Instantánea InsurTech
Estado actual de las cosas
&
Desarrollos previsibles

Octubre 2018

Carlos Alejandro Belloni


¿Qué
Es la Cuarta
Revolución
Industrial?

La 4IR se caracteriza por la ***fusión*** de tecnologías que dejan ***borrosa*** la distinción entre las esferas ***física, digital*** y ***biológica.*** Estas tecnologías superpuestas van a definir nuestras vidas en las décadas venideras.

- La revolución genética nos permitirá ***reprogramar nuestra biología.***
- La Nanotecnología nos permitirá ***manipular la materia en una escala molecular y atómica.***
- AI nos permitirá crear una ***inteligencia no biológica mayor que la humana***

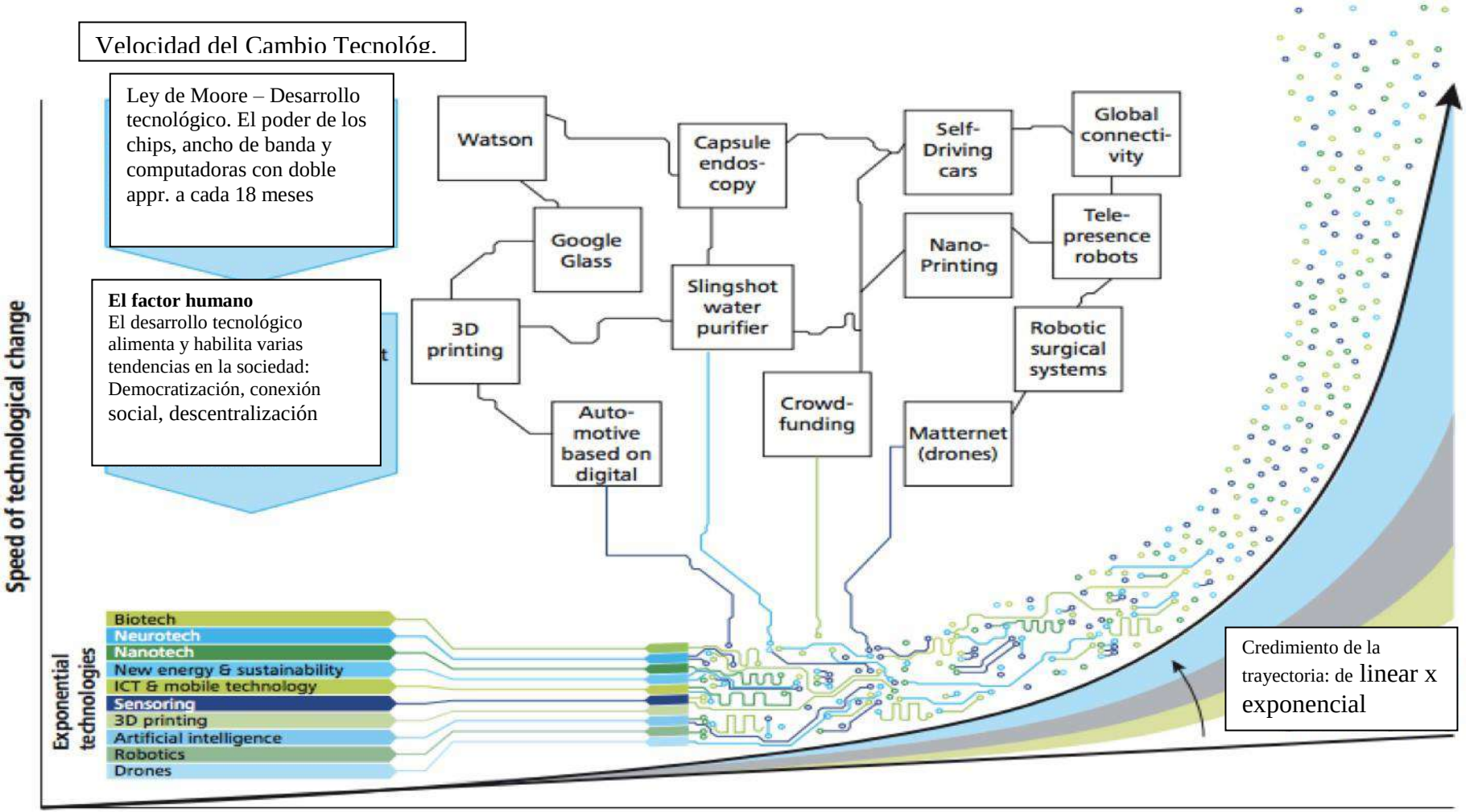

¿Por qué
debería
importarnos?

Porque cambiará todo, no apenas la idea de lo que es un ser humano, sino también los mismos cimientos sobre los que está construida nuestra sociedad

Velocidad del Cambio Tecnológ.

Ley de Moore – Desarrollo tecnológico. El poder de los chips, ancho de banda y computadoras con doble appr. a cada 18 meses

El factor humano
El desarrollo tecnológico alimenta y habilita varias tendencias en la sociedad: Democratización, conexión social, descentralización



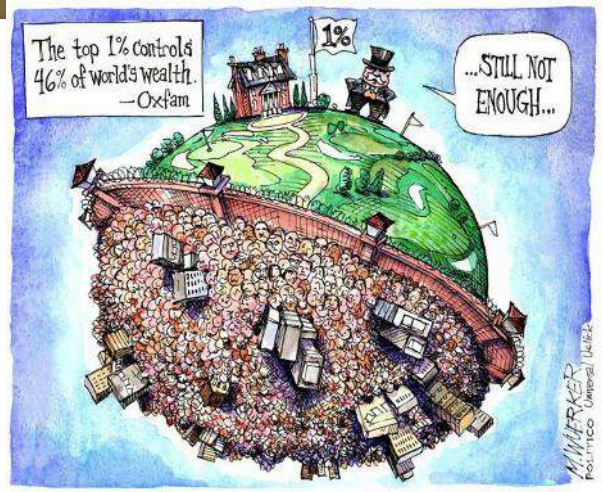
Credimiento de la trayectoria: de linear x exponencial

10%

15%

45%

66 millones de personas se vieron forzadas a abandonar sus hogares.
23 millones de personas son refugiados.



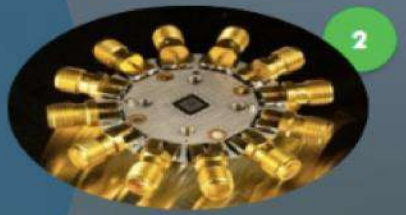
La importancia de los reguladores y las regulaciones


¿De qué
se
trata?

MEGA TENDENCIAS

1. La Internet de las Cosas

2.



3.

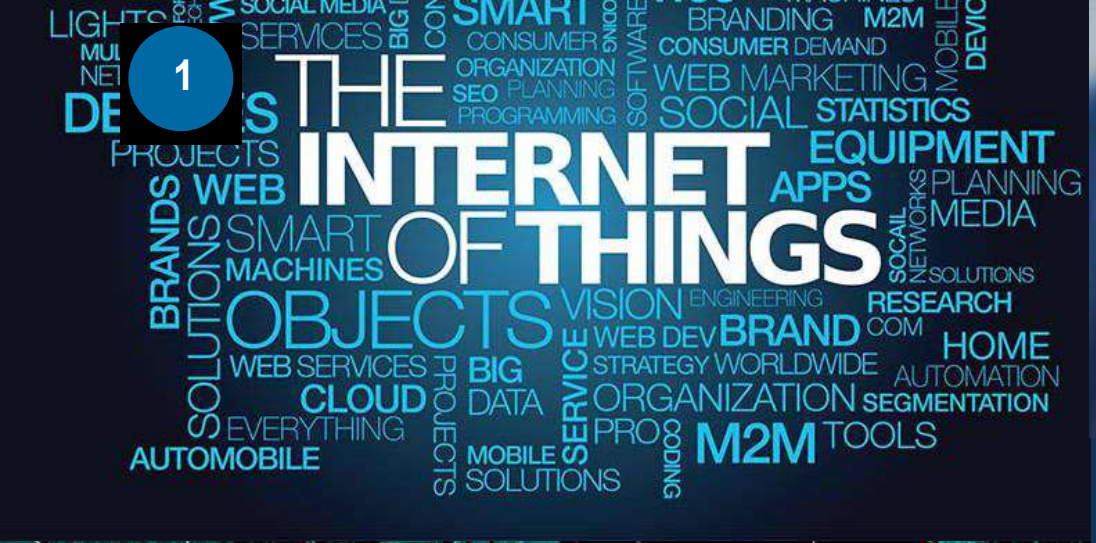
4.

5.

6.

7.

8.

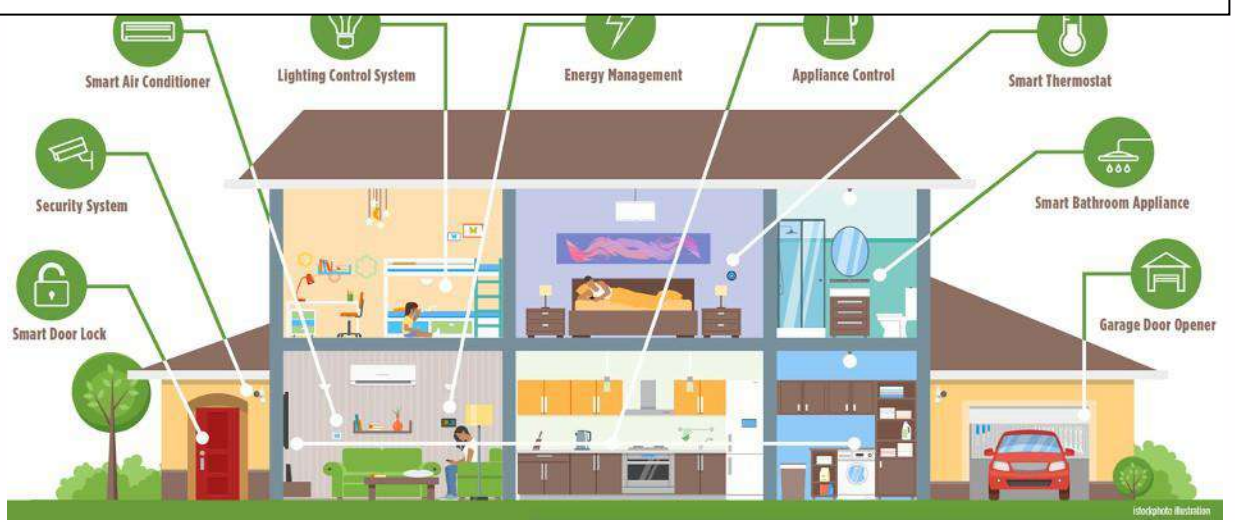

1
THE
INTERNET
OF THINGS
SMART
SERVICES
CONSUMER
ORGANIZATION
SEO
PROGRAMMING
BRANDING
M2M
CONSUMER DEMAND
WEB MARKETING
SOCIAL
STATISTICS
EQUIPMENT
APPS
PLANNING
MEDIA
WEB
SMART
MACHINES
OBJECTS
VISION
ENGINEERING
RESEARCH
BRAND
HOME
AUTOMATION
WEB SERVICES
CLOUD
BIG
DATA
STRATEGY
WORLDWIDE
ORGANIZATION
SEGMENTATION
EVERYTHING
M2M
TOOLS
AUTOMOBILE
MOBILE
SOLUTIONS
PROJECTS
BRANDS
SOLUTIONS
SOCIAL NETWORKS
SOFTWARE
MOBILE
DEVICE


Los hogares y las fábricas comenzarán a cambiar con la IoT…

… y también cambiará la industria de seguros de propiedad y accidentes

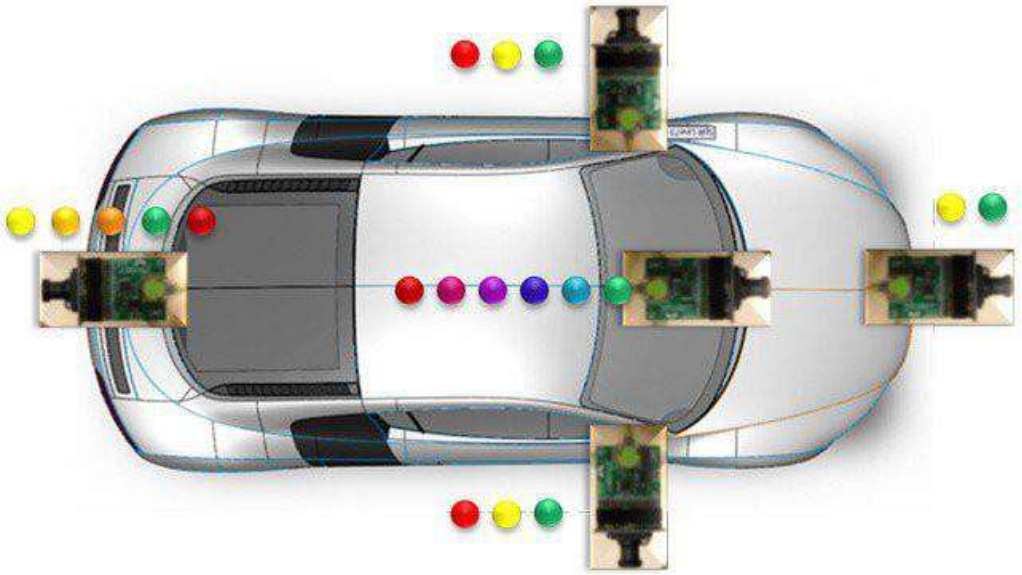
HOGAR, HOGAR INTELIGENTE

Dispositivos geniales, tendencia impulsada por la practicidad en la tec. del estilo de vida residencial



Los automóviles inteligentes ya están cambiando …

…y así cambiará también la industria aseguradora (automotora)



- 3D Surround View
- Rear View Camera
- Rear Cross Traffic
- Blind Spot Detection
- Lane Departure Warning
- Intelligent Headlamp Control
- Traffic Sign Recognition
- Forward Collision Warning
- Intelligent Speed Control
- Pedestrian Detection

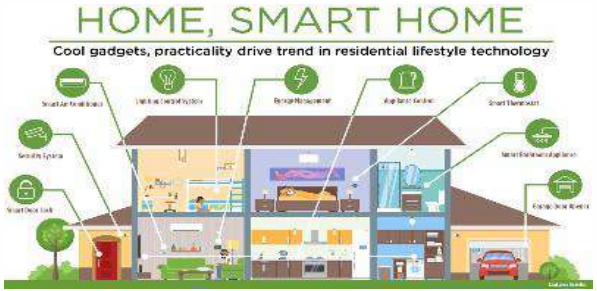
¡Y todo el resto también, lógicamente!

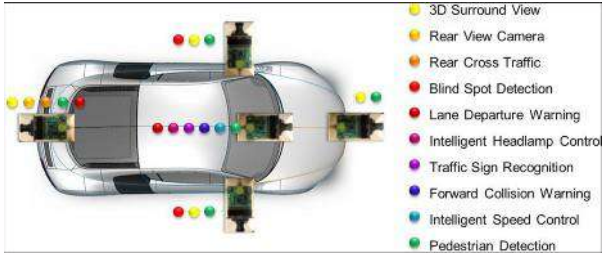
Están llegando cosas inteligentes…

…y así cambiará la industria aseguradora

El producto se está **desplazando** del aspecto **forense post evento a la prevención pre evento.**

En el futuro el producto incluirá **menos y menos** elementos de compensación por siniestros y **más servicios** designados a evitar/mitigar las pérdidas.





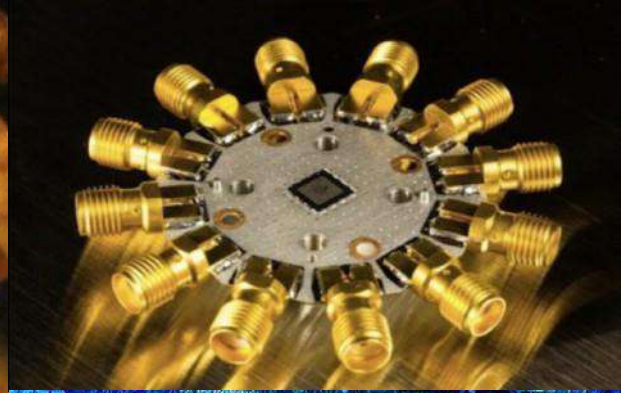
IoT es una “Frontera Adyacente” especialmente porque

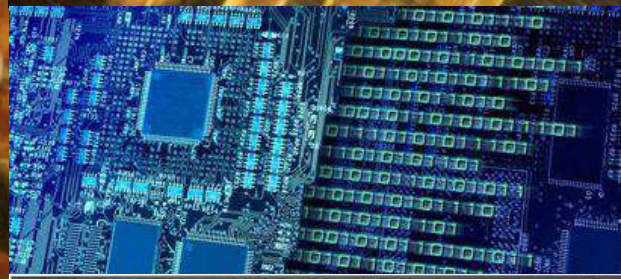
- Los costos tecnológicos de entrada ya no representan barreras
- Los reguladores están MUY LEJOS de la curva respecto a estos temas (como también lo están en muchos otros casos...)

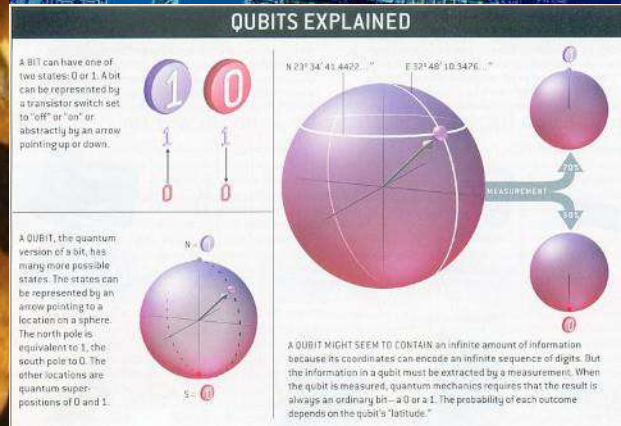
- El uso de los datos se descubre después de colectarlos…
  - Deberíamos mencionar algunas preocupaciones…

2

SLIDE 17






QUBITS EXPLAINED
A BIT can have one of two states: 0 or 1. A bit can be represented by a transistor switch set to "off" or "on" or abstractly by an arrow pointing up or down.
A QUBIT, the quantum version of a bit, has many more possible states. The states can be represented by an arrow pointing to a location on a sphere. The north pole is equivalent to 1, the south pole to 0. The other locations are quantum superpositions of 0 and 1.
MEASUREMENT
A QUBIT MIGHT SEEM TO CONTAIN an infinite amount of information because its coordinates can encode an infinite sequence of digits. But the information in a qubit must be extracted by a measurement. When the qubit is measured, quantum mechanics requires that the result is always an ordinary bit—a 0 or a 1. The probability of each outcome depends on the qubit's "latitude."

SLIDE 18

RAZONAMIENTO AI

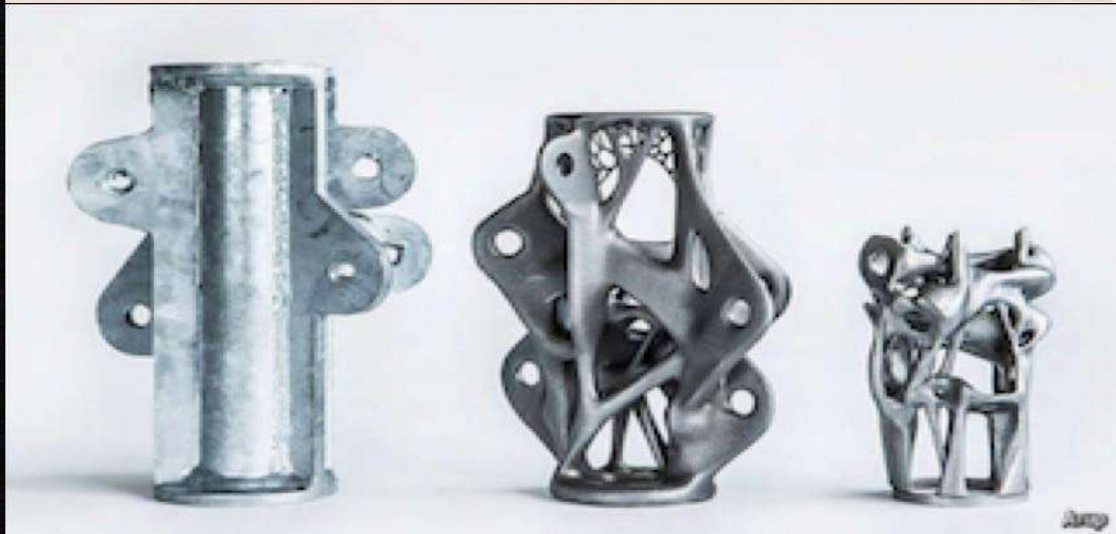
CIENCIA

COMPUTADORA

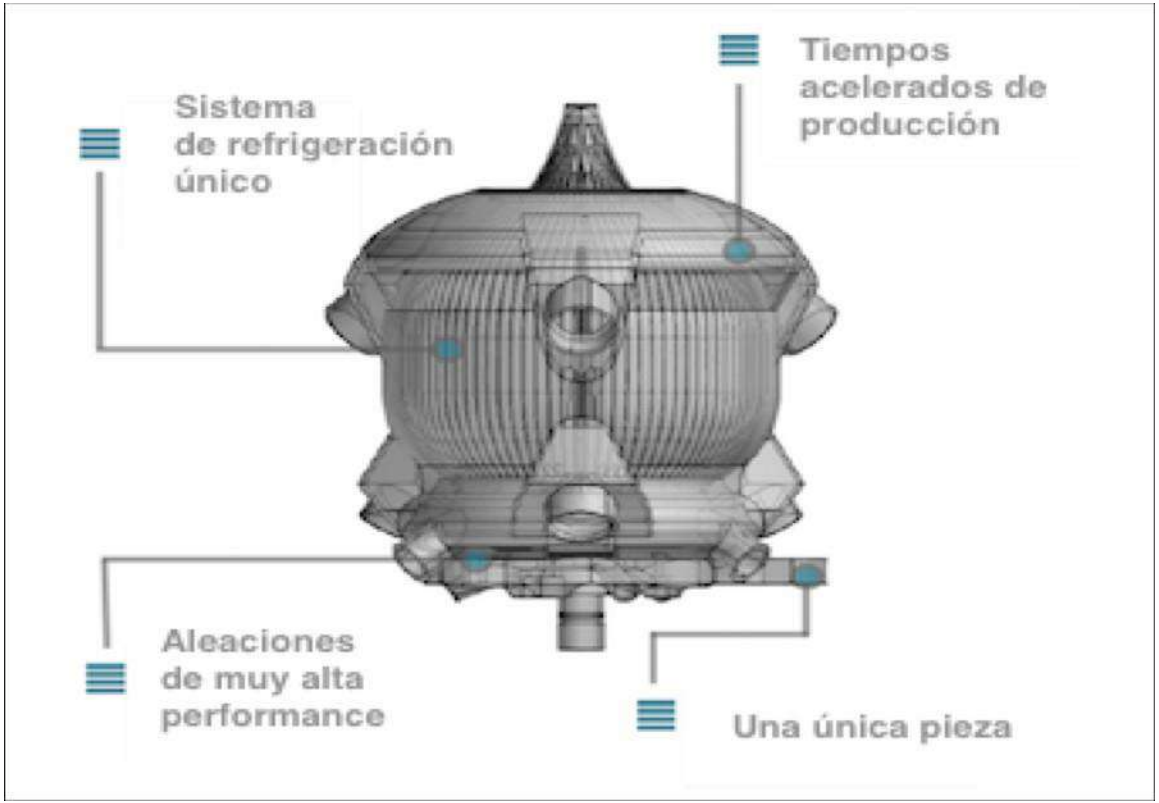
CONOCIMIENTO

APRENDIZAJE

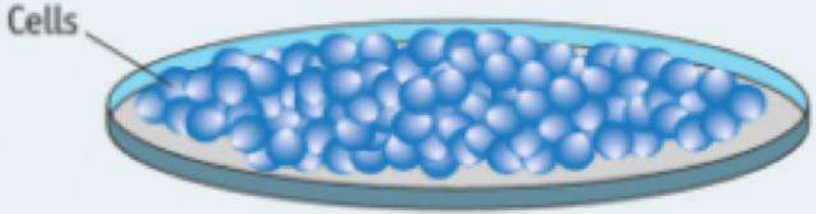

Watson IoT
olli



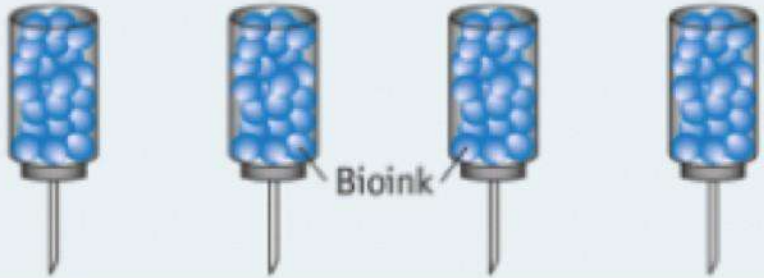
SLIDE 22


Tiempos acelerados de producción
Sistema de refrigeración único
Aleaciones de muy alta performance
Una única pieza

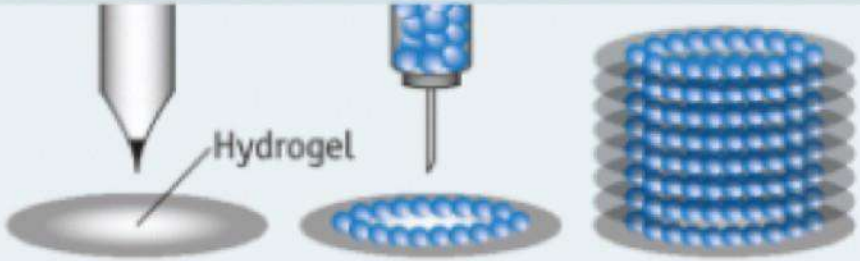
¿Cómo funciona una bio-impresora 3D?



1. Se dejan reproducir, en un ambiente propicio, células madre o células tomadas del organismo de una persona. Estas células serán usadas para producir la "bio-tinta".

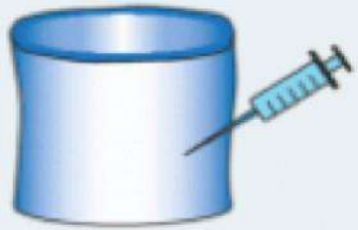


2. Esta "bio-tinta" se introduce en unos cartuchos en forma de jeringas con una agujas largas para la impresión.

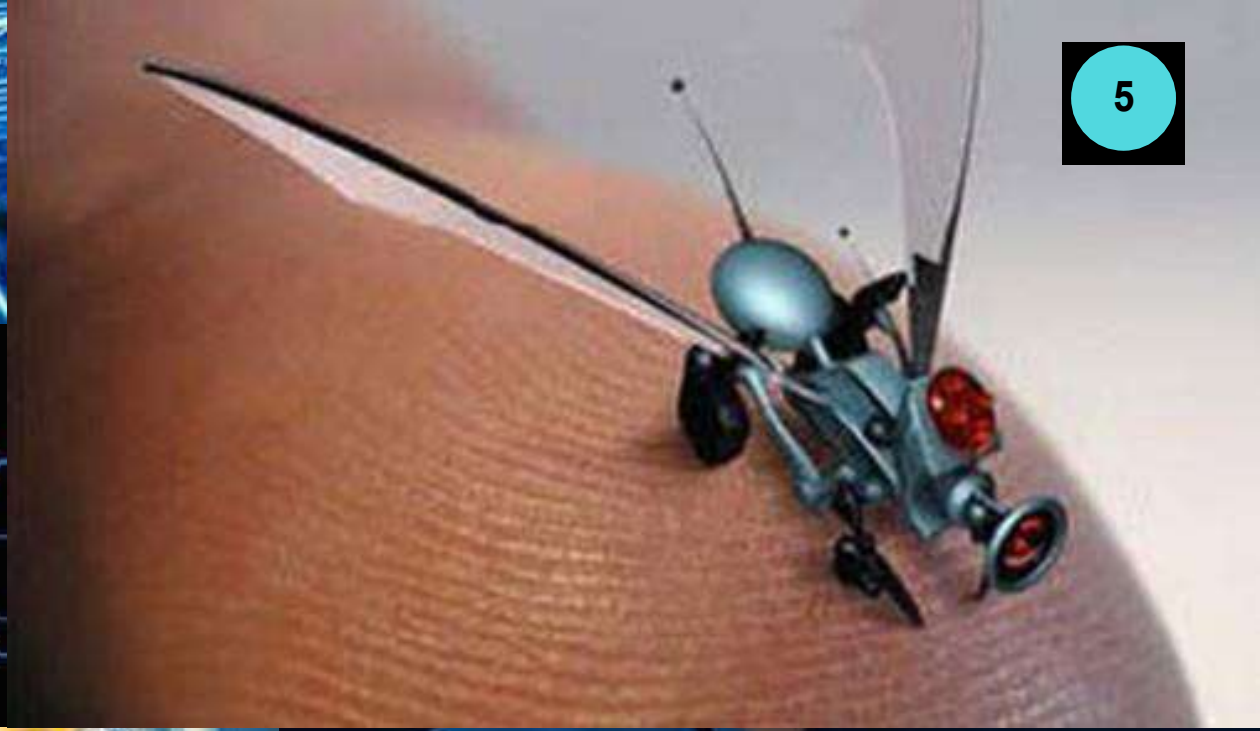


3. La computadora guía a la bio-impresora para ir depositando un diseño de células en capas muy precisas; una capa sobre otra. Entre cada capa se coloca una substancia llamada "hidrogel", la cual se coloca a través de una jeringa especial y que sirve para "darle forma" a las células.

4. El tejido así "impreso", se deja crecer y madurar y se retira el "hidrogel".



4. El tejido así "impreso", se puede usar para investigación médica o como material para trasplantes.

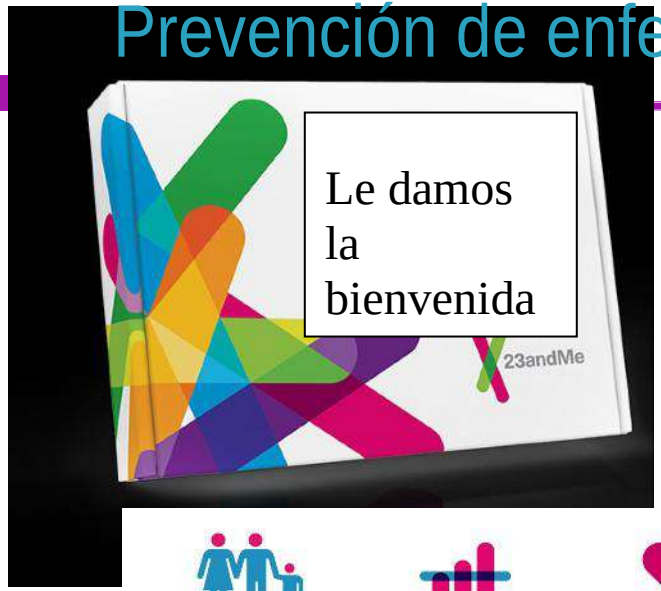



MEDICAL

SLIDE 25

SLIDE 26

Prevención de enfermedades por $199

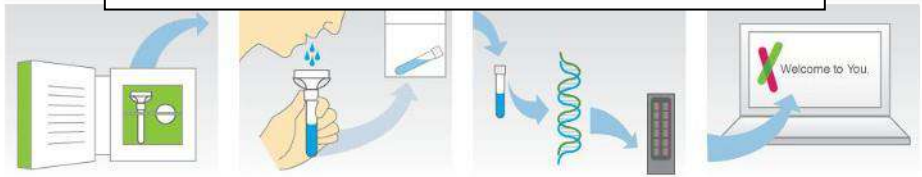


Le damos la bienvenida

Conozca su AND, lo único que necesita es un poco de saliva

Personal Genome Service™

Here's what



1. Order a kit from our online store.
2. Register your kit, spit into the tube, and send it to the lab.
3. Our CLIA-certified lab analyzes your DNA in 6-8 weeks.
4. Log in and start exploring your genome.

Carrier status
Find out if your children are at risk for inherited conditions, so you can plan for the health of your family.

Health risks
Understand your genetic health risks. Change what you can, manage what you can't.

Drug response
Arm your doctor with information on how you might respond to certain medications.

Health tools
Document your family health history, track inherited conditions, and share the knowledge.

Inherited traits
Explore your genetic traits for everything from lactose intolerance to male pattern baldness.

Scientific advances
Keep receiving updates on your DNA as discoveries are made, so your knowledge grows as you do.

Disease Risks (100)

Elevated Risks	Your Risk	Average Risk
Gallstones new	11.1%	7.0%
Restless Legs Syndrome	2.5%	2.0%

more »

Decreased Risks	Your Risk	Average Risk
Prostate Cancer ♂	12.7%	17.8%
Alzheimer's Disease new	4.9%	7.2%
Colorectal Cancer	4.2%	5.6%

more »

See all 100 risk reports...

Carrier Status (24)

Hemochromatosis	Variant Present
Alpha-1 Antitrypsin Deficiency	Variant Absent
Bloom's Syndrome	Variant Absent
BRCA Cancer Mutations (Selected)	Variant Absent
Canavan Disease	Variant Absent
Cystic Fibrosis	Variant Absent
Familial Dysautonomia	Variant Absent
Factor XI Deficiency	Variant Absent

See all 24 carrier status...

Traits (50)

Alcohol Flush Reaction	Does Not Flush
Bitter Taste Perception	Can Taste
Earwax Type	Wet
Eye Color	Likely Brown
Hair Curl	Slightly Curlier Hair on Average

See all 50 traits...

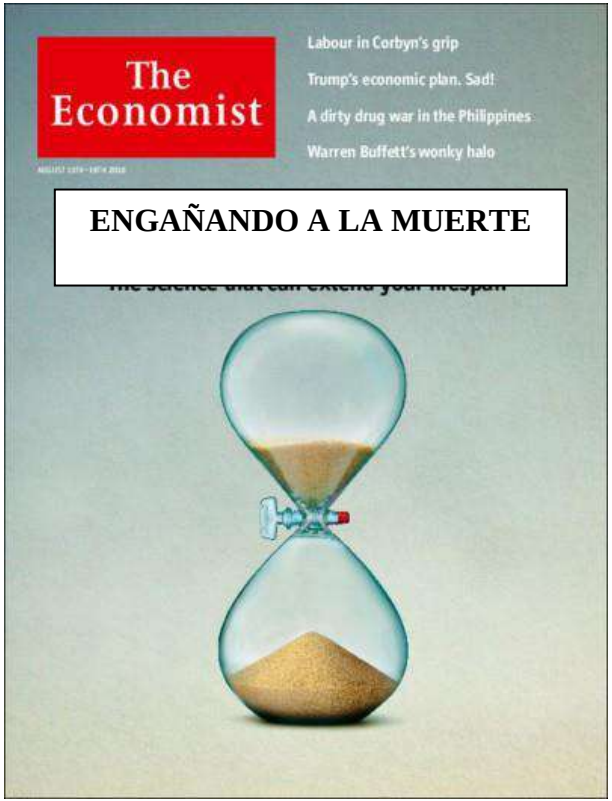
Drug Response (19)

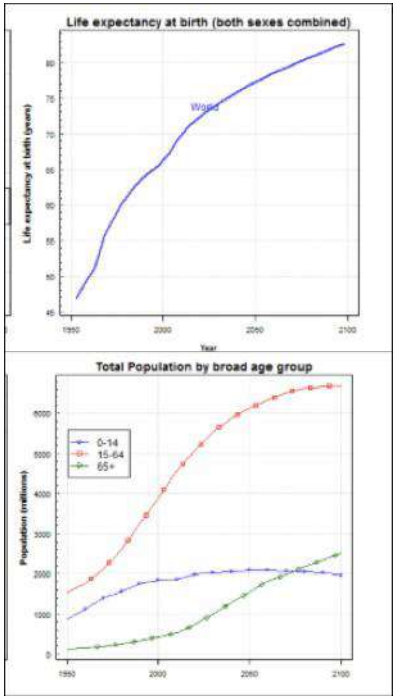
Warfarin (Coumadin®) Sensitivity	Increased
Abacavir Hypersensitivity	Typical
Alcohol Consumption, Smoking and Risk of Esophageal Cancer	Typical
Clopidogrel (Plavix®) Efficacy	Typical
Fluorouracil Toxicity	Typical

See all 19 drug response...

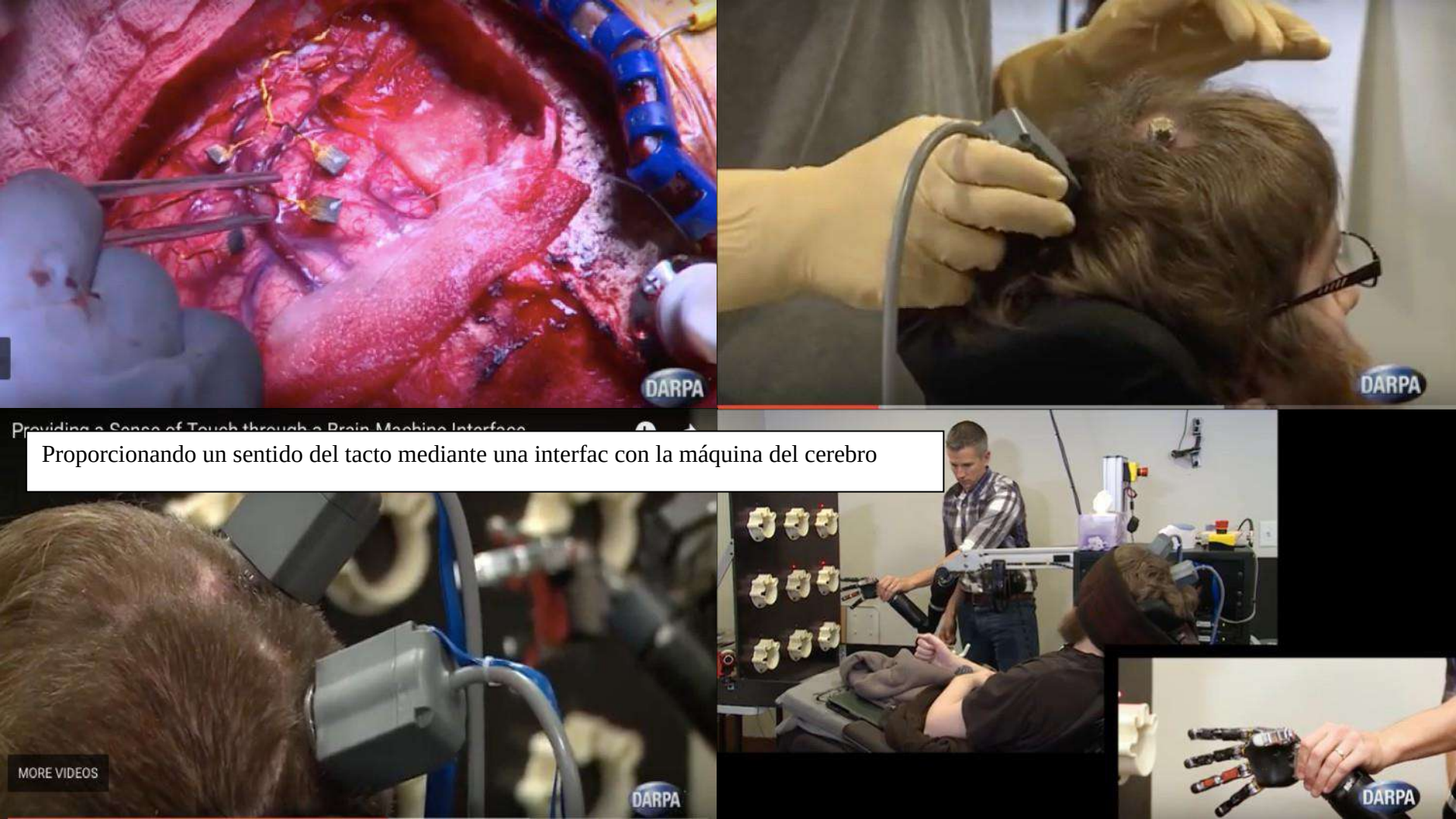
Comenzaremos a engañar a la muerte…

… cómo afectará entonces a la industria aseguradora (Vida)



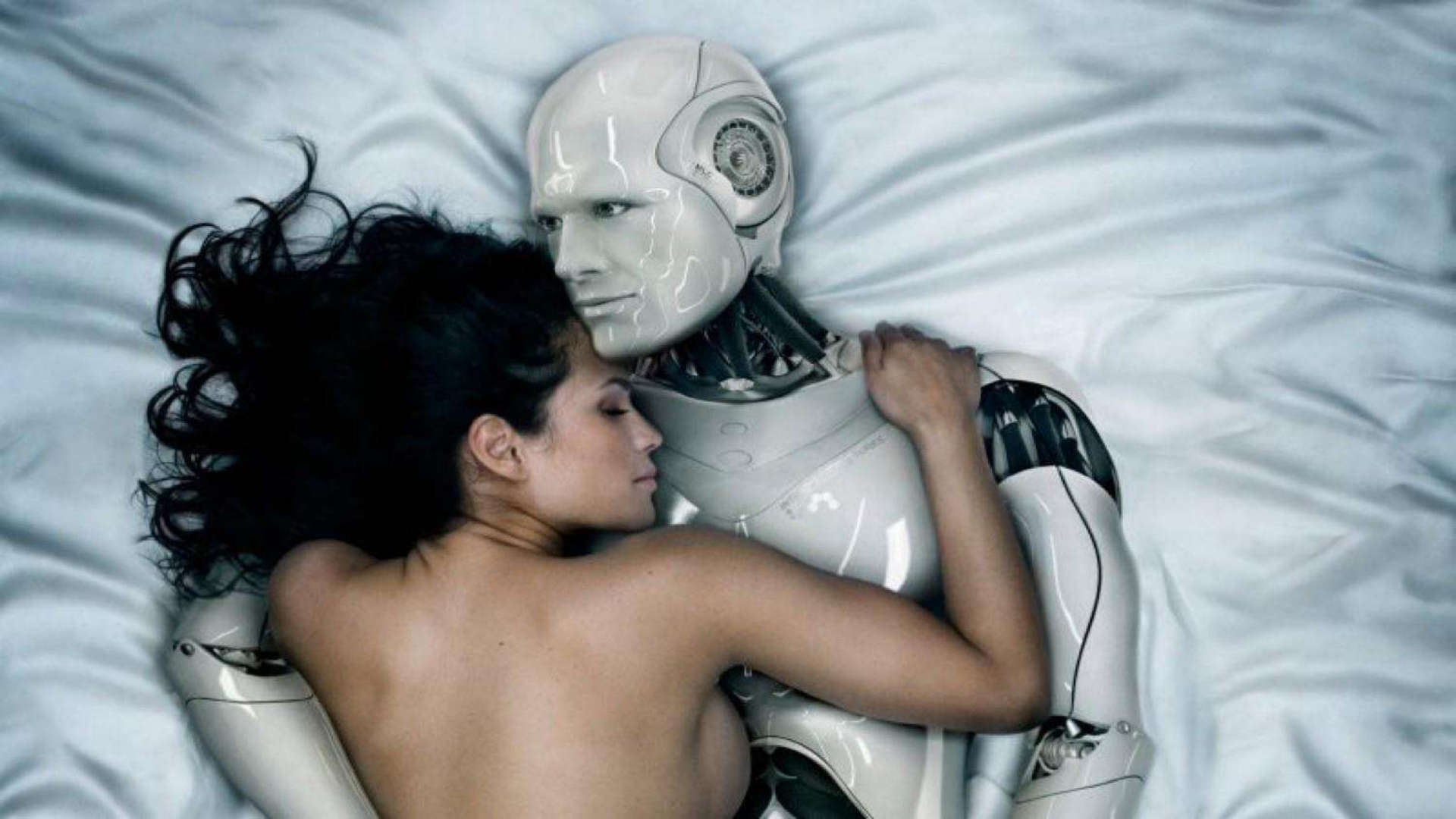


- 3D Bio – Impresión
- Uso de AI en la medicina
- Testing genético predictivo…
  - puede resultar en una selección adversa debido a información asimétrica.



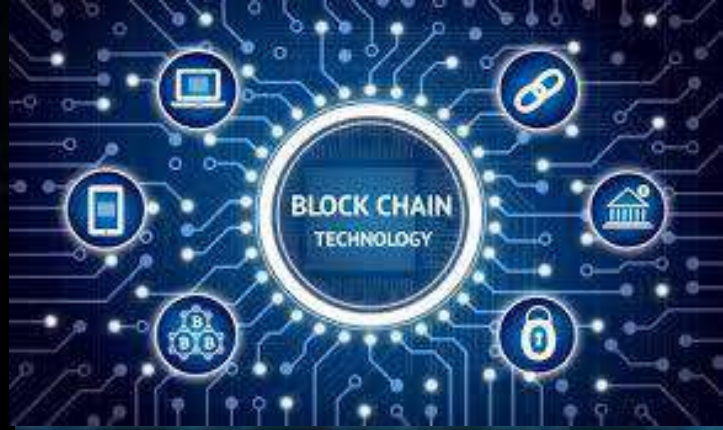
Proporcionando un sentido del tacto mediante una interfac con la máquina del cerebro

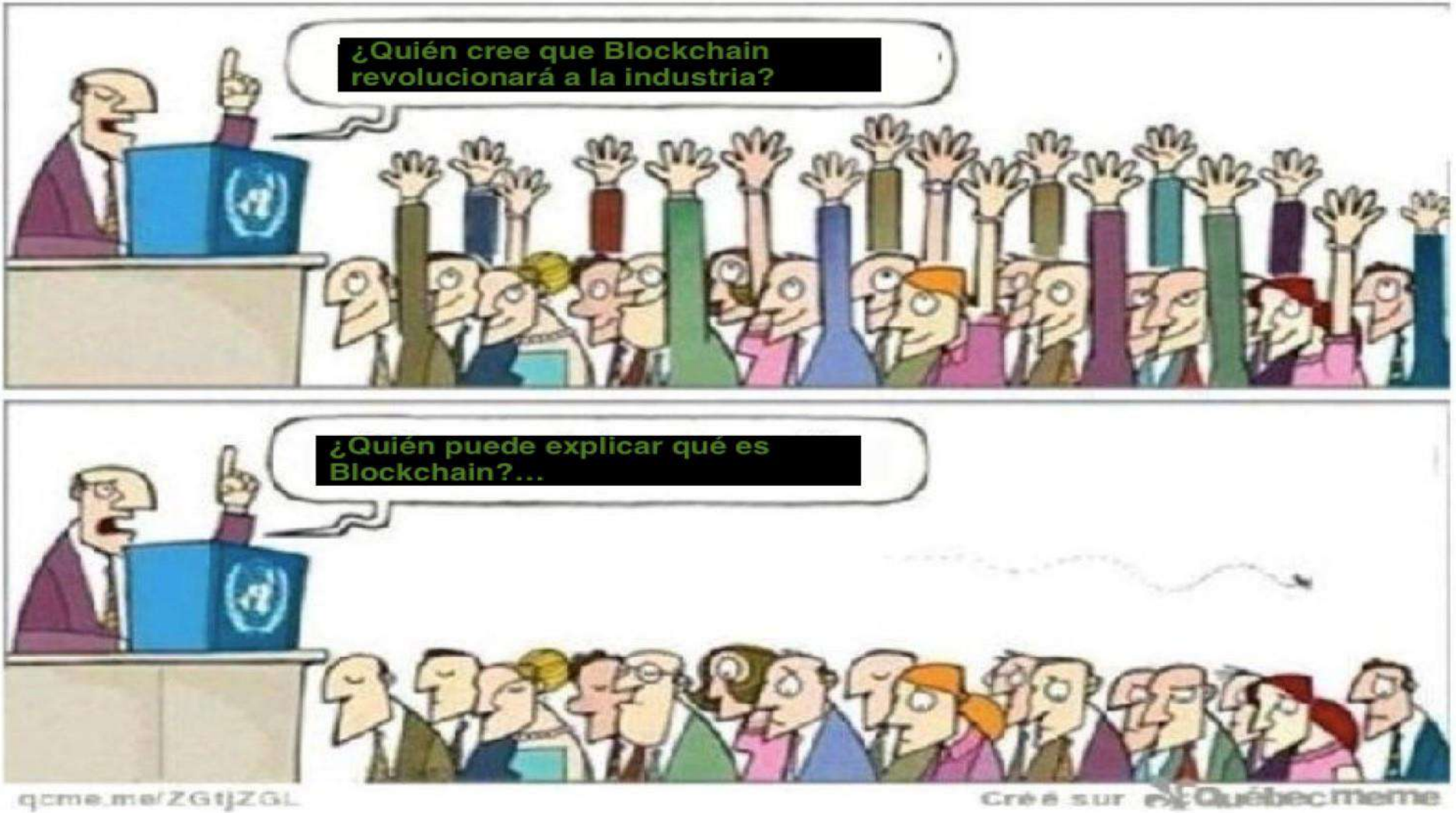
SLIDE 30



6

SLIDE 32

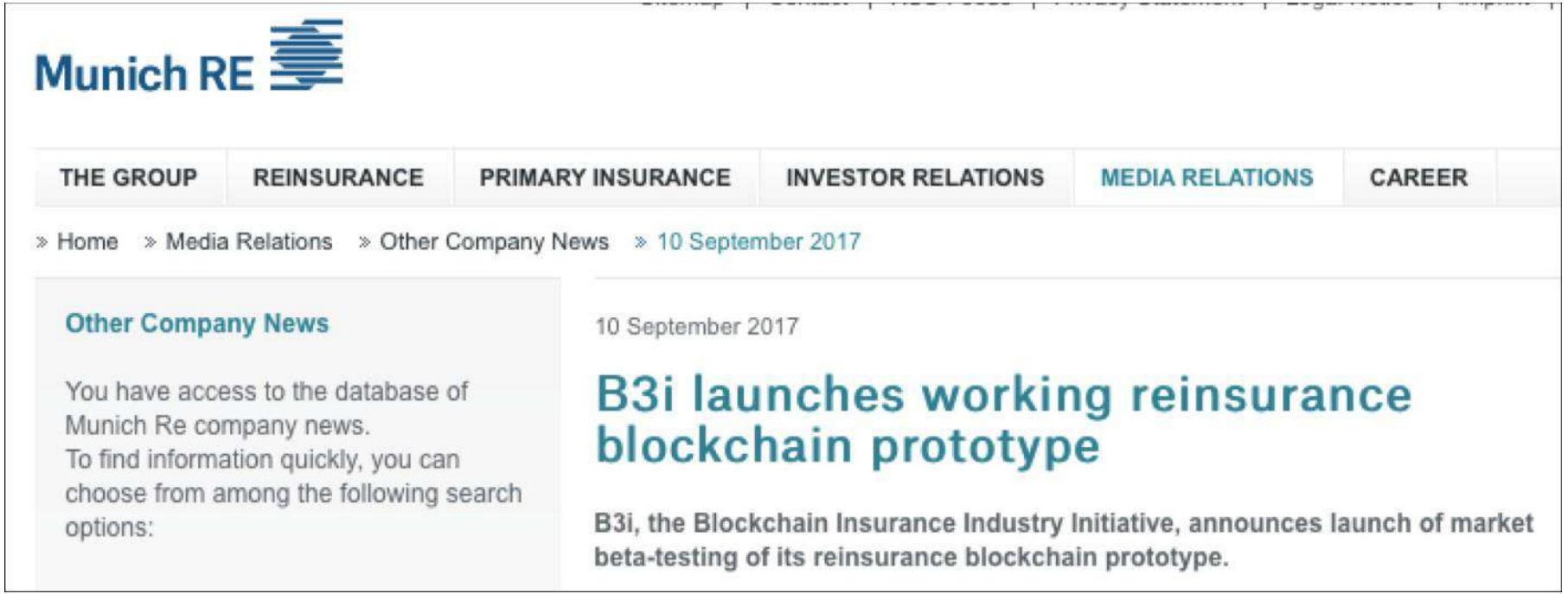



¿Quién cree que Blockchain revolucionará a la industria?
¿Quién puede explicar qué es Blockchain?...
qcme.me/ZGtjZGL
Créé sur Québecmeme

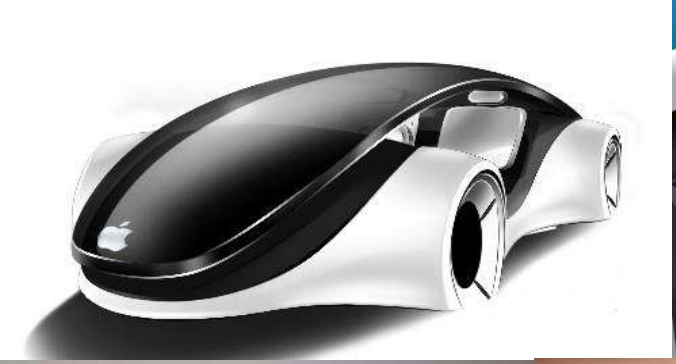

BITCLUB
GLOBAL MINING POOL

Por último pero no menos importante…
… ¿qué sabemos sobre Blockchain?

SLIDE 35




OTTO



SLIDE 38

Los vehículos autónomos **cambiarán completamente** la nueva economía por venir…

“¿Propiedad?

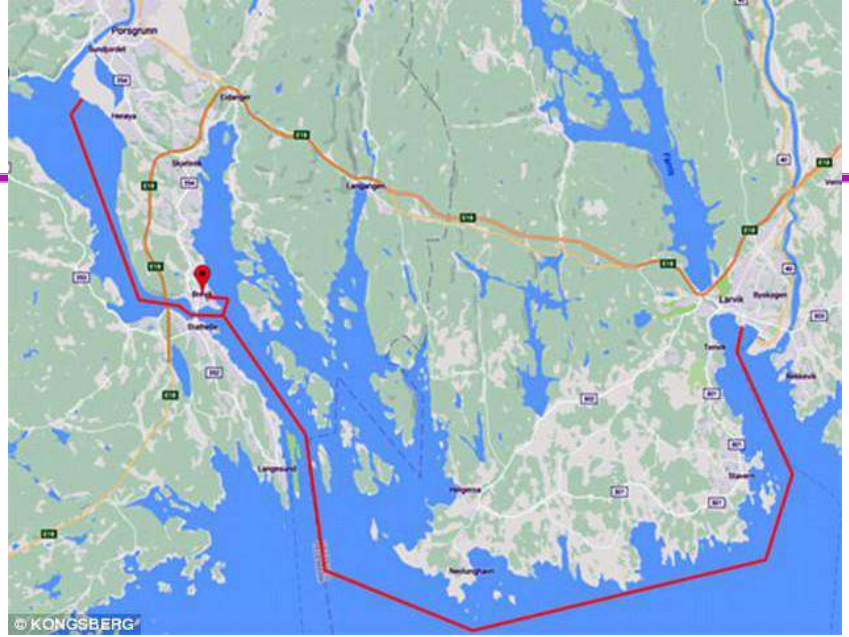
Qué tal si en vez de asegurar x mil millones de automóviles, ahora tendremos que asegurar unos pocos miles de flotas…

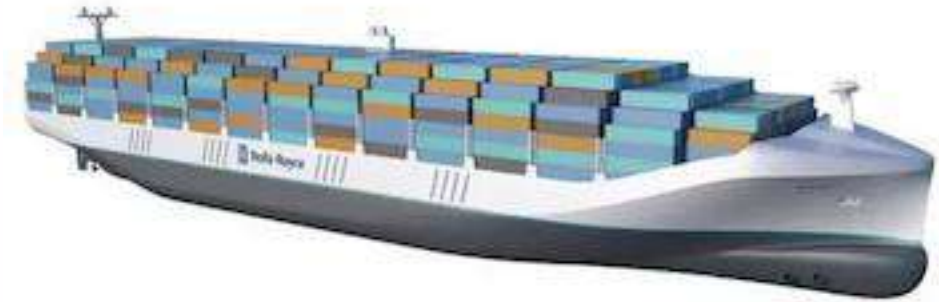
TECNOLOGÍA INCLUSIVA

¿Quién sentirá el impacto?

El mundo incipiente de InsurTech

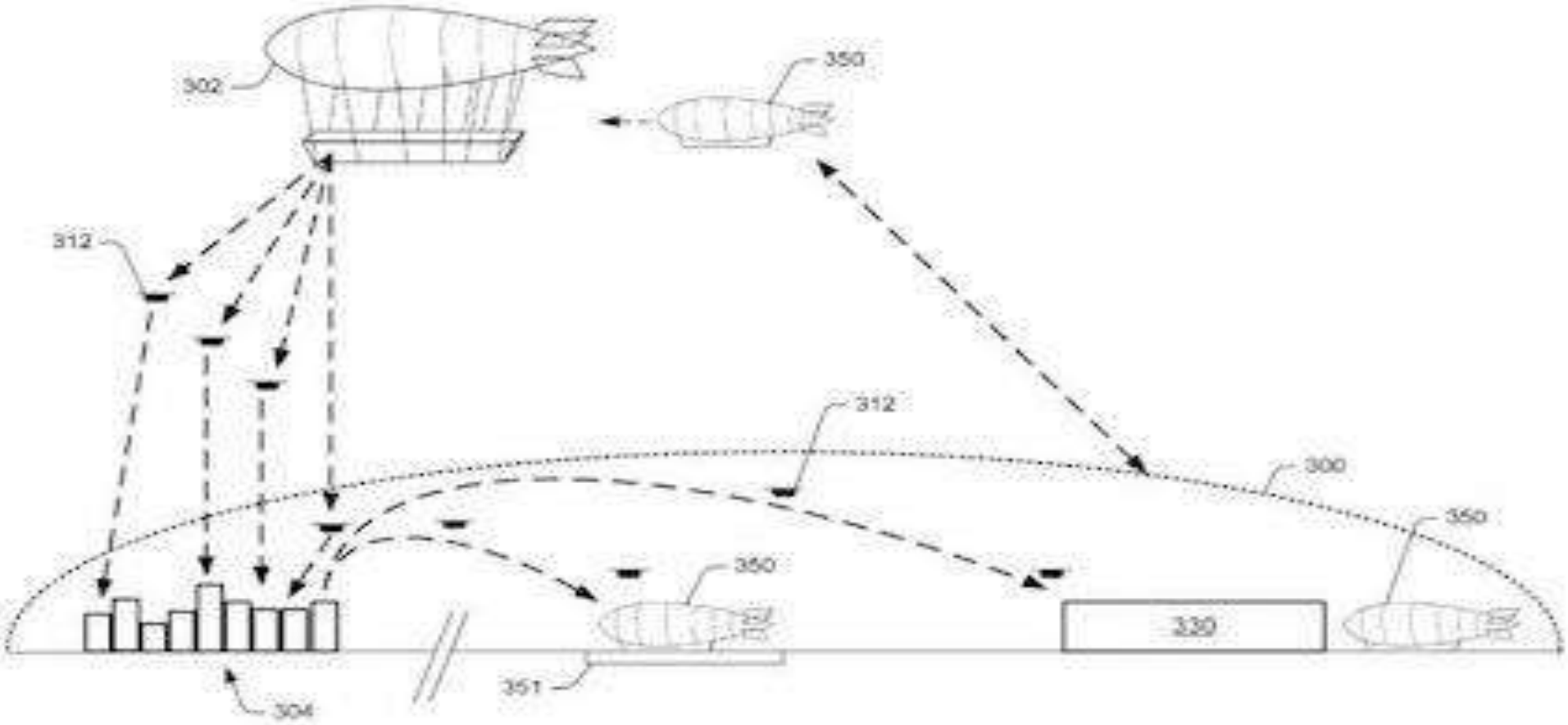
The autonomous ship YARA Birkeland.






THE STRAITS TIMES

SLIDE 41



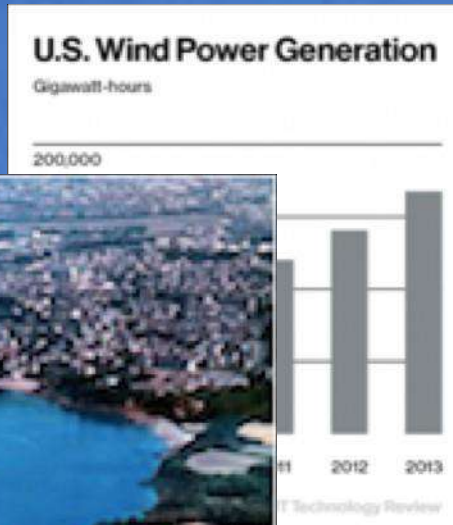

AUTOLIVERY
POWERED BY FORD


CHARGE
CHARGE

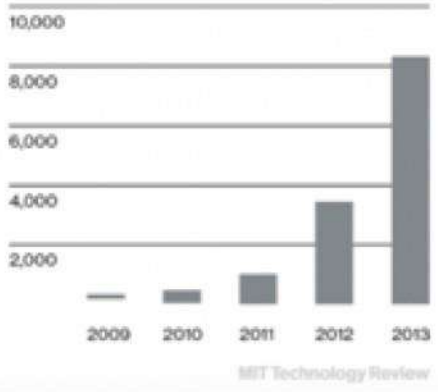

Prime Air
amazon

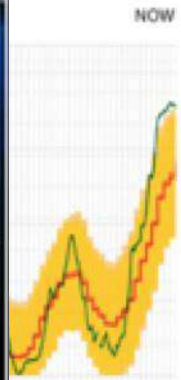

dispatch

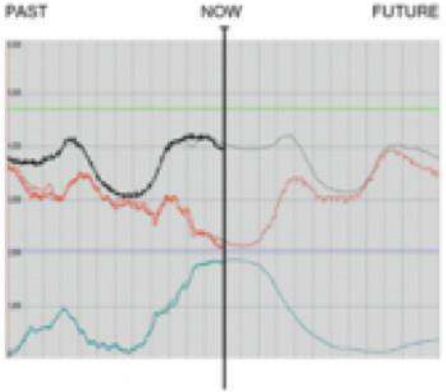
SLIDE 46



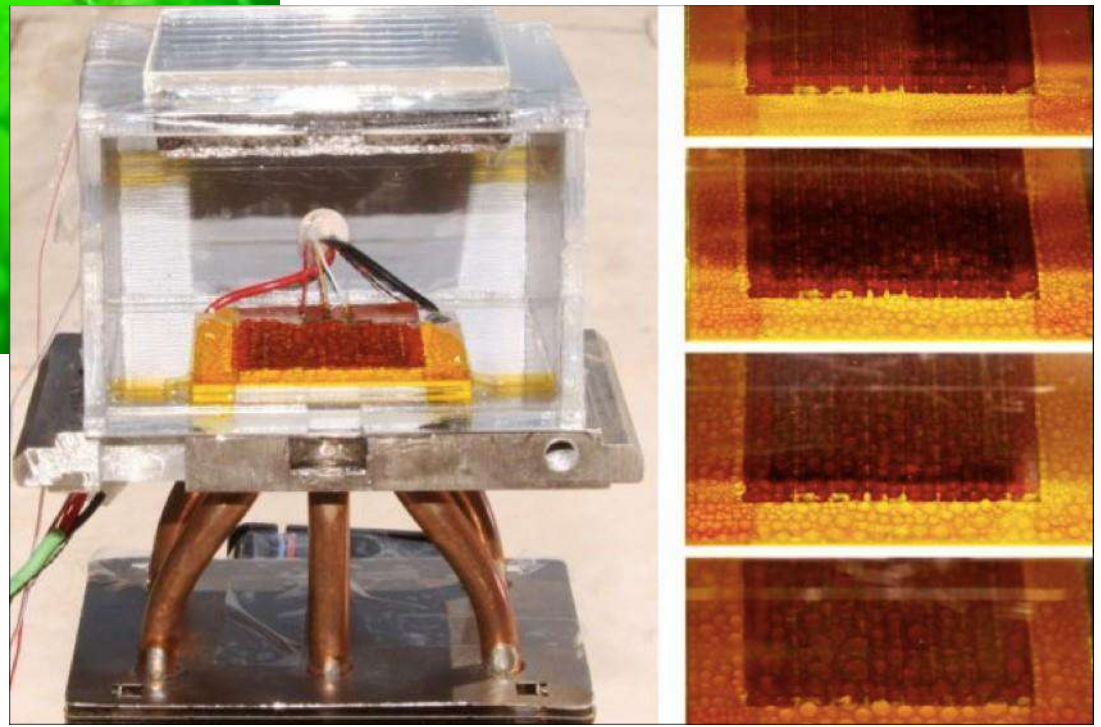
Generación Eólica EUA







Tecnología Inclusiva

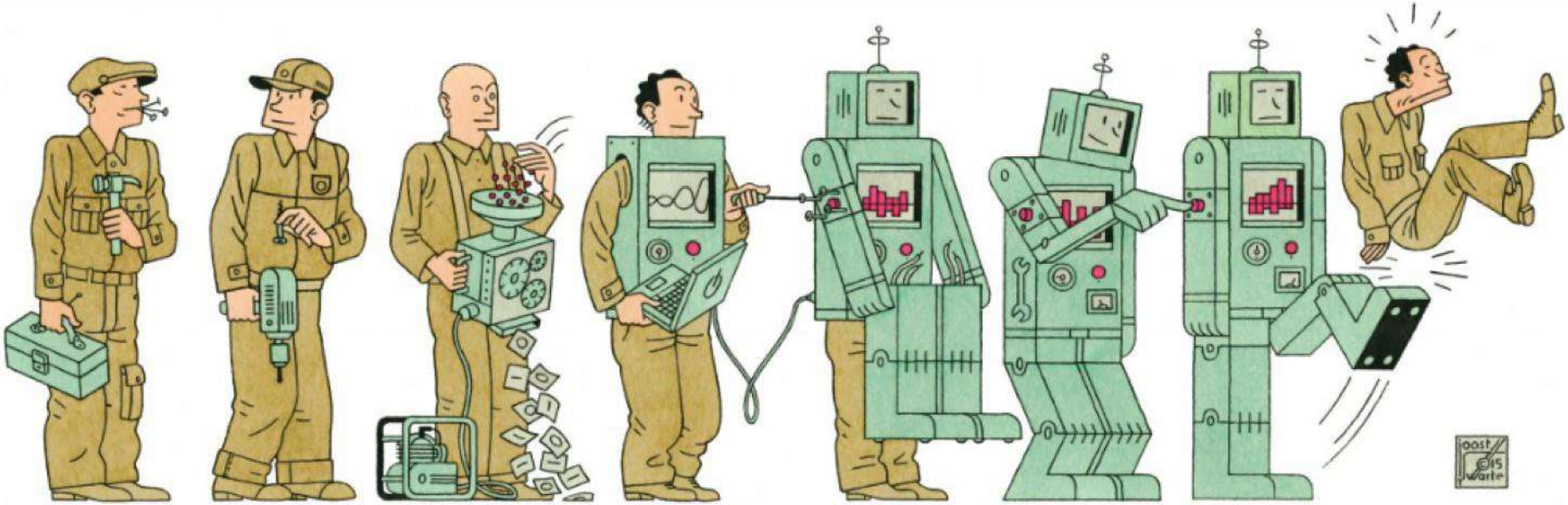



¿Quién
sentirá el
impacto?


TOYS R US BABIES R US
STORE CLOSING SALE!

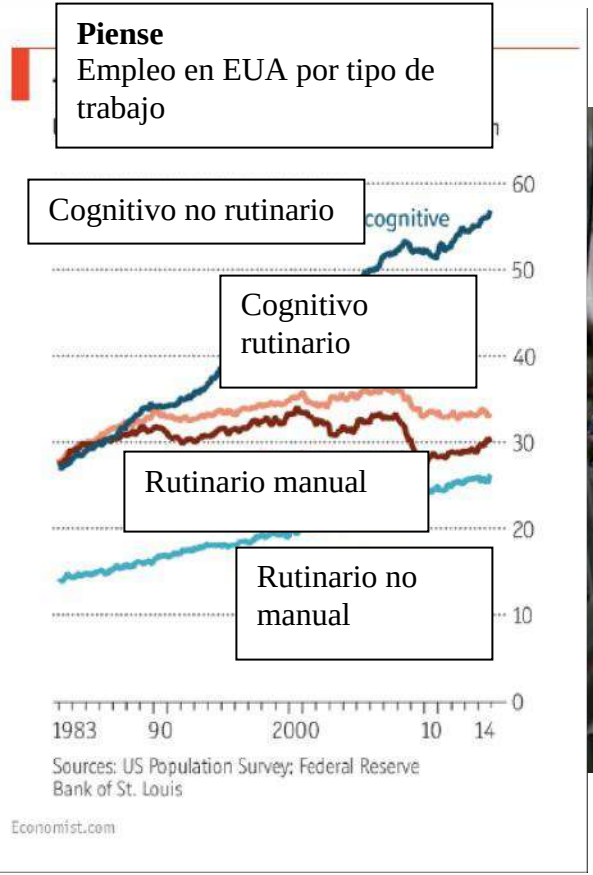

MUST GO!
ENTIRE STORE
GOING OUT OF
Seasonal
Dolls
Clearance

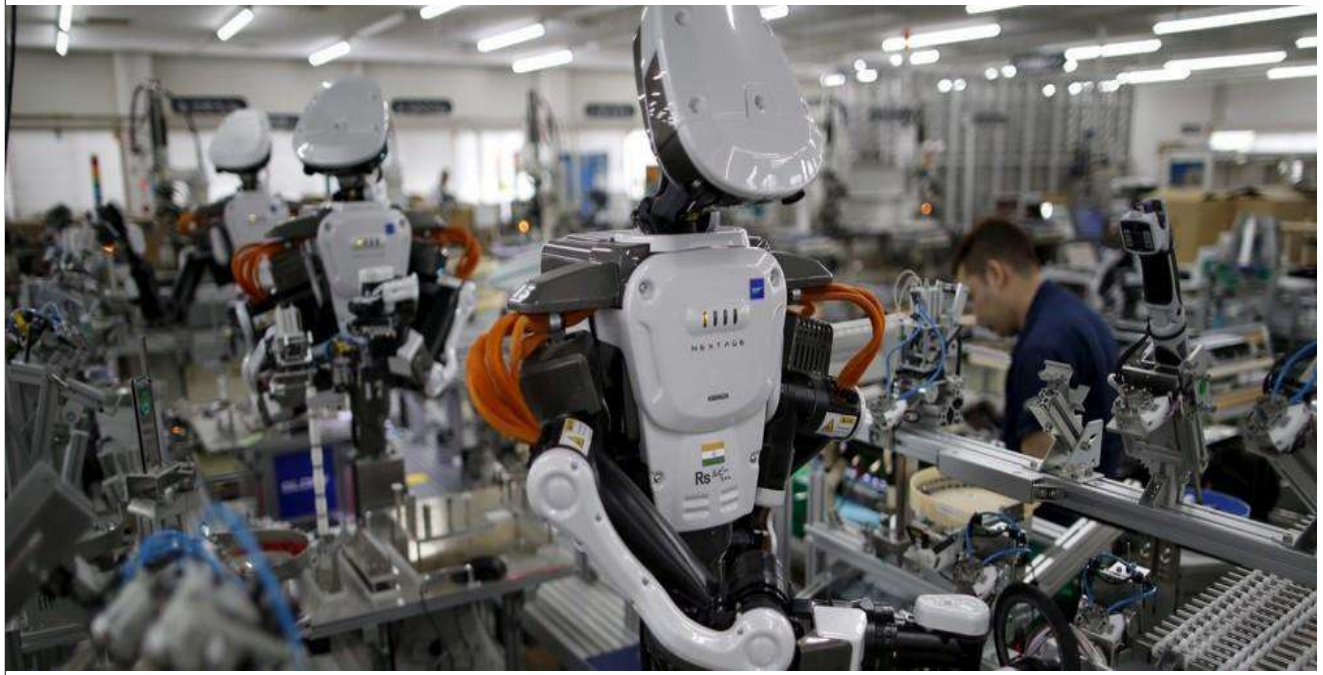

OLDCO

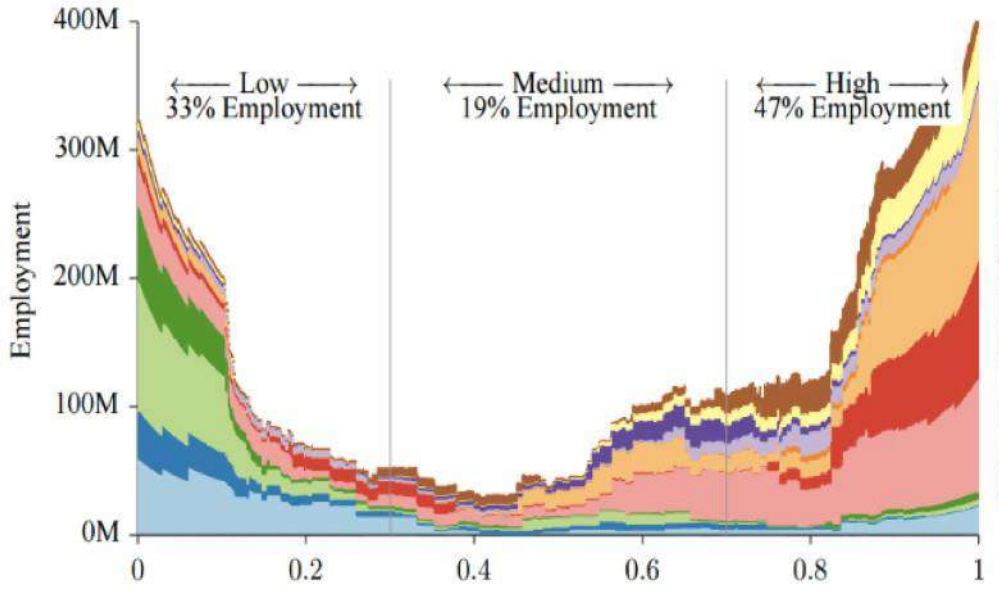


SLIDE 53

Piense
Empleo en EUA por tipo de trabajo







Gerencia, Comercial y Financiera
Computación, Ingeniería y Ciencia
Educacón, Legal, Serv.Comunitarios, Arte, Medios
Profesionales de Salud, y Servicio
Técnico
Ventas y Afines
Apoyo Oficinay Administrativo
Agricultura, Pesca, Silvicultura
Construcción y Extracción

Instalación, Mantenimiento y Reparaciones
Producción
Transporte y Traslado de Material

Probabilidad de Automación

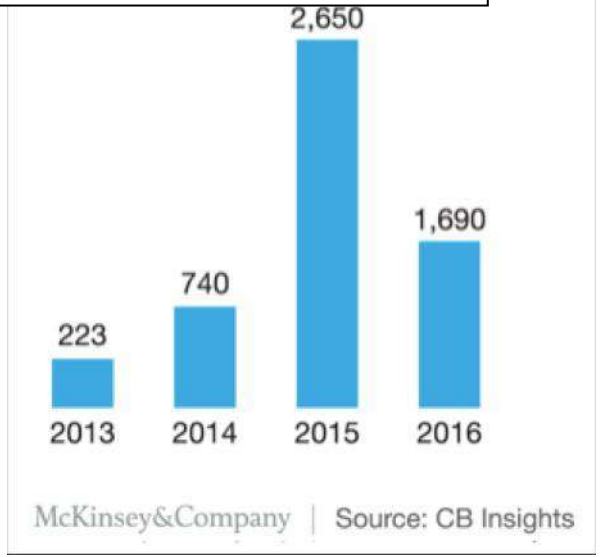
*Distribución basada en un *job mix* 2010

Source: Frey, C.B. and M.A. Osborne, "The Future of Employment: How Susceptible Are Jobs to Computerisation?", 17 September 2013

El mundo incipiente de InsurTech…

Crecimiento de Insurtechs

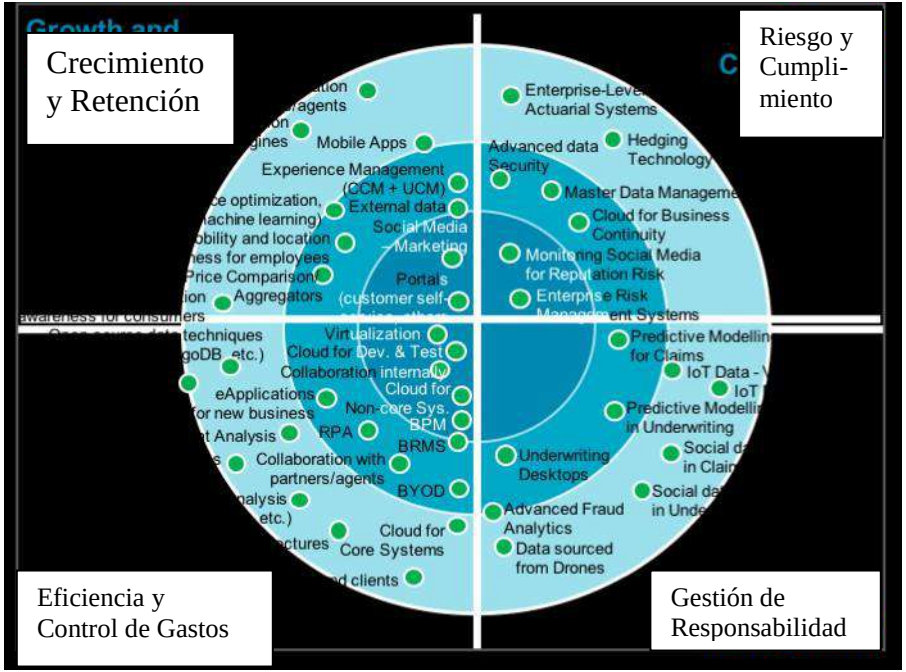
Financiación de tec. de seguros $ millones



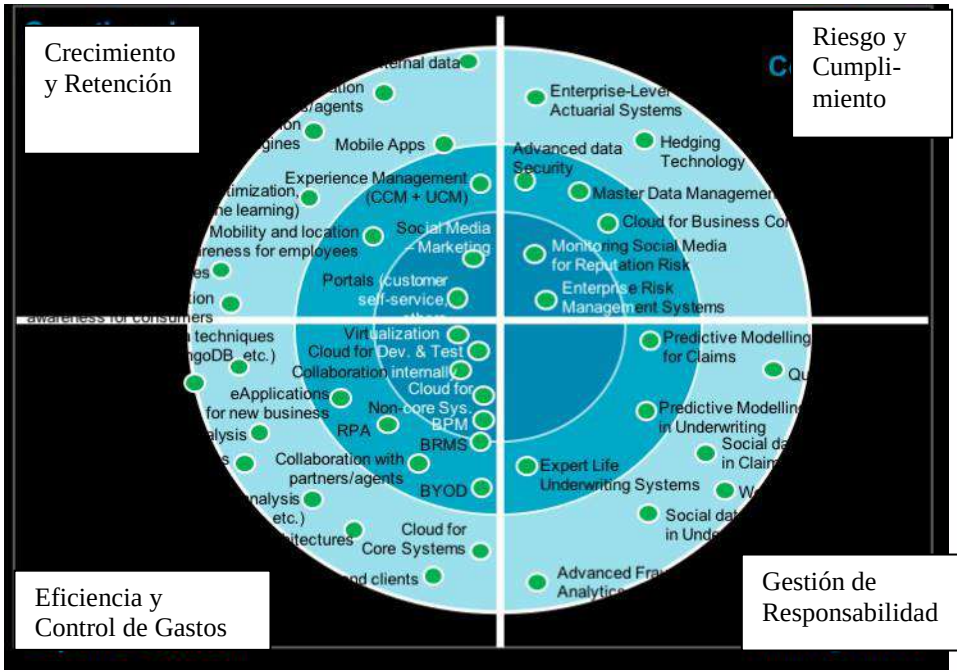
Hacia donde miran los insurtechs

Número de innovaciones como % total de la base de datos

Share de innovaciones en la base de datos de insurtechs


Crecimiento y Retención
Riesgo y Cumpli-miento
Eficiencia y Control de Gastos
Gestión de Responsabilidad
Mobile Apps
Experience Management (CCM + UCM)
External data
Social Media – Marketing
Portals (customer self-
Aggregators
Virtualization
Cloud for Dev. & Test
Collaboration internally
eApplications
for new business
Non-core Sys.
BPM
RPA
BRMS
Collaboration with partners/agents
BYOD
Cloud for Core Systems
Enterprise-Level Actuarial Systems
Advanced data Security
Hedging Technology
Master Data Manageme
Cloud for Business Continuity
Monitoring Social Media for Reputation Risk
Enterprise Risk
Predictive Modelling for Claims
IoT Data -
Predictive Modelling in Underwriting
Underwriting Desktops
Advanced Fraud Analytics
Data sourced from Drones

P&C


Crecimiento y Retención
Riesgo y Cumpli-miento
Eficiencia y Control de Gastos
Gestión de Responsabilidad
Mobile Apps
Experience Management (CCM + UCM)
Social Media – Marketing
Portals (customer self-service)
Virtualization
Cloud for Dev. & Test
Collaboration internally
Cloud for
Non-core Sys.
BPM
RPA
BRMS
Collaboration with partners/agents
BYOD
Cloud for Core Systems
Enterprise-Level Actuarial Systems
Advanced data Security
Hedging Technology
Master Data Management
Cloud for Business
Monitoring Social Media for Reputation Risk
Enterprise Risk Management Systems
Predictive Modelling for Claims
Predictive Modelling in Underwriting
Expert Life Underwriting Systems

VIDA

KPMG

EL PULSO DE FINITECH 4T 2017

Análisis global de inversiones en fintech

10 PRINCIPALES PRONÓSTICOS PARA 2018

1. **AI accelerates:** Continued innovation and adoption of AI as an underlying tech
2. **Regtech rising:** Increased investment in regtech around the world
3. **Building bridges:** Greater collaboration and partnering between large-scale providers
4. **Next gen digital lending:** The rise of online mortgage technology and platforms
5. **Beyond use cases:** Early success efforts in the initiation of blockchain production systems
6. **Open banking:** Open APIs pave the road for third party developers in Europe and Globally
7. **New challenger banks:** Financial services incumbents building their own digital banks
8. **Insurtech innovation:** Accelerated investment into driving insurtech innovations and building hubs around the world
9. **Going full-stack:** Broadening of solution sets by mature fintech companies
10. **Big tech participation:** More partnering between fintech and technology giants

Aitë PARTNER. ADVISOR. CATALYST.

10 Principales Tendencias en Servicios Financieros - 2018

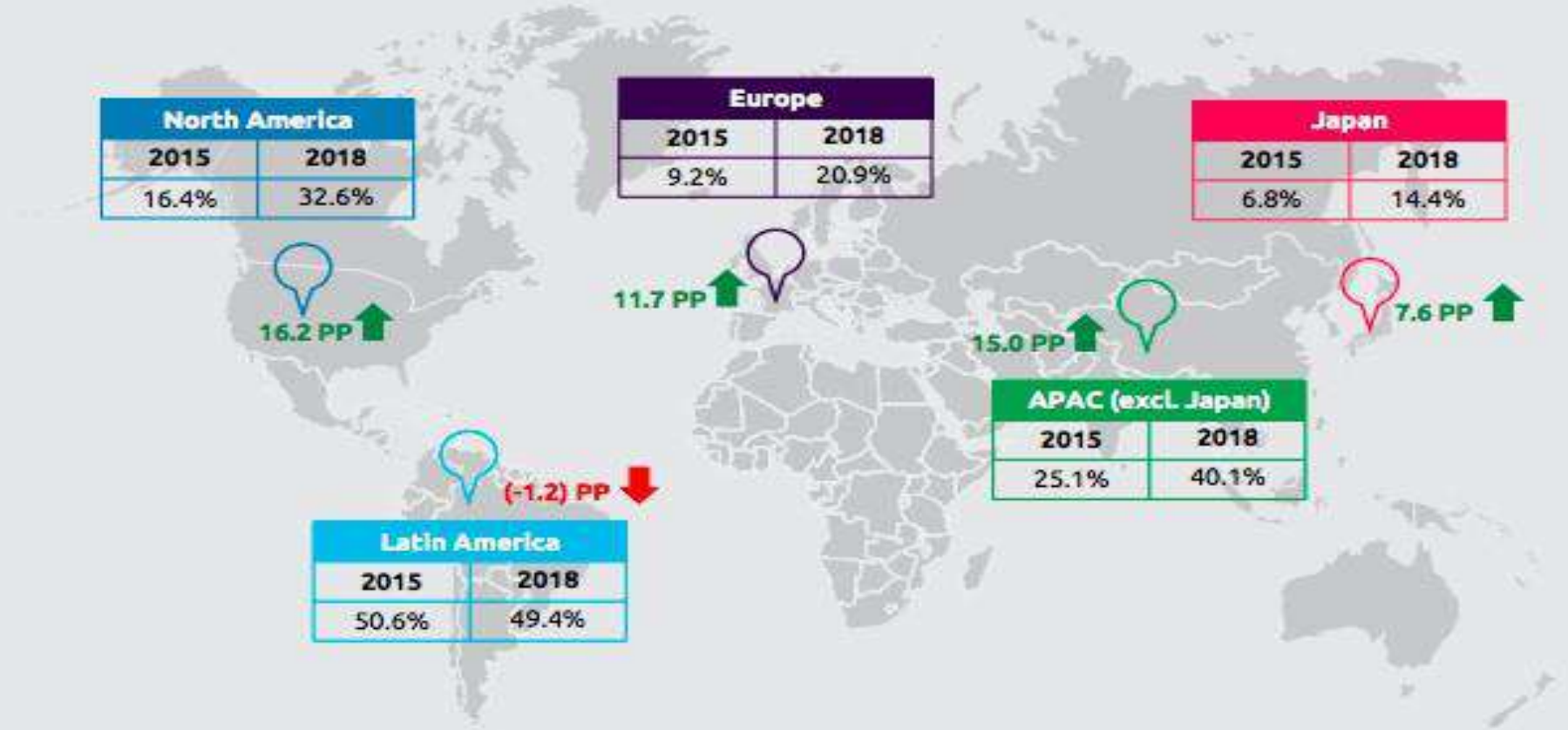
JANUARY 2018

Top 10 Trends in Financial Services, 2018 JANUARY 2018

SEGUROS

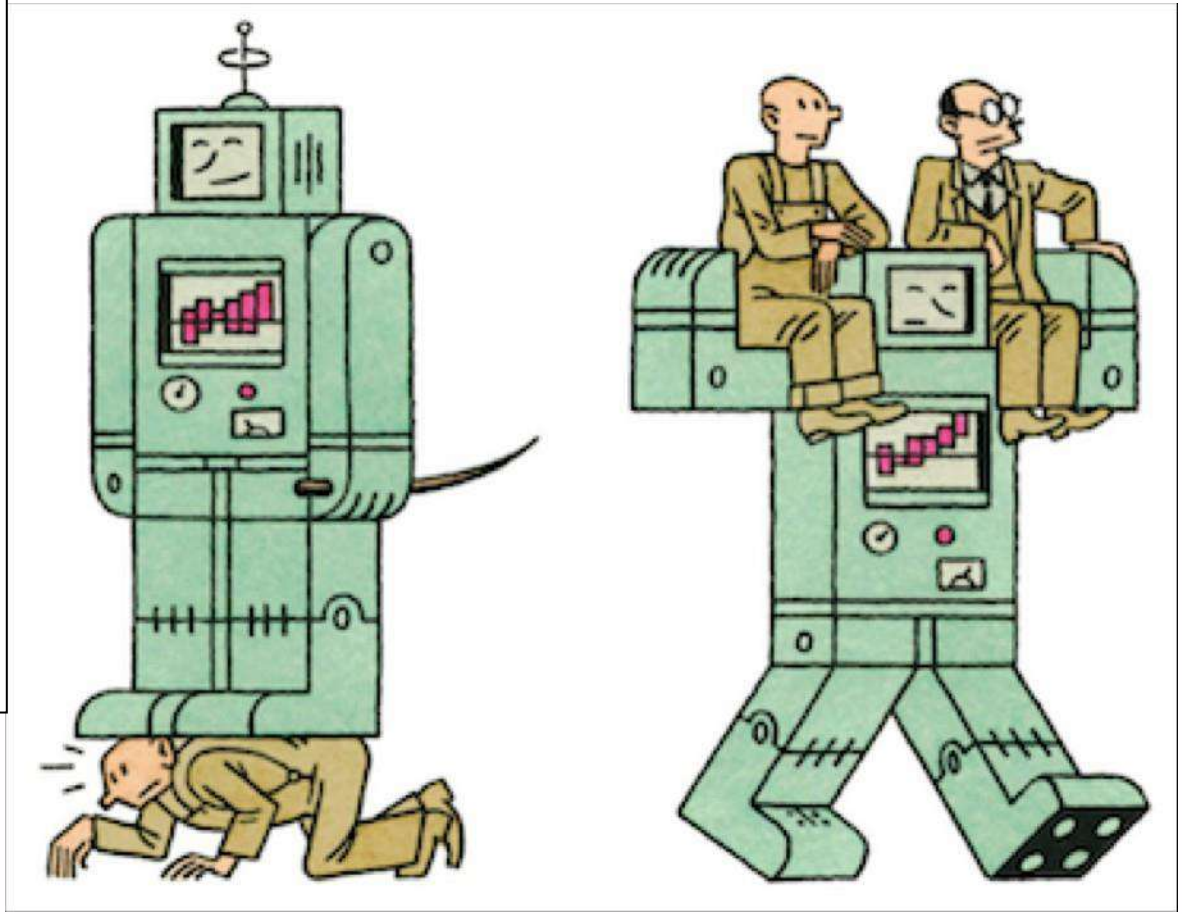
- **Data protection and privacy take center stage:** Several factors, including ceaseless cyberthreats and Europe's General Data Protection Regulation (GDPR), will force insurers to adopt a fresh data strategy.
- **Unstructured data spreads in property and casualty (P&C) underwriting and claims:** Consumers want quicker underwriting and claims decisions, which will compel carriers to turn to unstructured data.
- **Technology becomes a greater part of loss-control strategies:** High-severity losses are pushing carriers to think differently about how to limit those losses.
- **Instant claims payouts become key differentiators in P&C:** In an increasingly customer-centric environment, more carriers will strengthen policyholder engagement and relationships by using available technology to pay claims quickly.
- **Life insurers step up customer-facing full-office digital transformations:** Customer demand and the need to improve upon the full customer experience will force life insurance carriers to look beyond front-office digital solutions to solutions that will support the full policy life cycle.
- **Accelerated life insurance underwriting gets personal:** The need to create an individualized experience while providing immediate gratification, simplicity, convenience, and products that fit consumers' needs is pushing carriers to shift to a true accelerated underwriting process, employing rules engines, scoring tools, advanced algorithms, and third-party data.
- **Life insurers embrace automation:** Reducing operational costs, improving scalability, and streamlining internal processes while plagued by legacy systems are some key reasons life insurance carriers are forced to implement RPA to support automation.
- **Health plans emerge as a medical bill payment channel:** Deepening provider and member relationships are the linchpin for more payers to implement medical bill payment collection technologies, paving the way for a new disruptive consumer collection model in healthcare.
- **Health insurers revamp provider data management:** Better provider data management is being driven by Centers for Medicare & Medicaid Services. But with potential financial penalties, health plans recognize this capability's importance as their businesses become more consumer-focused.

Figura 1.8 - Voluntad del Cliente de Adquirir Seguros de las Grandes Operadoras Tecnológicas (%) 2015, 2018



Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

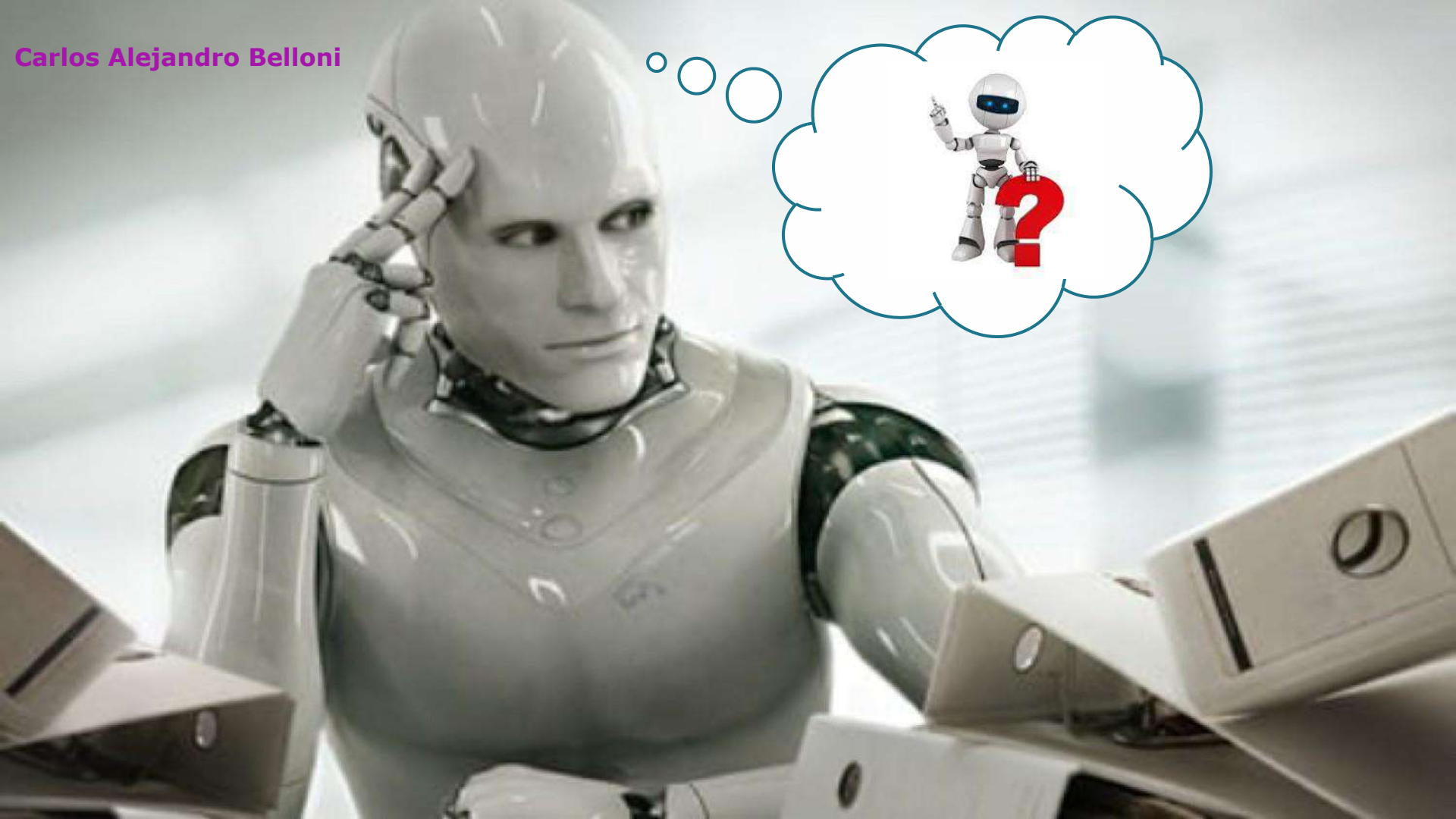
Tenemos que descubrir cómo podemos evitar que la tecnología nos desplace...



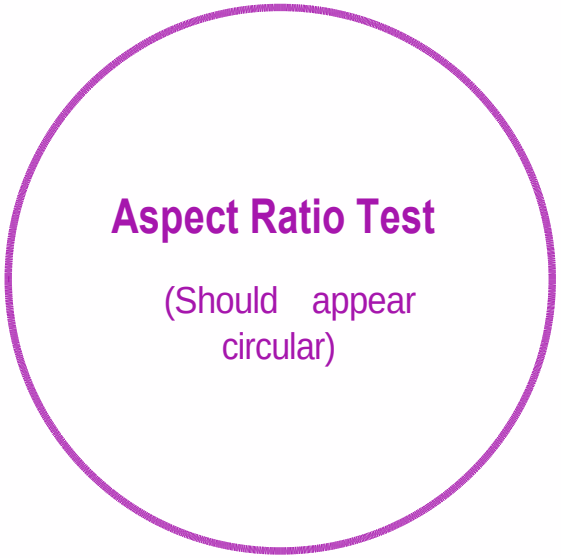
… y en cambio, cómo podemos obtener el máximo de todo eso para todo el mundo.


¿Está preparada la industria aseguradora?
¿Los reguladores están preparados?
¿NOSOTROS estamos preparados?

Carlos Alejandro Belloni

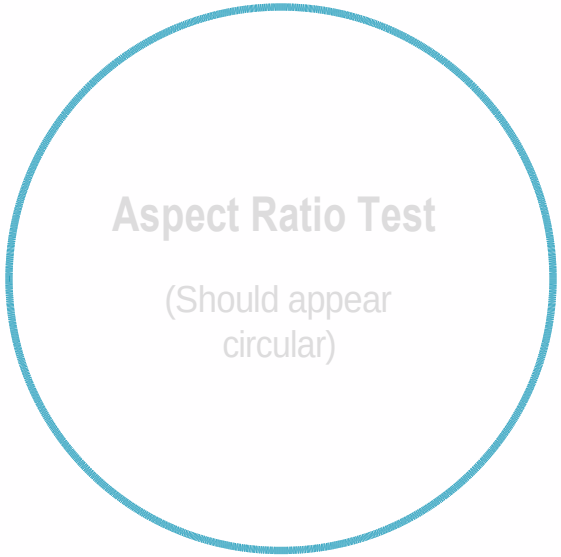


Test Resolution Slides



- To present in true widescreen, you'll need a computer and, optionally, a projector or flat panel that can output widescreen resolutions.
- Common computer widescreen resolutions are 1280 x 800 and 1440 x 900. (These are 16:10 aspect ratio, but will work well with 16:9 projectors and screens.)
- Standard high definition televisions resolutions are1280 x 720 and 1920 x 1080.
- Use the Test Pattern on the next slide to verify your slide show settings.

Widescreen Test Pattern (16:9)



4x3

x9