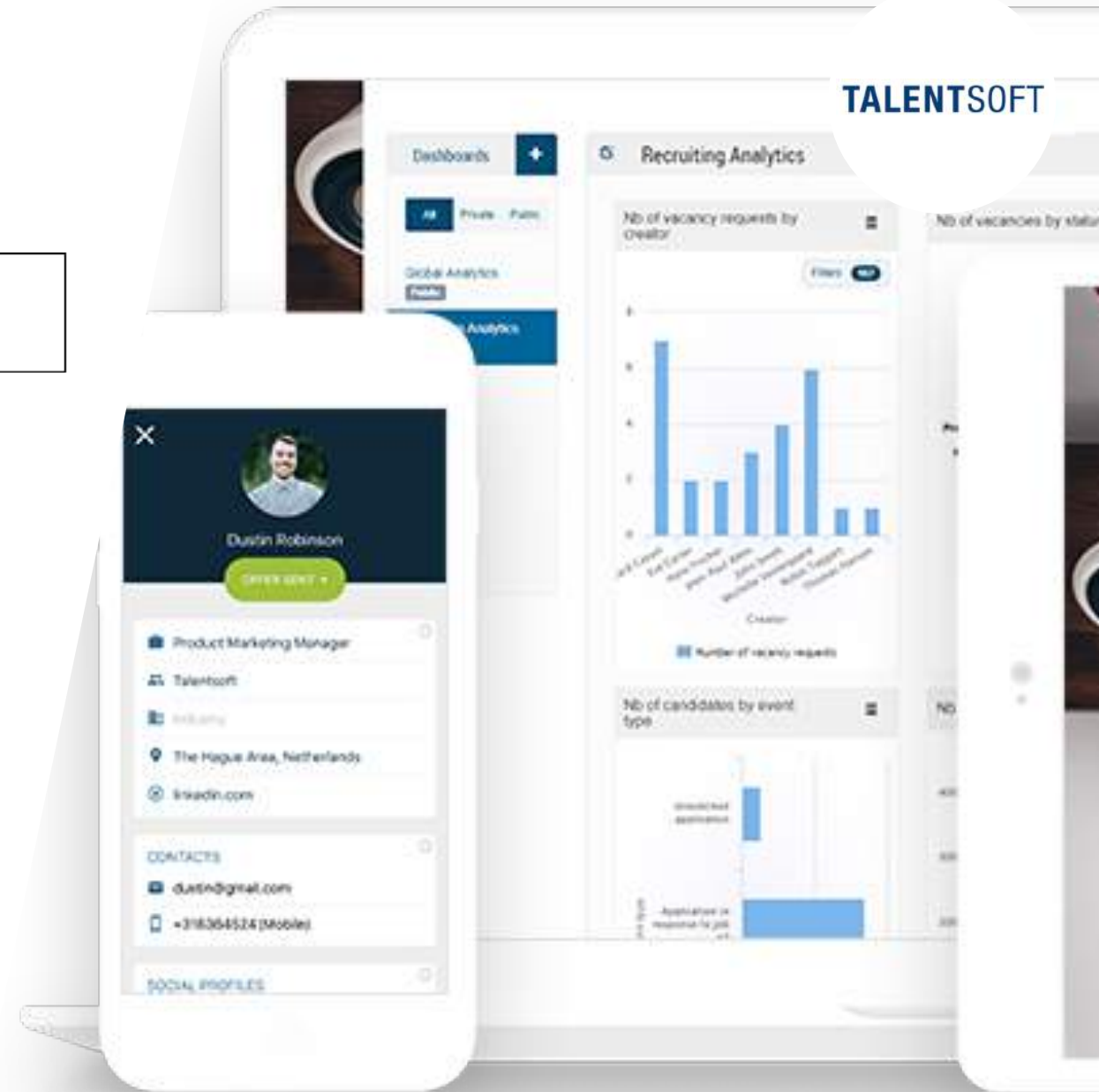
WHAT ?

Talentsoft places the professional development of employees at the heart of your company's HR processes.

➤ The startup offers a suite of cloud-based software with a unique solution for different talent management or training needs : **recruitment, performance and skills, etc.**

WHAT'S THE POINT ?

➤ Flexible and scalable applications that allow companies to gradually develop their various HR issues.



PLATFORM POWERED BY AI, TO ONBOARD, CROSS BOARD AND OFF THE BOARD EASILY AND EFFICIENTLY YOUR EMPLOYEES



WHAT ?

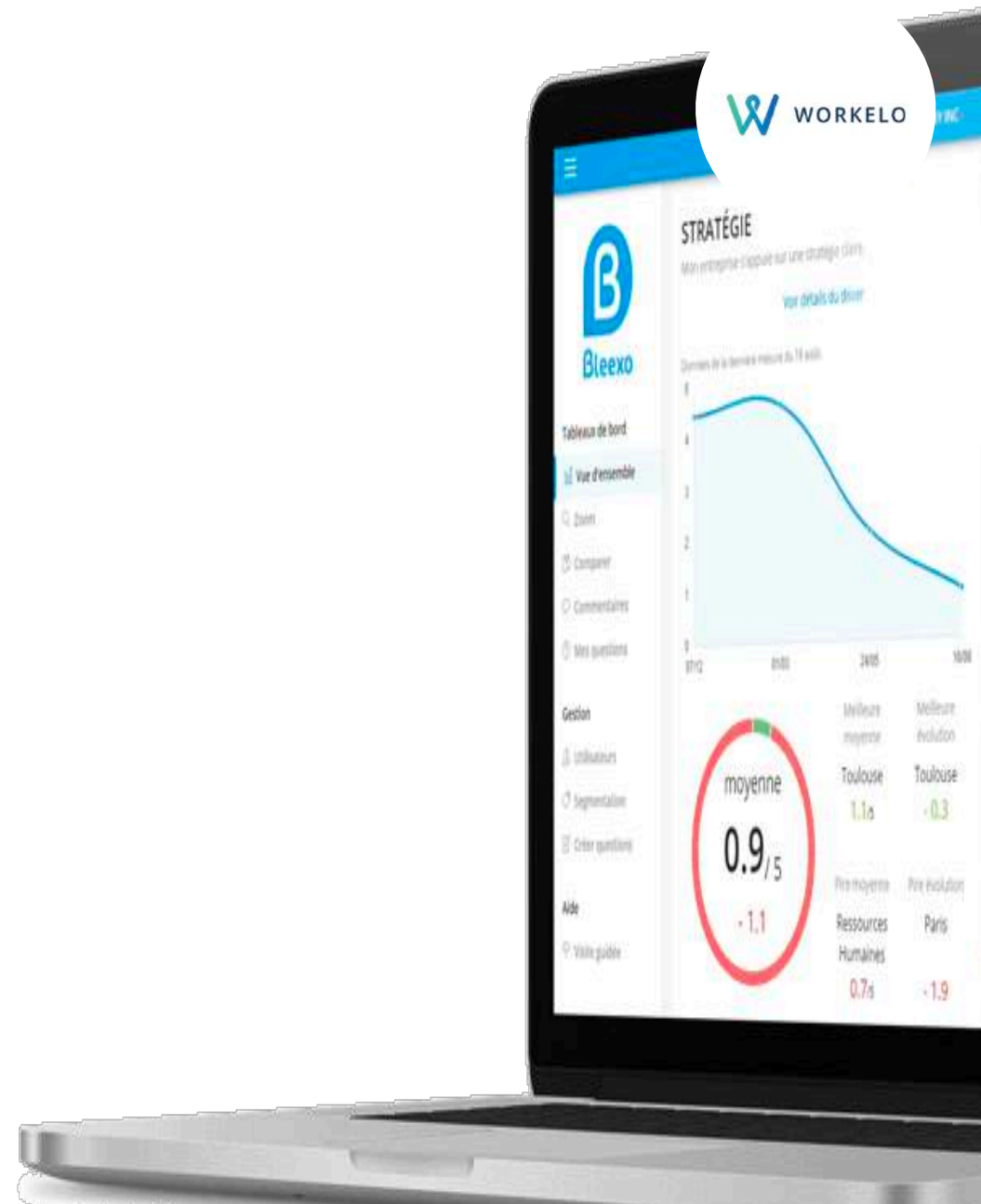
➤ Workelo is a platform that makes workers on boarding easier. The platform's modules range from managing administrative documents to preparing a welcome kit (or endowments), including content to read, tasks to perform or meetings within teams to plan. All this with a clear overview, allowing managers and HR to effectively monitor each step forward and relieve themselves of repetitive integration tasks

WHAT'S THE POINT ?

➤ Onboarding (or integrating) new employees is a challenge for most companies: process inefficiencies, cultural loss and managers overwhelmed.

➤ Workelo offers the opportunity to easily reinvent on boarding and the internal mobility of employees, by allowing simple collaboration between teams and automating more than 200 time-consuming tasks.

The platform is RGPD compliant



INTUITIVE MOBILE LEARNING SOLUTION



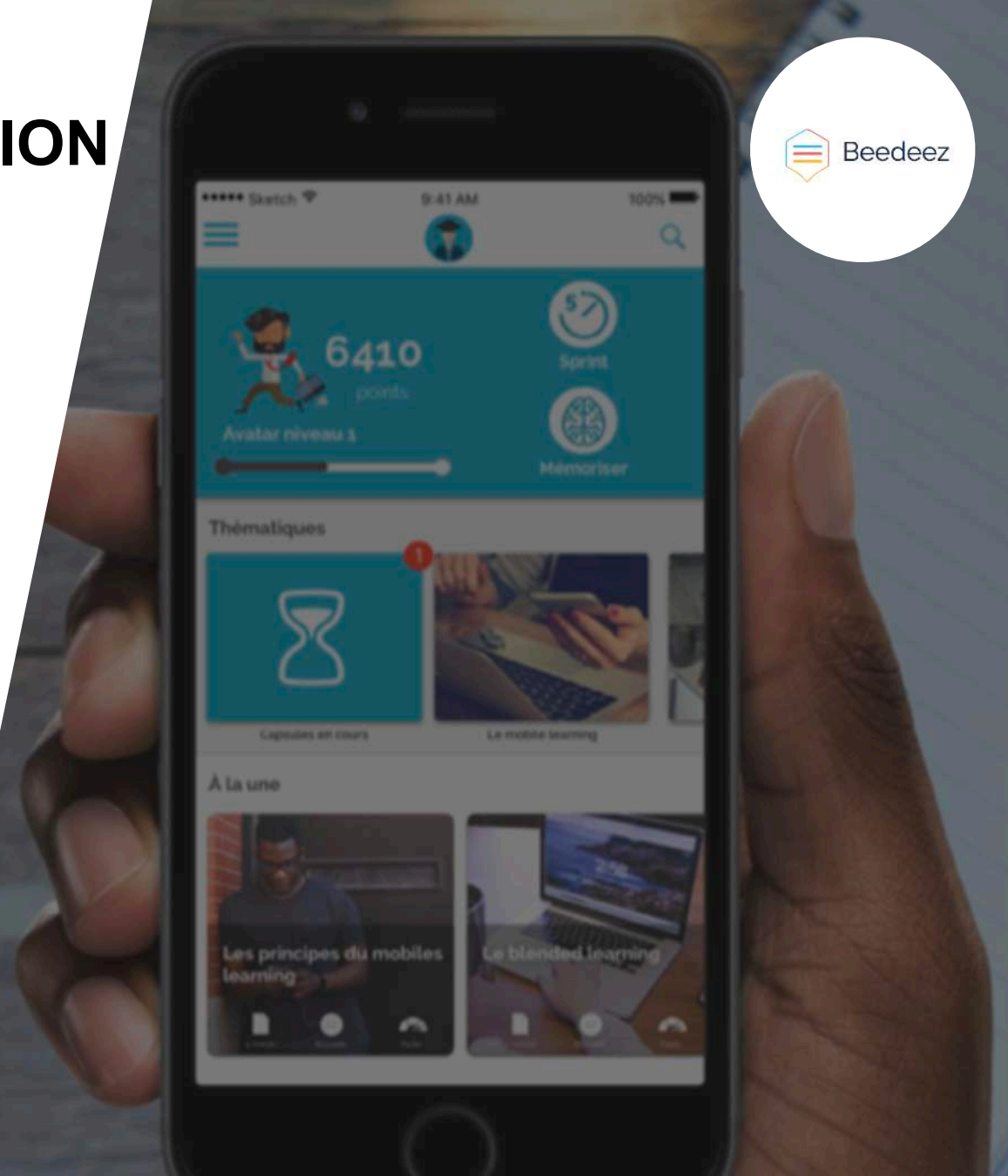
WHAT ?

BeeDeez is a mobile solution that allows to easily create fun knowledge capsules and instantly share them with employees. It is the mobile learning solution for your company.

- Short and fun formats
- Collaborative tool
- Intuitive content creation platform
- Assimilation of knowledge
- Learning measured through detailed statistics

WHAT'S THE POINT ?

It allows to spread knowledge very effectively to employees and/or customers.



REDUCING WORK-RELATED PAIN



WHAT ?

In partnership with SNCF Mobility, **Ergosanté** is developing an exoskeleton. **It can adapt to any shape and seizes, any gender and can be personalized with any given features.**

WHAT IS THE POINT?

The point is to **palliate the musculoskeletal disorders observed in some of the workers.** The exoskeleton will help protect muscle, skeletons and body in general whilst performing physically demanding tasks. **It is more security and well-being for the employees** as well as enhancing them for better productivity and efficiency.



Bonus **WOW !**



TRANSFORMING WASTE INTO ENERGY



- UNIGY is an American start-up created in April 2019 with the desire to develop solutions **to transform waste into energy on a large scale.**
- In France, more than 300 million tonnes of waste are produced each year. **Their treatment today represents a complex and significant challenge for territories.**
- UNIGY is rethinking the role of waste, through its innovations, to give it a **second useful life for the whole community.** An energy of the future available to all and that could be deployed in the near future.

This booth was in fact a stunt conceived by DDB Paris for GRT Gaz, to promote existing technologies that are already transforming waste into gaz / energy. No need for a (fake) new startup... some eco-solutions already do exist.



Louis Vuitton soft screen handbags



Virtual Hair Advisor 100% voice activated, 100% AR & 100% personalized..



Gary Kasparov, Avast ambassador, defied by 8 chess players simultaneously



Citroën unveiled the "19_19 Concept », a 100% electric autonomous connected concept car



Plastic Odyssey's « reduces prototype » boat, visible on the Matmut Stand at VivaTech

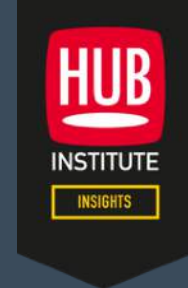


Hover Taxi unveils a urban flying vehicle, with vertical take-off and landing..



Bulgari automated pop-up store

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Emmanuel Vivier
Co-founder of the HUB INSTITUTE,
author & expert in Digital
Transformation/Digital Marketing



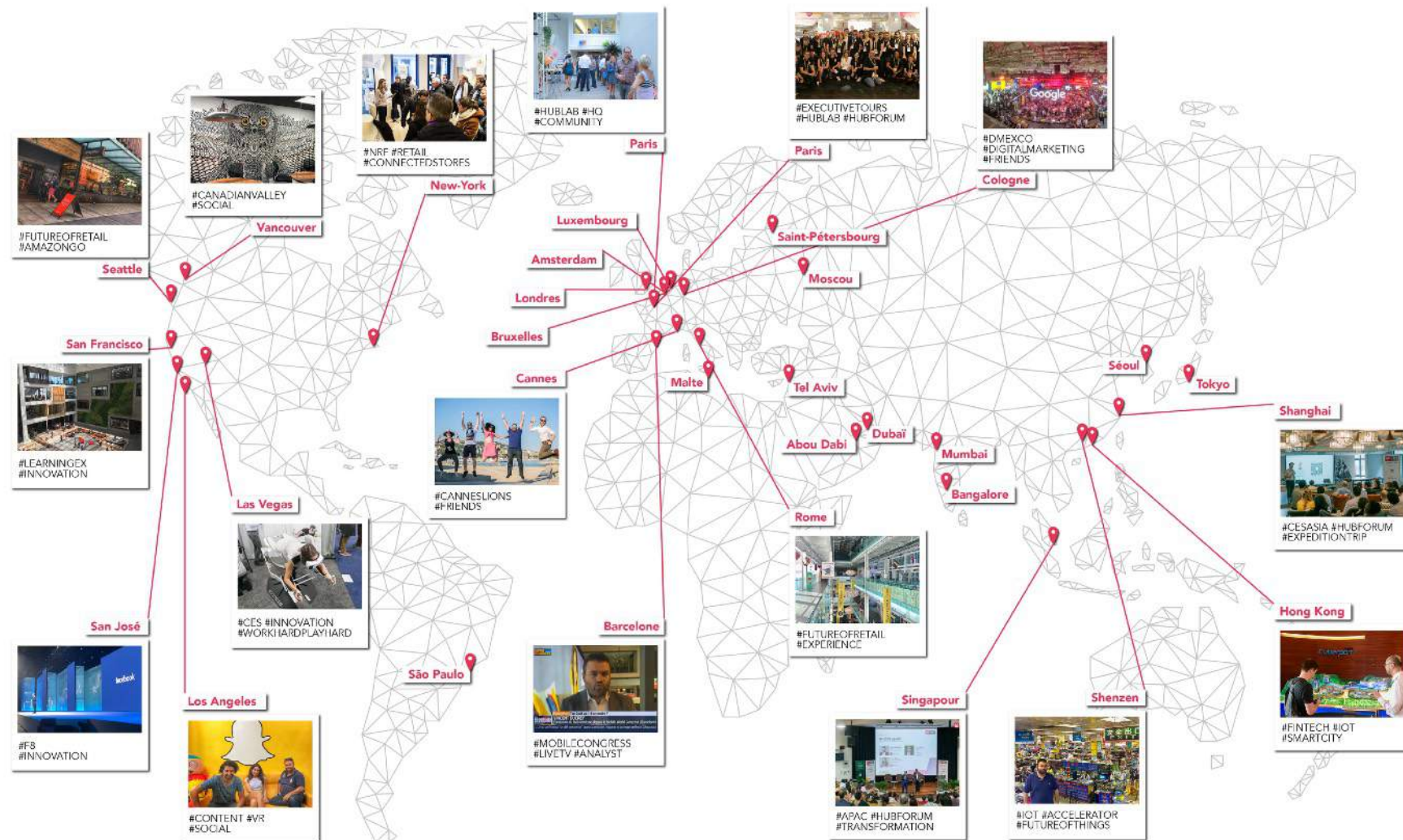
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