

Transformación Industrial: Algunas lecciones desde la gestión del cambio y la innovación

Guillermo Dorronsoro

Management Board Advisor, Zabala Innovation



10 AÑOS IMPULSANDO LA
TRANSFORMACIÓN INDUSTRIAL

**IMPRIMIENDO
VALOR,
POTENCIANDO LA
INDUSTRIA**

6 DE NOVIEMBRE

BALUARTE. PAMPLONA



ICEX España
Exportación
e Inversiones

Gobierno
de Navarra  Nafarroako
Gobernua

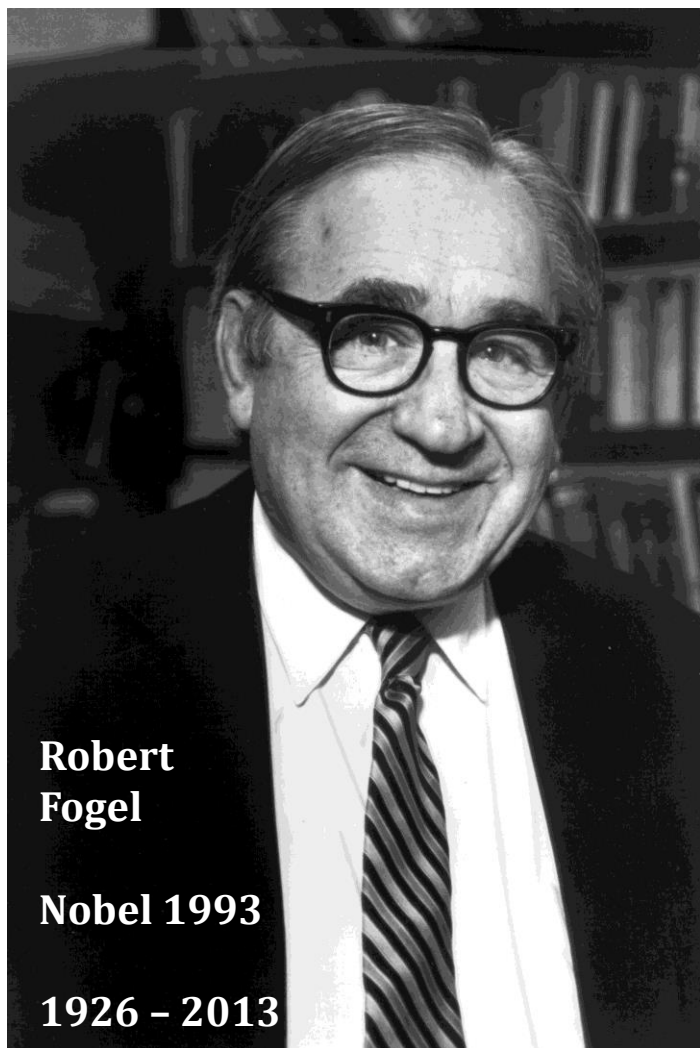


 **3 NEO**
Plataforma Tecnológica Española
de Impresión Avanzada



- 1 Una historia de transformación**
- 2 ¿Se puede aprender a gestionar la innovación?**
- 3 ¿Se puede aprender a gestionar el cambio?**
- 4 Algunos consejos finales**

1 Una historia de transformación

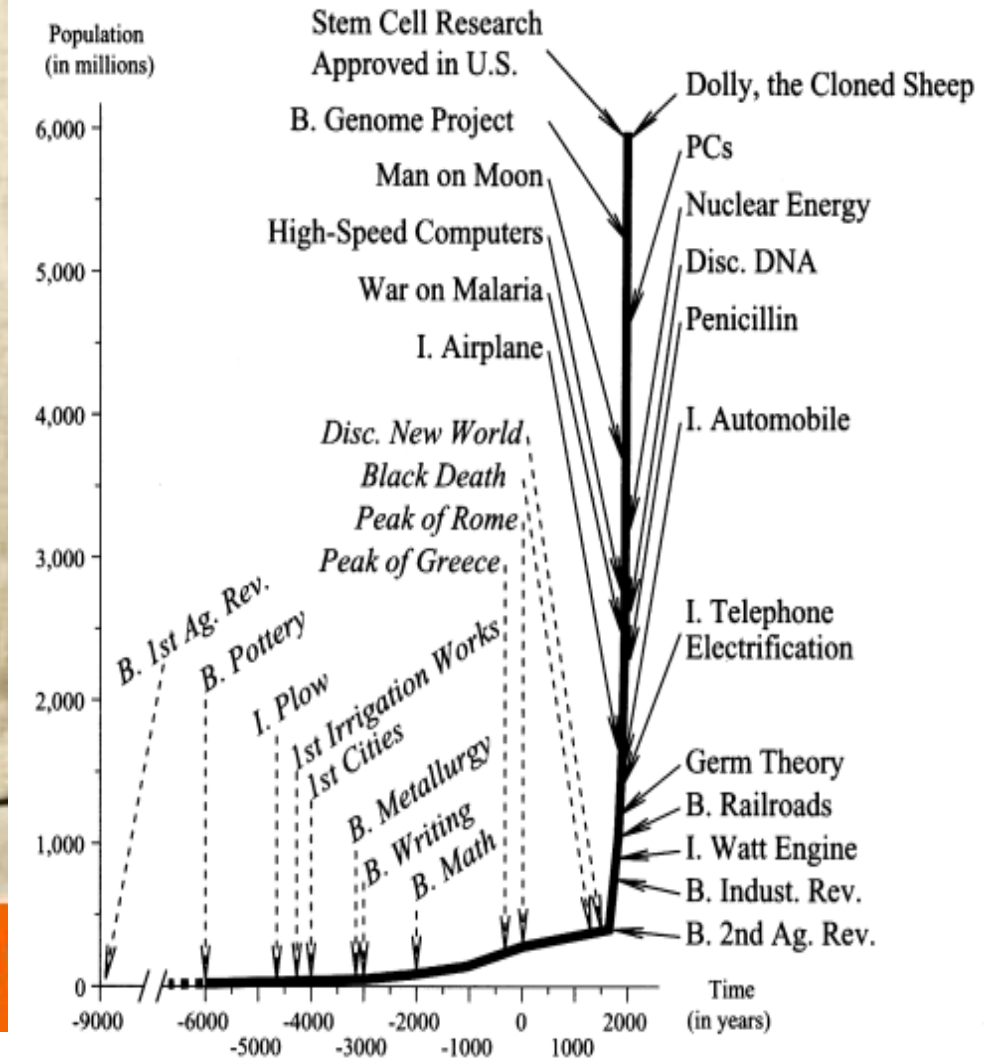
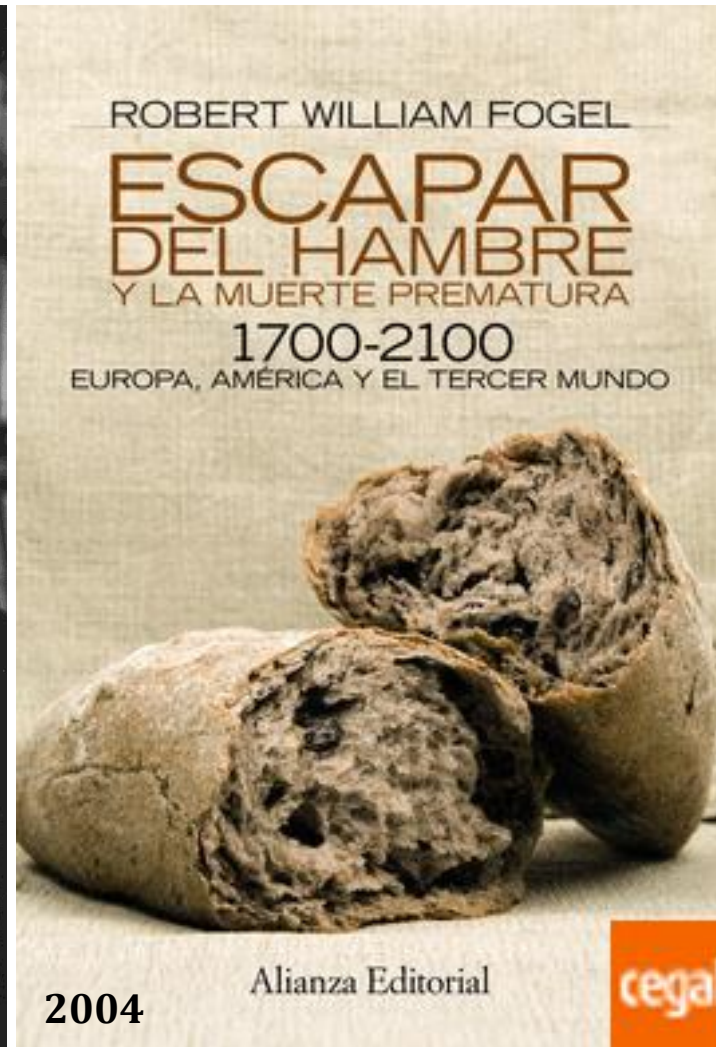
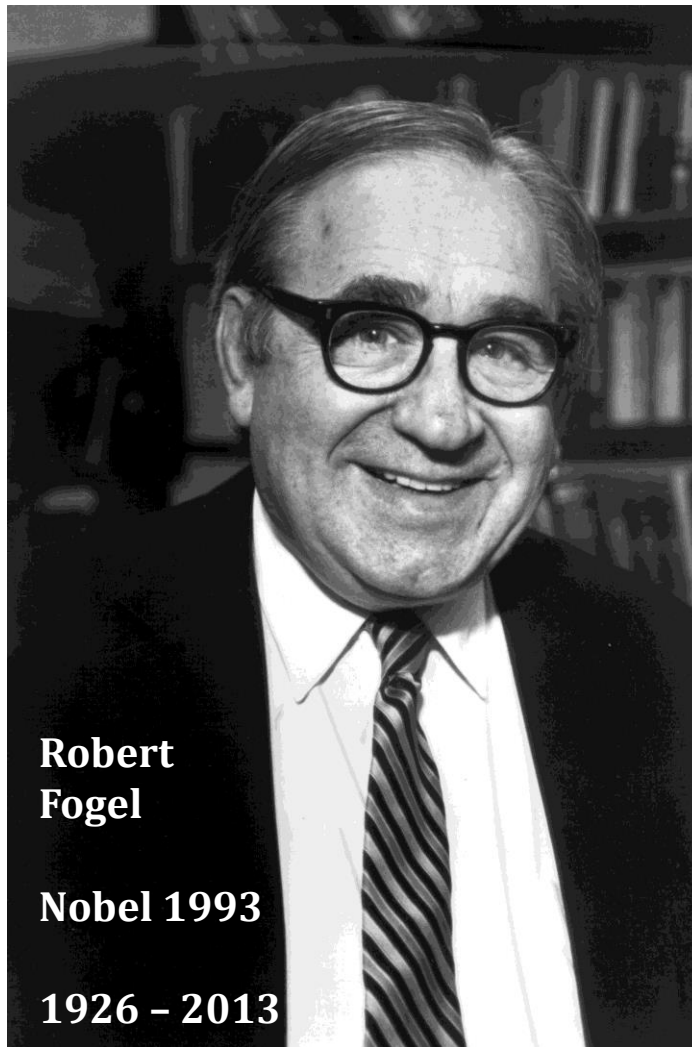


**Robert
Fogel**

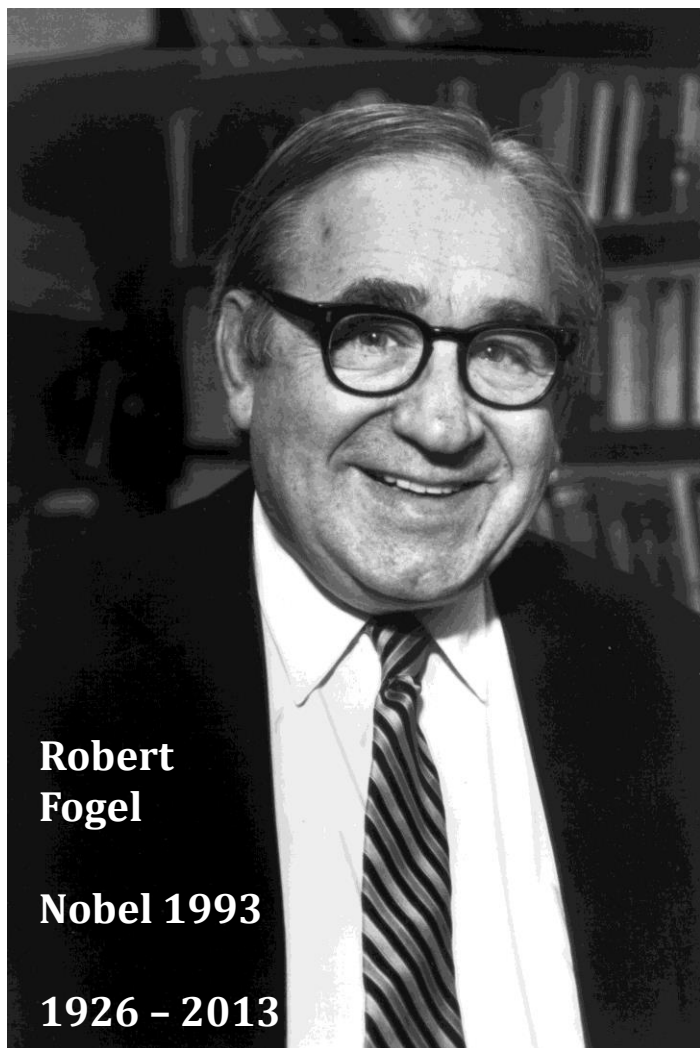
Nobel 1993

1926 – 2013

1. Una historia de transformación



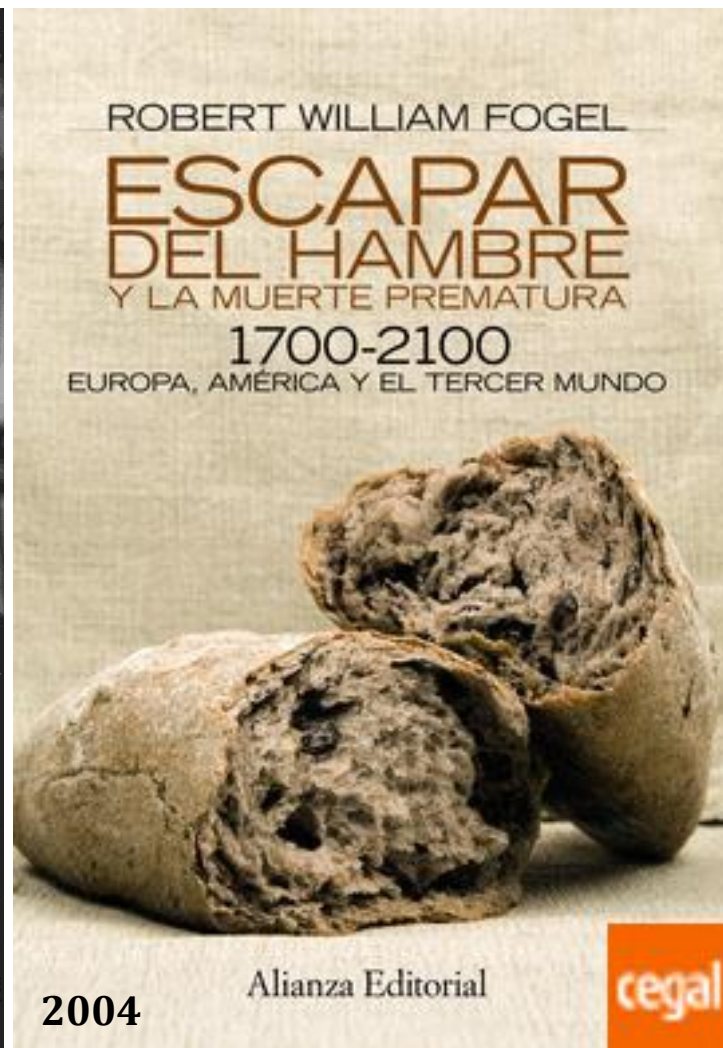
1. Una historia de transformación



Robert
Fogel

Nobel 1993

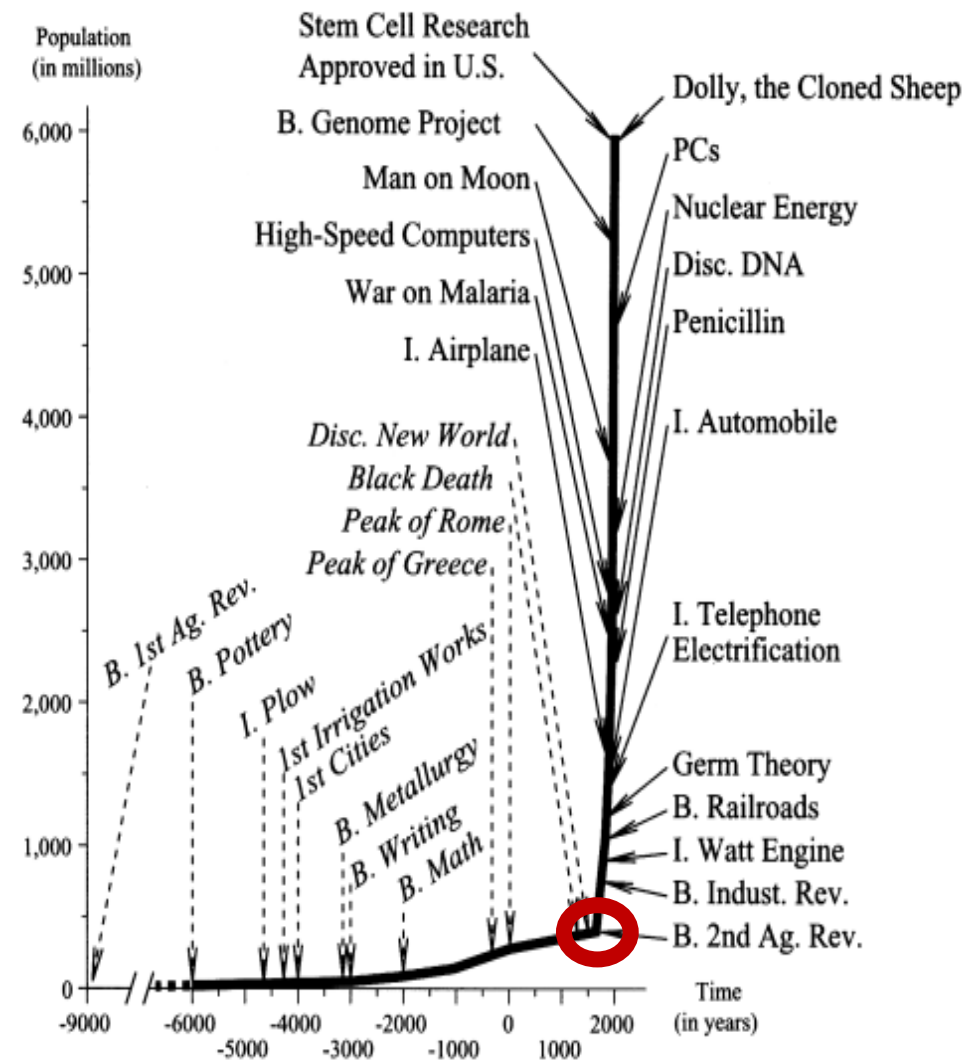
1926 – 2013



2004

Alianza Editorial

cegal



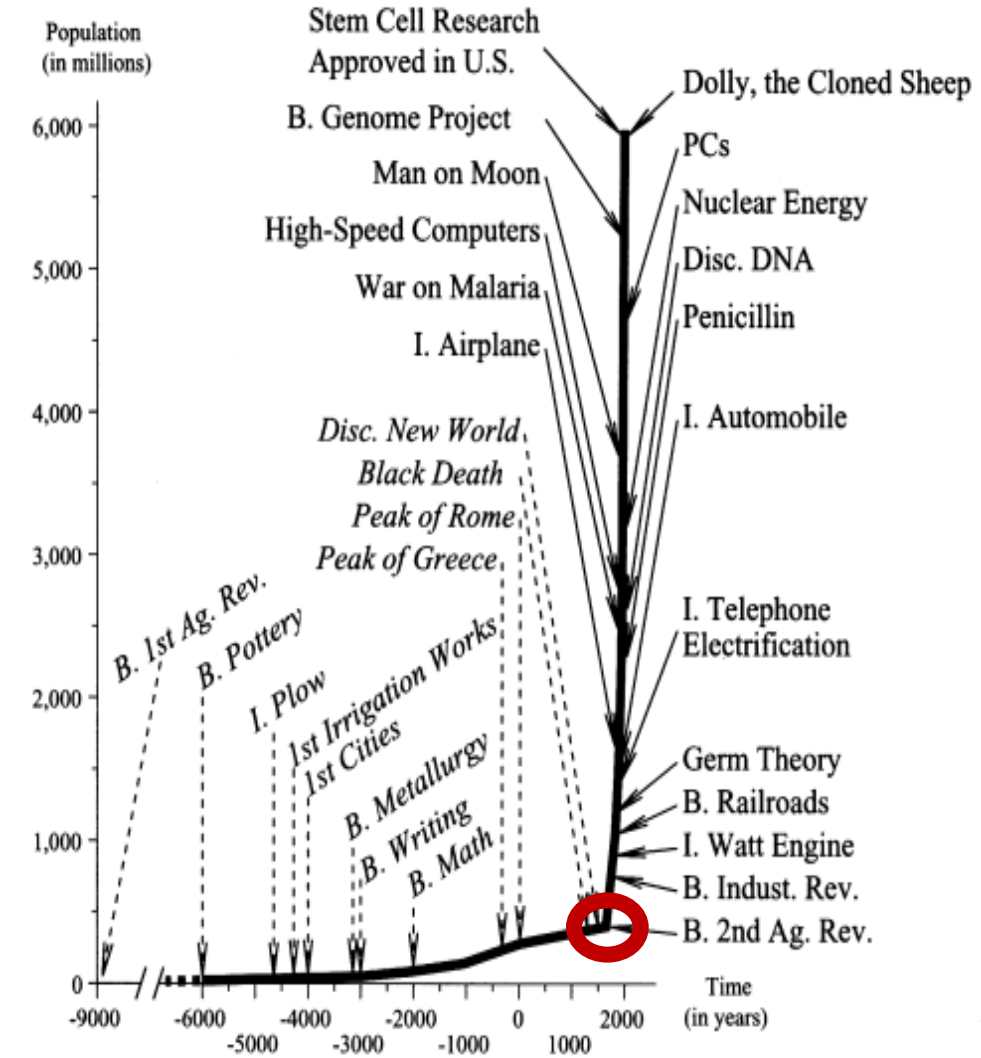
1. Una historia de transformación

Edward Jenner



1776

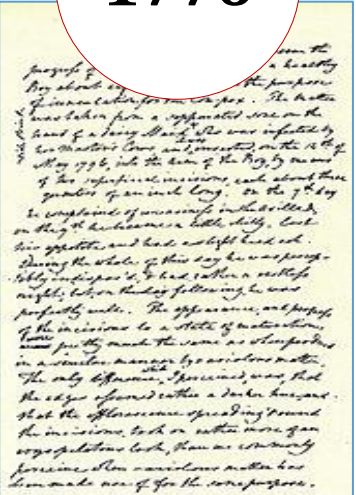
from the a healthy
boy about 12 years of age. The matter
was taken from a suppurated sore on the
hand of a young dairymaid. He was infected by
two inoculations (one on the right arm and the
other on the left) into the arm of the boy by means
of two superficial incisions, each about three
quarters of an inch long. On the 7th day
he complained of uneasiness in the right arm,
on the 14th he became a little chilly, lost
his appetite, and had a slight head-ache.
During the whole of this day he was perfectly
well, and on the 15th he had rather a restless
night, but on the day following he was
perfectly well. The appearance, and progress
of the incisions, to a state of maturation,
were pretty much the same as those of a
mild case of smallpox. The only difference, I perceived, was that
the edges appeared rather a darker hue, and
that the inflammation spreading round
the incisions, took on rather more of a
conspicuous look, than in ordinary
pox, when a venereal matter has
been made use of for the same purpose.



1. Una historia de transformación

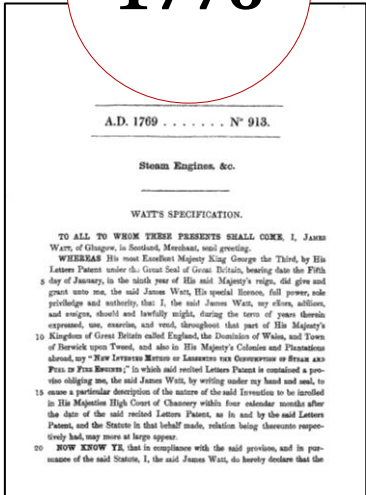


1776



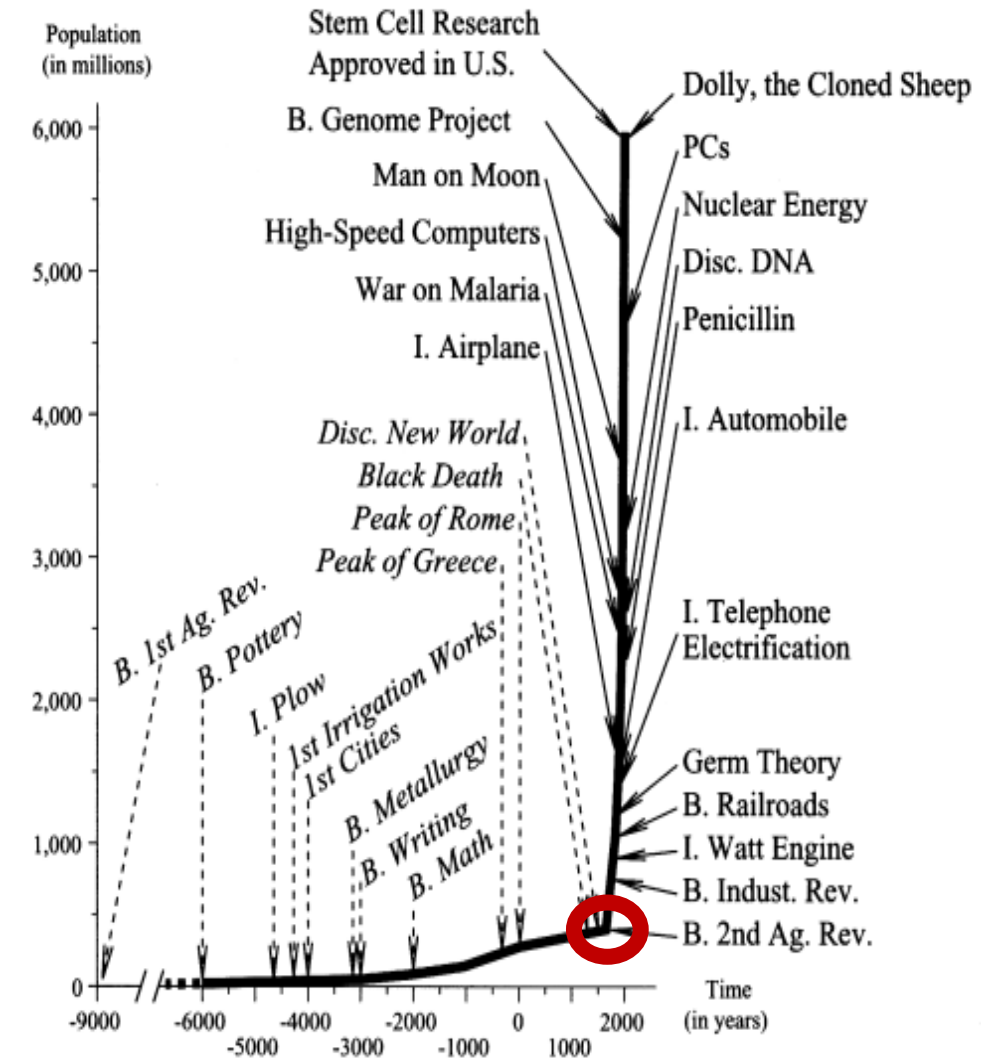
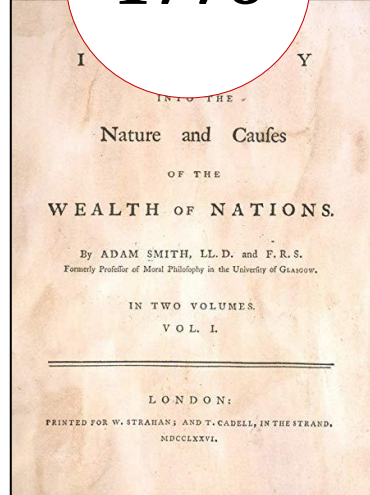
1776

1776



A portrait of John Jay, a Founding Father of the United States. He is shown from the chest up, wearing a dark blue coat and a white cravat. He has white hair and is looking slightly to the right. A large white circle with the year '1776' is overlaid on the bottom right of the image.

1776



1. Una historia de transformación

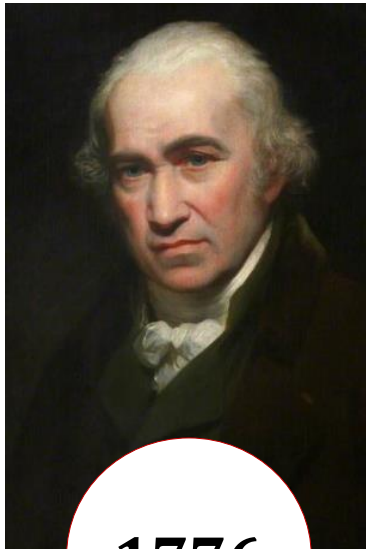
Edward Jenner



1776

From the a healthy boy about 12 years of age. The matter was taken from a suppurated sore on the hand of a young slave, who was infected by her mistress. It was inoculated on the 14th of May 1796, into the arm of the boy named James. The operation was successful, and about three weeks afterwards he was attacked with the small pox. He recovered, and his face was marked with the small pox. The operation was successful, and about three weeks afterwards he was attacked with the small pox. He recovered, and his face was marked with the small pox. The operation was successful, and about three weeks afterwards he was attacked with the small pox. He recovered, and his face was marked with the small pox.

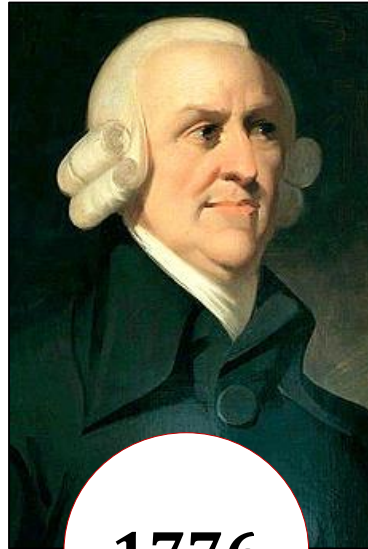
James Watt



1776

A.D. 1769 N° 913.
Steam Engines, &c.
WATT'S SPECIFICATION.
TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JAMES WATT, of Glasgow, in Scotland, Merchant, send greeting.
WHEREAS His most Excellent Majesty King George the Third, by His Letters Patent under the Great Seal of Great Britain, bearing date the Fifth day of January, in the sixth year of His said Majesty's reign, did give and grant unto me, the said James Watt, His special Privilege, full power, sole privilege and authority, that I, the said James Watt, my executors, assigns, and assigns, should and lawfully might, during the term of years therein expressed, use, exercise, and vend, throughout that part of His Majesty's Kingdom of Great Britain called England, the Towns of Wales, and Town of Berwick upon Tweed, and also in His Majesty's Colonies and Plantations abroad, my "New Method or Improvement of Consuming less Steam and Fuel in Fire Engines;" in which said Letters Patent is contained a proviso obliging me, the said James Watt, by writing under my hand and seal, to cause a particular description of the nature of the said Invention to be enrolled in His Majesty's High Court of Chancery within four calendar months after the date of the said enrolled Letters Patent, as in and by the said Letters Patent, and the Statute in that behalf made, relation being thereunto respectively had, may more at large appear.
NOW KNOW YE, that in compliance with the said proviso, and in pursuance of the said Statute, I, the said James Watt, do hereby declare that the

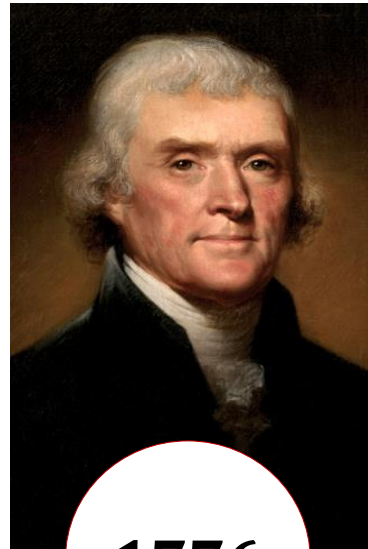
Adam Smith



1776

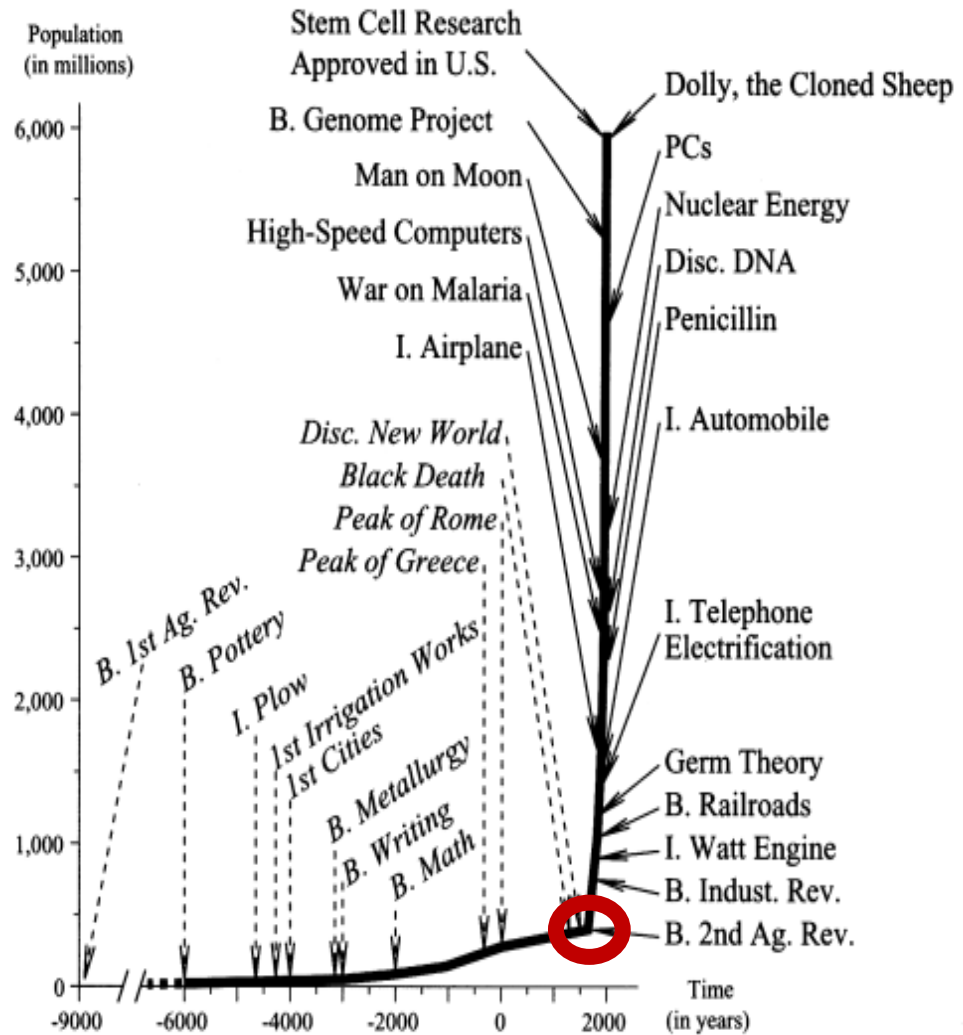
IN TWO VOLUMES.
VOL. I.
LONDON:
PRINTED FOR W. STRAHAN; AND T. CADELL, IN THE STRAND.
MDCCLXXVI.

Thomas Jefferson



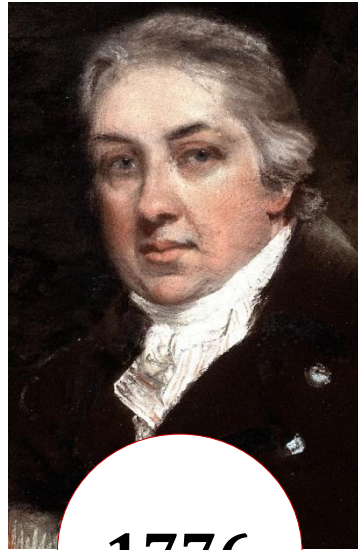
1776

The unannounced arrival of the American Revolution in 1776 was a turning point in the history of the world. It was the first time that a people had declared their independence from a foreign power. The American Revolution was a struggle for freedom and self-government. It was a struggle that inspired other peoples to fight for their own freedom. The American Revolution was a struggle that changed the course of history. It was a struggle that led to the birth of a new nation. The American Revolution was a struggle that was fought for the principles of liberty and justice for all.



1. Una historia de transformación

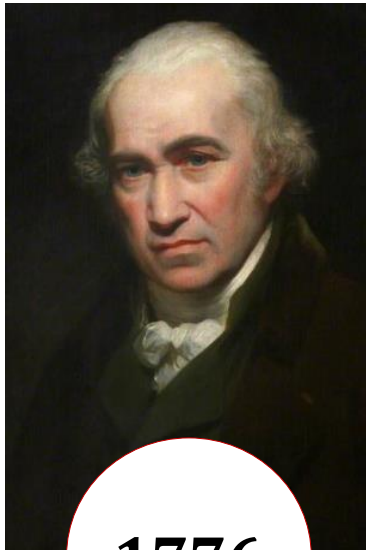
Edward Jenner



1776

...over the
...a healthy
...the purpose
...the matter
...a very hard, she was infected by
...the matter, and converted, on the 14th
...the 14th, into the form of the Pox, by means
...of two superficial incisions, each about three
...quarters of an inch long. On the 7th day
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...on the 10th he had a little swelling, but
...two opposite, and had a slight head-ach.
...During the whole of this day he was perfectly
...till, and he said, "I had rather a restful
...night, when, thinking following he was
...perfectly well. The appearance, and progress
...of the incisions, to a state of maturation,
...and finally made the same as other persons
...in a similar manner, by a similar matter.
...The only difference, however, was that
...the edges appeared rather a darker hue, and
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James Watt



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Steam Engine, &c.

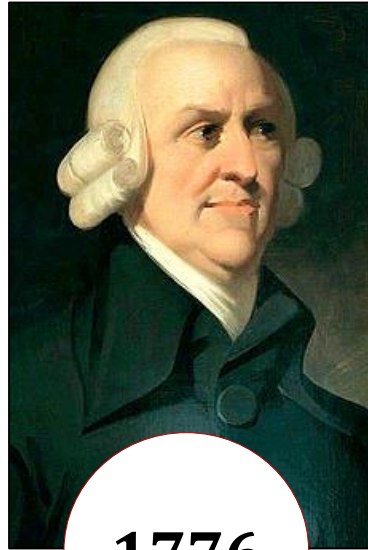
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Adam Smith



1776

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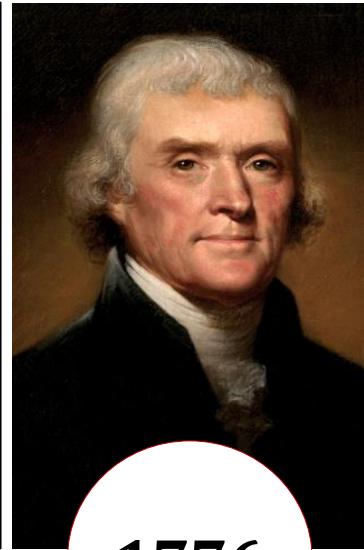
VOL. I.

Nature and Causes
OF THE
WEALTH OF NATIONS.

By ADAM SMITH, LL.D. and F.R.S.
Formerly Professor of Moral Philosophy in the University of Glasgow.

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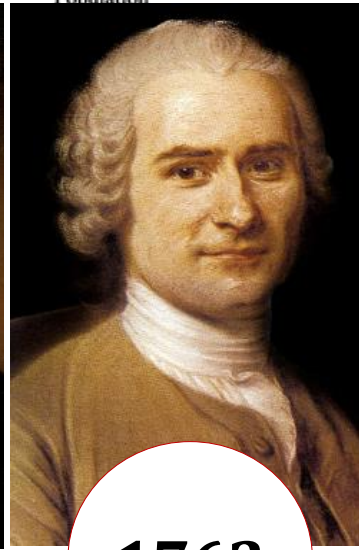
1776

The unannounced... America.

CONSTITUTIONAL;
PRINCIPES
DU
DROIT POLITIQUE.
PAR J. J. ROUSSEAU,
CITOYEN DE GENEVE.
— federis agens
Disce, leges. Encl. xi.

A AMSTERDAM,
Chez MARC MICHEL REY.
MDCCLXII.

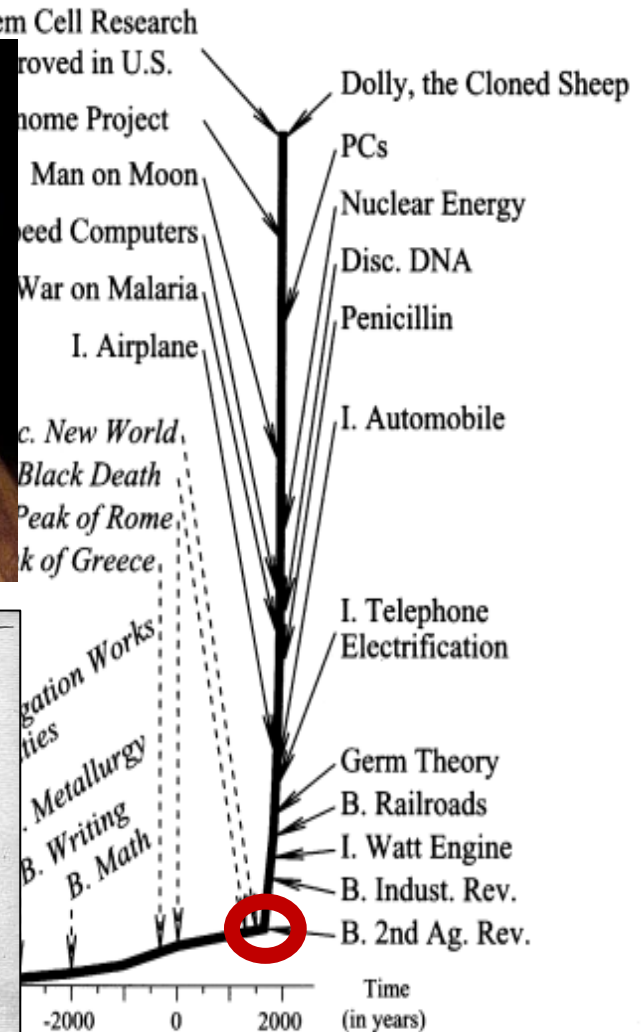
Jean J. Rousseau



1762

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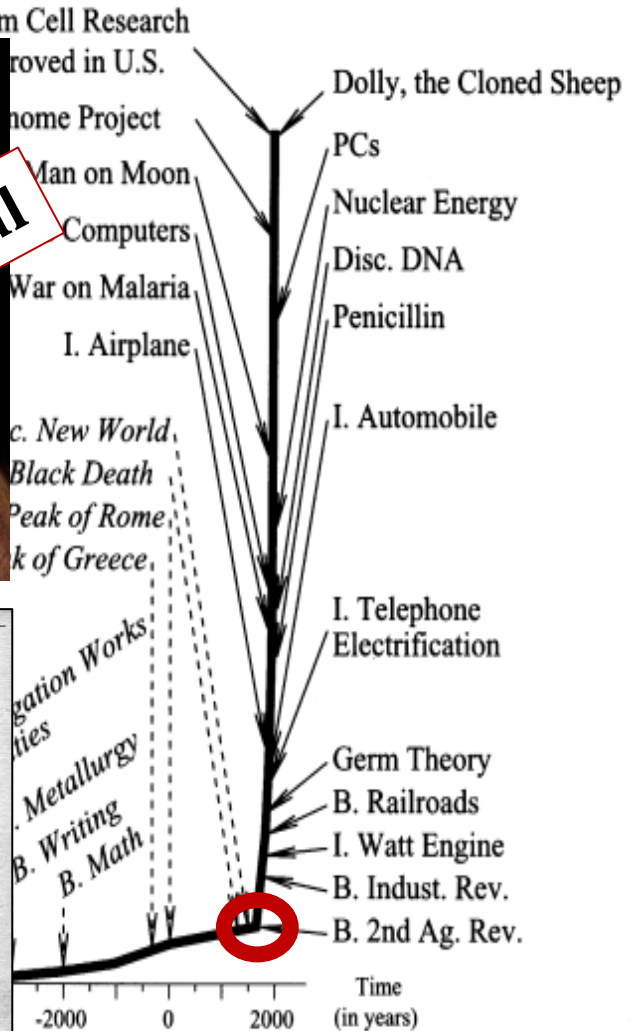
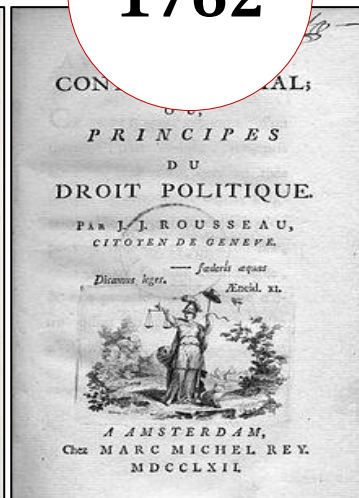
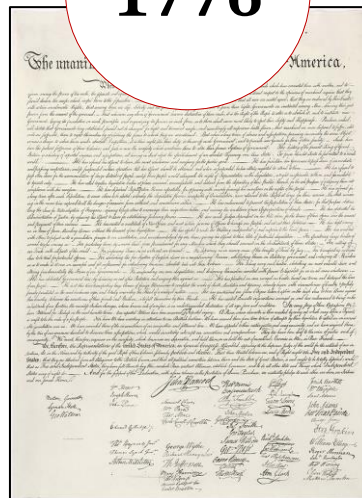
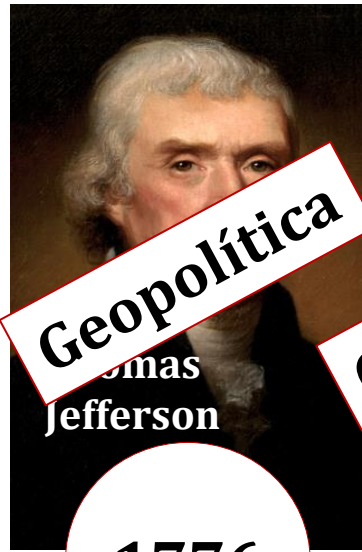
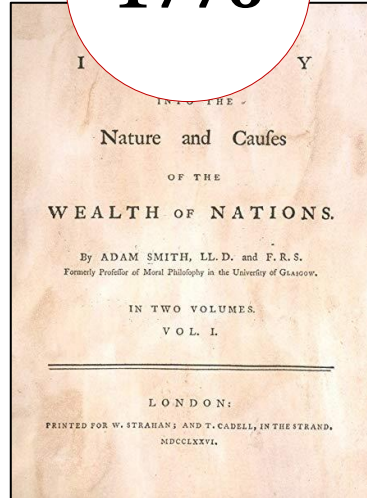
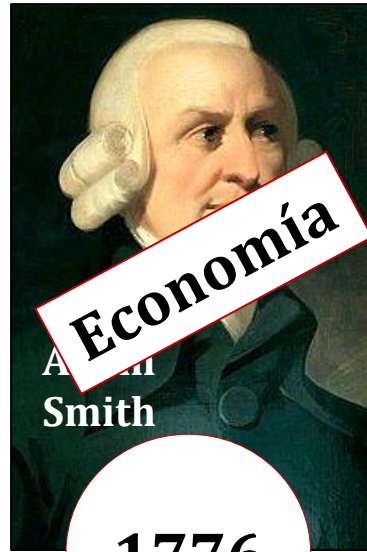
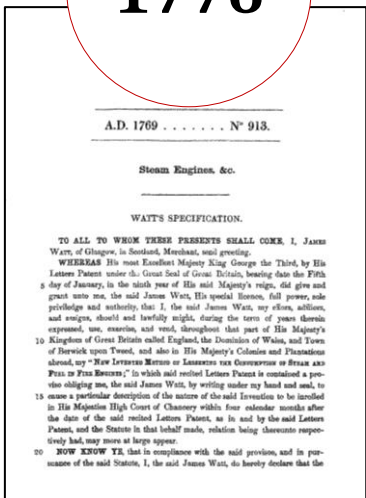
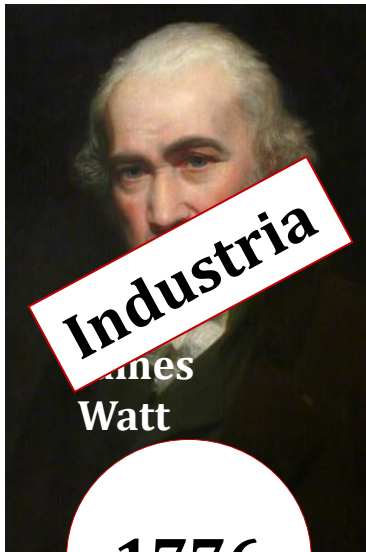
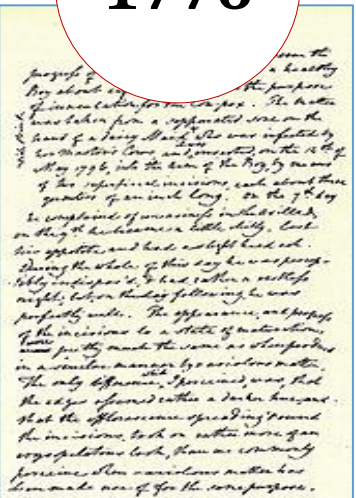
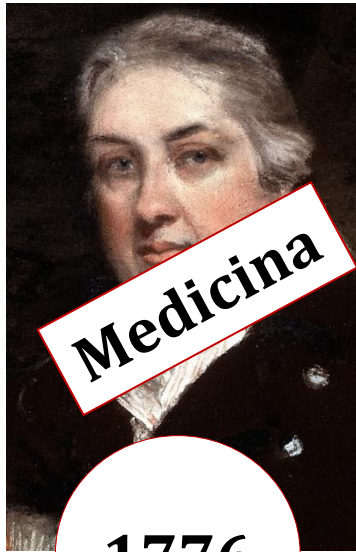
Edward Jenner

James Watt

Adam Smith

Thomas Jefferson

Jean J. Rousseau



1. Una historia de transformación

Siglos XV – XVI Renacimiento

Siglo XVII Revolución Científica

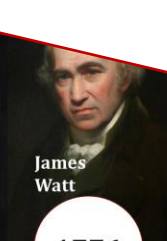
Siglo XVIII Ilustración
Revolución



James Watt

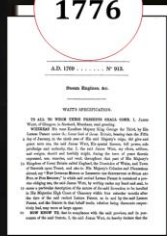
1776





Adam Smith

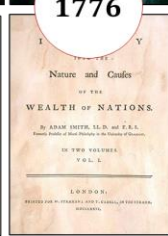
1776





Thomas Jefferson

1776

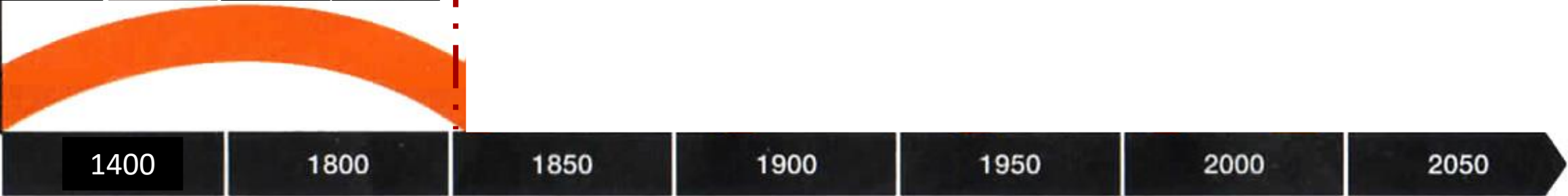




Jean Jacques Rousseau

1762





1. Una historia de transformación

Siglos XV – XVI Renacimiento

Siglo XVII Revolución Científica

Siglo XVIII Ilustración

Revolución



1.0

Steam power
Railroads
Steel
Telegraph



1. Una historia de transformación

Siglos XV – XVI Renacimiento

Siglo XVII Revolución Científica

Siglo XVIII Ilustración

Revolución



1.0

Steam power
Railroads
Steel
Telegraph

2.0

Fossil fuel pow
Electricity
Cars/Aviation
Telephone
Radio

1400

1800

1850

1900

1950

2000

2050

1. Una historia de transformación

Siglos XV – XVI Renacimiento

Siglo XVII Revolución Científica

Siglo XVIII Ilustración

Revolución



1.0

Steam power
Railroads
Steel
Telegraph

2.0

Fossil fuel pow
Electricity
Cars/Aviation
Telephone
Radio

3.0

Nuclear power
Electronics
Space travel
Television

1400

1800

1850

1900

1950

2000

2050

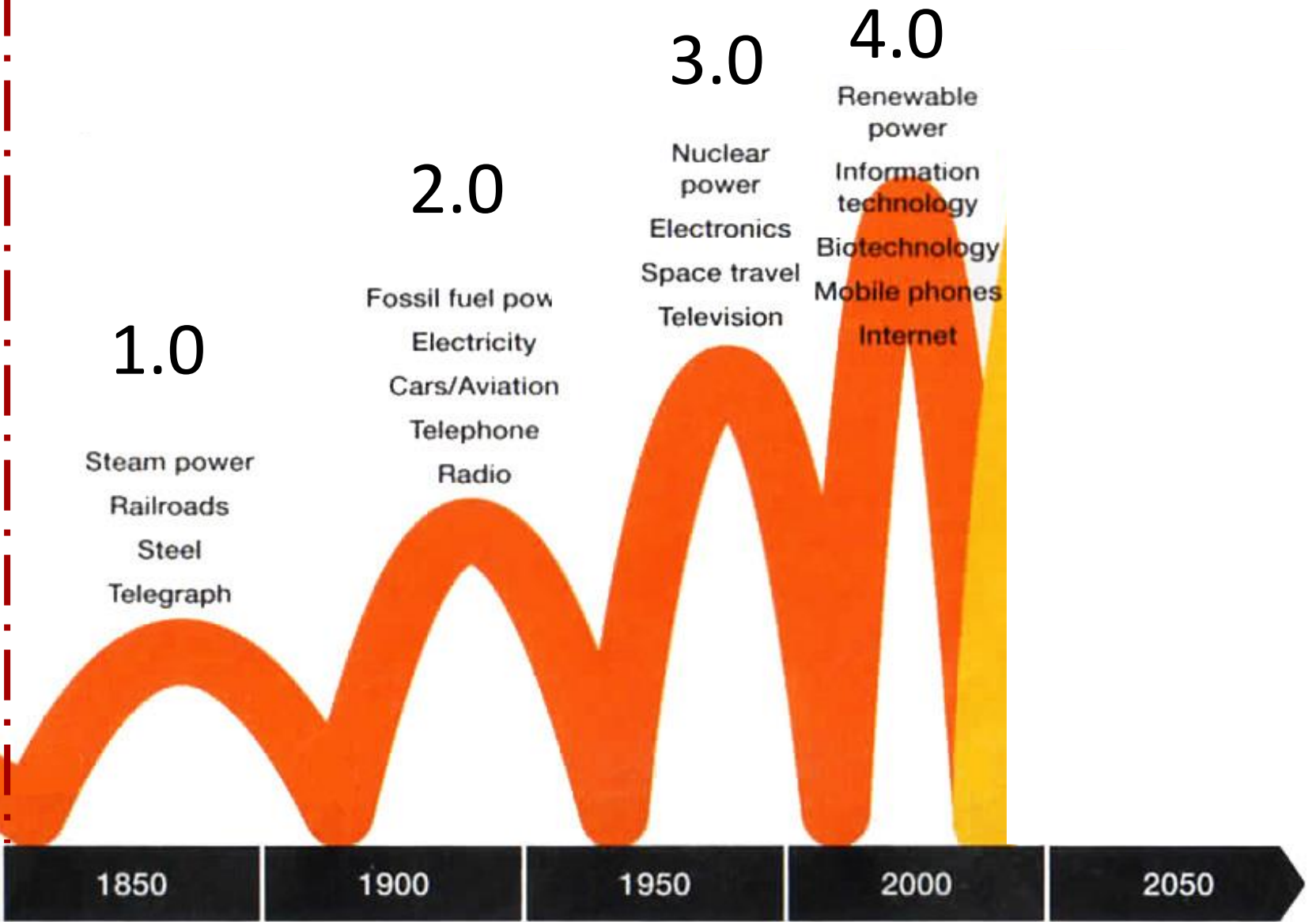
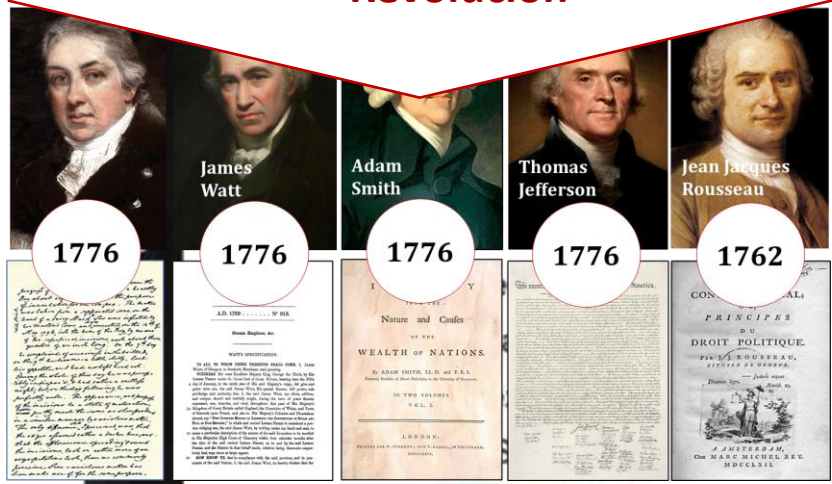
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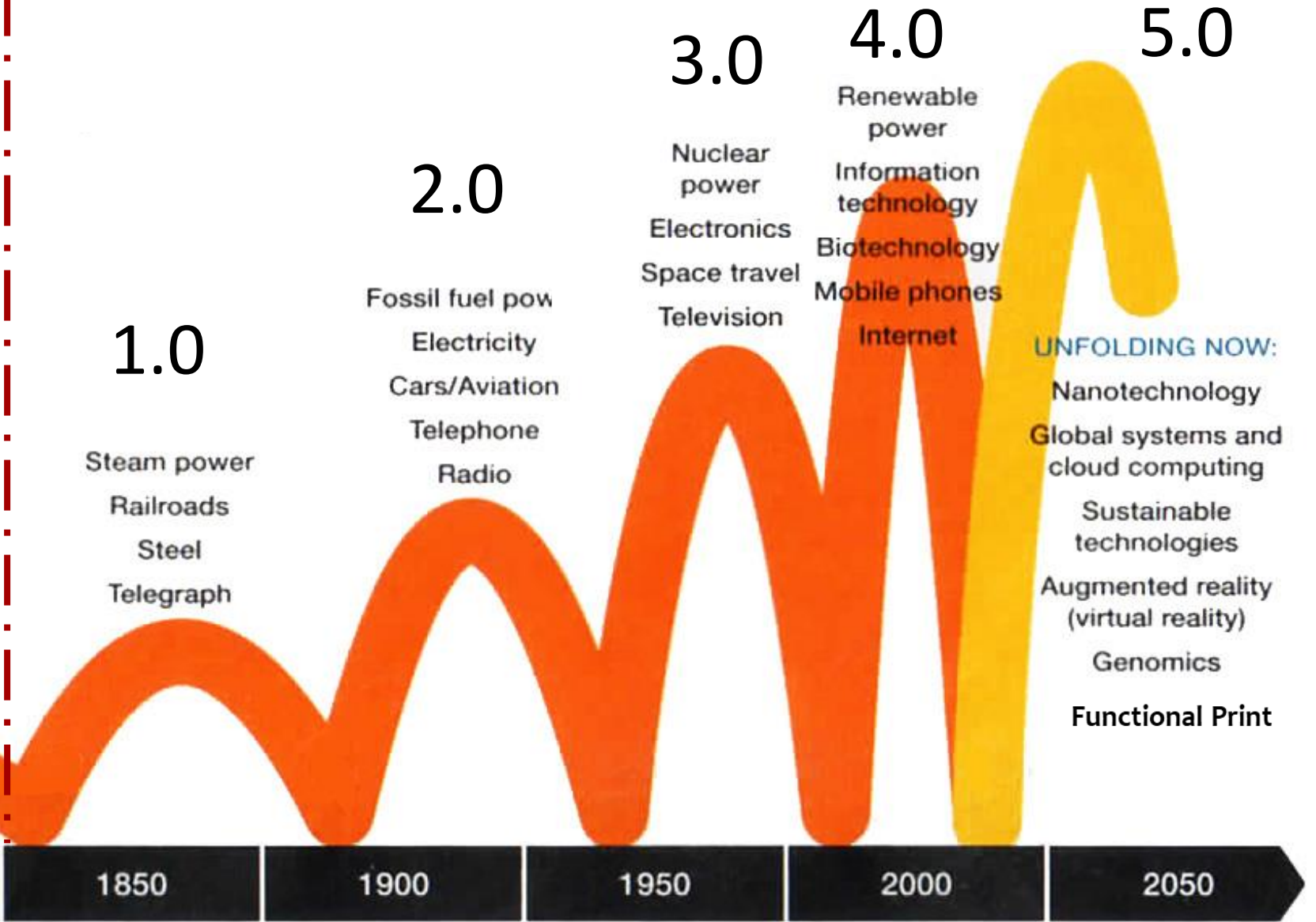
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Siglos XV – XVI Renacimiento

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Siglo XVIII Ilustración

Revolución



1. Una historia de transformación

1 Una historia de transformación

2 ¿Se puede aprender a gestionar la innovación?

1954

Drucker, "The Practice of Management"



Peter Drucker (1909 - 2005)

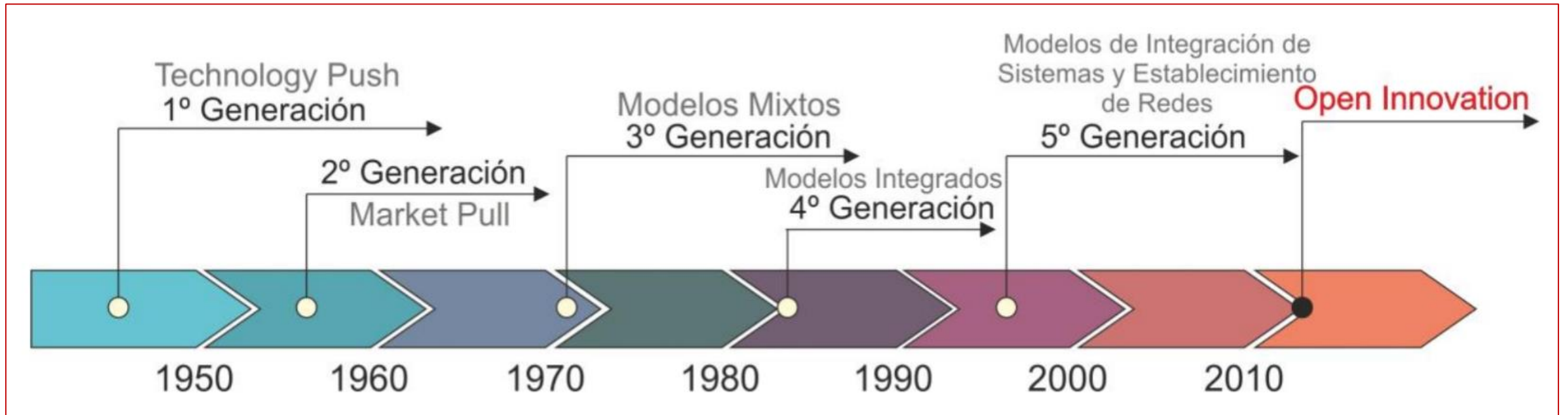
"Because the purpose of business is to create a customer, the business enterprise has two - and only two - basic functions: **marketing** and **innovation**."

Marketing and innovation produce results; all the rest are costs."

2. ¿Se puede aprender a gestionar la innovación?

1994

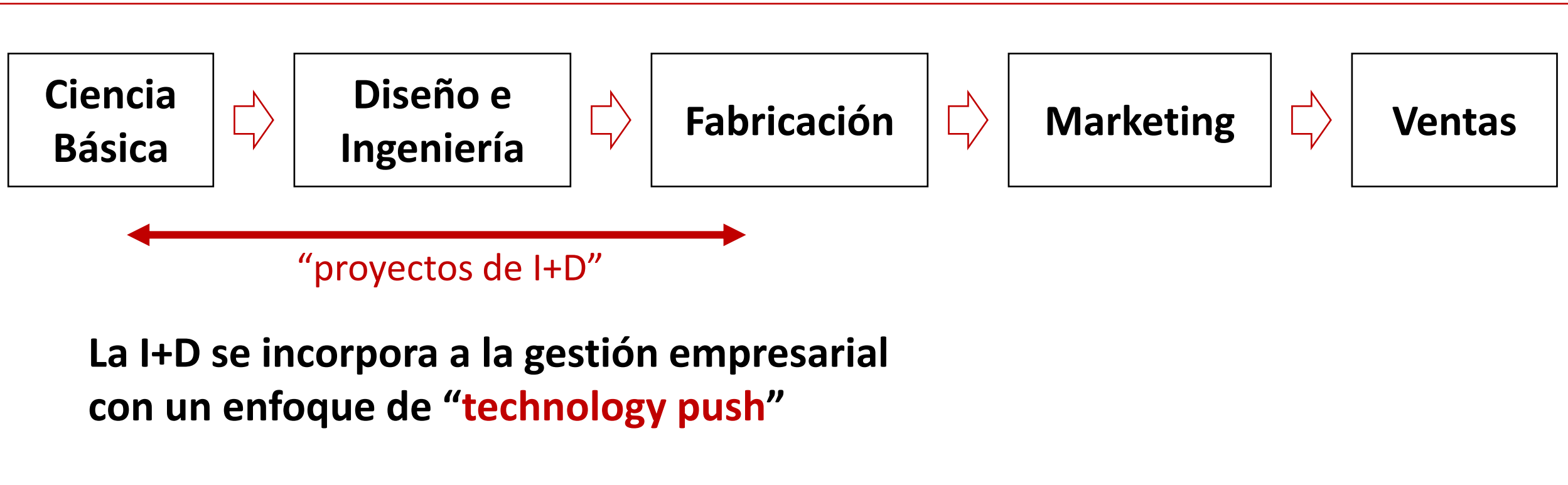
Rothwell, "Towards the fifth-generation Innovation Process"



2. ¿Se puede aprender a gestionar la innovación?

1950's –1960's

Rothwell, 1994, "Towards the fifth-generation Innovation Process"



2. ¿Se puede aprender a gestionar la innovación?

1960's – 1970's

Rothwell, 1994, "Towards the fifth-generation Innovation Process"

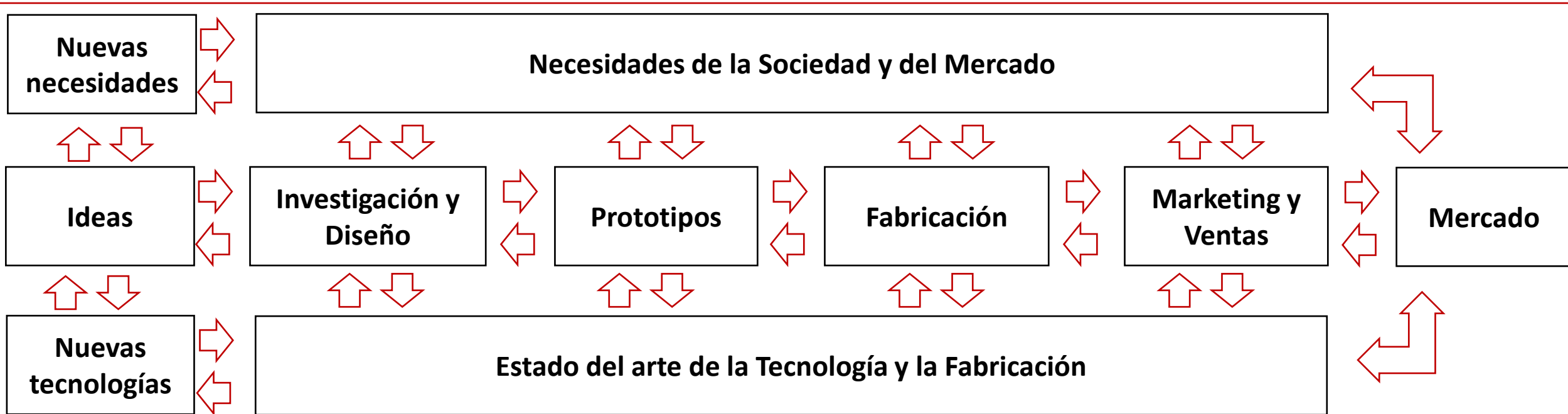


Como reacción, el marketing pone el foco en las necesidades del mercado con un enfoque de “**market pull**”

2. ¿Se puede aprender a gestionar la innovación?

1970's – 1980's

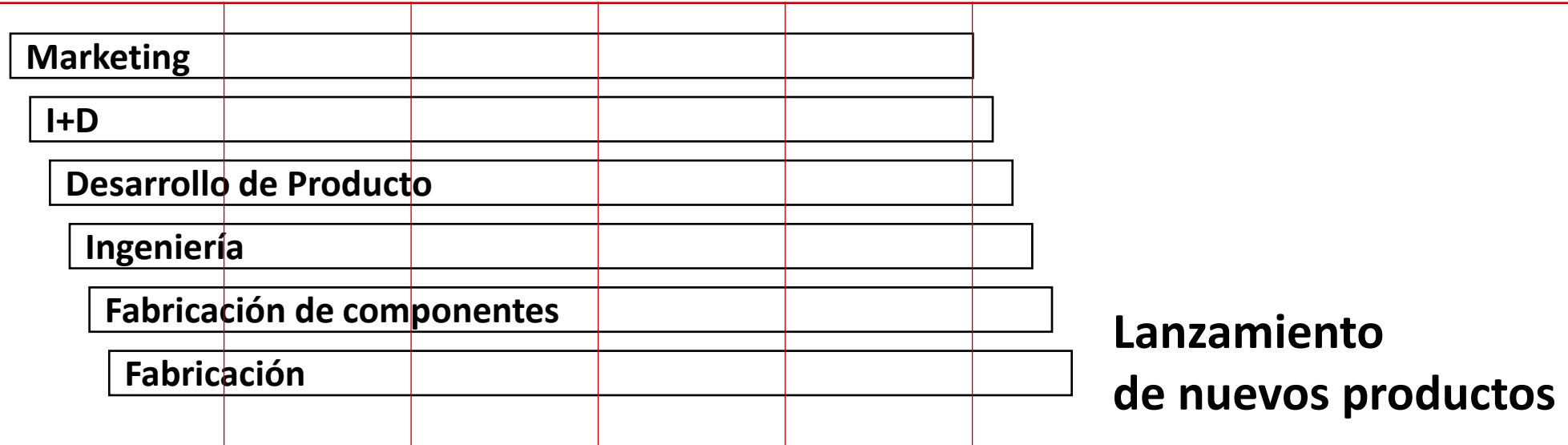
Rothwell, 1994, "Towards the fifth-generation Innovation Process"



La síntesis da lugar a **modelos mixtos**
que exigen la coordinación de diferentes áreas de la empresa

1980's – 1990's

Rothwell, 1994, "Towards the fifth-generation Innovation Process"



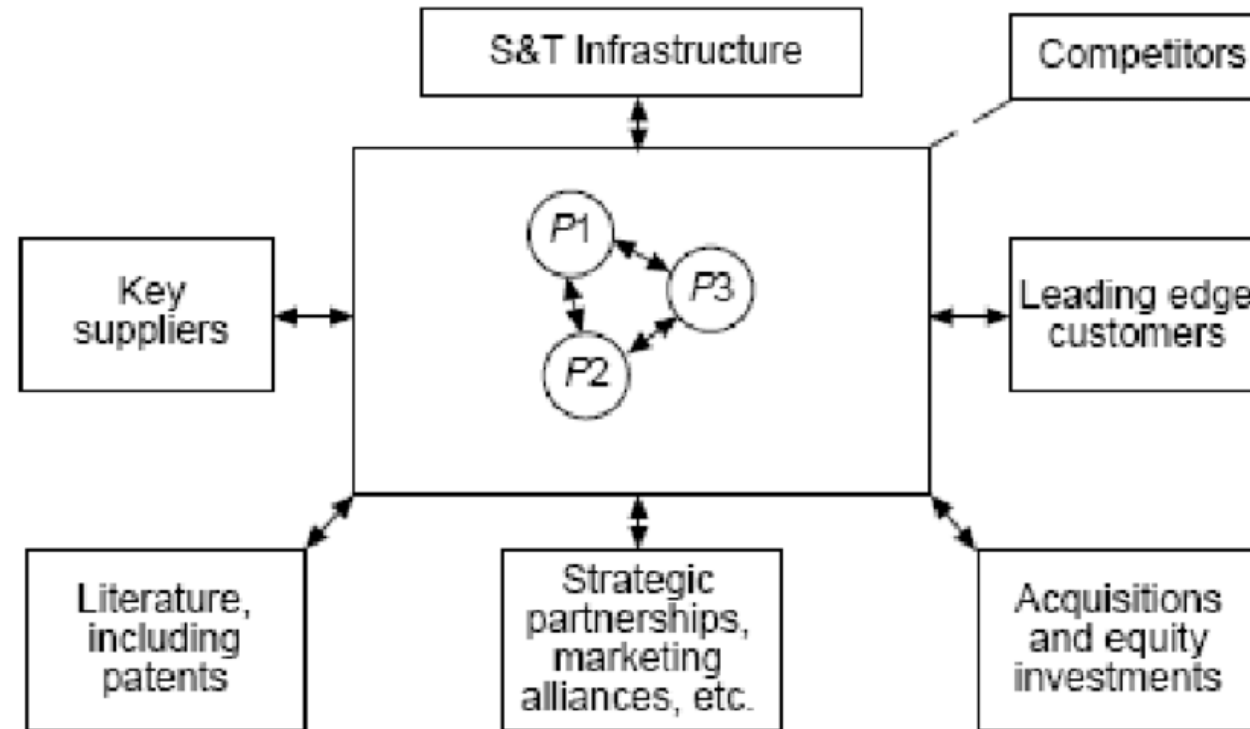
Reuniones conjuntas (I+D, Ingeniería, Planta, Jefes Producto)

Los **modelos integrados** ponen énfasis en la eficacia del proceso

El objetivo es llevar innovaciones al mercado constantemente

1990's

Rothwell, 1994, "Towards the fifth-generation Innovation Process"



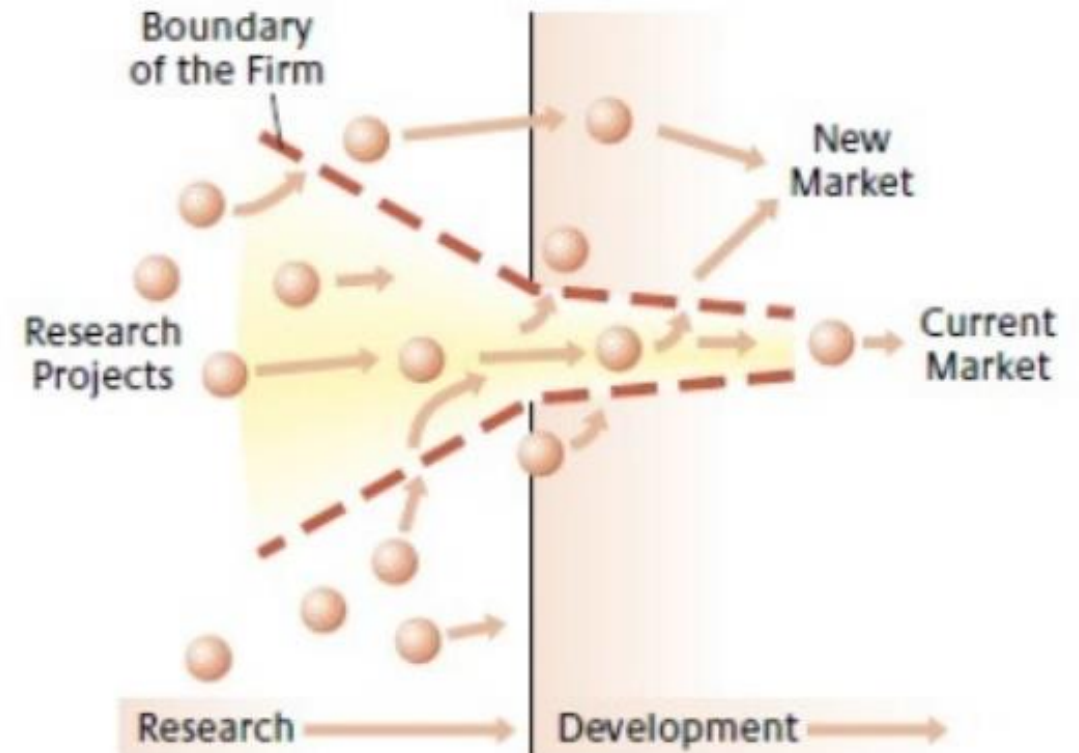
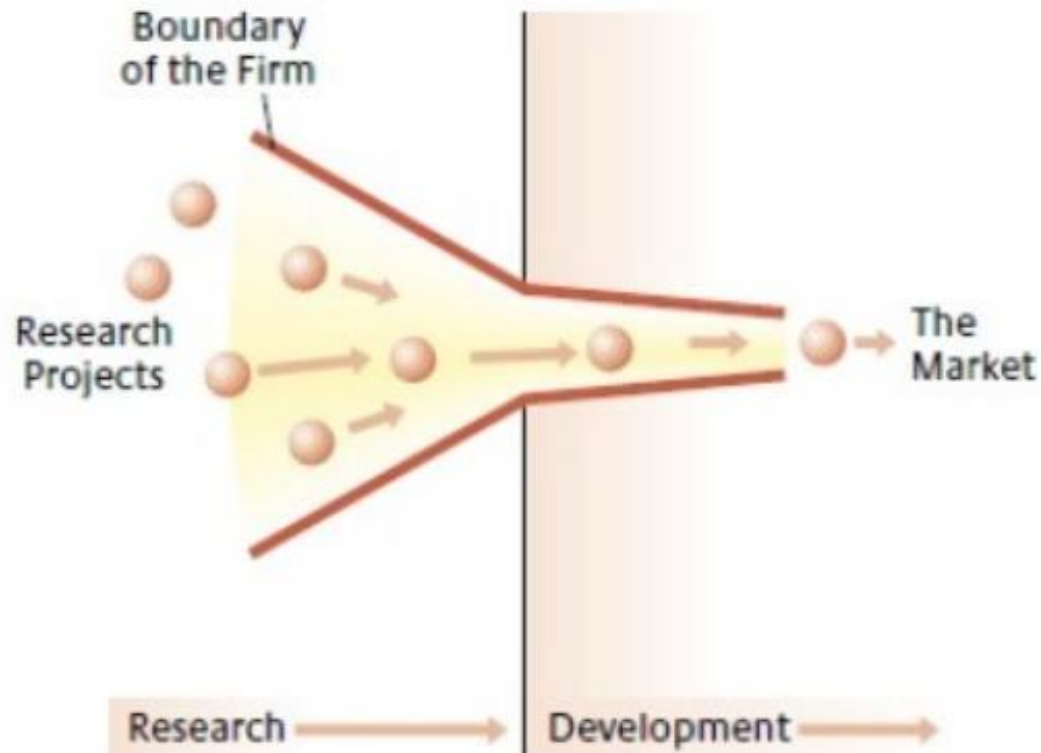
La “**innovación 5.0**” introduce la necesidad de innovar en red

2. ¿Se puede aprender a gestionar la innovación?

2000 - 2010

Chesbrough, 2003, "Open Innovation"

La **"innovación abierta"** insiste en la idea de **"ecosistema"**



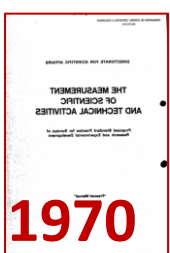
2. ¿Se puede aprender a gestionar la innovación?



**Manual
de Frascati**



1963



1970



1976



1981



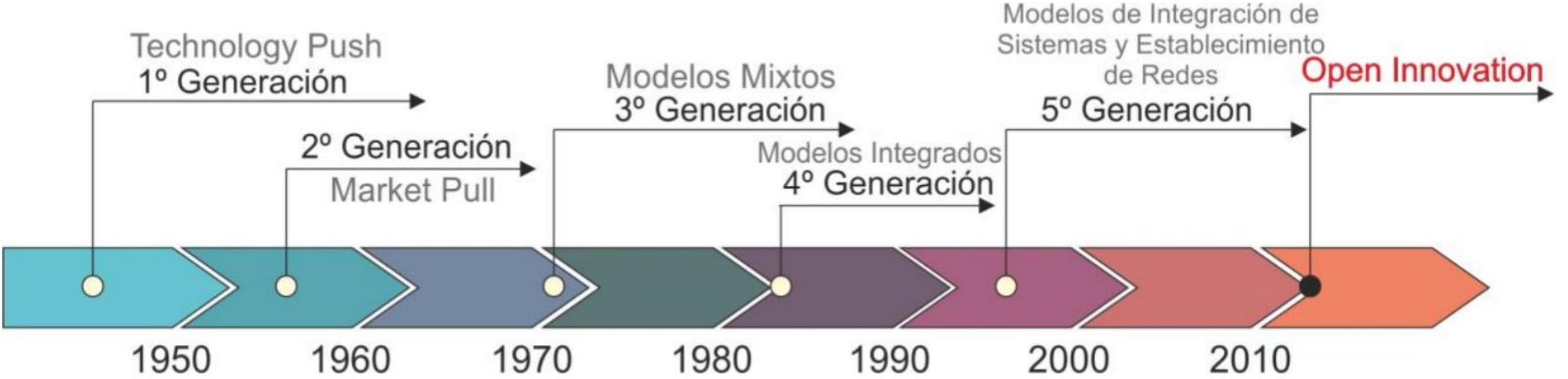
1993



2002



2015

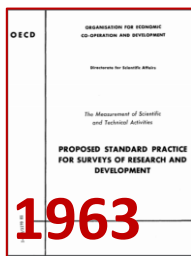


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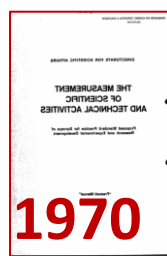




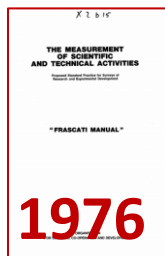
**Manual
de Frascati**



1963



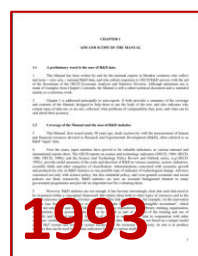
1970



1976



1981



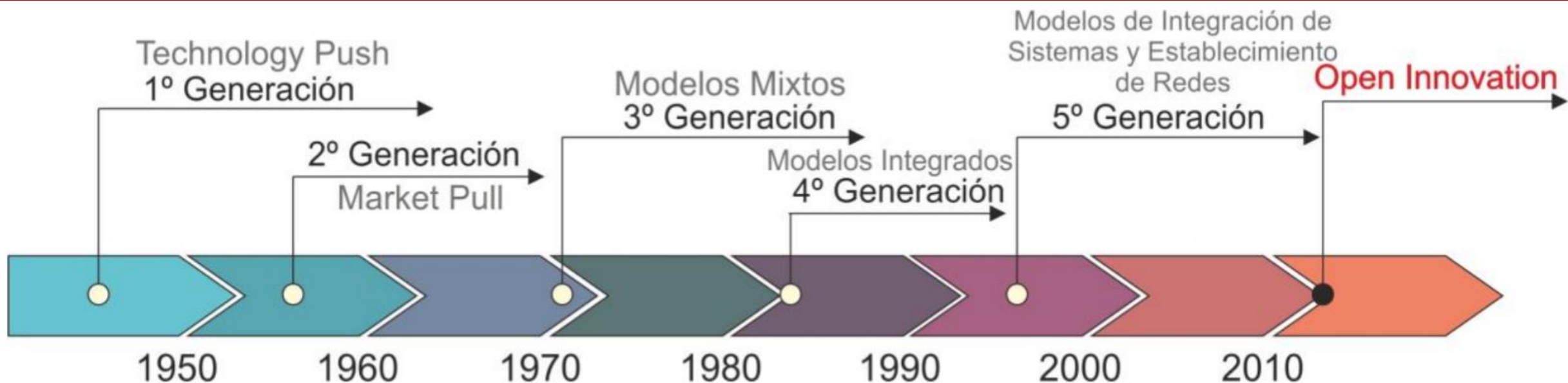
1993



2002



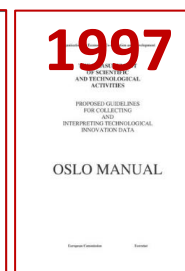
2015



**Manual
de Oslo**



1992



1997



2005



2018

2. ¿Se puede aprender a gestionar la innovación?



International Standard
ISO 56001:2024
Innovation management
system — Requirements
Reference number
ISO 56001:2024
Edition 1
2024-09
© ISO 2024

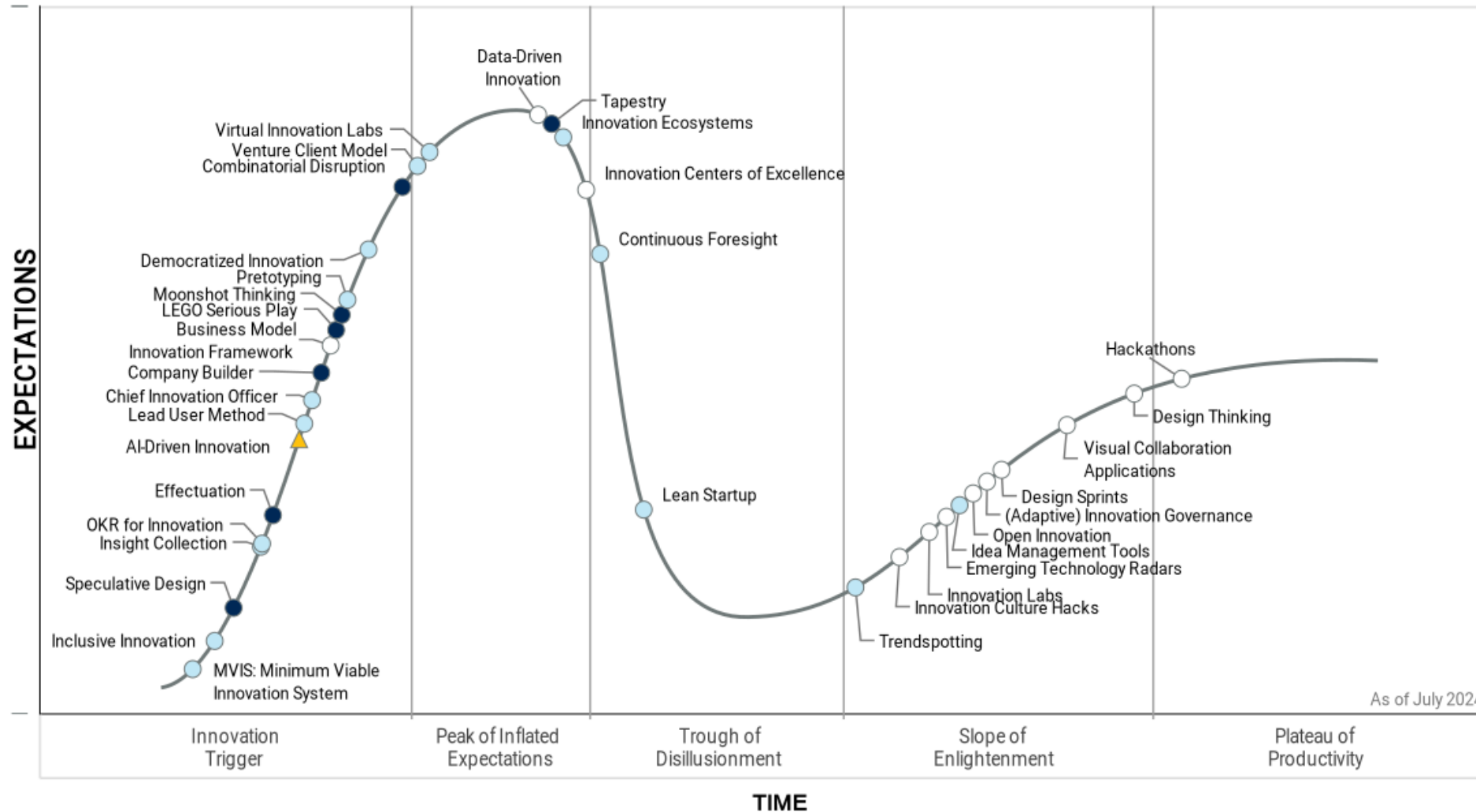
ISO 56001:2024

Innovation management system —
Requirements

Published (Edition 1, 2024)

2. ¿Se puede aprender a gestionar la innovación?

Hype Cycle for Innovation Practices, 2024



2. ¿Se puede aprender a gestionar la innovación?

Gartner



Executive Education





BIP

Business Innovation Programme

Mastering advanced innovation and entrepreneurship

Boston - Bilbao

Module 1	Strategic Analysis for Innovation	Deusto Bilbao biweekly on Friday and Saturday mornings
Module 2	Innovation Management: Open Innovation	
Module 3	Building the Innovative Organization within an Entrepreneurial Ecosystem and Monetizing It	
Module 4	Leadership for Innovation	Boston Intensive one-week
	Innovation Project Business development plan	Deusto Bilbao Project Defense



2. ¿Se puede aprender a gestionar la innovación?

- 1 Una historia de transformación
- 2 ¿Se puede aprender a gestionar la innovación?
- 3 ¿Se puede aprender a gestionar el cambio?**



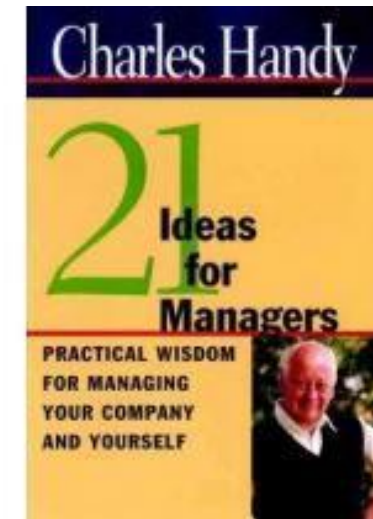
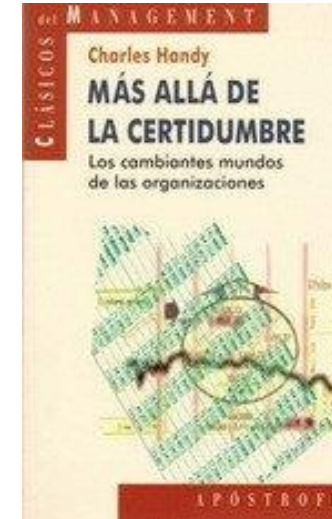
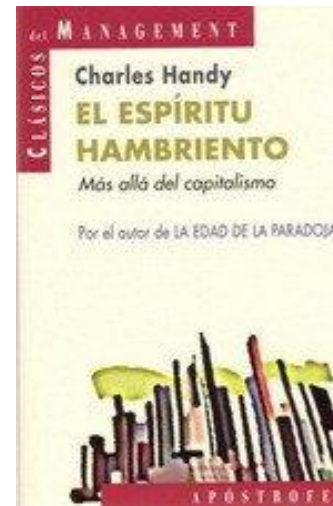
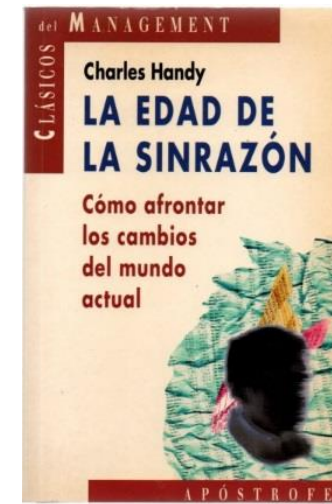
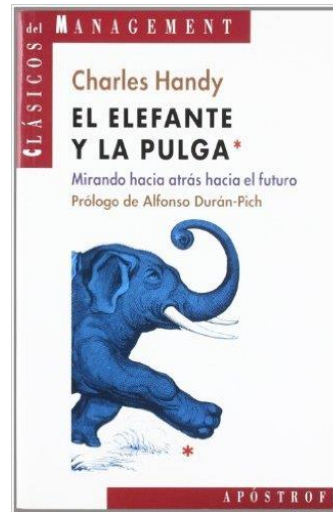
3. ¿Se puede aprender a gestionar el cambio?



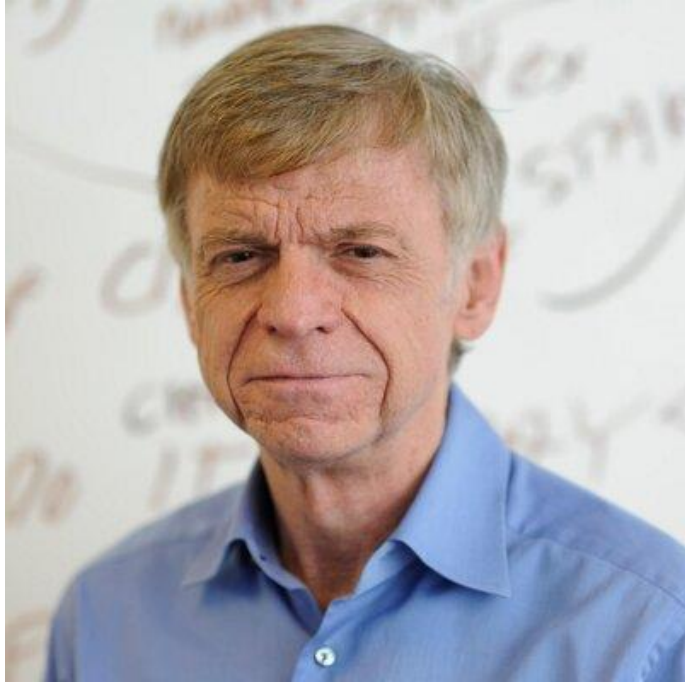
3. ¿Se puede aprender a gestionar el cambio?



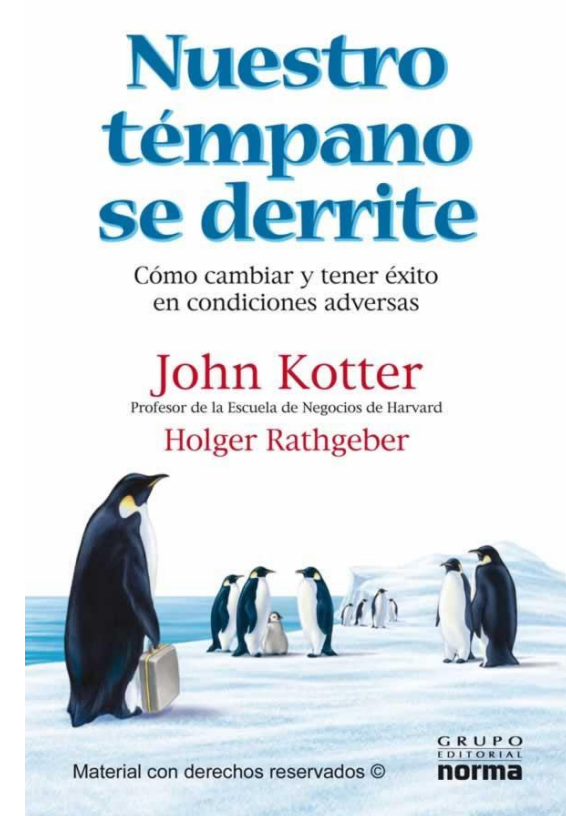
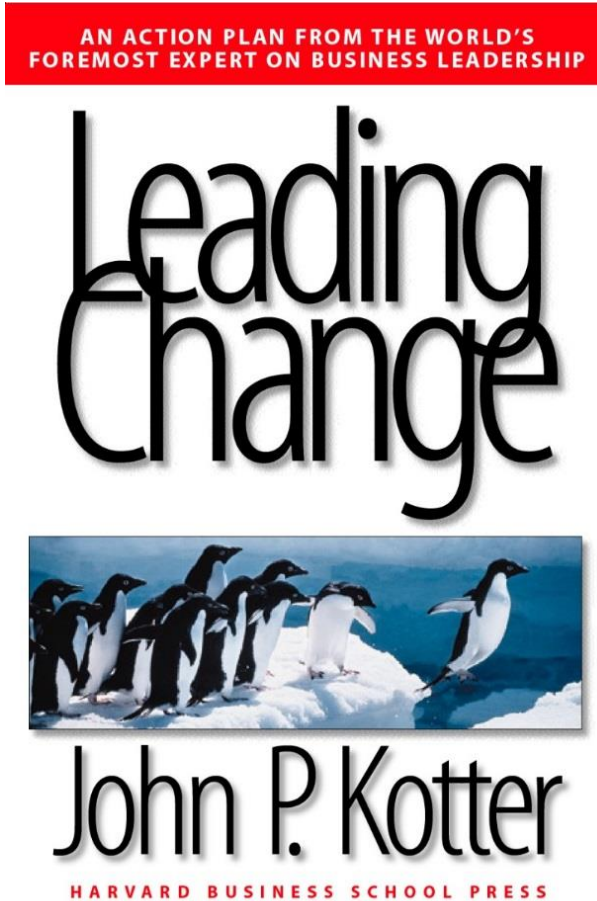
@charleshandy25



3. ¿Se puede aprender a gestionar el cambio?



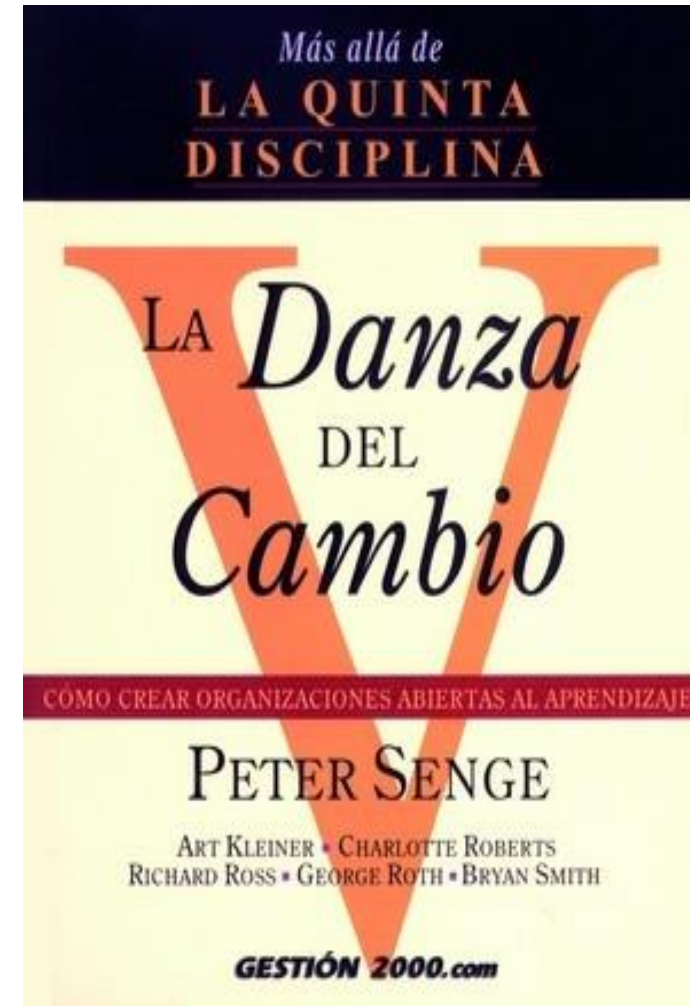
@johnpkotter



3. ¿Se puede aprender a gestionar el cambio?



@petersenge



3. ¿Se puede aprender a gestionar el cambio?



@ottoscharmer1

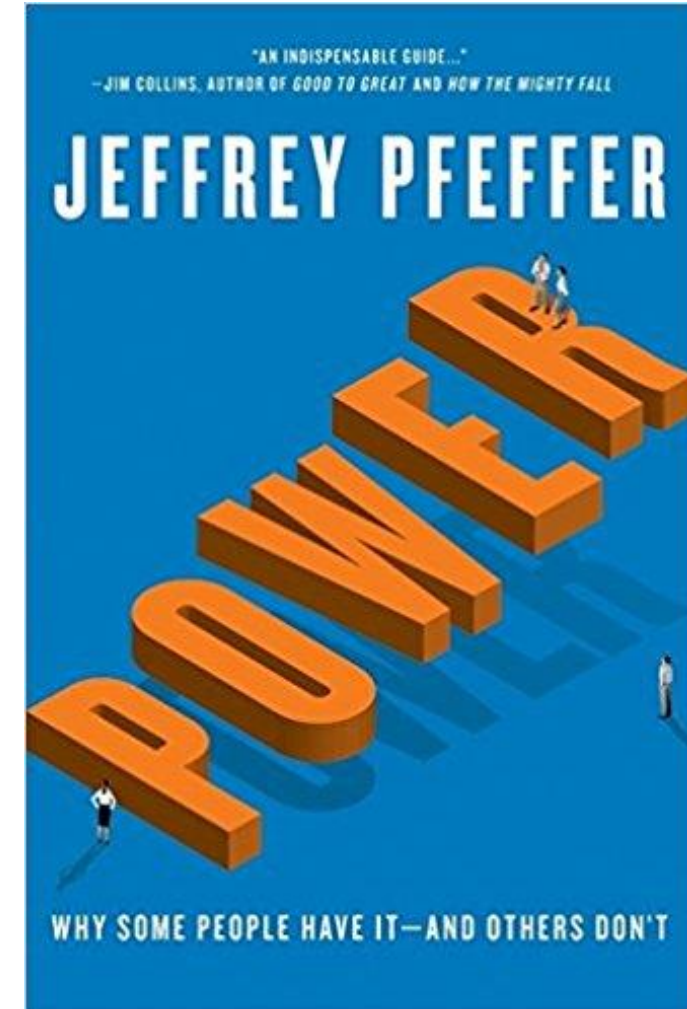


3. ¿Se puede aprender a gestionar el cambio?



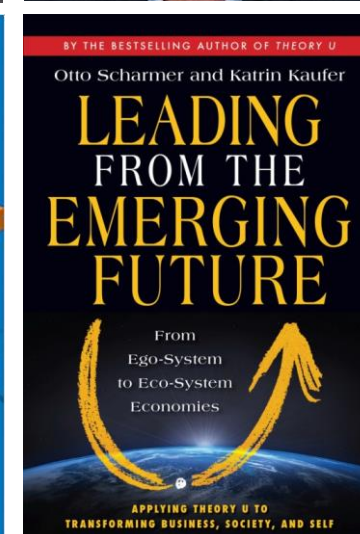
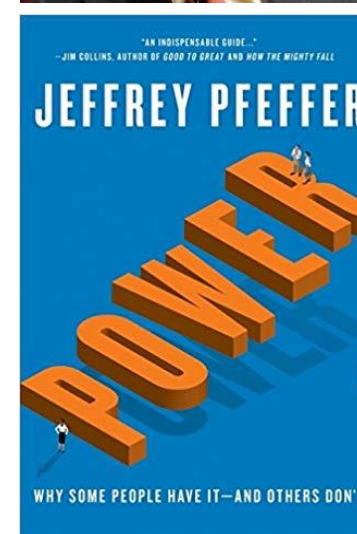
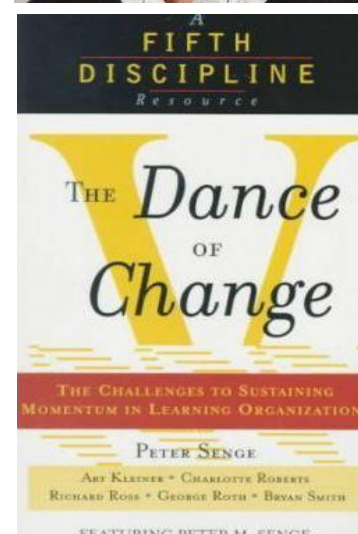
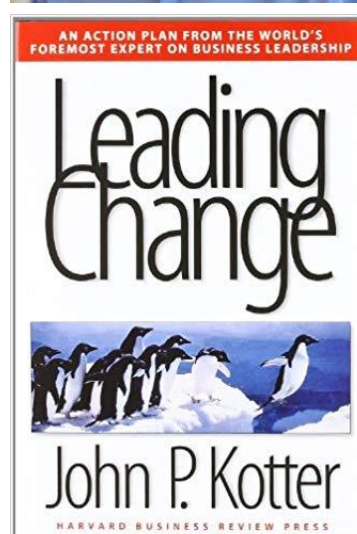
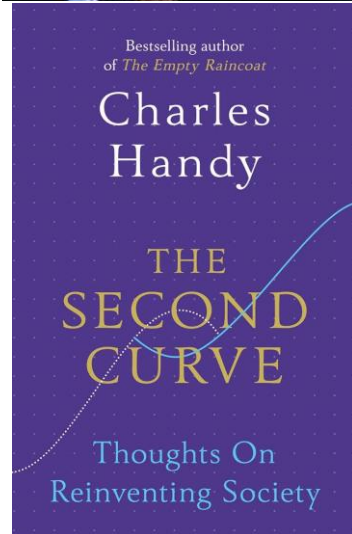
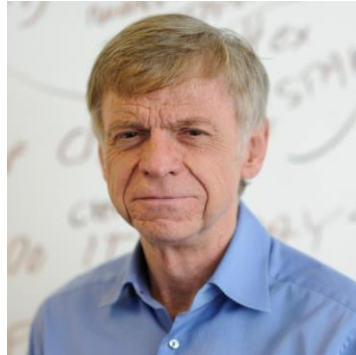
STANFORD
BUSINESS GRADUATE
SCHOOL OF

@JeffreyPfeffer



3. ¿Se puede aprender a gestionar el cambio?

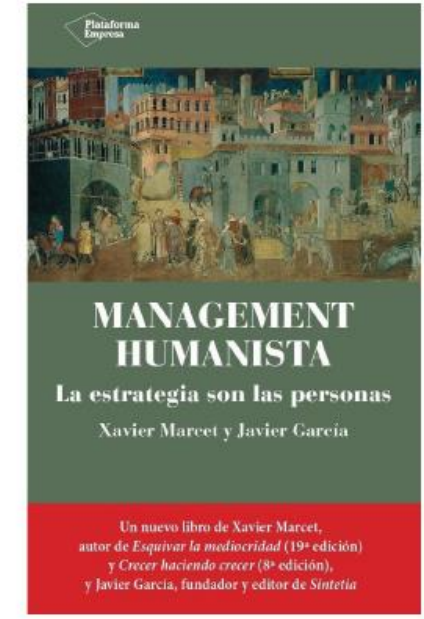
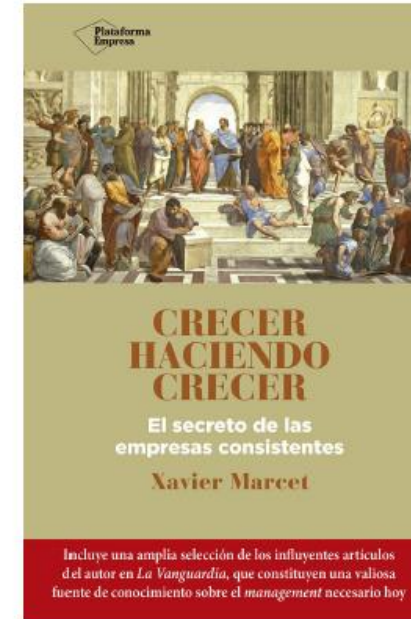
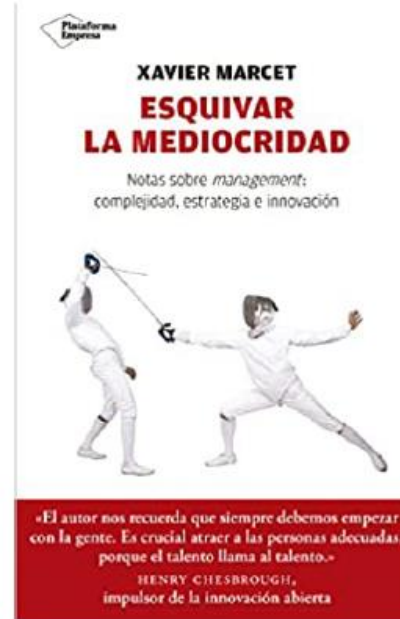
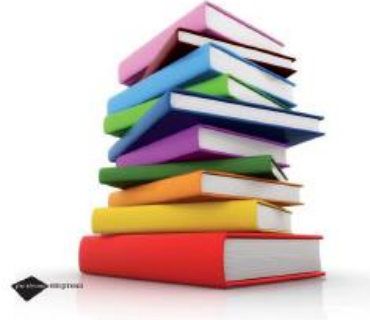
THINKERS
50 Hall of Fame



3. ¿Se puede aprender a gestionar el cambio?



XAVIER MARCET
**COSAS QUE
APRENDEMOS
DESPUÉS**
Bloggiana sobre management,
innovación y estrategia



Xavier Marcet

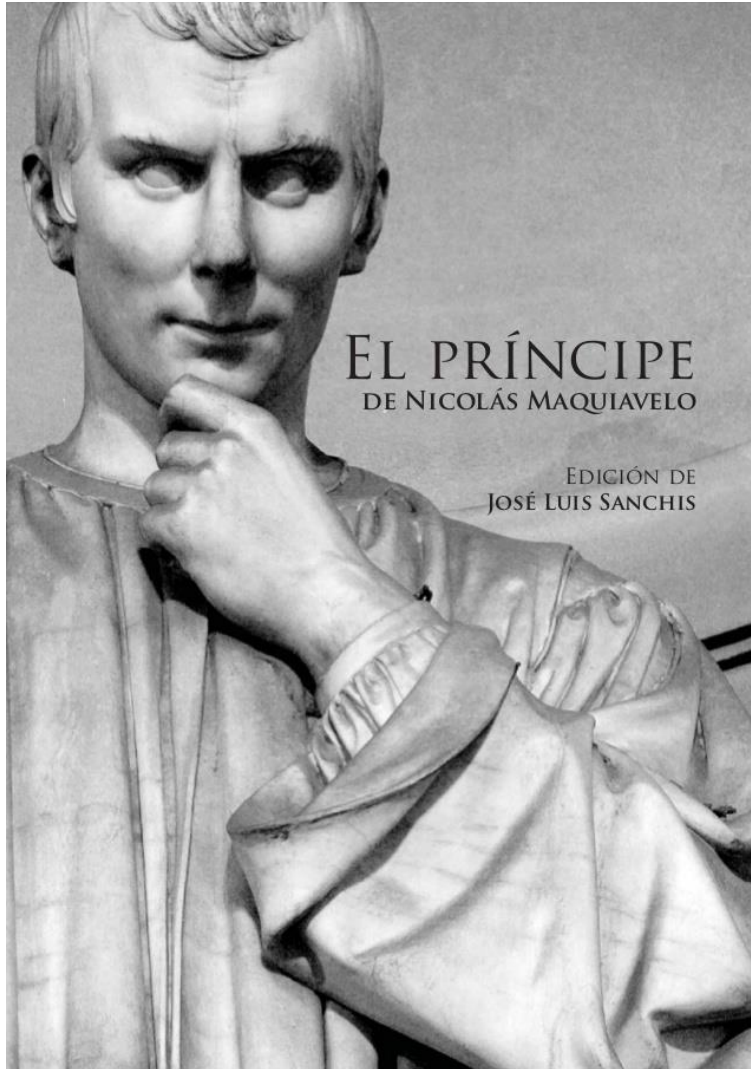
<https://www.linkedin.com/in/xavier-marcet-5580681>

<https://x.com/XavierMarcet>

3. ¿Se puede aprender a gestionar el cambio?

- 1 Una historia de transformación
- 2 ¿Se puede aprender a gestionar la innovación?
- 3 ¿Se puede aprender a gestionar el cambio?

4 Algunos consejos finales



adaptarse

be future

resistir

be resilient

cambiar

be change

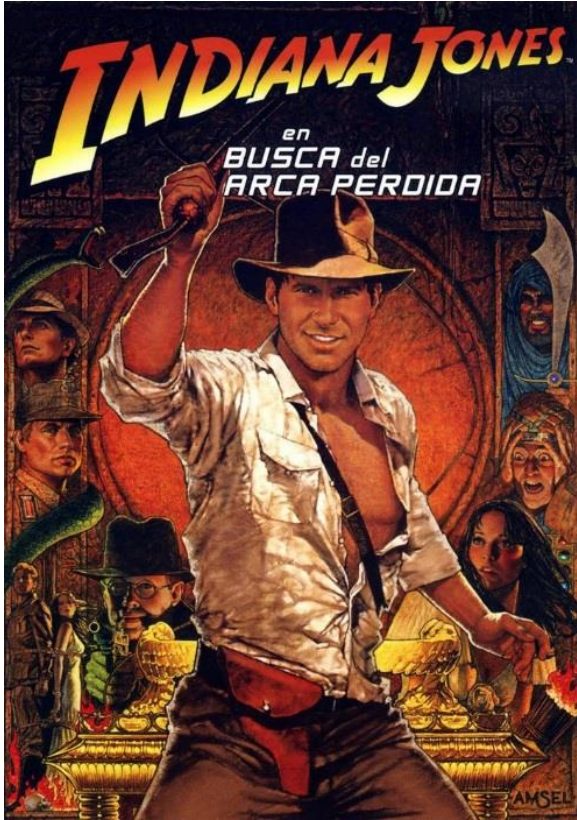
audacia

be happy

4. Algunos consejos finales

be future

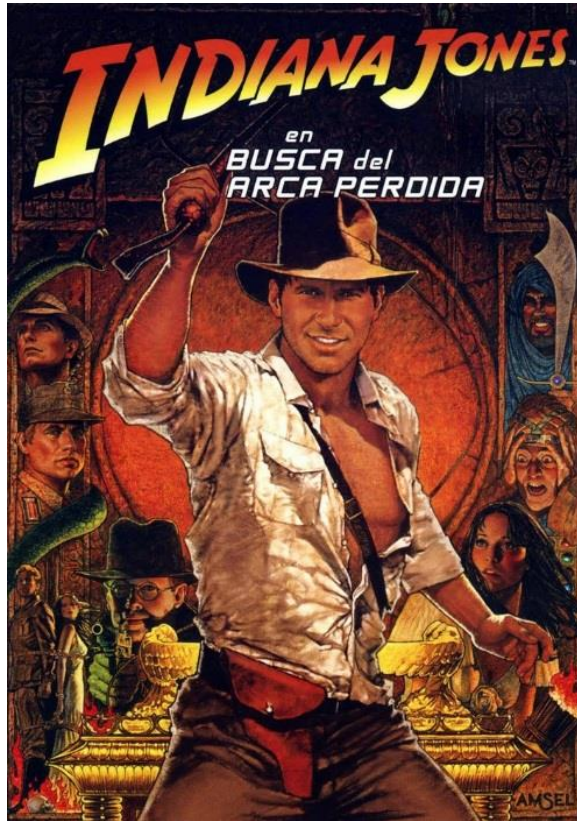
estrategia emergente | “... tratar de contar con el futuro”



4. Algunos consejos finales

be future

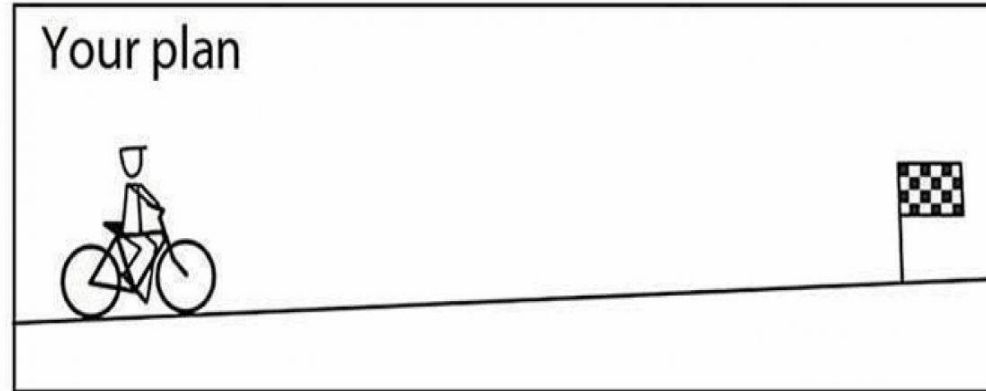
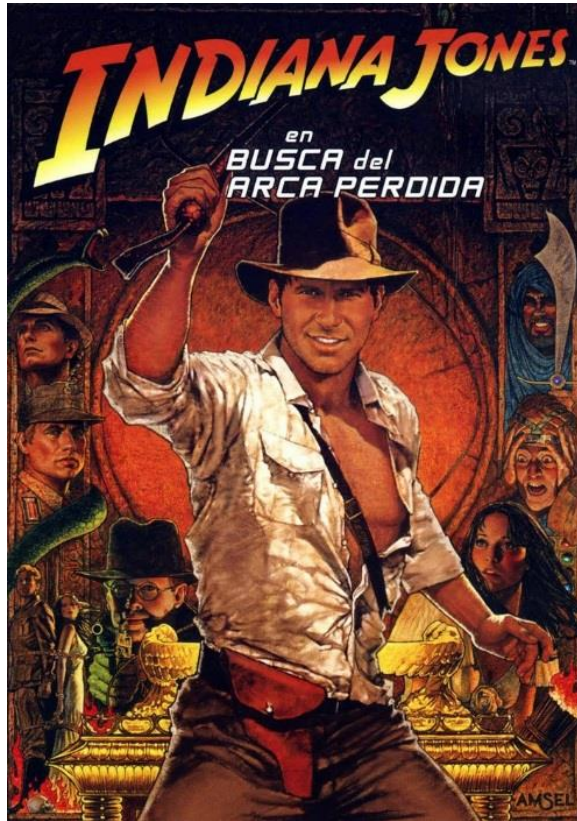
estrategia emergente | “... tratar de contar con el futuro”



4. Algunos consejos finales

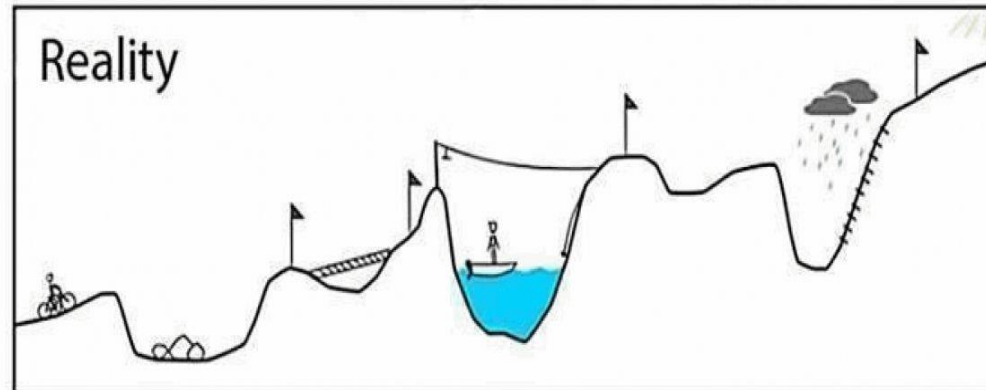
be future

estrategia emergente | “... tratar de contar con el futuro”



Tengo un Plan Estratégico

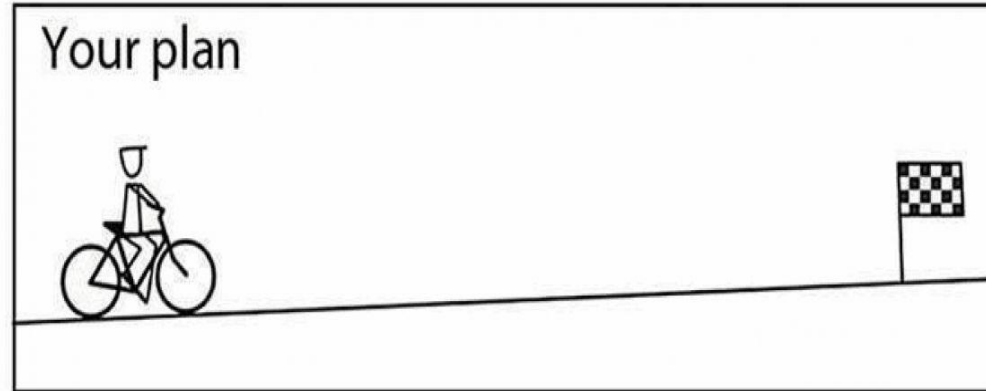
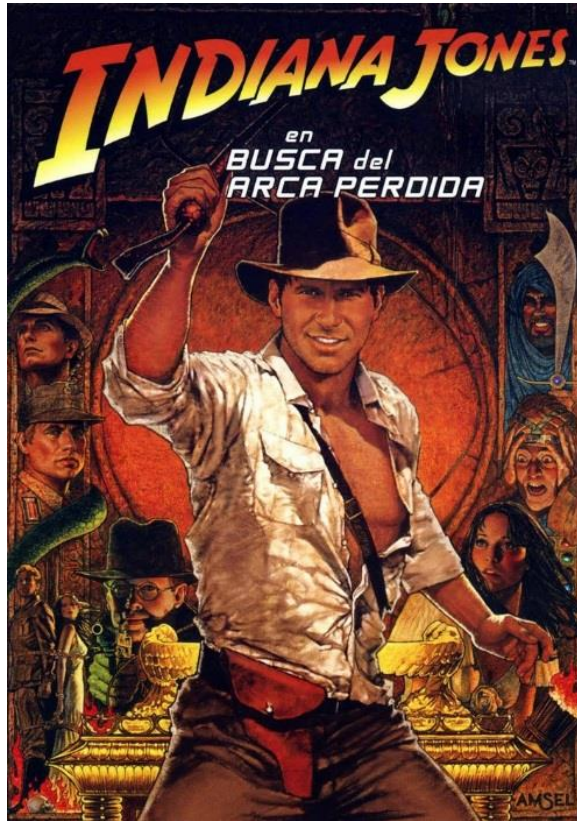
“Estrategia deliberada”



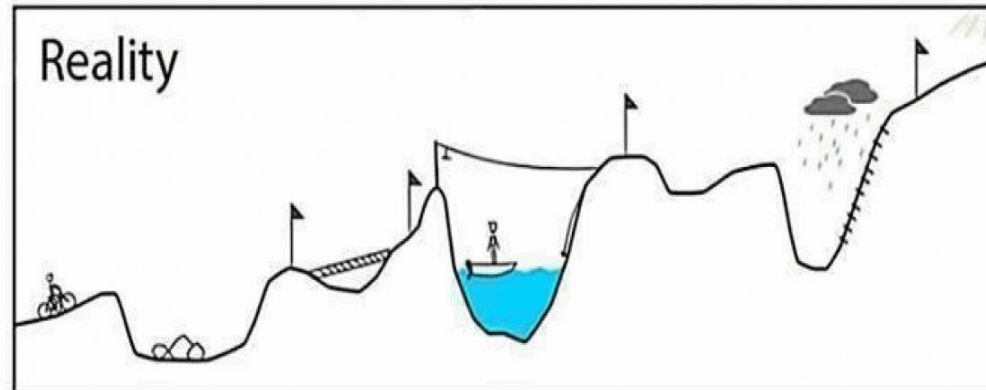
Improviso sobre la marcha

be future

estrategia emergente | “... tratar de contar con el futuro”



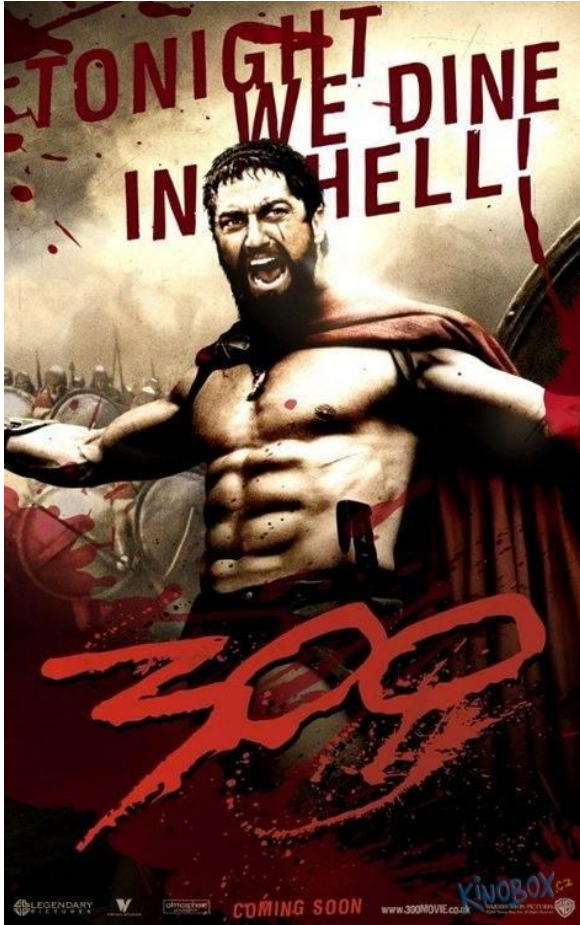
Tengo un Plan Estratégico
“Estrategia deliberada”



Improviso sobre la marcha
“Estrategia emergente”

be resilient

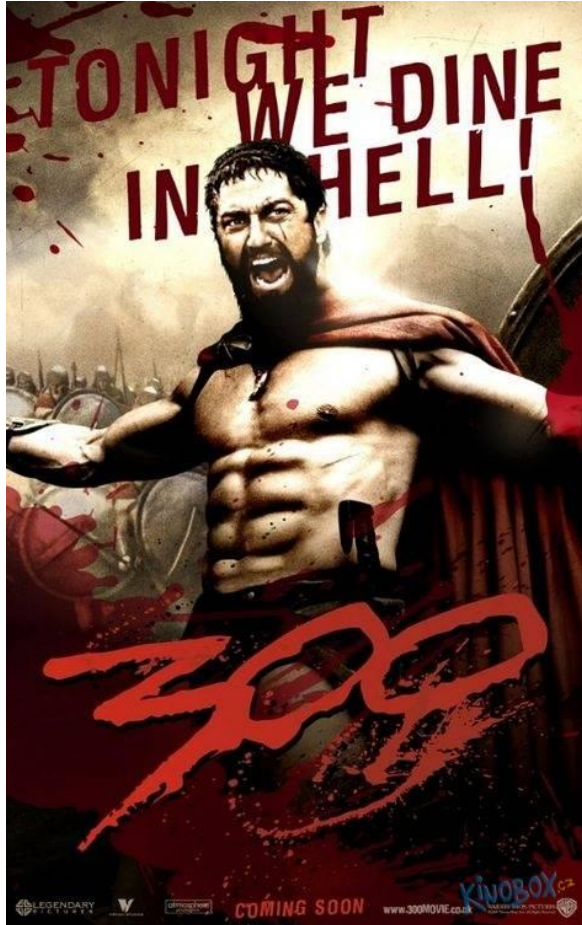
resiliencia | empresa abierta, empresa en red



4. Algunos consejos finales

be resilient

resiliencia | empresa abierta, empresa en red



4. Algunos consejos finales

be change

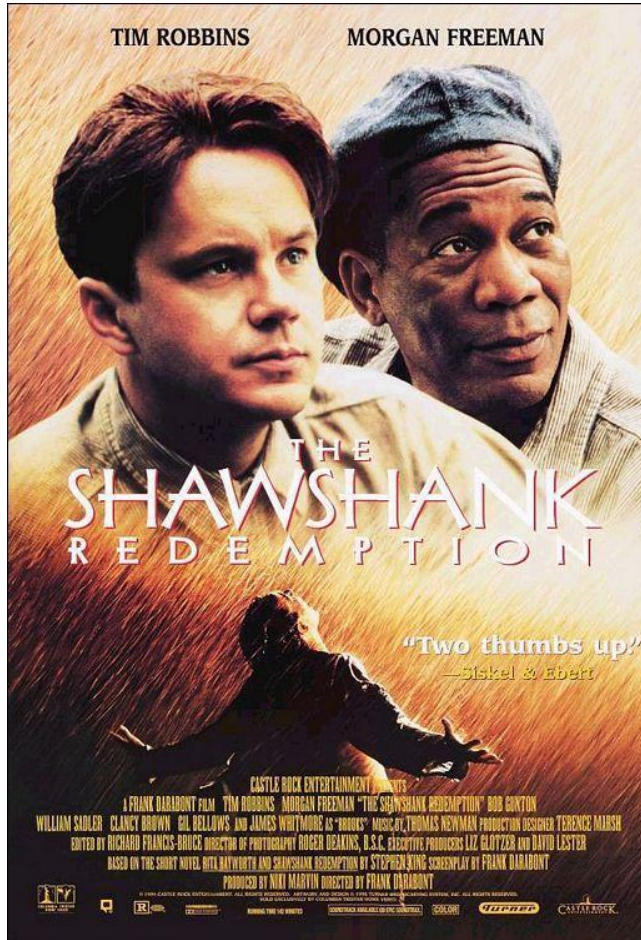
cambiar lo necesario | aprender a cambiar



4. Algunos consejos finales

be happy

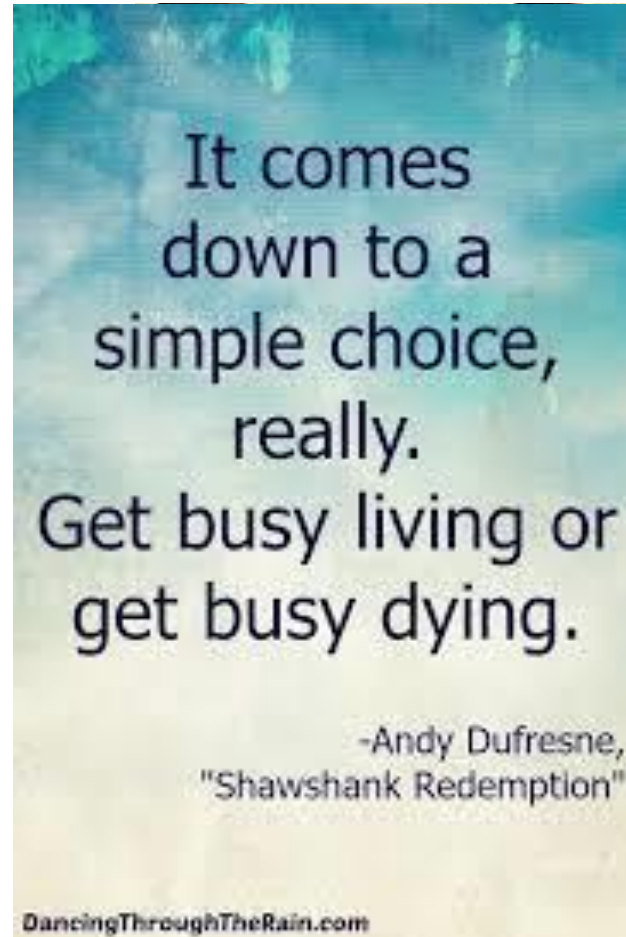
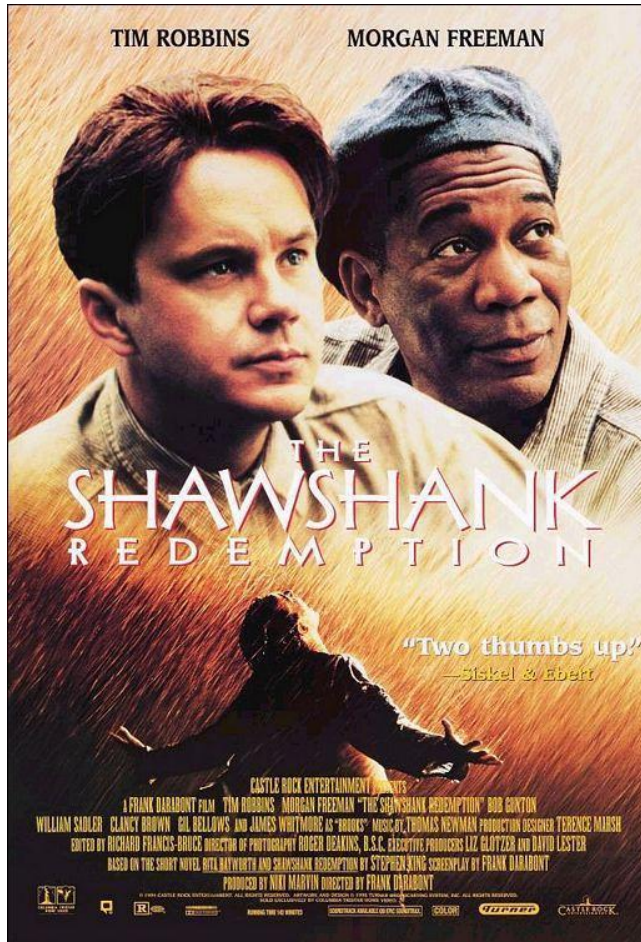
sonreir | el peor error es resignarse a sobrevivir



4. Algunos consejos finales

be happy

sonreir | el peor error es resignarse a sobrevivir



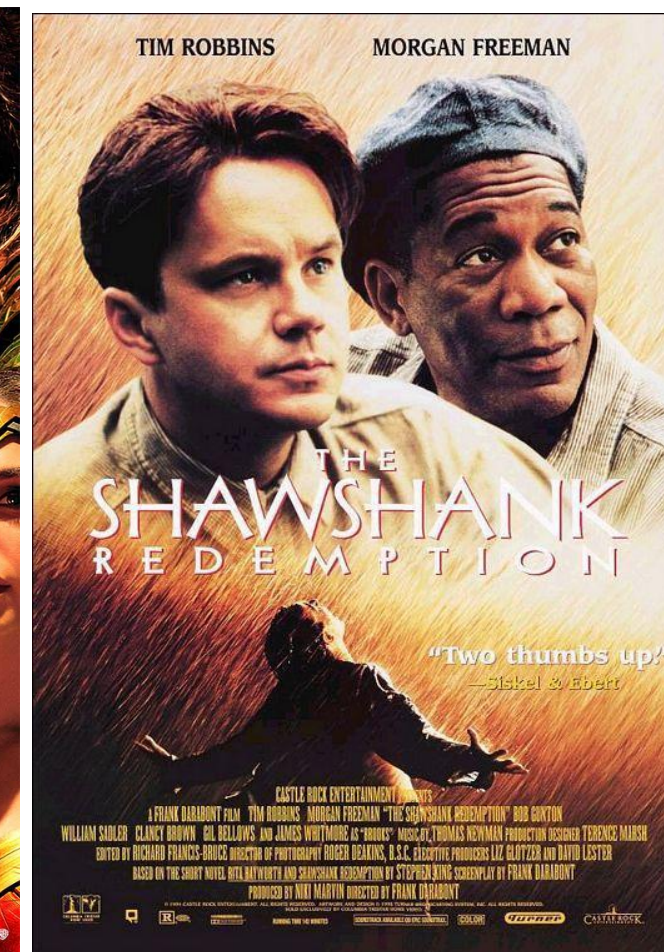
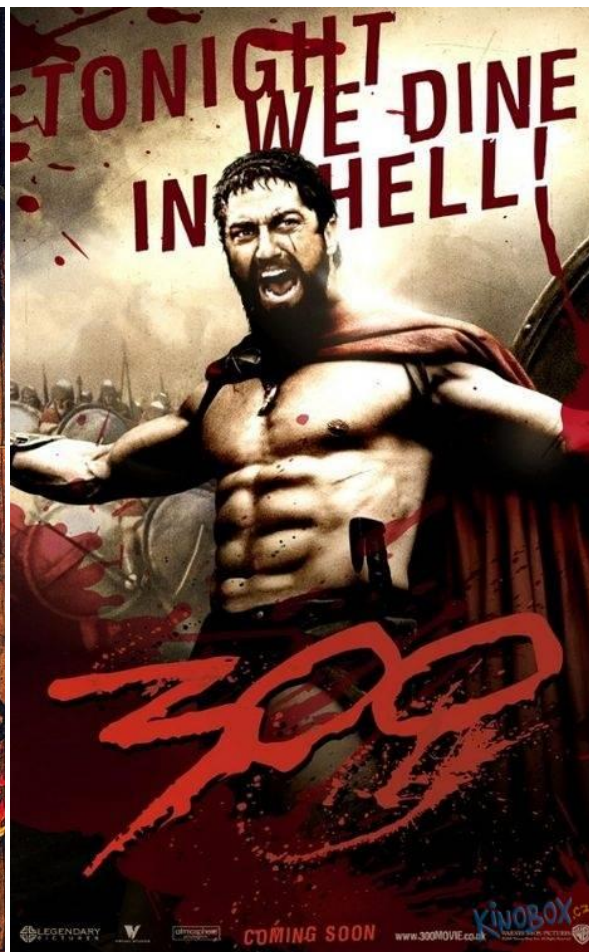
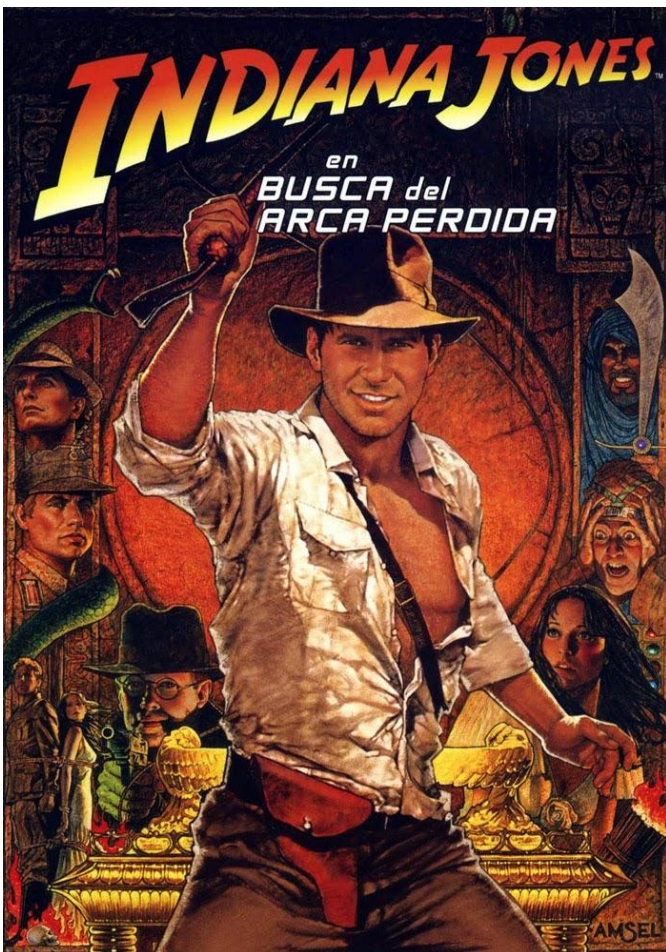
4. Algunos consejos finales

adaptarse

resistir en red

cambiar

sonreir



4. Algunos consejos finales



Muchas gracias!

zabala
INNOVATION

Deusto
Business School
Universidad de Deusto



[@guillerdorrn](https://www.linkedin.com/in/guillerdorrn)



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