



# Los datos: el futuro de la profesión

27è Fòrum de l'Auditor Professional

Julio 2017

# Hola!

## Soy @santi\_roman

Formador

Mentor

Digital Project Manager

Más sobre mi:

<https://www.linkedin.com/in/santiroman/>





# 1. Contexto actual

Pasado, presente

# 80's y 90's

- © La calma tras la tormenta de los 70's
- © Crecimiento, estabilidad, visibilidad.
- © Organizaciones centradas en reingeniería de procesos y BPO's.
- © Se habla de eficiencia, optimización, simplificación.
- © Más operaciones y menos estrategia

# 2000's



## **Vuca**

Volatility

Uncertainty

Complexity

Ambiguity



## **Tecnología**

Disrupción social y económica



## **Cisnes Negros**

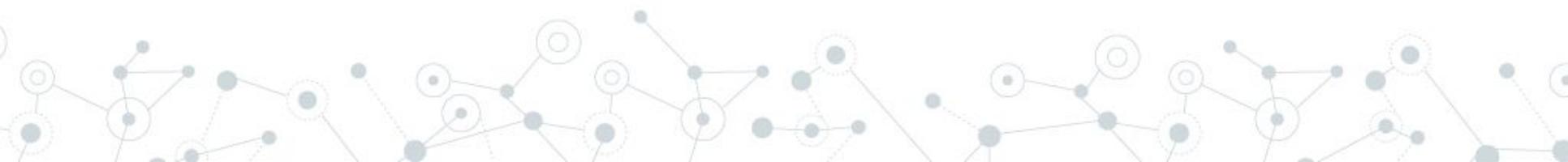
Diferencia entre riesgo e  
incertidumbre



## **Abundancia**

Nada vale nada

Ciclos de producto más cortos



2000's

# VUCA

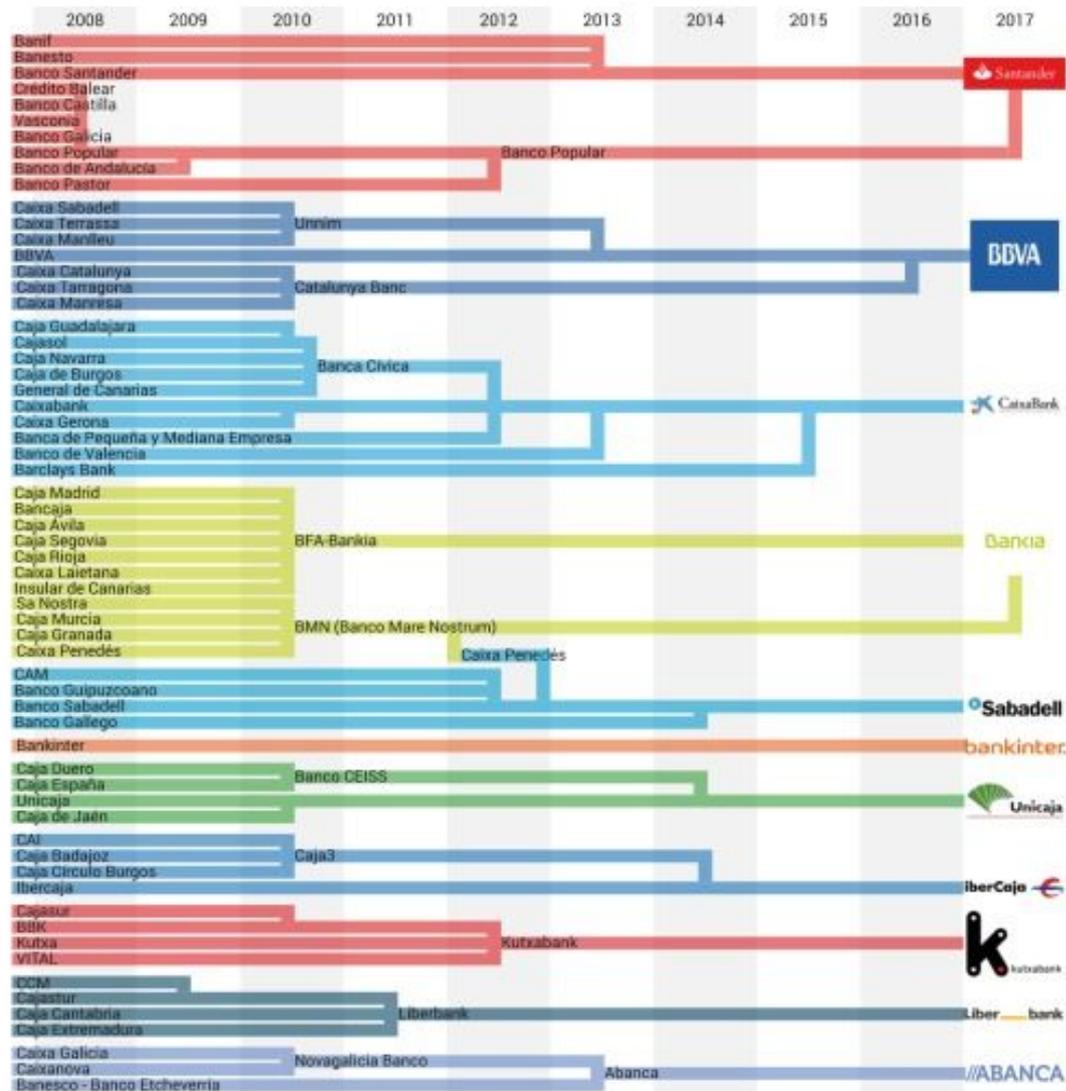
Volatility

Uncertainty

Complexity

Ambiguity

## La concentración del sector bancario español en la última década

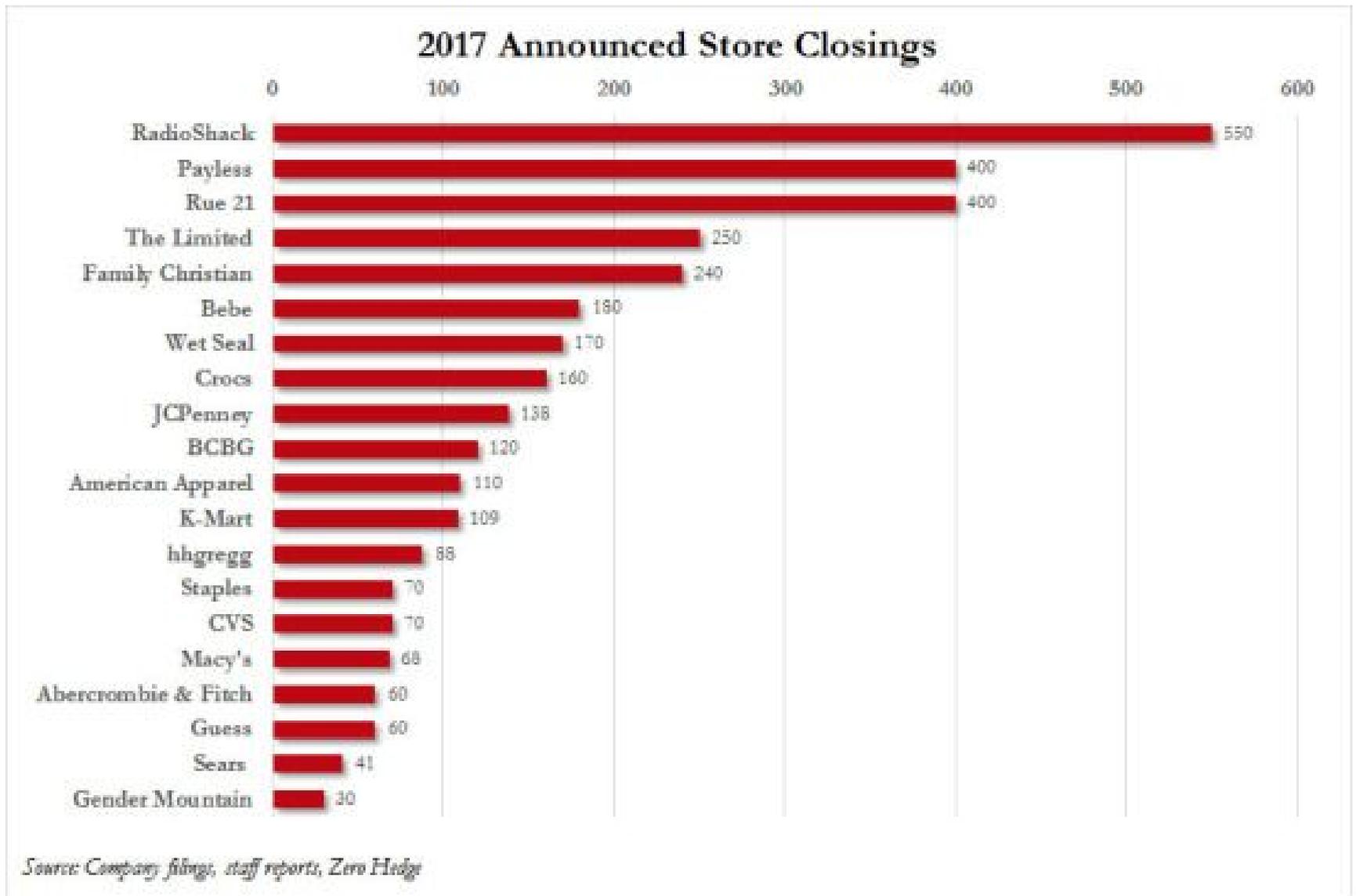


\* Antes de 2008, otras fusiones bancarias destacadas fueron las siguientes: Banco Santander absorbió al Hispanoamericano (1991) y al Central Hispano Americano (1999); el Banco Bilbao Vizcaya absorbió a Argentaria, Banca Catalana, Banco de Alicante y Banco de Comercio, todos en 2000; y Banco Sabadell absorbió a Solbank (2001), Banco Herrero (2002), Banco Atlántico (2004) y Banco Urquijo (2006)





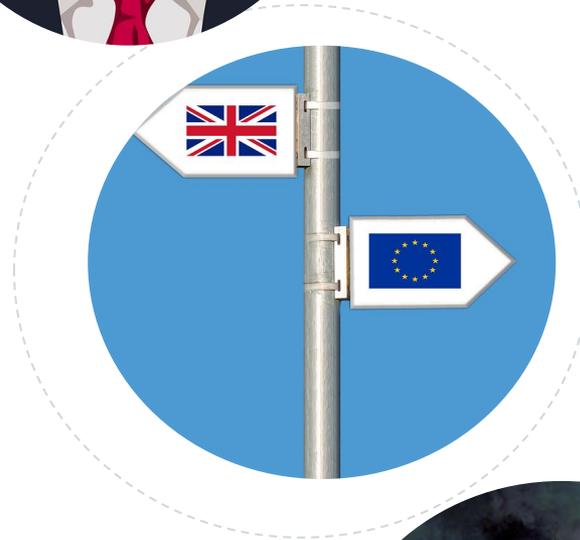
# Cierres Retail USA 2017



2000's

# Cisnes Negros

Metáfora para referirse a sucesos altamente improbables pero de una magnitud tal que cambian el devenir de la historia.



2000's

# Tecnología

Chart of the Week

## THE LARGEST COMPANIES BY MARKET CAP

The oil barons have been replaced by the whiz kids of Silicon Valley



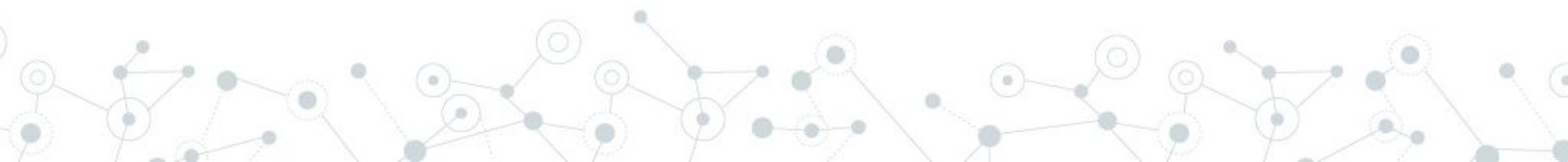
Top 5 Publicly Traded Companies (by Market Cap)



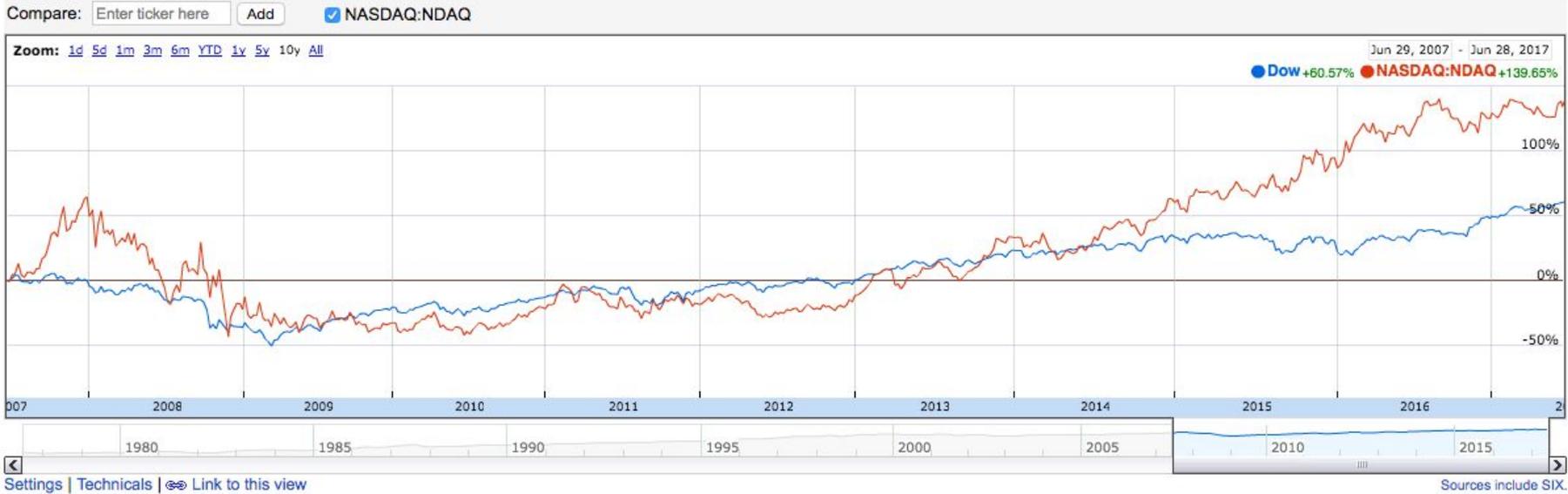
# Apple's cash, if it were its own company, would be the 11th largest firm in the S&P 500

	April 1, 2017						
	Adjusted Cost	Unrealized Gains	Unrealized Losses	Fair Value	Cash and Cash Equivalents	Short-Term Marketable Securities	Long-Term Marketable Securities
Cash	\$ 7,600	\$ —	\$ —	\$ 7,600	\$ 7,600	\$ —	\$ —
Level 1 <sup>(1)</sup> :							
Money market funds	2,742	—	—	2,742	2,742	—	—
Mutual funds	997	—	(120)	877	—	877	—
Subtotal	3,739	—	(120)	3,619	2,742	877	—
Level 2 <sup>(2)</sup> :							
U.S. Treasury securities	53,365	65	(300)	53,130	2,280	16,067	34,783
U.S. agency securities	5,680	3	(10)	5,673	687	3,687	1,299
Non-U.S. government securities	7,151	135	(67)	7,219	—	193	7,026
Certificates of deposit and time deposits	6,386	—	—	6,386	921	4,665	800
Commercial paper	3,233	—	—	3,233	877	2,356	—
Corporate securities	147,939	643	(449)	148,133	50	23,992	124,091
Municipal securities	950	3	(3)	950	—	77	873
Mortgage- and asset-backed securities	21,080	31	(219)	20,898	—	30	20,868
Subtotal	245,790	880	(1,048)	245,622	4,815	51,067	189,740
Total	\$ 257,129	\$ 880	\$ (1,168)	\$ 256,841	\$ 15,157	\$ 51,944	\$ 189,740

Fuente: 10-Q Q2 2017



# Nasdaq vs Dow +50%



# Automatización / Robotización



# Automatización / Robotización

## Will software replace the auditor? - Unit4

[www.unit4.com/.../will-there-be-a-future-for-the-role-of-auditor-or-will-software-repl...](http://www.unit4.com/.../will-there-be-a-future-for-the-role-of-auditor-or-will-software-repl...) ▼

Jan 28, 2016 - Will there be a future for the role of **auditor** or will software replace the ... Software **automation** provides an excellent way for wrangling the ...

## The only way to survive the audit process is with automation | Network ...

[www.networkworld.com/.../the-only-way-to-survive-the-audit-process-is-with-automa...](http://www.networkworld.com/.../the-only-way-to-survive-the-audit-process-is-with-automa...) ▼

May 2, 2011 - There's nothing more unpleasant than a root canal, except maybe an **audit** of your IT operations. Yet with regular audits being a component of ...

## Audit: how to win in the race against automation | ACCA Global

[www.accaglobal.com/in/en/member/member/accounting-business/.../beware-bot.html](http://www.accaglobal.com/in/en/member/member/accounting-business/.../beware-bot.html) ▼

Apr 1, 2015 - Will smarter software put human **auditors** out of business? Possibly, but what does seem certain is that technical accounting knowledge on its ...

## Accounting jobs most at risk from automation, warns PwC ...

<https://www.accountantsdaily.com.au/.../8188-accounting-jobs-most-at-risk-from-auto...> ▼

May 6, 2015 - "Two examples in our **audit** practice are our **automated** data assurance service, which will have the capability to provide a real time **audit** to all ...

2030

Business and Financial Operations



Accountants and Auditors



Accountants and Auditors have a

**93.5%**

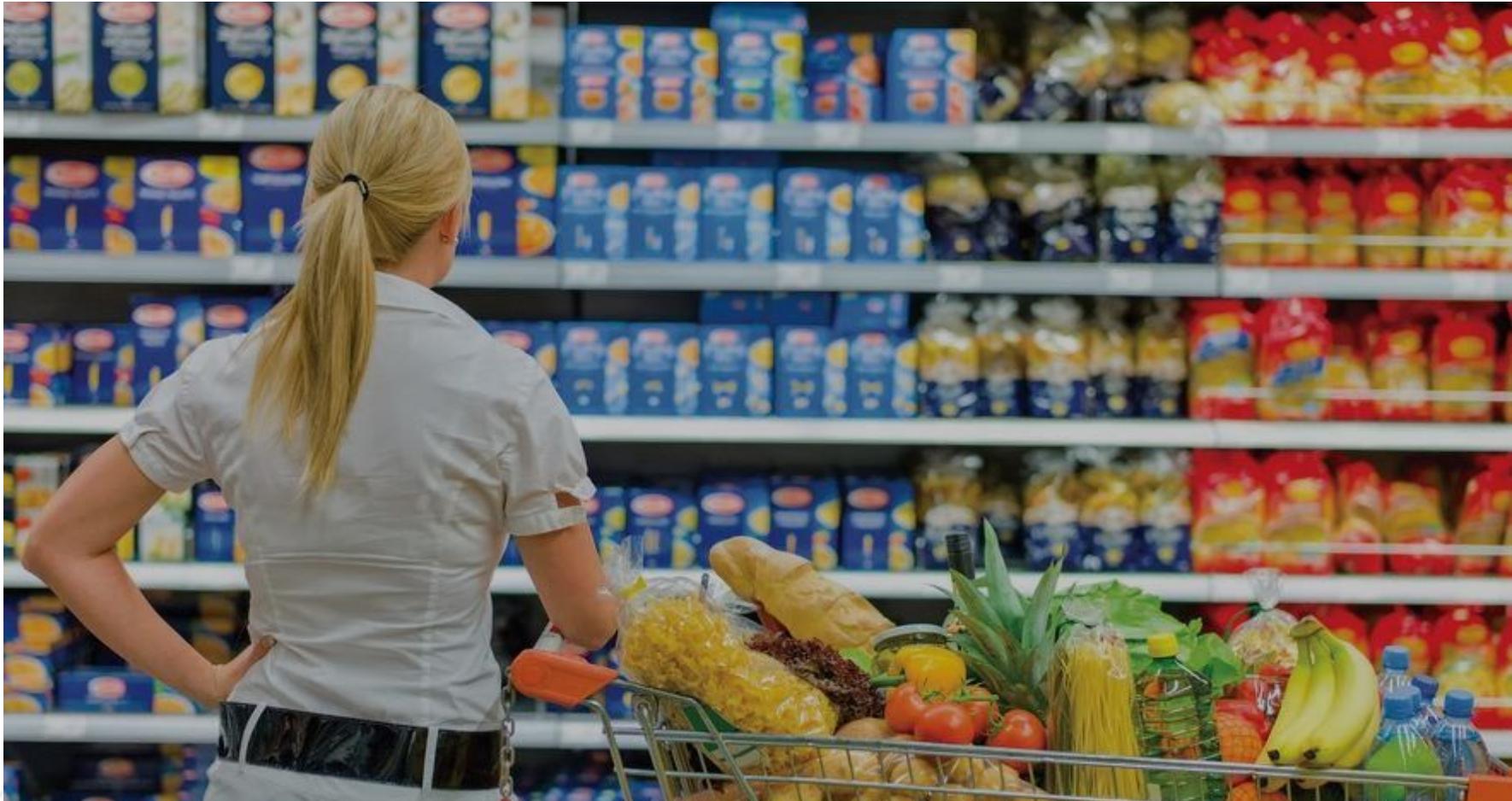
chance of being automated.

How do we know this? Some aspects of a job are easier to automate than others. It all depends on the tasks. Look at the orange bars to see how Accountants and Auditors compare with other professions...

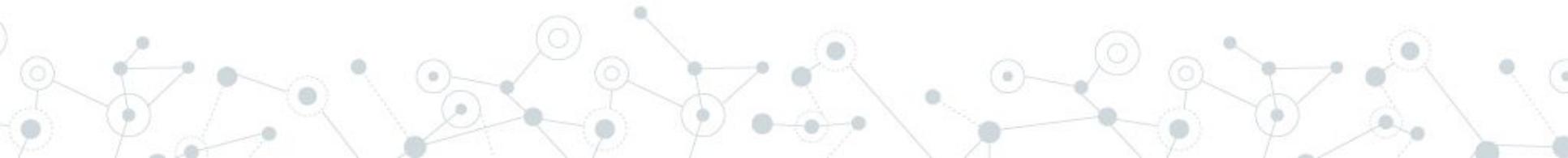
<http://www.npr.org/sections/money/2015/05/21/408234543/will-your-job-be-done-by-a-machine>

2000's

# Abundancia



Marca / Experiencia / Premium





“

*“Nunca antes había sido tan rápido, barato y sencillo abrir un negocio... Y nunca había sido tan difícil mantenerse competitivo”*

A decorative background featuring a network diagram with nodes and connecting lines, primarily located on the left and bottom right sides of the slide. The nodes are represented by circles of varying sizes and colors (grey, white, and blue), connected by thin grey lines. The overall aesthetic is clean and modern, suggesting a digital or technological theme.

# 2. En busca del valor añadido

Futuro de la profesión



“

*“ Although use of automation will increase, judgement and decision- making cannot be automated”*

*American Accounting Association*

# ¿Qué no pueden replicar las máquinas?

- © Asesoramiento en la toma de decisiones
- © Visión global de negocio y best practices
- © Emociones y sentimientos
- © Empatía y confianza
- © Capacidades soft: negociación, liderazgo, asertividad, etc.

# Datos

Las empresas han invertido mucho \$\$\$ en IT y desarrollado BA y BI, pero sigue habiendo un problema (oportunidad) en la gestión, manipulación e interpretación de estos datos



“

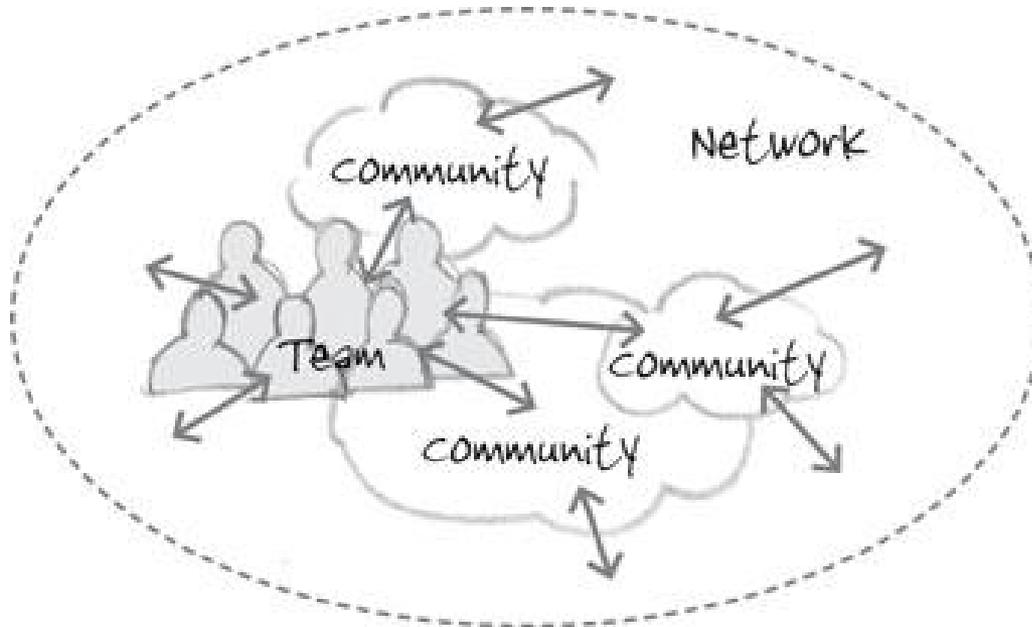
*More data will be created in  
2017 than the previous 5,000 years  
of humanity”*

*Richard Harris Executive Directors App Developer  
Magazine*

# La profesión necesita centrarse en los activos digitales de las compañías

- © Ciberseguridad
- © Forensic
- © Business Analytics
- © Data & Corporate governance (privacy & security)
- © Reporting
- © Visual data
- © Risk Management
- © Compliance

# Open: CO

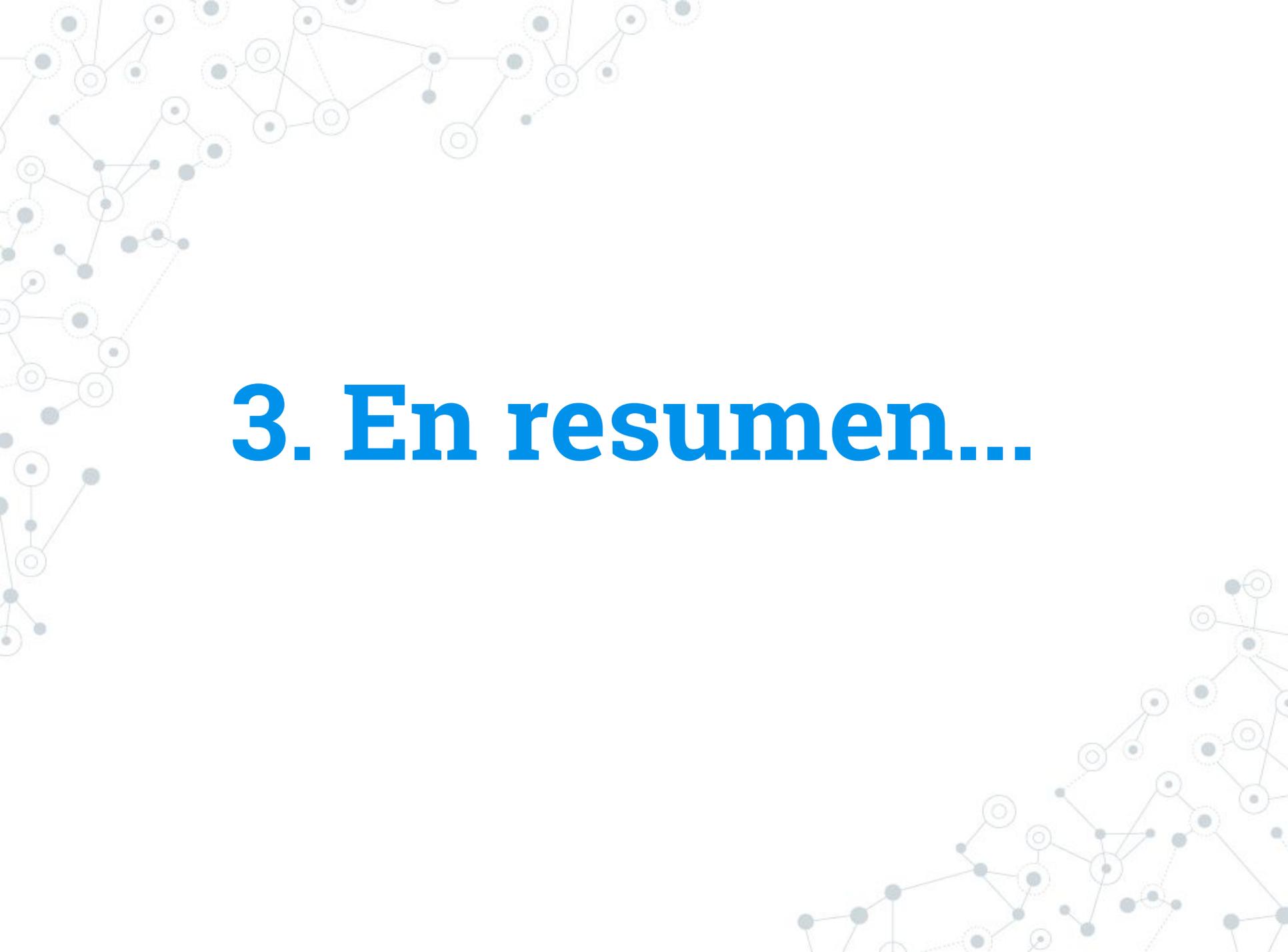


CoLaborar

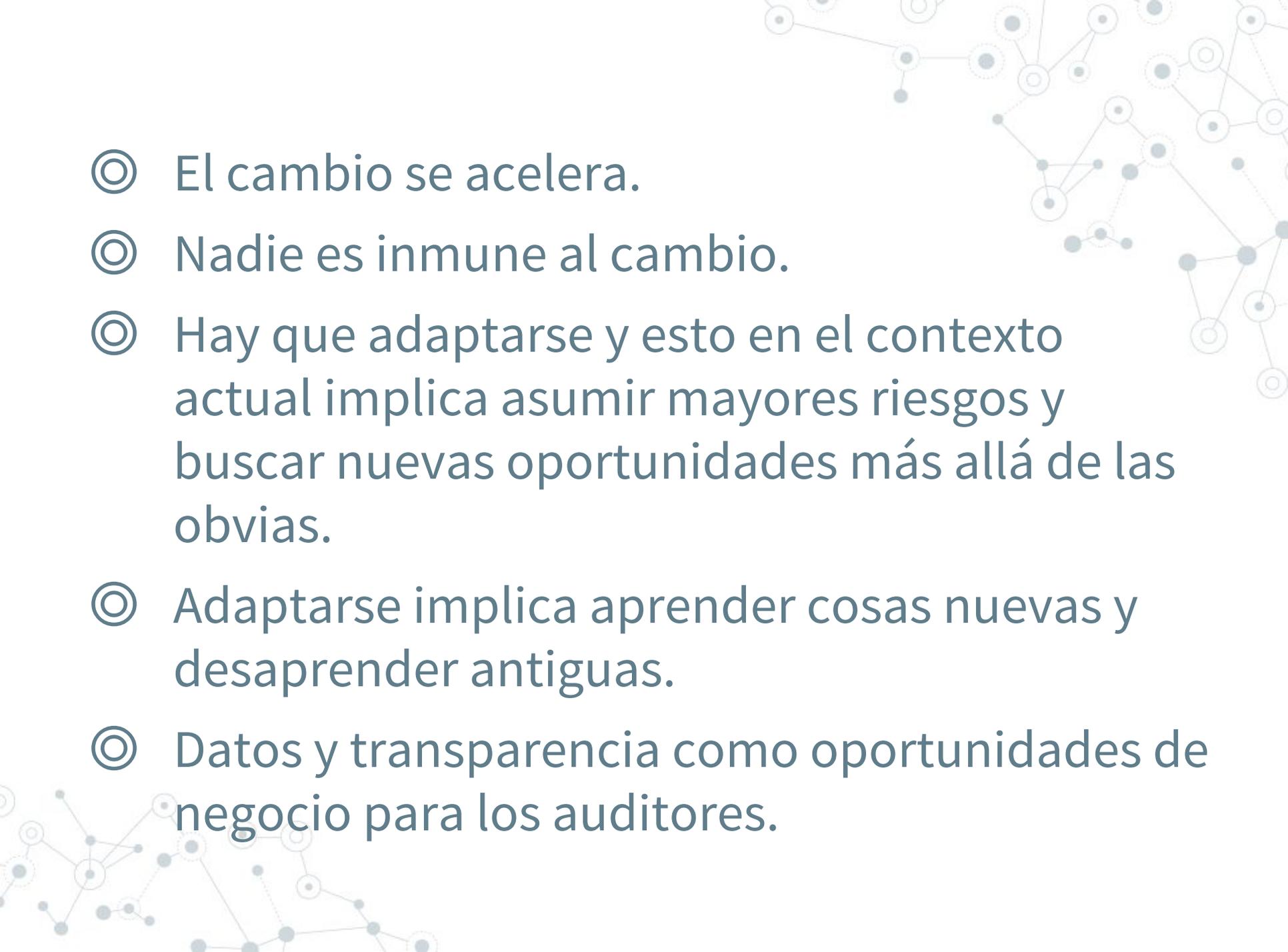
CoCreatar

CoInvertir

CoWorking

A decorative background graphic consisting of a network of interconnected nodes and lines. The nodes are represented by circles of varying sizes and colors (white, grey, blue), and the lines are thin and grey. The network is distributed across the page, with a denser concentration on the left side and a more sparse, branching structure on the right side.

# 3. En resumen...

- 
- ◎ El cambio se acelera.
  - ◎ Nadie es inmune al cambio.
  - ◎ Hay que adaptarse y esto en el contexto actual implica asumir mayores riesgos y buscar nuevas oportunidades más allá de las obvias.
  - ◎ Adaptarse implica aprender cosas nuevas y desaprender antiguas.
  - ◎ Datos y transparencia como oportunidades de negocio para los auditores.

A decorative network diagram in the top right corner, consisting of various sized circles (nodes) connected by thin lines (edges). Some nodes are solid grey, while others are hollow with a grey outline. The connections form a complex, branching structure.

# Gracias!

## Preguntas?

Podéis encontrarme en:  
[@santi\\_roman](#)



# 15 Zettabytes se crearán en 2017

1000 Bytes = 1 Kilobyte

1000 Kilobytes = 1 Megabyte

1000 Megabytes = 1 Gigabyte

1000 Gigabytes = 1 Terabyte

1000 Terabytes = 1 Petabyte

1000 Petabytes = 1 Exabyte

**1000 Exabytes = 1 Zettabyte**

1000 Zettabytes = 1 Yottabyte

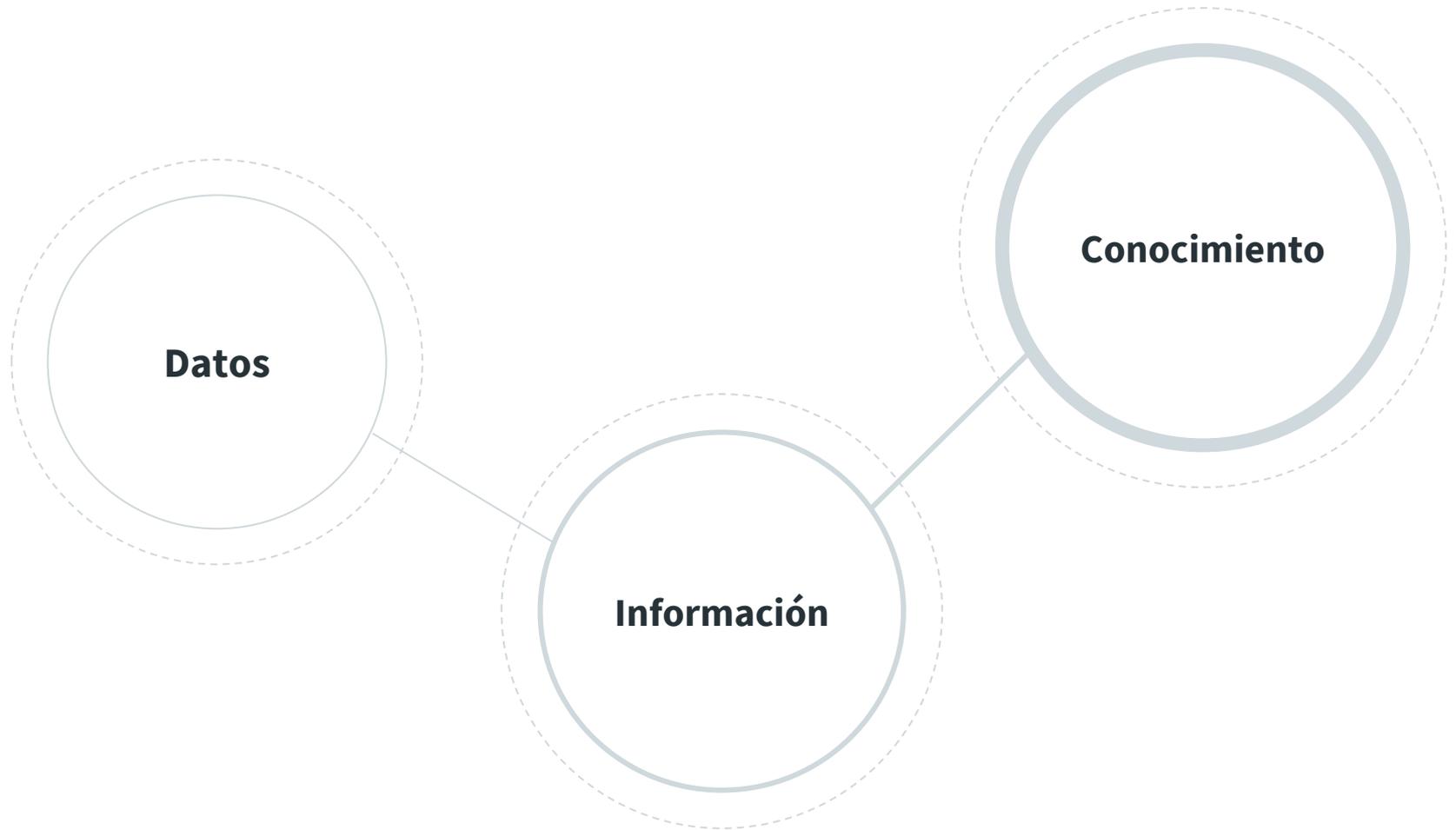
1000 Yottabytes = 1 Brontobyte

1000 Brontobytes = 1 Geopbyte

# Open: Transparencia



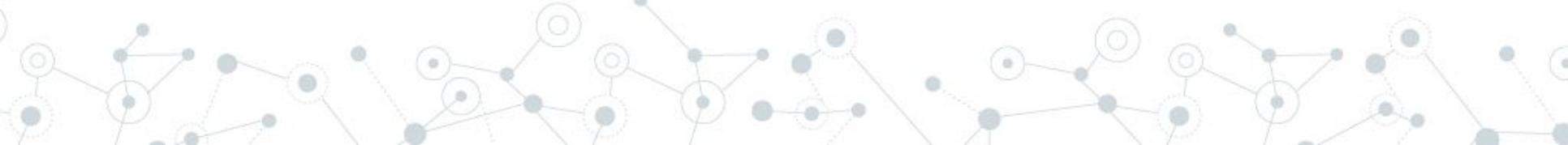
# Path de los datos



## 4.2 Transparencia

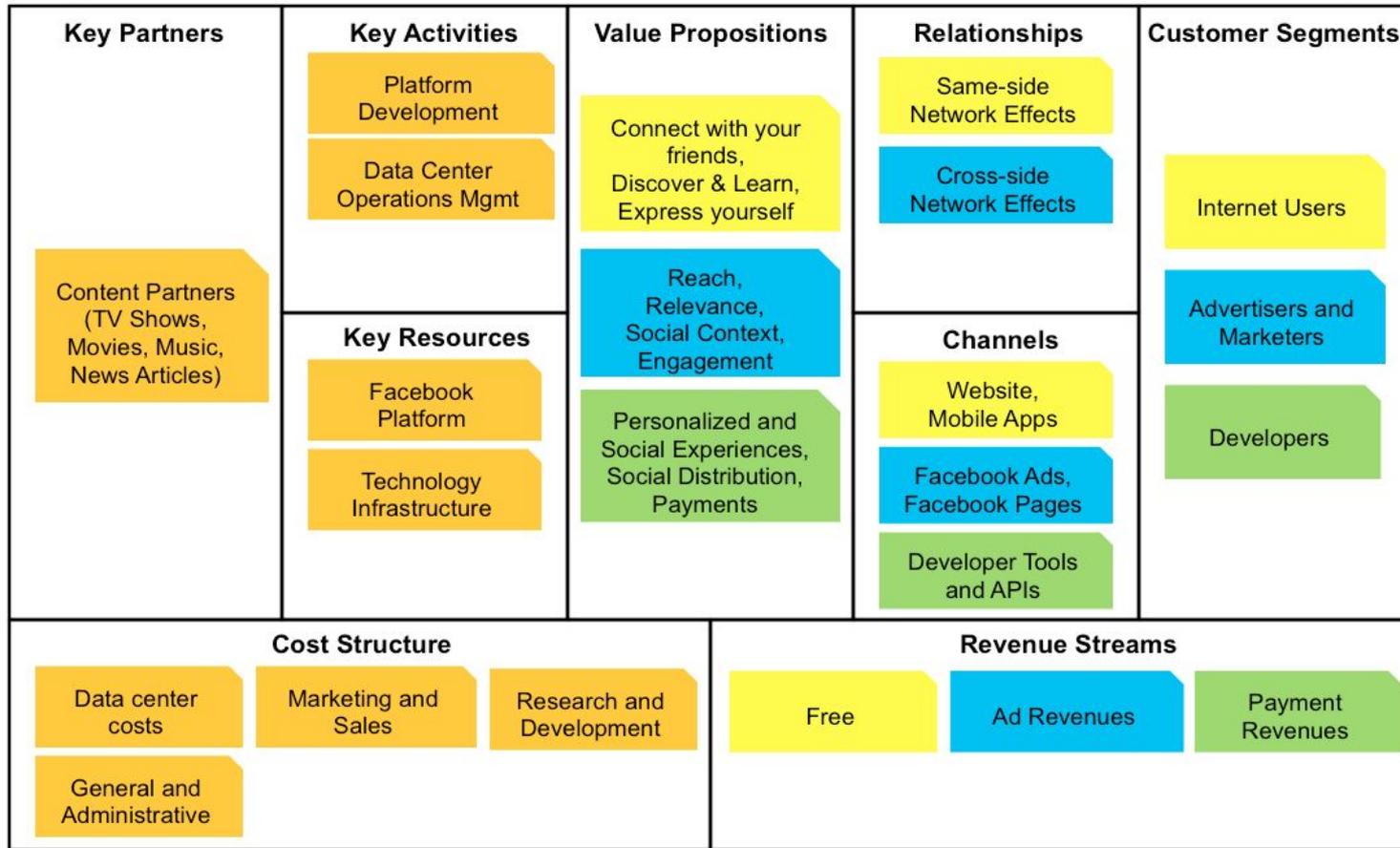
La sociedad demanda organizaciones más transparentes en las que se pueda confiar.

# Crear nuevos modelos de negocio



# Crear nuevos modelos de negocio

## Facebook – World's leading Social Networking Site (SNS)



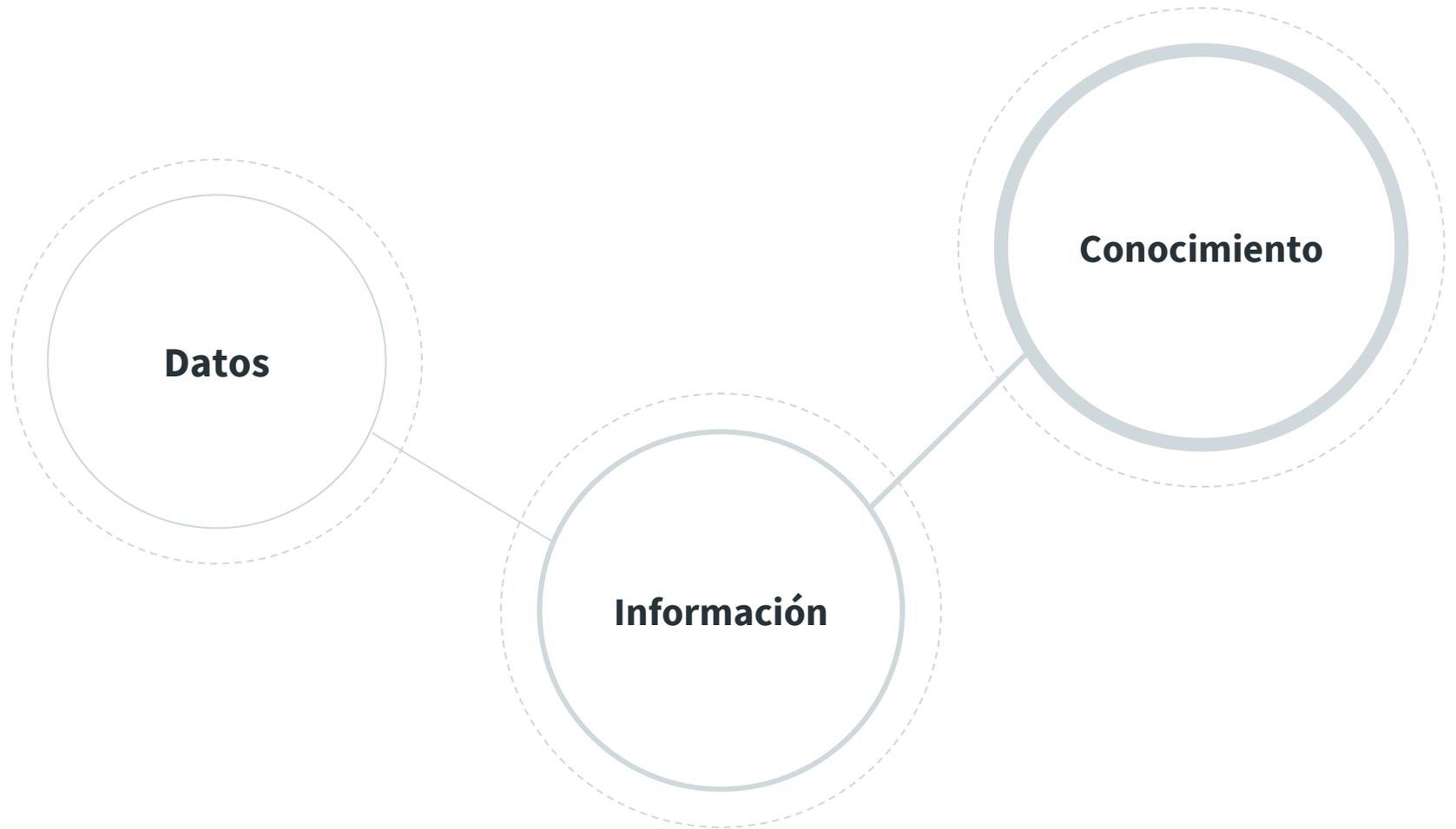


“

*“If everything seems under control,  
you’re not going fast enough.”*

*Mario Andretti*

# Información



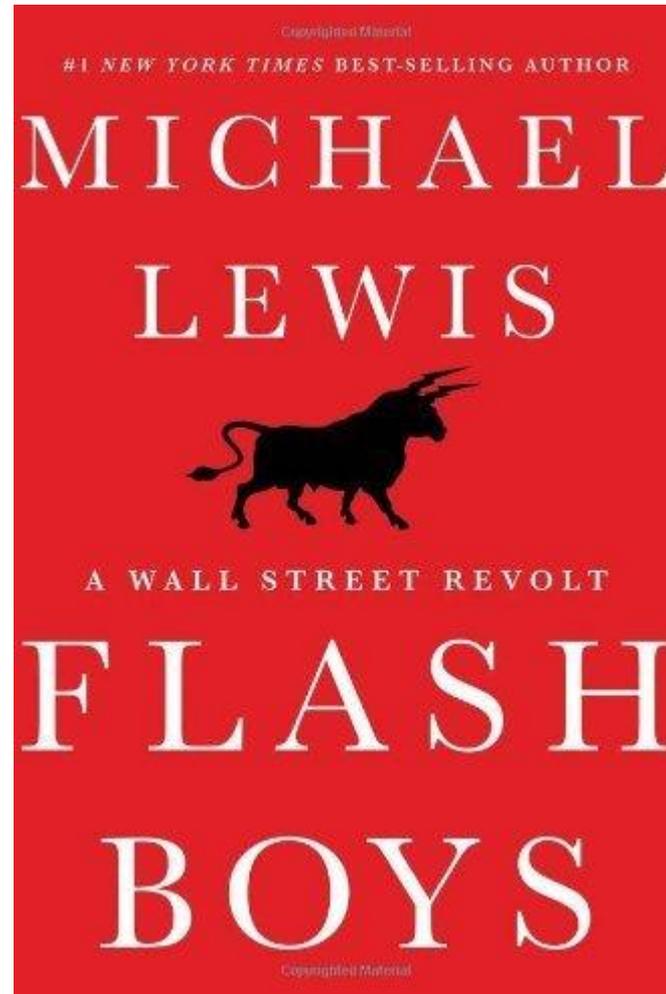
# Futuro

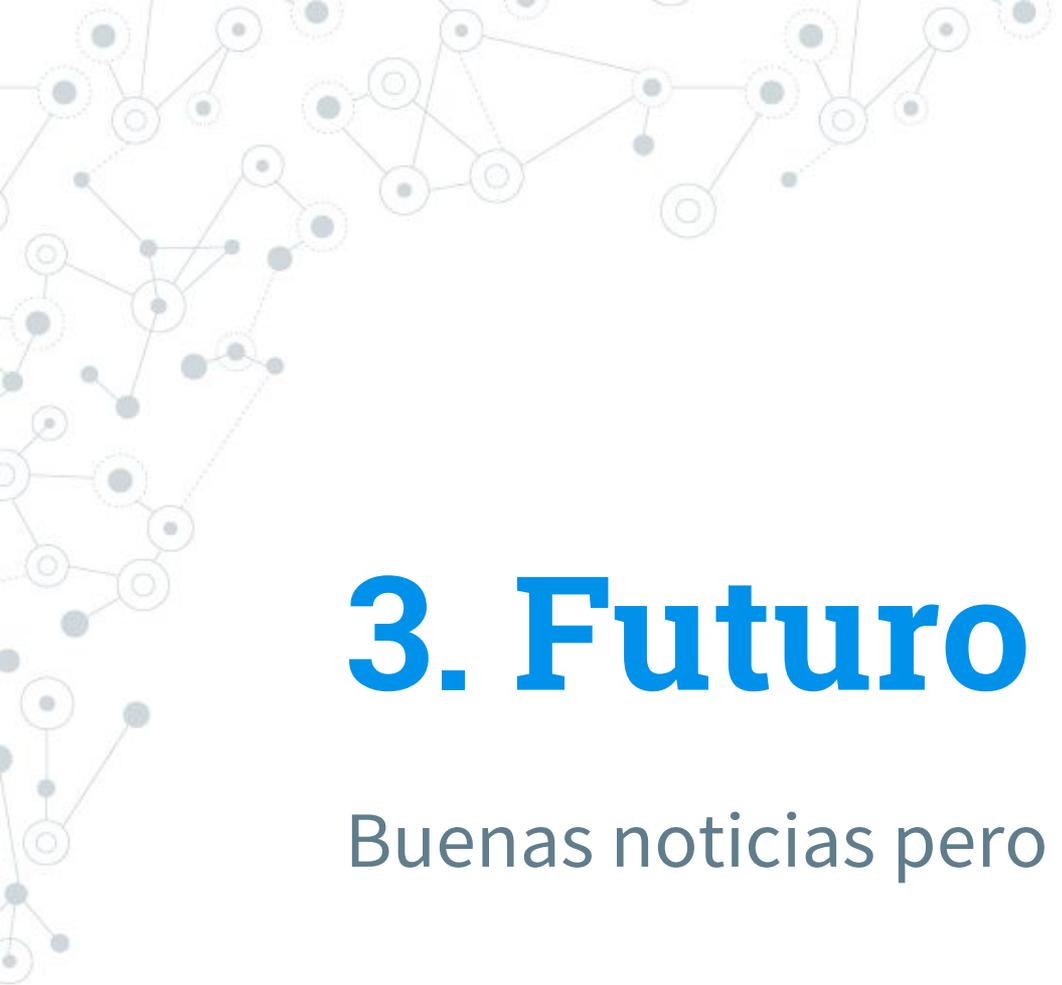
A decorative network diagram in the top right corner, consisting of various sized circles (nodes) connected by thin lines, some solid and some dashed, creating a complex web-like structure.

## Tecnologías que amenazan al sector

- ◎ Inteligencia Artificial (AI)
  - ◎ Machine Learning y redes neuronales
  - ◎ Automation & Robotic
  - ◎ Blockchain
- 
- A decorative network diagram in the bottom left corner, similar to the one in the top right, featuring a cluster of nodes and connecting lines.

# Tecnologías que amenazan al sector





# 3. Futuro

Buenas noticias pero hay que cambiar



# ¿Capacidades de un auditor?

## **Diagnóstico**

Saber interpretar los problemas codificados en los Estados Financieros

## **Comparar**

Extraer Best Practices fruto de la rica visión de ver muchas empresas en diferentes negocios

## **Asesorar**

Poner en valor la experiencia y capacidades del auditor.



## Riesgo

Medible

Objetivo

Resultados conocidos

## Incertidumbre

No medible

Subjetiva

Resultados inciertos



# 2000's



## Vuca

Volatility

Uncertainty

Complexity

Ambiguity



## Cisnes Negros

Diferencia entre riesgo e  
incertidumbre



## Tecnología

Disrupción social y económica



## Información

El input del management moderno



## Comoditización

Nada vale nada

Ciclos de producto más cortos



## Open

Ecosistemas colaborativos

Organizaciones más transparentes

