# OPORTUNIDADES DE I+D EN COMPUTACIÓN EN LAS EMPRESAS ESPAÑOLAS

Victor Canivell

"Fronteras de la Computación"


22 Julio 2011

# La óptica empresarial


Courtesy – wordle.net

# Prioridades actuales

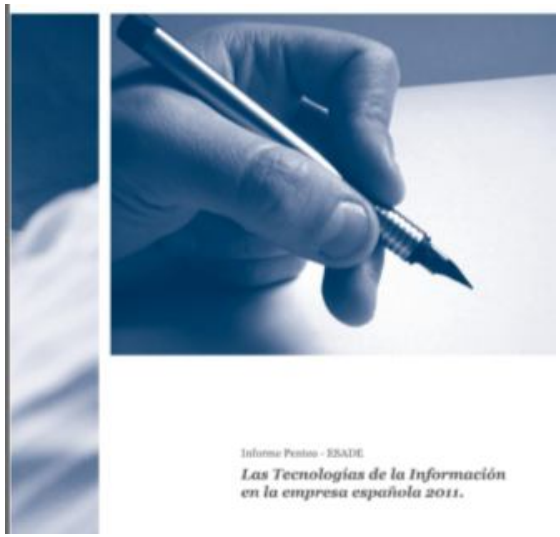



**Tabla 5.1** Comparación de la visión de los proveedores y los CIO sobre las iniciativas TIC a corto plazo de las empresas españolas

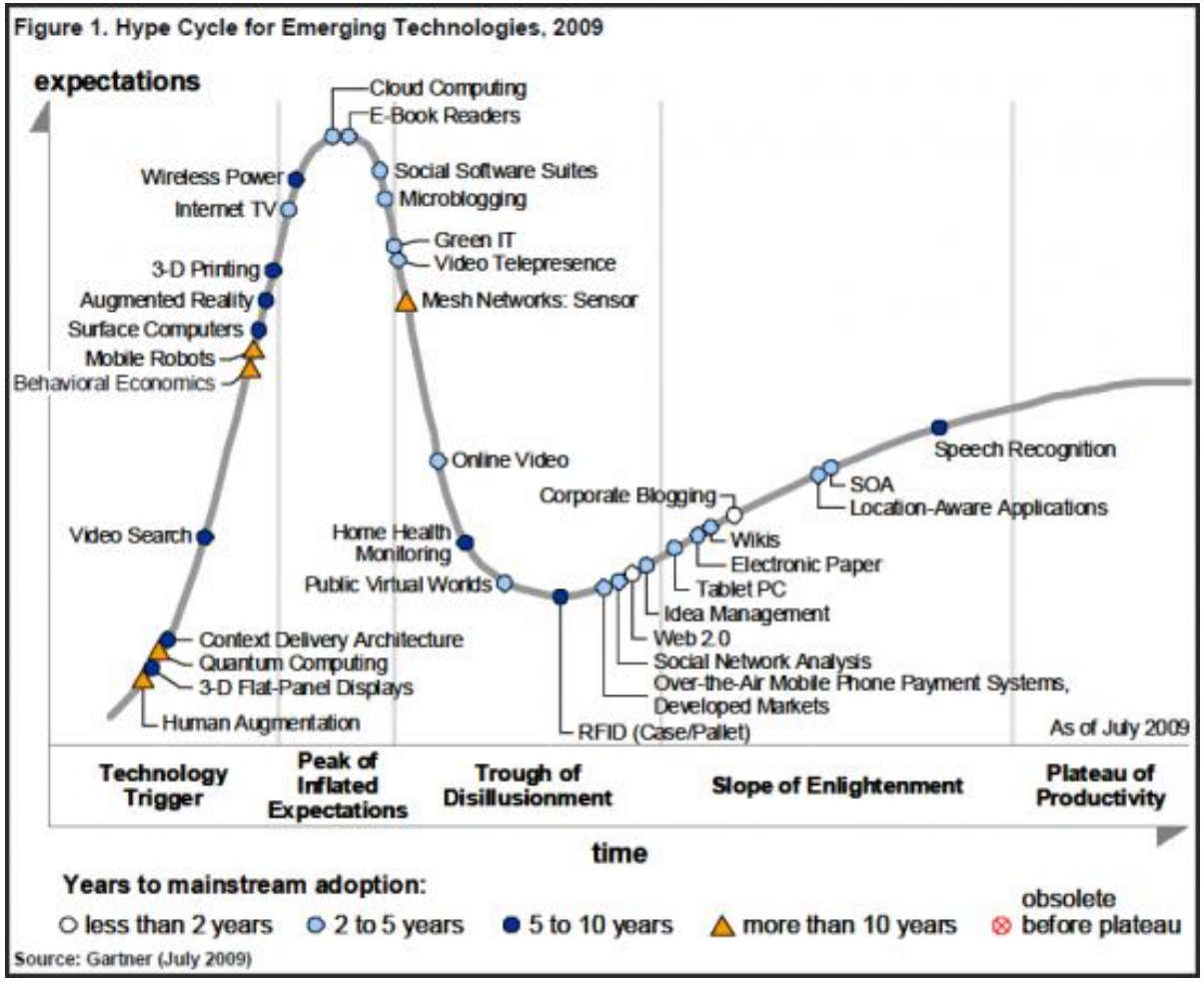
| Prioridad | PROVEEDORES | CIOs |
|---|---|---|
| 1 | Business Intelligence | Business Intelligence |
| 2 | Seguridad | Seguridad |
| 3 | Outsourcing | CRM |
| 4 | CLOUD Computing | Gobierno TIC |
| 5 | Movilidad | Desktop |
| 6 | Gobierno TIC | Consolidar |
| 7 | Virtualización | Cloud Computing |
| 8 | Consolidación | Reorganización |
| 9 | CRM | Redes Sociales |
| 10 | Redes Sociales | Software as a Service |

Informe ESADE - PENTEO
Las Tecnologías de la Información en la Empresa Española 2011

Informes
Junio 2011

# Lo que viene

Gartner



# Dónde trabajar & por qué

**TIPO DE I&D**

Básica > 3+ años
Producto TIC < 18 meses
Uso de las TIC

UPC

SAFELAYER

Telefónica
TELEFÓNICA INVESTIGACIÓN Y DESARROLLO


Universidad de Zaragoza

**TIPO DE ORGANIZACIÓN**

Académica > publicaciones
Empresarial > ventas

accenture

**UBICACIONES**

Nacional (2%)
Internacional

# El 35% de investigadores en empresas

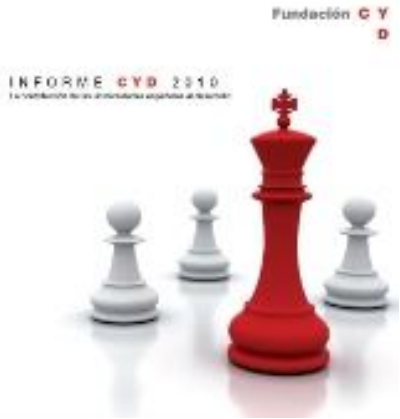
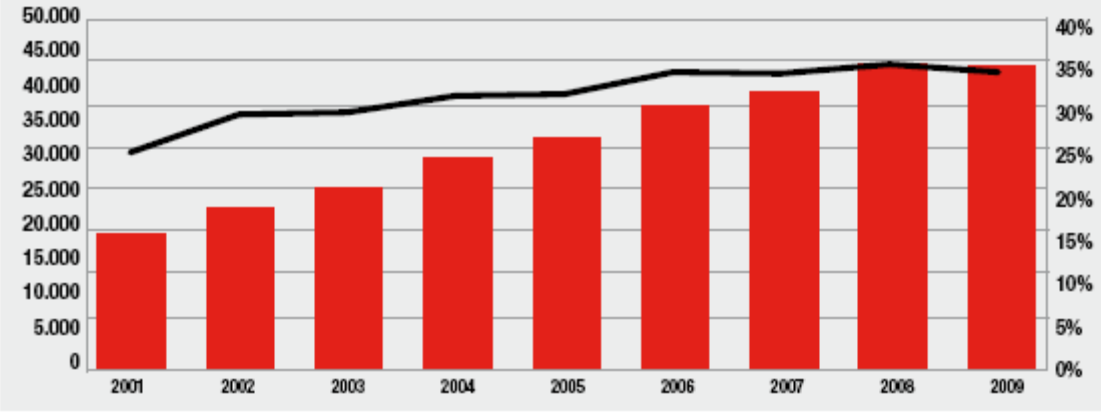
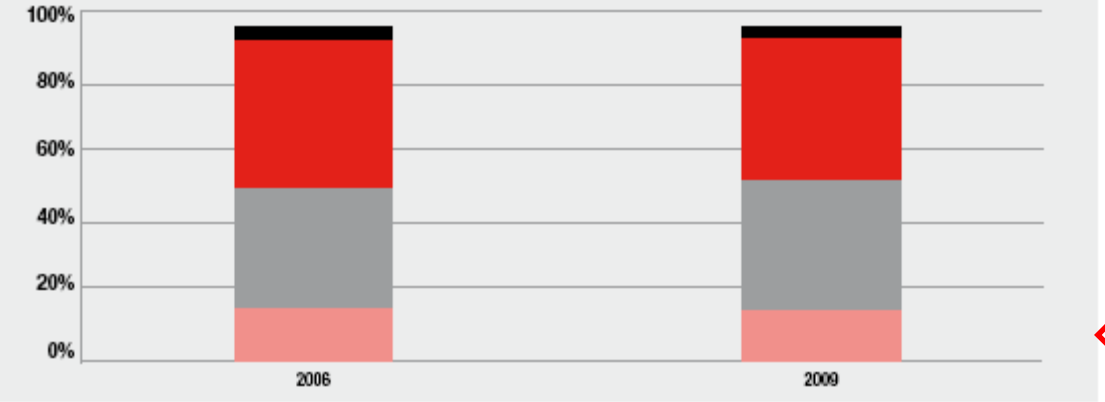



**Gráfico 35. Número de investigadores empleados en el sector privado y porcentaje sobre el total de investigadores en España. Periodo 2001-2009**




*Fuente: Encuesta de actividades sobre I+D. INE.*

**Gráfico 36. Distribución porcentual de los doctores en España según el sector en que se hallaban empleados. Años 2006 y 2009**




*Fuente: Encuesta sobre recursos humanos en ciencia y tecnología. INE. Años 2006 y 2009.*

# Agenda

1. ¿Qué empresas, y por qué, hacen I&D?
   La competitividad, la innovación y la I&D
2. Época de grandes cambios
3. El mundo de las start-ups

# 1. Las empresas y la I+D

- Competitividad, innovación e I+D
- Las TIC y la innovación
- Rankings y el caso español

# ¿Qué buscan las empresas?

Las empresas buscan
generar valor económico  añadido*
ofertando al mercado productos y servicios
que responden a necesidades reales y/o latentes
de sus clientes

* “Añadido” :

más allá de la suma del uso de sus recursos y
de sus contribuciones fiscales y de responsabilidad social,

con un punto de equilibrio del aprox 10%

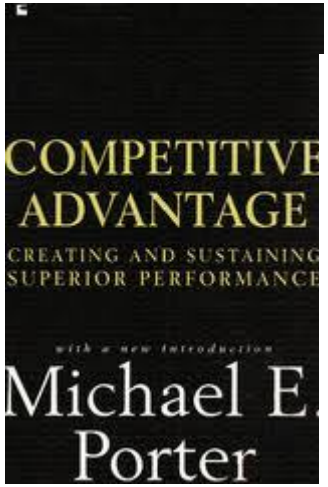
# Valor añadido & ventaja competitiva

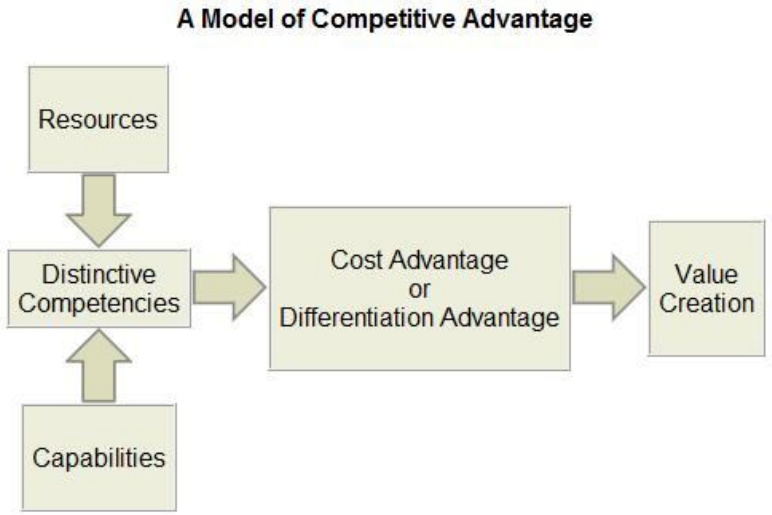
El valor añadido se fundamenta en disponer de ventajas competitivas sostenibles

# Dos estrategias de ventaja competitiva

Estrategias de diferenciación:

- menores costes/ más eficiencia
- nuevos productos/ más eficacia

# La innovación empresarial

Desarrolla nuevas formas
de responder a las necesidades de los clientes
aportando valor económico

COMPETITIVIDAD > DIFERENCIACION > INNOVACION > I&D

# Definición de la innovación empresarial

La introducción
de un producto (bien o servicio)
o de un proceso,
nuevo o significativamente mejorado,
o la introducción
de un método de comercialización o de organización nuevo,
aplicado
a las prácticas de negocio,
a la organización del trabajo
o a las relaciones externas

(OCDE y CM, 2007, 49)

# Objetos de innovación

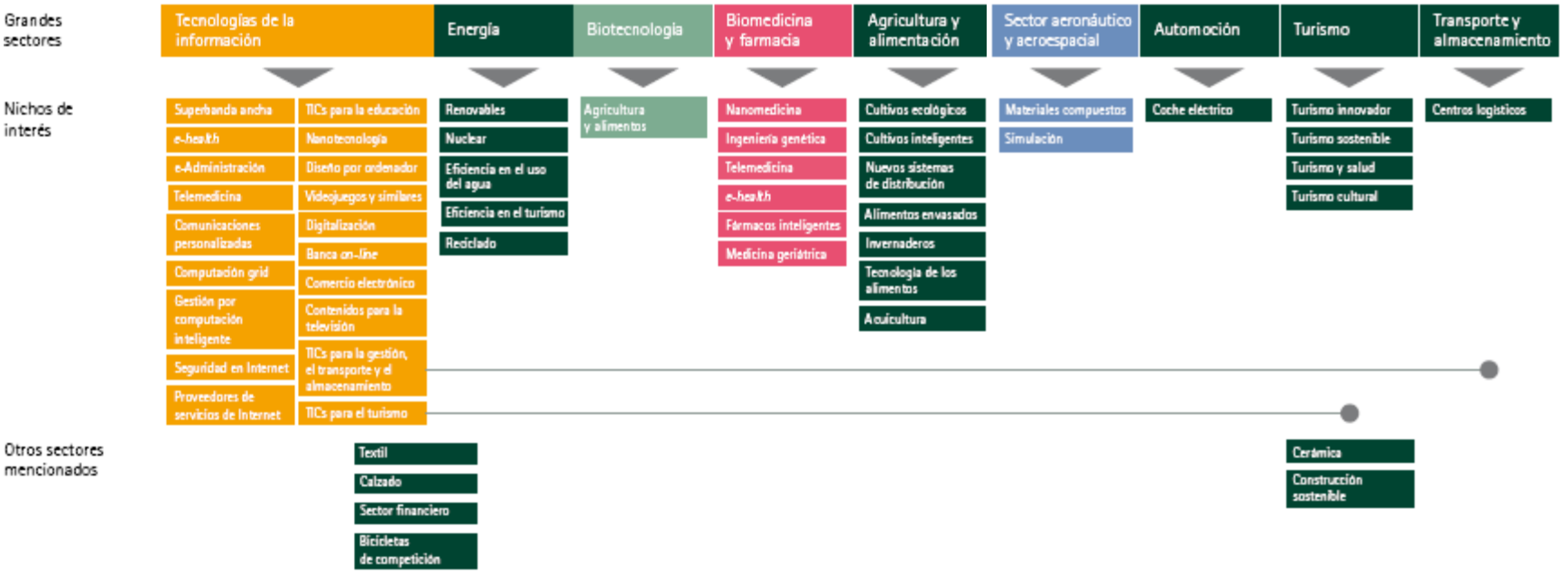
- Productos y servicios a ofrecer al cliente
  - Market Pull:
    producir lo que se vende
  - Tecnology Push:
    vender lo que se produce


- Procesos internos en la cadena de valor
  - Procesos de negocio
  - Organización
  - Infraestructuras

# Sectores con potencial innovador

## Cómo: con más cualificación y más TIC

Gráfico 2
Principales sectores y subsectores con potencial innovador




A efectos de simplificar el análisis y partiendo de la clasificación de la OCDE (2005), se distinguen solo dos tipos de sectores o áreas de actividad: los de alto contenido tecnológico y los de medio o bajo contenido tecnológico (áreas en verde oscuro). Los primeros son áreas también denominadas «de tecnología punta», mientras que los segundos reciben el nombre de «sectores tradicionales».

# TIC & innovación

## La era de los ingenieros o cómo Facebook es un competidor para el BBVA

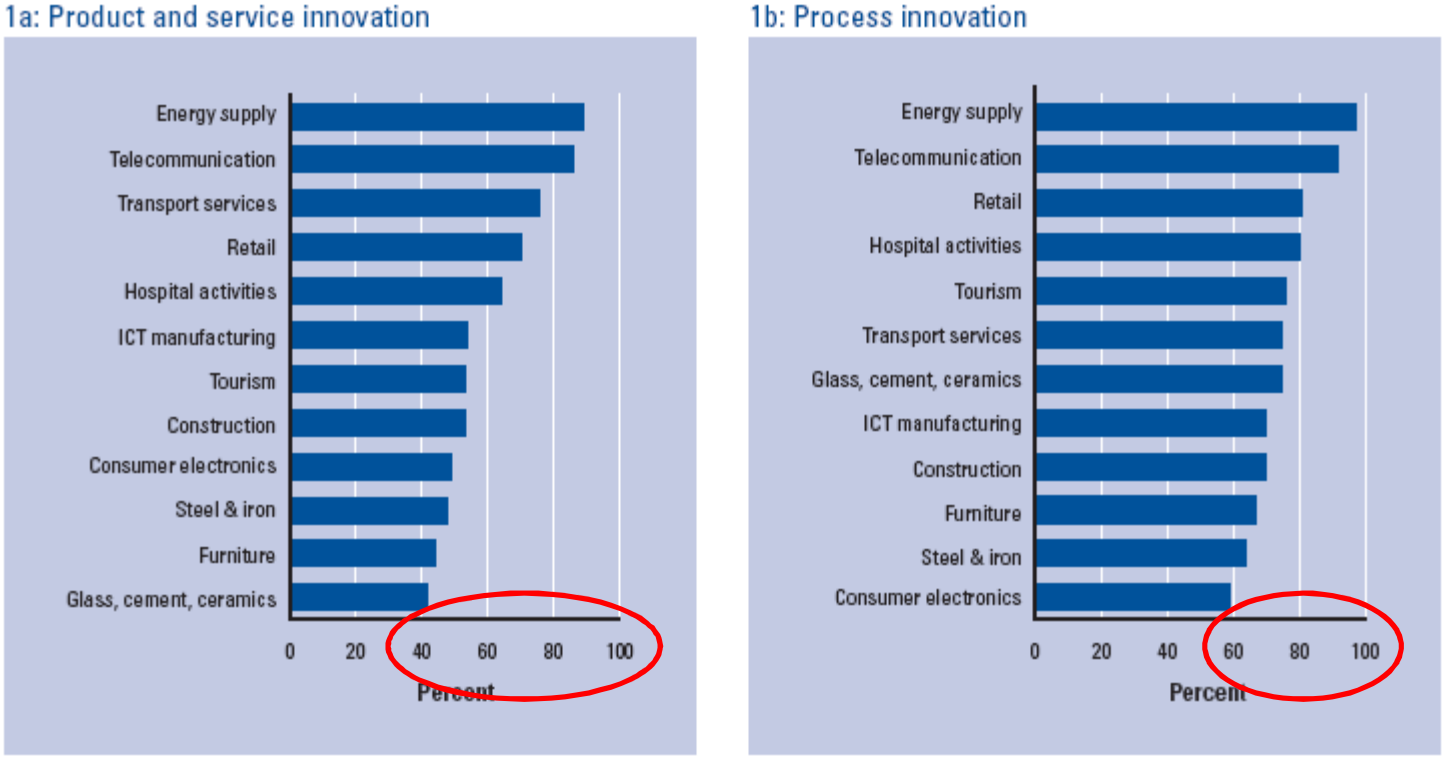
**7 julio 2011** - 17:59 - Autor: Luz Fernández


**Facebook es un competidor más peligroso para el BBVA que cualquier banco del mundo**. Así lo cree su presidente **Francisco González**, que ha hecho estas confesiones a un grupo de periodistas reunidos con el director del **MIT Media Lab** Joichi Ito con motivo de la inauguración oficial del Centro de Innovación del BBVA.

# Influencia de las TIC en la innovación

1.3: Building Communities around Digital Highways

**Figure 1: The role of ICT in innovation by industry, 2006–09**

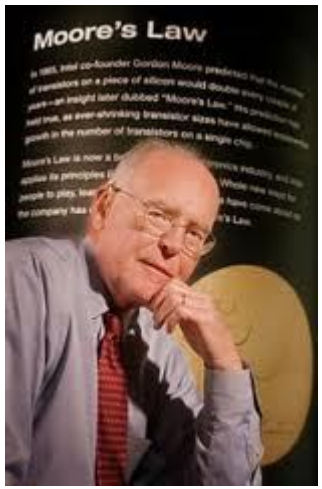



Source: e-Business W@tch, 2010.
Note: The percentage is of the product and process innovation that is enabled by ICT in each sector. The methodology and metrics to assess both innovation and ICT contribution are defined by the e-Business W@tch study.

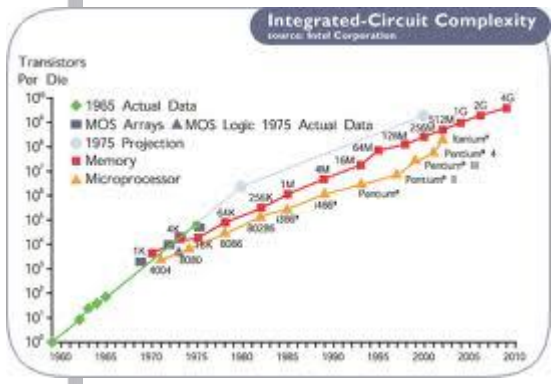
# Impacto de las TIC

- Ha automatizado y cambiado los procesos de negocio en todos los sectores
  - ERP, CRM, email, web
  - CAD-CAM-CAE, diseño, JIT, BPM, BI
- Ha cambiado la estructura de varios sectores
  - Generación, manipulación, producción y distribución de contenidos digitales
  - Prensa, libros, música, fotografía, cine, TV, software
  - Telecomunicaciones

# La Ley de Moore




| 2000 | 2010 |
|---|---|
|  |  |
| Height: 381mm | Height: 115.2mm |
| Width: 381mm | Width: 58.6mm |
| Depth: 435mm | Depth: 9.3mm |
| Weight: 15,800g | Weight: 137g |
| Price: £1,500 | Price: £599 |
| CPU: 500MHz | CPU: 1GHz |
| RAM: 128MB | RAM: 512MB |
| Display: 1024 x 768 | Display: 960 x 640 |
| Storage: 30GB | Storage: 32GB |



# Las TIC = un nuevo sector





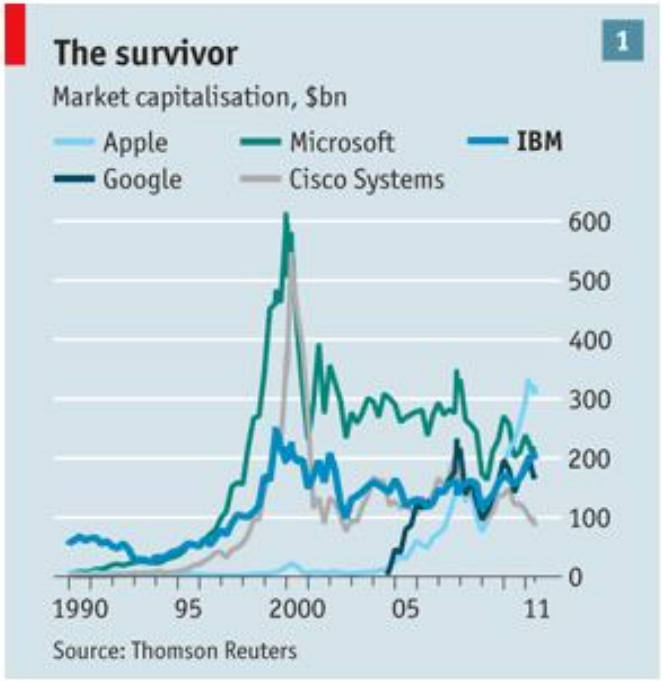


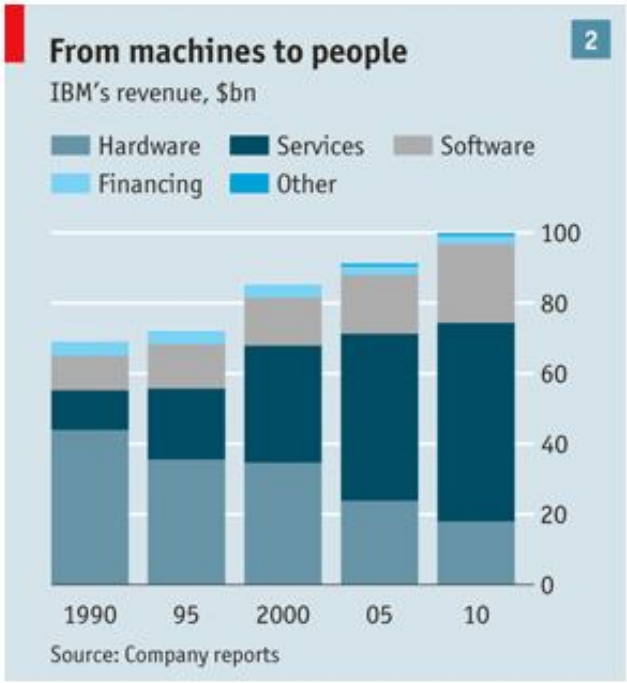






# El centenario de IBM



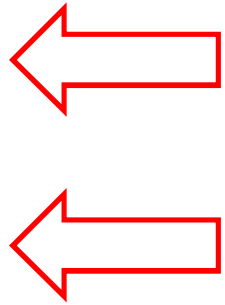
# Un sector de peso

Publicly traded companies

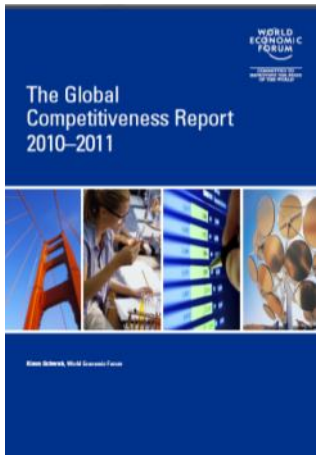
**2010**

This Financial Times Global 500 based list is up to date as of December 31, 2010. Indicated changes in market value are relative to the previous quarter.

| Rank | First quarter[1] | Second quarter[2] | Third quarter[3] | Fourth quarter[4] |
|---|---|---|---|---|
| 1 | PetroChina ▼329,259.7 | Exxon Mobil ▼291,789.1 | Exxon Mobil ▲314,622.5 | Exxon Mobil ▲368,711.5 |
| 2 | Exxon Mobil ▼316,230.8 | PetroChina ▼288,504.8 | PetroChina ▲270,889.9 | PetroChina ▲303,273.6 |
| 3 | Microsoft ▼256,864.7 | Apple Inc. ▲228,876.8 | Apple Inc. ▲259,223.4 | Apple Inc. ▲295,886.3 |
| 4 | Industrial and Commercial Bank of China ▼246,419.8 | Industrial and Commercial Bank of China ▼211,258.7 | Petrobras ▲220,616.5 | BHP Billiton ▲243,540.3 |
| 5 | Apple Inc. ▲213,096.7 | Microsoft ▲201,655.8 | Industrial and Commercial Bank of China ▲213,364.1 | Microsoft ▲238,784.5 |
| 6 | BHP Billiton ▲209,935.1 | China Mobile ▲201,471.2 | Microsoft ▲210,676.4 | Industrial and Commercial Bank of China ▲233,369.1 |
| 7 | Wal-mart ▲209,000.7 | Berkshire Hathaway ▼197,356.8 | China Mobile ▲205,339.6 | Petrobras ▲229,066.6 |
| 8 | Berkshire Hathaway ▲200,620.5 | China Construction Bank ▲189,170.7 | Berkshire Hathaway ▲204,792.0 | China Construction Bank ▲222,245.1 |
| 9 | General Electric ▲194,246.2 | Wal-mart ▼178,322.7 | China Construction Bank ▲202,998.4 | Royal Dutch Shell ▲208,593.7 |
| 10 | China Mobile ▲192,998.6 | Procter & Gamble 172,736.5 | BHP Billiton ▲196,866.0 | Nestlé ▲203,534.3 |



# ¿Quién es competitivo?

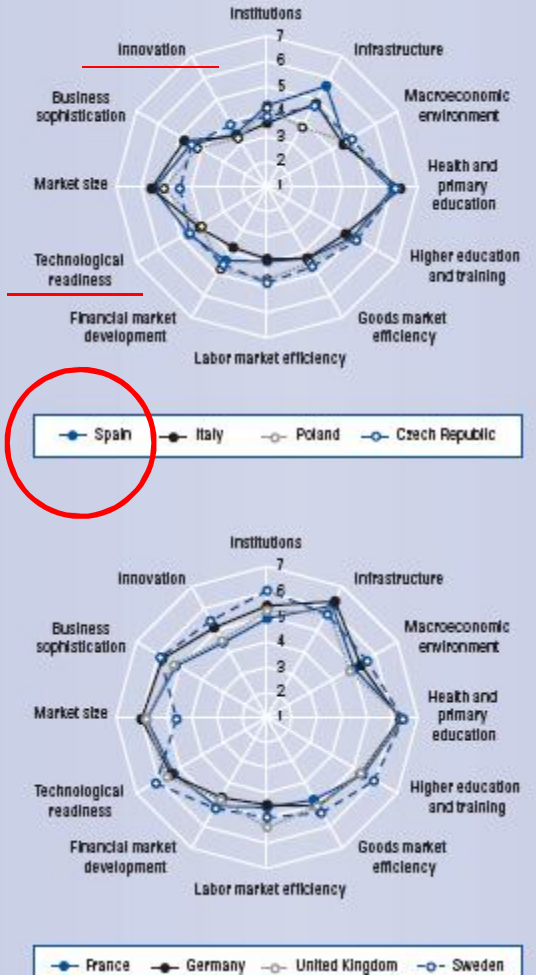



Fuente: WEF

**Table 1: Rankings of the EU27 in the Global Competitiveness Index 2010–2011**

| Economy | Rank | Score |
|---|---|---|
| Sweden | 2 | 5.56 |
| Germany | 5 | 5.39 |
| Finland | 7 | 5.37 |
| Netherlands | 8 | 5.33 |
| Denmark | 9 | 5.32 |
| United Kingdom | 12 | 5.25 |
| France | 15 | 5.13 |
| Austria | 18 | 5.09 |
| Belgium | 19 | 5.07 |
| Luxembourg | 20 | 5.05 |
| Ireland | 29 | 4.74 |
| Estonia | 33 | 4.61 |
| Czech Republic | 36 | 4.57 |
| Poland | 39 | 4.51 |
| Cyprus | 40 | 4.50 |
| Spain | 42 | 4.49 |
| Slovenia | 45 | 4.42 |
| Portugal | 46 | 4.38 |
| Lithuania | 47 | 4.38 |
| Italy | 48 | 4.37 |
| Malta | 50 | 4.34 |
| Hungary | 52 | 4.33 |
| Slovak Republic | 60 | 4.25 |
| Romania | 67 | 4.16 |
| Latvia | 70 | 4.14 |
| Bulgaria | 71 | 4.13 |
| Greece | 83 | 3.99 |

**Figure 1: Comparative performance of selected EU countries**

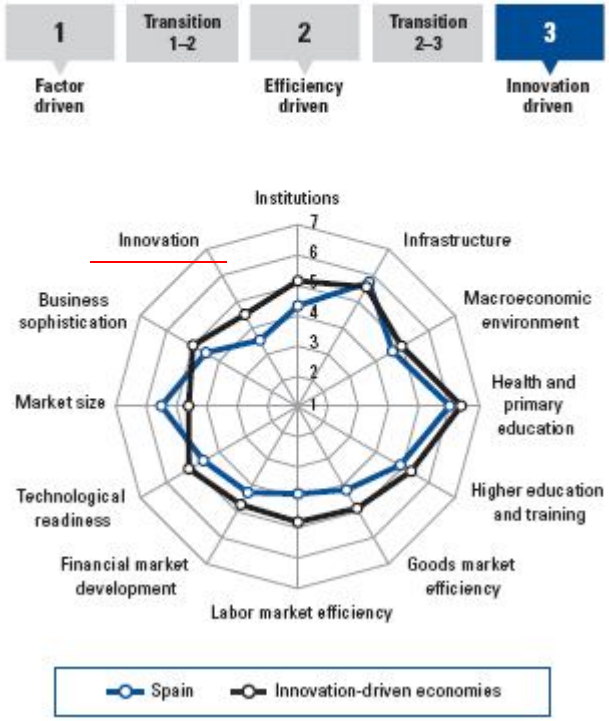


# España = 42º GCI... y 9º GDP (!)

## Global Competitiveness Index

| | Rank (out of 139) | Score (1–7) |
|---|---|---|
| **GCI 2010–2011** | **42** | **4.5** |
| GCI 2009–2010 (out of 133) | 33 | 4.6 |
| GCI 2008–2009 (out of 134) | 29 | 4.7 |
| **Basic requirements** | **38** | **5.1** |
| 1st pillar: Institutions | 53 | 4.3 |
| 2nd pillar: Infrastructure | 14 | 5.7 |
| 3rd pillar: Macroeconomic environment | 66 | 4.6 |
| 4th pillar: Health and primary education | 49 | 6.0 |
| **Efficiency enhancers** | **32** | **4.6** |
| 5th pillar: Higher education and training | 31 | 4.9 |
| 6th pillar: Goods market efficiency | 62 | 4.2 |
| 7th pillar: Labor market efficiency | 115 | 3.9 |
| 8th pillar: Financial market development | 56 | 4.3 |
| 9th pillar: Technological readiness | 30 | 4.6 |
| 10th pillar: Market size | 13 | 5.5 |
| **Innovation and sophistication factors** | **41** | **4.0** |
| 11th pillar: Business sophistication | 35 | 4.5 |
| 12th pillar: Innovation | 46 | 3.5 |

**Stage of development**



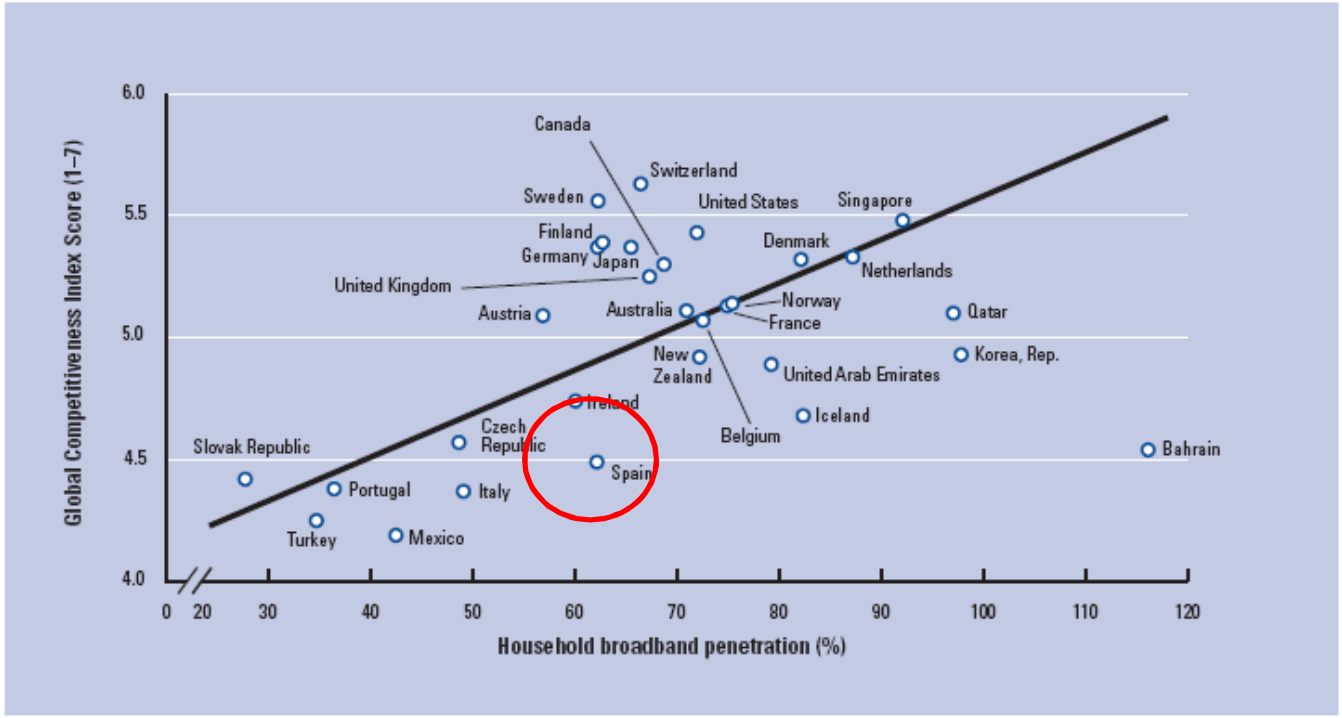
# Competitividad & ancho de banda

**NEGATIVO**:
Hogares con acceso a internet a la cola en UE 59%
vs 70% de media & 90% NL, L, S

"eEspaña 2011" Fund. Orange

1.3: Building Communities around Digital Highways

**Figure 3: Competitiveness vs. broadband penetration, 2010**




Sources: World Economic Forum, 2010; ITU, 2010; Booz & Company analysis.
Note: *Competitiveness* is defined by the World Economic Forum as the set of institutions, policies, and factors that determine the level of productivity of a country.

**POSITIVO**: Acceso móvil a internet 3G = 20% (nº 3 en UE, vs 10% media)

"eEspaña 2011" Fund. Orange

# Costes

INCLUYENDO EL COSTE DE LÍNEA

## El precio de la banda ancha en España es el más alto de los países de la OCDE

Directorio Japón España Reino Unido Turquía

Deja tu comentario

COMPARTE ESTA NOTICIA

tweet 28 menea tuenti +1 0

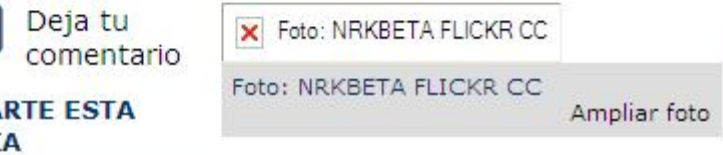


Foto: NRKBETA FLICKR CC

Foto: NRKBETA FLICKR CC Ampliar foto

MADRID, 27 Jun. (EUROPA PRESS) -

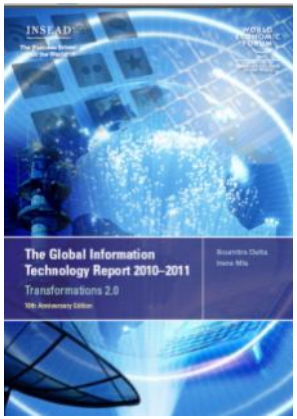
Los precios de la banda ancha en España son los más altos de los países de la OCDE si se incluye el coste de línea y los séptimos más caros sin tener en cuenta esta carga, según consta en el último estudio de "Perspectivas de la Comunicación" de la OCDE.

En concreto, la oferta más barata (entry price) de banda ancha en España asciende a 28,29 dólares (19,91 euros), sin la cuota de línea, y a 44,48 dólares (31,3 euros) incluyendo este coste.

De esta forma, España encabeza, junto a Chile, Corea y Nueva Zelanda, el ranking de países más caros en lo que a banda ancha se refiere, con precios que rebasan hasta en 30,96 dólares (21,79 euros) el precio más bajo 13,52 dólares (9,51 euros) que se cobra por estos servicios en Estonia.

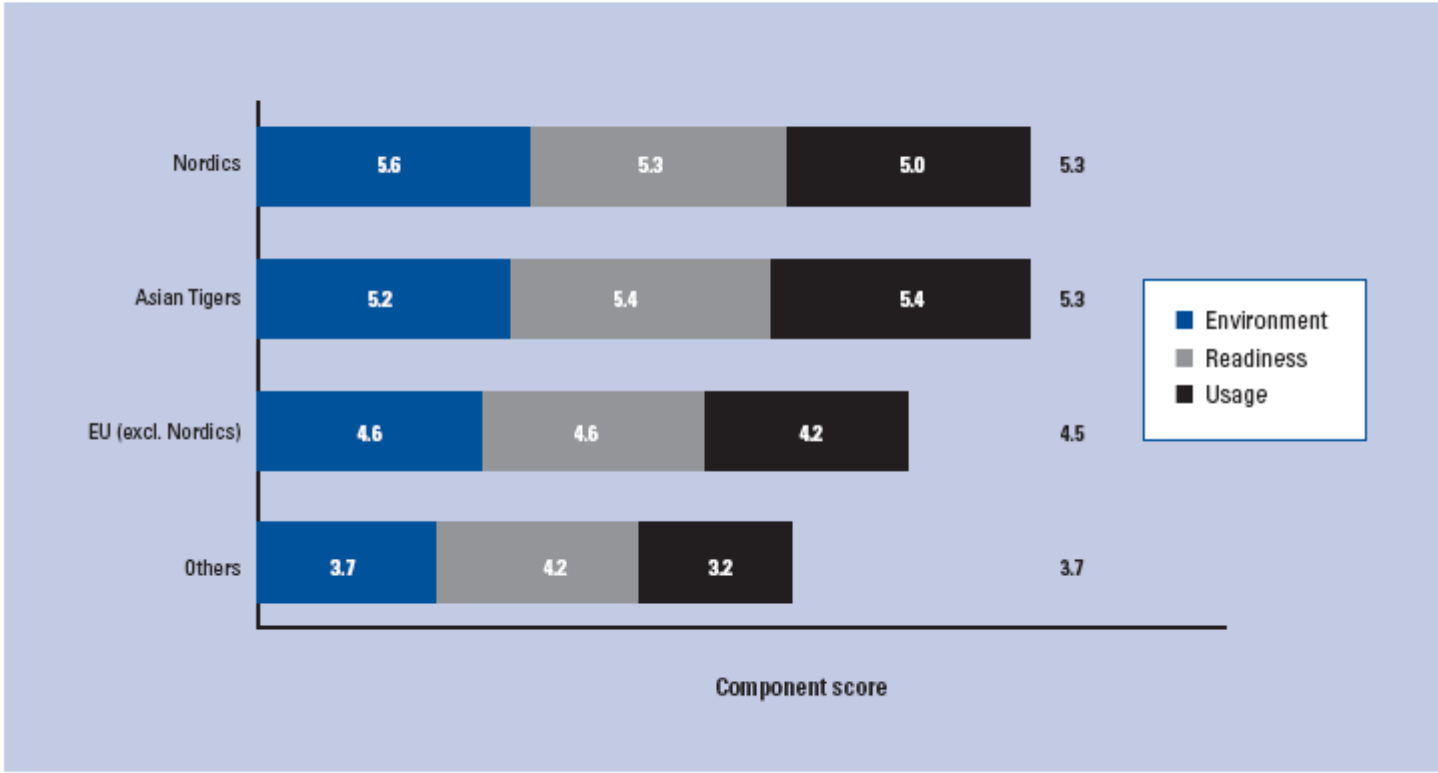
Así, además de Estonia, Turquía, con un precio de 14,31 dólares (10,07 euros), Eslovenia, con 14,5 dólares (10,2 euros) y Japón, con 14,82 dólares (10,43 euros) son los países con los precios más asequibles

# Network Readiness Index




1.1: The Networked Readiness Index 2010–2011

**Figure 3: Average NRI score for selected country groups**




Note: The contribution of each component to the overall NRI is depicted by the length of each respective solid bar. The number at the end of each bar is the overall NRI score. *Nordics* comprise Denmark, Finland, Iceland, Norway, and Sweden; *Asian Tigers* refers to Hong Kong, Korea, Singapore, and Taiwan. *EU (excl. Nordics)* corresponds to the EU27 less Denmark, Finland, and Sweden. *Others* refers to all other economies covered by the study.

Fuente:
WEF + INSEAD

# España = 37º NRI



## Spain

### Key indicators

| | |
|---|---|
| Population (millions), 2009 | 45.8 |
| GDP (PPP) per capita (PPP $), 2009 | 29,625 |
| GDP (US$ billions), 2009 | 1,467.9 |
| Global Competitiveness Index 2010–2011 rank (out of 139) | 42 |

### Networked Readiness Index

| Edition (No. of economies) | Score | Rank |
|---|---|---|
| **2010–2011 (138)** | **4.3** | **37** |
| 2009–2010 (133) | 4.4 | 34 |
| 2008–2009 (134) | 4.5 | 34 |
| 2007–2008 (127) | 4.5 | 31 |
| 2006–2007 (122) | 4.4 | 32 |

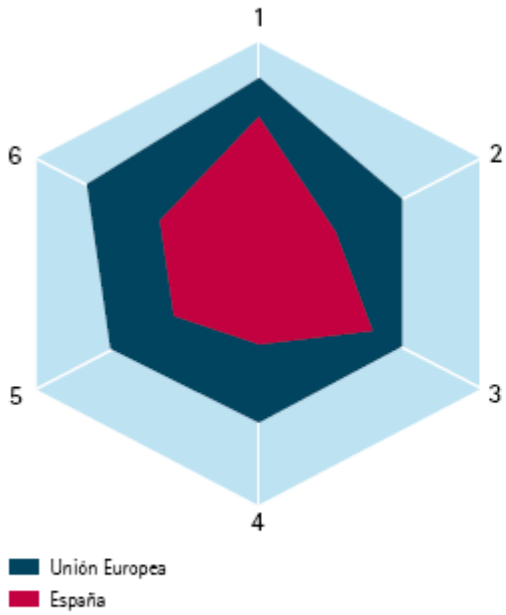
| **Environment component** | **4.5** | **37** |
|---|---|---|
| **Market environment** | **4.3** | **49** |
| 1.01 Venture capital availability* | 2.6 | 58 |
| 1.02 Financial market sophistication* | 5.7 | 24 |
| 1.03 Availability of latest technologies* | 5.8 | 32 |
| 1.04 State of cluster development* | 4.1 | 36 |
| 1.05 Burden of government regulation* | 2.8 | 109 |
| 1.06 Extent & effect of taxation* | 3.0 | 111 |
| 1.07 Total tax rate, % profits | 56.5 | 114 |
| 1.08 No. days to start a business | 47 | 116 |

| **Readiness component** | **4.2** | **70** |
|---|---|---|
| **Individual readiness** | **4.2** | **109** |
| 4.01 Quality of math & science education* | 3.1 | 113 |
| 4.02 Quality of educational system* | 3.1 | 106 |
| 4.03 Adult literacy rate, % | 97.6 | 52 |
| 4.04 Residential phone installation (PPP $) | 137.8 | 110 |
| 4.05 Residential monthly phone subscription (PPP $) | 23.1 | 116 |
| 4.06 Fixed phone tariffs (PPP $) | 0.21 | 92 |
| 4.07 Mobile cellular tariffs (PPP $) | 0.83 | 123 |
| 4.08 Fixed broadband Internet tariffs (PPP $) | 28.3 | 40 |
| 4.09 Buyer sophistication* | 3.8 | 47 |
| **Business readiness** | **4.6** | **31** |
| 5.01 Extent of staff training* | 3.7 | 68 |
| 5.02 Quality of management schools* | 5.6 | 8 |
| 5.03 Company spending on R&D* | 3.2 | 47 |
| 5.04 University-industry collaboration in R&D* | 4.0 | 46 |
| 5.05 Business phone installation (PPP $) | 98.2 | 72 |
| 5.06 Business monthly phone subscription (PPP $) | 23.1 | 95 |
| 5.07 Local supplier quality* | 5.2 | 26 |
| 5.08 Computer, communications, & other services imports, % services imports | 52.5 | 11 |
| **Government readiness** | **3.7** | **93** |
| 6.01 Gov't prioritization of ICT* | 4.2 | 100 |
| 6.02 Gov't procurement of advanced tech.* | 3.4 | 67 |
| 6.03 Importance of ICT to gov't vision* | 3.6 | 96 |

| **Usage component** | **4.4** | **28** |
|---|---|---|
| **Individual usage** | **4.8** | **32** |
| 7.01 Mobile phone subscriptions/100 pop. | 113.8 | 44 |
| 7.02 Cellular subscriptions w/data, % total | 45.2 | 15 |

# Innovación: España y la UE


Gráfico 1
La situación española




Nota: los seis primeros puntos reflejan la comparativa España-Unión Europea (gráfico); los cuatro restantes hacen referencia exclusivamente a España.

1. El 74 % de la población española se gradúa en educación secundaria, frente al 85 % en la Unión Europea.

2. El 68 % de las personas de entre 18 y 24 años que terminan la educación secundaria continúa estudiando, frente al 83 % en la Unión Europea.

3. El 54 % de las personas ha accedido a Internet al menos una vez por semana, frente al 64 % en la Unión Europea.

4. El 16 % de las personas ha comprado bienes o servicios para uso privado en Internet, frente al 33 % en la Unión Europea.

5. El gasto empresarial en I+D representa en España el 0,71 % del PIB, frente al 1,25 % en la Unión Europea.

6. El 6,1 % de las empresas españolas lanza al mercado productos nuevos o significativamente mejorados, frente al 12,7 % en la Unión Europea.

7. Solo el 9,6 % de la población española manifiesta tener interés por la ciencia y la tecnología. Entre aquellos que tienen educación universitaria, el porcentaje se eleva al 17 %.

8. España es el 6.º país con más trabas a la actividad empresarial, de los 19 que analiza el Banco Mundial.

9. España ocupa el 12.º lugar en nivel de cooperación para la innovación, de los 14 países que estudia la Unión Europea.

10. En España hay unas 12.000 empresas que hacen I+D y unas 42.000 que innovan.

# Innovación: ranking EIU


## How the Economist Intelligence Unit ranks countries

To rank countries, the Economist Intelligence Unit distinguishes between "innovation output" (performance) and "innovation inputs" (enablers).

**Innovation output** is measured by the sum of patents granted by three major government patent offices: the European Patent Office (EPO), the Japanese Patent Office (JPO) and the US Patent and Trademark Office (USPTO). The data are averaged over four-year periods, and normalised as number of patents per million to create an index on a 1-10 scale. The 2007 index is based on data from the 2002-05 period; the 2009 index uses data from 2004 to 2007.

**Innovation inputs** include both direct drivers and the broad economic, social and political context, or innovation environment. They are based on the scores from the Economist Intelligence Unit's Business Environment Ranking (BER) model averaged over five-year periods: 2002-06 for the original ranking and 2004-08 for the update.

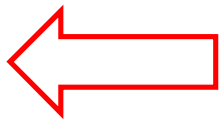
The five-year forecasts (2007-11 and 2009-13, respectively) are based on the BER model. The model itself is based on historical conditions and expectations of conditions over the next five years. (For a detailed description of the methodology used in developing the ranking and the Economist Intelligence Unit's BER model that underlies our forecasts, please go to www.eiu.com/sponsor/cisco/innovationindex09).

**Innovation inputs**

| *Direct innovation inputs (0.75 weight)* | *Innovation environment (0.25 weight)* |
|---|---|
| Research and development (R&D) as % of gross domestic product (GDP) | Political environment |
| Quality of local research infrastructure | Market opportunities |
| Education of workforce | Policy towards free enterprise and competition |
| Technical skills of workforce | Policy towards foreign investment |
| Quality of information technology (IT) and communications infrastructure | Foreign trade and exchange controls |
| Broadband penetration | Taxes |
| | Financing |
| | The labour market |
| | Infrastructure |

# España = 26º

| 2009–2013 | Innovation performance | | | | Innovation enablers | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Expected innovation performance index | Rank | Growth expected during the next 5 years (%) | Expected change in rank | Expected direct inputs index | Rank | Expected innovation environment index | Rank | Expected aggregate innovation enablers index | Rank |
| Japan | 10.00 | 1 | 0.0 | 0 | 9.94 | 9 | 6.97 | 28 | 9.20 | 11 |
| Switzerland | 9.70 | 2 | -0.2 | 0 | 10.00 | 1 | 8.28 | 7 | 9.57 | 4 |
| Finland | 9.53 | 3 | 0.3 | 0 | 10.00 | 1 | 8.52 | 3 | 9.63 | 1 |
| USA | 9.44 | 5 | -0.6 | -1 | 10.00 | 1 | 7.86 | 14 | 9.47 | 6 |
| Sweden | 9.42 | 7 | -0.2 | -2 | 10.00 | 1 | 8.41 | 6 | 9.60 | 3 |
| Germany | 9.49 | 4 | 1.0 | 2 | 10.00 | 1 | 8.25 | 8 | 9.56 | 5 |
| Taiwan | 9.44 | 6 | 0.7 | 1 | 9.63 | 10 | 7.34 | 21 | 9.05 | 14 |
| Netherlands | 9.16 | 9 | -0.1 | -1 | 9.63 | 10 | 8.22 | 10 | 9.27 | 8 |
| Israel | 9.20 | 8 | 0.8 | 1 | 10.00 | 1 | 6.93 | 31 | 9.23 | 9 |
| Denmark | 9.06 | 10 | -0.2 | 0 | 10.00 | 1 | 8.44 | 4 | 9.61 | 2 |
| South Korea | 9.05 | 11 | 1.2 | 0 | 9.50 | 13 | 6.73 | 35 | 8.81 | 17 |
| Austria | 8.98 | 12 | 0.6 | 0 | 9.19 | 18 | 7.39 | 20 | 8.74 | 19 |
| France | 8.96 | 13 | 0.9 | 0 | 10.00 | 1 | 7.66 | 17 | 9.42 | 7 |
| Canada | 8.83 | 15 | -0.4 | -1 | 9.50 | 13 | 8.10 | 11 | 9.15 | 12 |
| Belgium | 8.89 | 14 | 1.2 | 1 | 9.25 | 15 | 7.73 | 16 | 8.87 | 16 |
| Singapore | 8.75 | 16 | -0.1 | 0 | 8.88 | 19 | 8.43 | 5 | 8.76 | 18 |
| Norway | 8.75 | 17 | 0.2 | 0 | 8.88 | 19 | 7.82 | 15 | 8.61 | 20 |
| UK | 8.58 | 19 | -1.6 | -1 | 9.25 | 15 | 7.93 | 13 | 8.92 | 15 |
| Ireland | 8.57 | 20 | 0.9 | -1 | 9.25 | 15 | 8.74 | 1 | 9.12 | 13 |
| Australia | 8.61 | 18 | 1.4 | 2 | 9.63 | 10 | 8.05 | 12 | 9.23 | 10 |
| Hong Kong | 8.46 | 22 | 0.2 | -1 | 8.06 | 23 | 8.57 | 2 | 8.19 | 22 |
| Italy | 8.46 | 21 | 0.3 | 1 | 7.94 | 26 | 6.31 | 45 | 7.53 | 28 |
| New Zealand | 8.40 | 23 | 2.0 | 0 | 8.44 | 21 | 8.22 | 9 | 8.38 | 21 |
| Slovenia | 7.80 | 24 | 0.9 | 0 | 8.25 | 22 | 6.58 | 37 | 7.83 | 24 |
| Cyprus | 7.72 | 25 | 1.4 | 0 | 6.13 | 43 | 7.21 | 23 | 6.40 | 38 |
| Spain | 7.50 | 26 | -0.1 | 0 | 8.00 | 24 | 7.28 | 22 | 7.82 | 25 |
| Hungary | 7.28 | 27 | 1.5 | 0 | 7.81 | 28 | 6.86 | 33 | 7.57 | 27 |
| Czech Republic | 6.79 | 31 | -1.0 | -3 | 7.94 | 26 | 6.98 | 26 | 7.70 | 26 |
| Croatia | 7.16 | 28 | 5.1 | 1 | 6.75 | 32 | 6.07 | 54 | 6.58 | 34 |
| Estonia | 6.82 | 30 | 0.9 | 0 | 8.00 | 24 | 7.64 | 18 | 7.91 | 23 |
| Malaysia | 6.57 | 35 | -1.9 | -4 | 6.38 | 37 | 6.22 | 48 | 6.34 | 40 |
| Greece | 6.75 | 33 | 1.7 | -1 | 6.00 | 45 | 6.26 | 46 | 6.06 | 45 |
| Portugal | 6.79 | 32 | 2.9 | 1 | 7.25 | 29 | 6.98 | 27 | 7.18 | 30 |
| South Africa | 6.94 | 29 | 5.5 | 5 | 5.94 | 47 | 6.39 | 44 | 6.05 | 48 |
| Costa Rica | 6.69 | 34 | 5.4 | 1 | 6.19 | 42 | 6.94 | 30 | 6.37 | 39 |
| Slovakia | 6.19 | 38 | 0.3 | -2 | 7.19 | 31 | 7.20 | 24 | 7.19 | 29 |
| Kuwait | 6.25 | 36 | 1.6 | 1 | 4.81 | 60 | 6.15 | 52 | 5.15 | 58 |
| Lithuania | 6.14 | 40 | 1.1 | -2 | 6.63 | 35 | 6.50 | 40 | 6.59 | 33 |
| Russia | 6.14 | 39 | 1.9 | 0 | 7.25 | 29 | 4.74 | 69 | 6.62 | 32 |
| UAE | 6.07 | 44 | 1.7 | -4 | 6.06 | 44 | 6.79 | 34 | 6.25 | 42 |
| Argentina | 6.08 | 42 | 2.0 | -1 | 6.31 | 40 | 5.86 | 58 | 6.20 | 44 |



# I&D empresarial: España y la UE

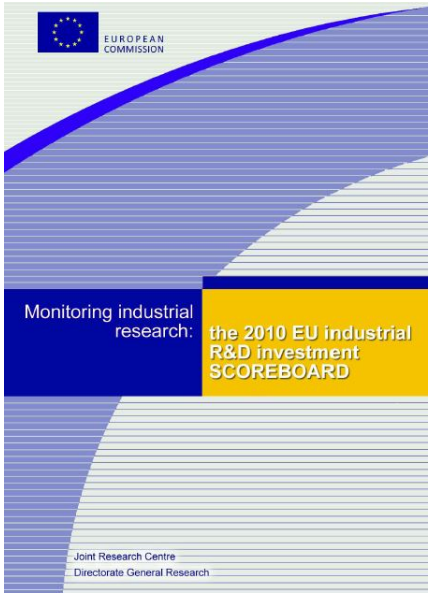



**Table 11. R&D trends of companies based in the top 10 EU Member States***

| Country | No. of companies | R&D Share within EU | One year growth, % | CAGR 3 yr, % |
|---|---|---|---|---|
| Germany | 206 (209) | 33.8 | -3.2 | 3.1 |
| France | 116 (125) | 18.9 | -4.3 | 2.1 |
| UK | 246 (247) | 15.4 | -0.6 | 6.3 |
| The Netherlands | 52 (53) | 7.3 | -3.3 | 1.2 |
| Sweden | 76 (70) | 5.0 | -6.6 | 4.0 |
| Italy | 53 (57) | 4.9 | -2.2 | 7.4 |
| Finland | 56 (58) | 4.9 | -6.0 | 8.5 |
| Denmark | 46 (47) | 2.9 | 1.8 | 11.1 |
| Spain | 27 (21) | 2.2 | 15.4 | 16.3 |
| Belgium | 40 (39) | 1.8 | -5.2 | 3.3 |
| **Total EU-10** | **918** (926) | **97.2** | **-2.9** | **4.1** |

* Figures of the 2009 *Scoreboard* in brackets.

*Source: The 2010 EU Industrial R&D Investment Scoreboard. European Commission, JRC/DG RTD.*

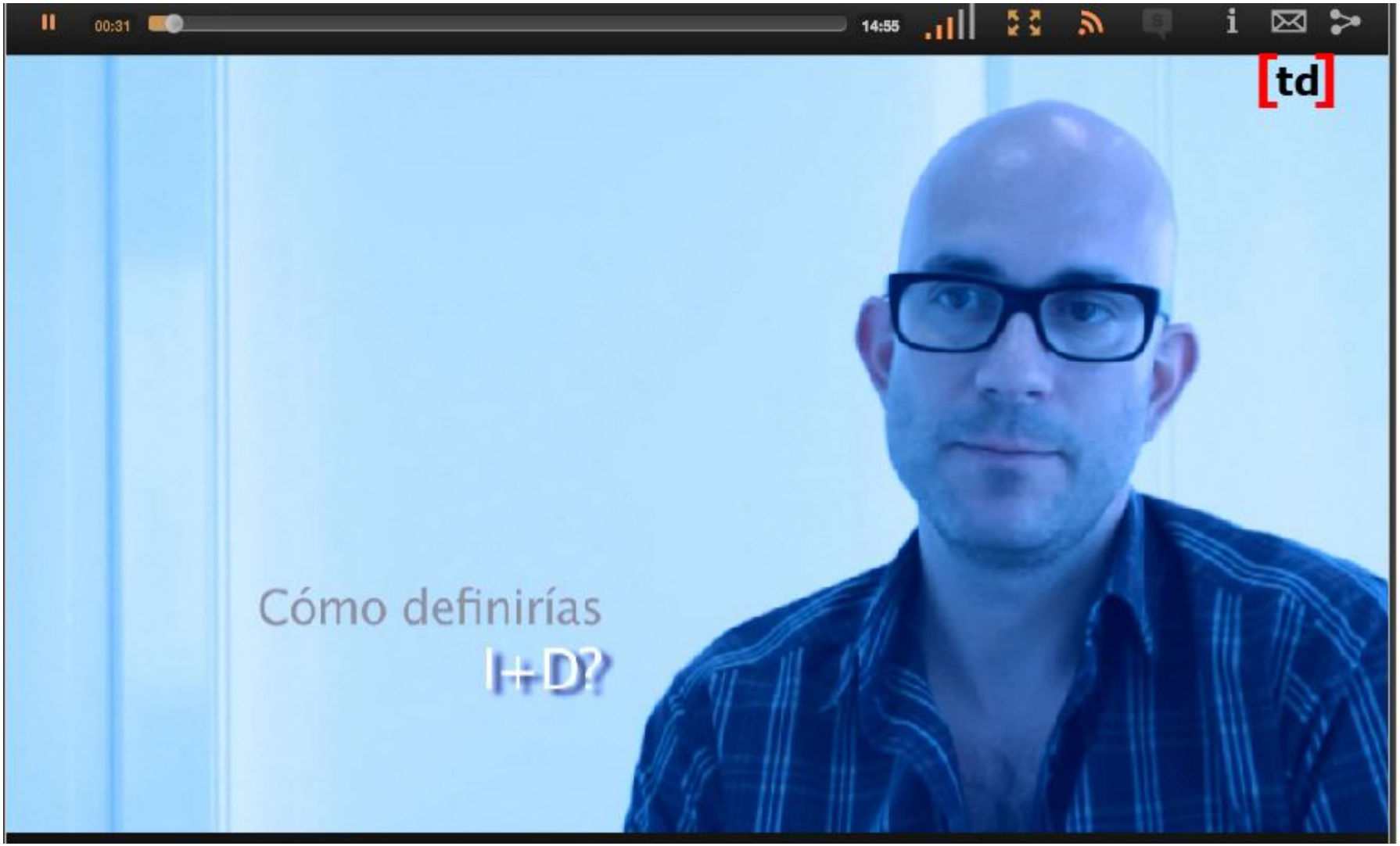
# Empresas Españolas en el Top-1k I&D UE

| Nº | Empresa | M€ | I+D/Ventas |
|---|---|---|---|
| 31 | SANTANDER | 856 | 2.1% |
| 34 | TELEFONICA | 777 | 1.4% |
| 103 | INDRA | 175 | 7.9% |
| 141 | ALMIRALL | 133 | 14.4% |
| 184 | ACCIONA | 92 | 1.2% |
| 187 | IBERDROLA | 90 | 0.4% |
| 189 | ABENGOA | 89 | 2.2% |
| 222 | REPSOL | 75 | 2.2% |
| 233 | FAGOR | 69 | 4.9% |
| 274 | ZELTIA | 54 | 43.9% |
| 284 | ITP | 50 | 10.3% |
| 314 | GAMESA | 41 | 1.3% |
| 324 | ACS | 40 | 0.2% |
| 462 | OBRASCON | 21 | 0.5% |
| 629 | AMPER | 12 | 4.4% |
| 636 | CAF | 12 | 1.0% |
| 715 | EBRO PULEVA | 9 | 0.4% |
| 717 | LABS ROVI | 9 | 6.8% |
| 754 | Corp IBV | 8 | 0.8% |
| 773 | GRIFOLS | 8 | 0.9% |
| 823 | FAES FARMA | 7 | 3.6% |
| 823 | REE | 7 | 0.6% |
| 866 | CIE AUTOM'VE | 6 | 0.5% |
| 923 | PESCANOVA | 5 | 0.4% |
| 961 | ERCROS | 5 | 0.8% |
| 987 | NIC. CORREA | 4 | 9.3% |

Fuente: EC Scorecard

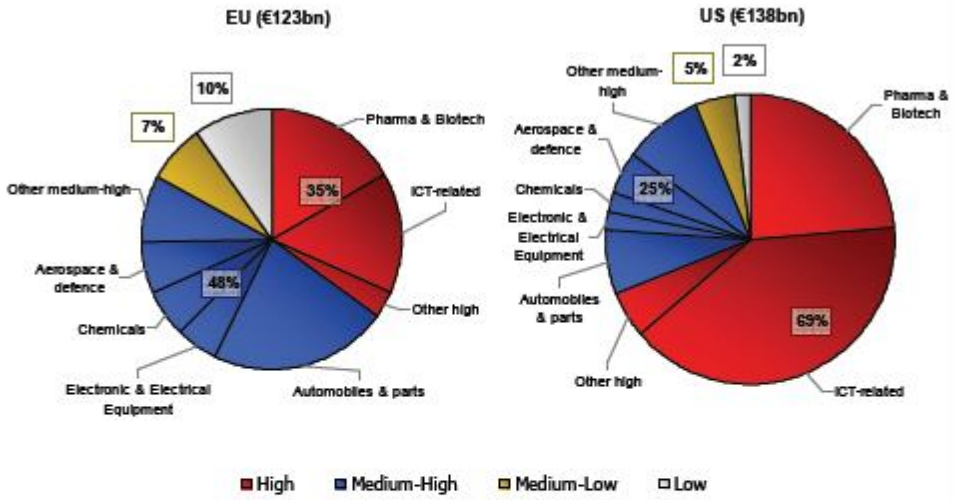
# Telefónica I&D: CarlosDomingo Consejero Delegado

http://www.tertuliadigital.tv/#



# I&D empresarial: UE vs EEUU

**Figure S4. R&D investment shares by sector group**




Sectors are split into four groups according to the R&D intensity of the sector worldwide:

**High R&D intensity** sectors (intensity above 5%) include e.g. Pharmaceuticals & biotechnology; Health care equipment & services; Technology hardware & equipment; Software & computer services.

**Medium-high R&D intensity** sectors (between 2% and 5%) include e.g. Electronics & electrical equipment; Automobiles & parts; Aerospace & defence; Industrial engineering & machinery; Chemicals; Personal goods; Household goods; General industrials; Support services.

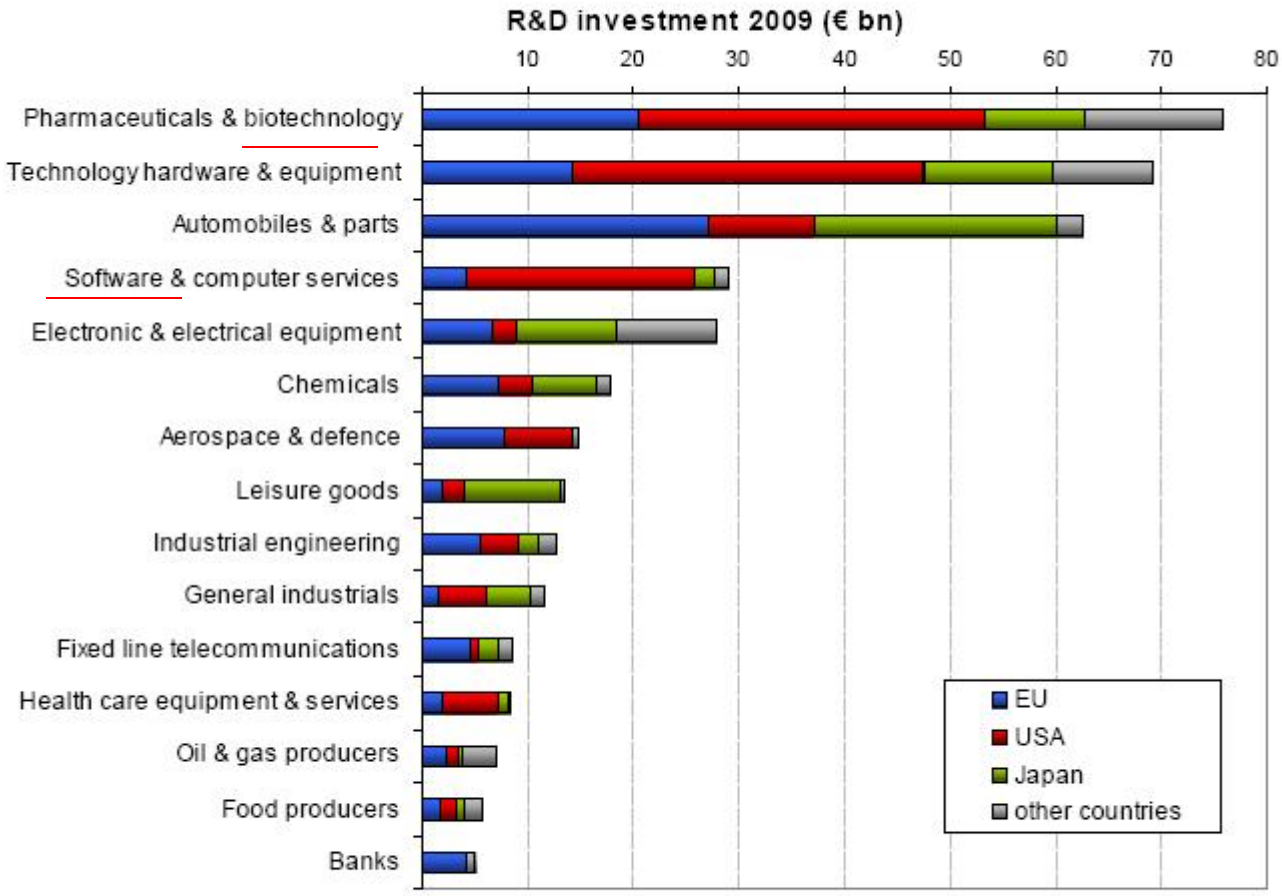
**Medium-low R&D intensity** sectors (between 1% and 2%) include e.g. Food producers; Beverages; Travel & leisure; Media; Oil equipment; Electricity; Fixed line telecommunications.

**Low R&D intensity** sectors (less than 1%) include e.g. Oil & gas producers; Industrial metals; Construction & materials; Food & drug retailers; Transportation; Mining; Tobacco; Multi-utilities.

*Source: The 2010 EU Industrial R&D Investment Scoreboard*
*European Commission, JRC/DG RTD.*

# I&D empresarial por sectores

**Figure 3. R&D ranking of industrial sectors and share of main world regions for the world's top 1400 companies in the 2010 *Scoreboard***

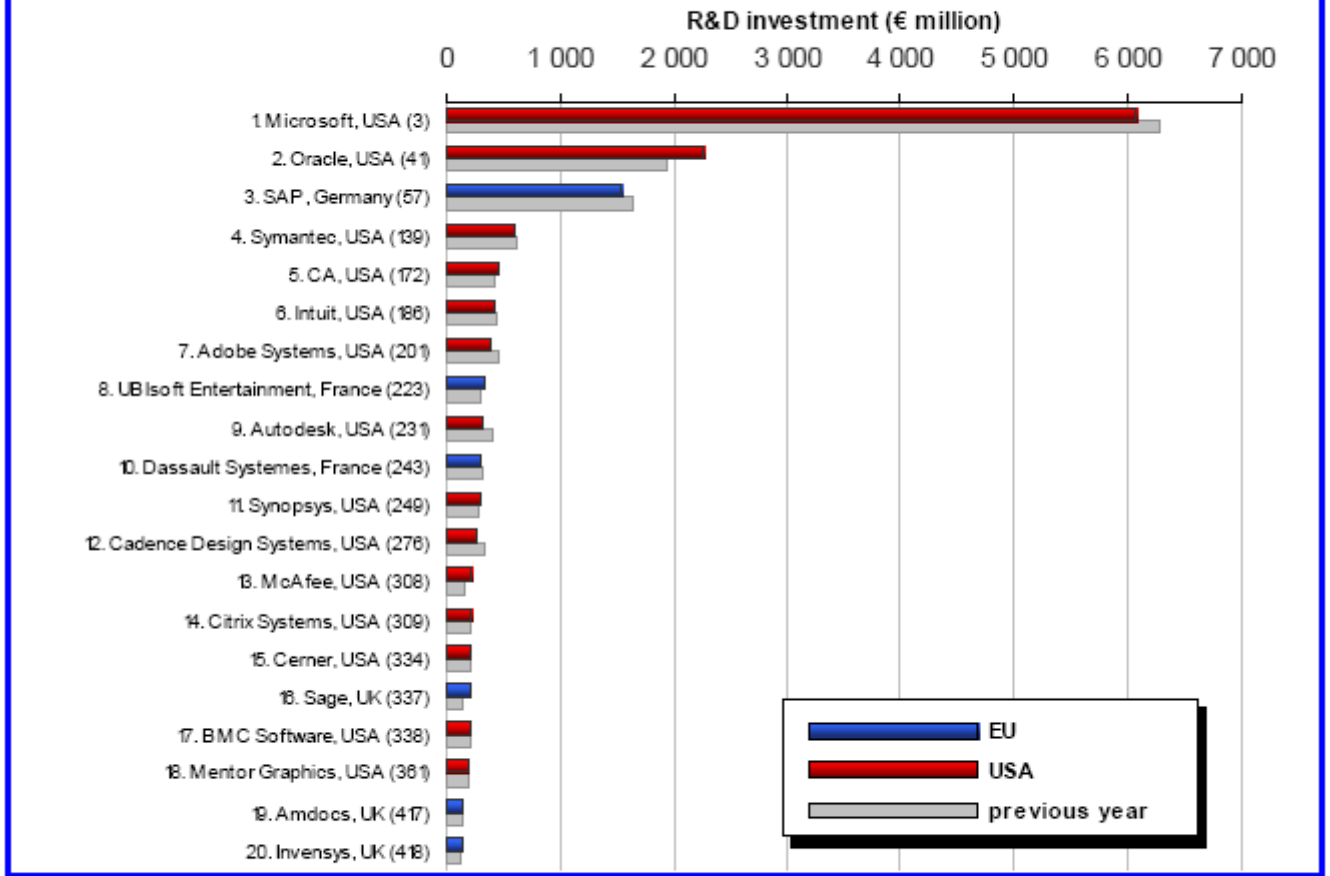



*Note:* *Ranked by total worldwide R&D investment of the sector.*

*Source:* *The 2010 EU Industrial R&D Investment Scoreboard*
*European Commission, JRC/DG RTD.*

# I&D: empresas de software

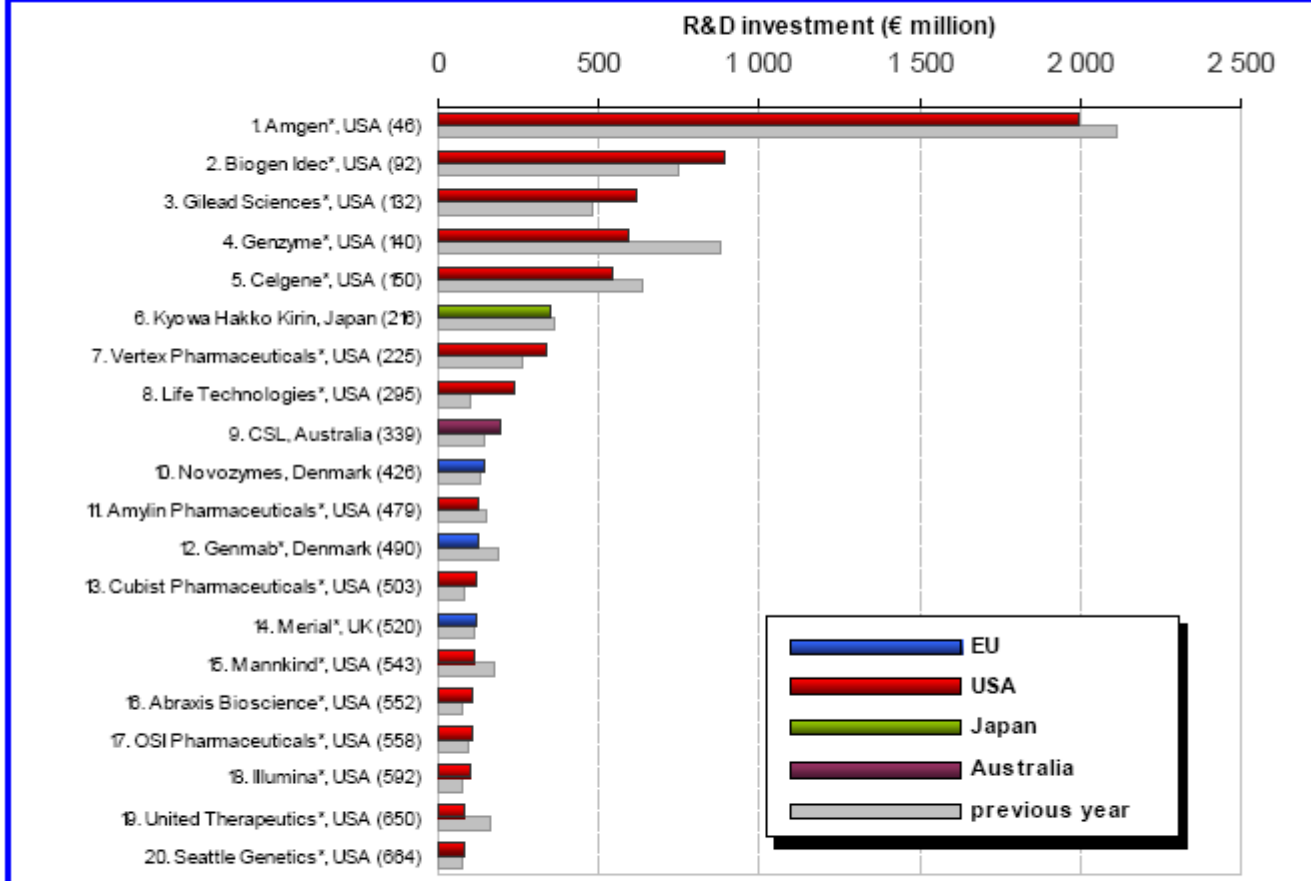
**Figure 6. Ranking of the top 20 R&D companies in the software sector by their total R&D investment in the 2010 *Scoreboard***




*Note: The number in brackets after the names of the companies indicate the position in the general Scoreboard ranking. Sector groups as in figure S3 of the Summary. For companies with data available for the whole period.*
*Source: The 2010 EU Industrial R&D Investment Scoreboard*
*European Commission, JRC/DG RTD.*

# I&D: empresas de biotech

**Figure 7. Ranking of the top 20 R&D companies in the biotechnology sector by their total R&D investment in the 2010 *Scoreboard***




*Note: The number in brackets after the names of the companies indicate the position in the general Scoreboard ranking. Sector groups as in figure S3 of the Summary. For companies with data available for the whole period.*
*Source: The 2010 EU Industrial R&D Investment Scoreboard*
*European Commission, JRC/DG RTD.*

# Las empresas jóvenes & I+D

**Table 14. Young firms and their presence by sector**

| Sector (ICB) | Number of firms | Share of young firms | R&D by young firms | R&D intensity of young firms | R&D intensity of old firms | Share of sector in total R&D |
|---|---|---|---|---|---|---|
| Internet | 7 | 100.0 | 100.0 | 13.3 | 0.0 | 0.8 |
| Biotechnology | 41 | 87.8 | 90.4 | 22.7 | 9.3 | 2.1 |
| Software | 53 | 90.6 | 89.3 | 14.8 | 12.7 | 4.5 |
| Food & drug retailers, & General retailers | 9 | 33.3 | 66.1 | 7.0 | 0.3 | 0.7 |
| Semiconductors | 78 | 69.2 | 50.4 | 17.6 | 16.4 | 5.9 |
| Telecom equipment | 37 | 70.3 | 45.2 | 13.3 | 12.4 | 6.2 |
| Travel & leisure | 10 | 50.0 | 44.8 | 1.6 | 13.4 | 0.3 |
| Computer hardware | 30 | 70.0 | 40.9 | 3.4 | 4.3 | 3.8 |
| Health care | 40 | 25.0 | 27.4 | 8.3 | 5.8 | 2.0 |
| Support services | 11 | 45.5 | 23.3 | 1.7 | 2.7 | 0.3 |
| **Total** | **1000** | **32.6** | **19.2** | **6.1** | **3.3** | **100.0** |
| Computer services | 14 | 57.1 | 17.4 | 9.3 | 5.2 | 1.8 |
| Leisure goods | 25 | 32.0 | 13.5 | 13.1 | 6.1 | 3.4 |
| Oil & gas | 31 | 9.7 | 12.9 | 0.7 | 0.5 | 2.2 |
| Electronics | 61 | 27.9 | 10.7 | 2.6 | 5.5 | 5.6 |
| Telecom services | 21 | 33.3 | 10.5 | 0.9 | 1.8 | 2.4 |
| Media | 8 | 25.0 | 7.2 | 2.4 | 2.8 | 0.6 |
| Industrial machinery | 46 | 8.7 | 6.9 | 4.1 | 2.8 | 1.3 |
| Electrical hardware | 25 | 24.0 | 6.6 | 5.1 | 4.3 | 2.7 |
| Construction & materials | 23 | 4.3 | 5.4 | 0.8 | 1.1 | 0.8 |
| Commercial vehicles | 17 | 11.8 | 5.0 | 3.3 | 3.8 | 1.6 |
| Other sectors | 74 | 12.2 | 4.7 | 3.3 | 1.2 | 3.5 |
| Personal goods | 13 | 7.7 | 4.7 | 3.2 | 2.6 | 0.6 |
| Pharmaceuticals | 71 | 28.2 | 3.9 | 15.5 | 15.5 | 17.0 |
| General industrials | 34 | 8.8 | 3.8 | 1.1 | 2.8 | 2.9 |
| Aerospace & defence | 33 | 18.2 | 2.9 | 5.2 | 4.0 | 3.8 |
| Chemicals | 69 | 7.2 | 2.7 | 0.9 | 3.8 | 4.4 |
| Automobiles & parts | 72 | 12.5 | 2.4 | 2.7 | 4.8 | 16.0 |
| Electricity | 13 | 0.0 | 0.0 | 0.0 | 0.7 | 0.6 |
| Food & Beverages | 27 | 0.0 | 0.0 | 0.0 | 1.7 | 1.8 |
| Gas, water & multiutilities | 7 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 |

*Source: The 2010 EU Industrial R&D Investment Scoreboard*

*European Commission, JRC/DG RTD.*

# Nuestro caso

- Del “que inventen ellos” de Unamuno, de los múltiples casos de cierre y/o de venta a empresas extranjeras…
- …a casos de éxito internacional

# De BuyVIP a Home24x7

EL PAÍS.com | Versión para imprimir

## Alice.com llega a España

La tienda de venta directa se instala en nuestro país de la mano de Home 24x7

ADRIÁN SEGOVIA - Madrid - 15/07/2011

No es un supermercado online, pero en Alice.com podrás hacer la compra por Internet ahorrando dinero, tras aprovechar ofertas especiales que reduzca precio del producto, y sin perder tiempo en desplazamientos, colas o atascos. ¿Cómo? Comprando directamente a las marcas. Así de sencillo. De alguna manera, las grandes productoras de bienes de gran consumo se unen para almacenar sus productos en un punto único y Alice.com hace posible que estas firmas te los vendan directamente. El fenómeno está siendo un éxito en Estados Unidos, con 700.000 cuentas de usuarios y unas tasa de repetición de co elevadas. Pero no solo, ya que son las propias marcas las que están viendo en este nuevo canal tres atractivos contundentes: desintermediación (llegan al consumidor directamente), aprendizaje (al estar en contacto con el cliente final, detectan sus intereses y pueden ajustar las mejores promociones en el pu de venta físico una vez contrastado su éxito en la red) y ventas (una nueva ventana de explotación y ganar dinero).

Alice.com se ha fusionado con la española Home 24x7 con miras a expandirse por Europa. Nacho Somalo, fundador y CEO de Home 24x7, asumirá la presidencia europea de Alice.com, que comenzará su expansión desde España. Algunas de las compañías que ya cuentan con una zona para ofrecer sus productos directamente al consumidor son General Mills, Bic, Kellogg's, Unilever, Johnson & Johnson, Bayer, LG y 3M.

La operación ha sido capitaneada por el propio Somalo y por el empresario Gustavo García Brusilovsky, fundador de BuyVip cuya compañía fue adquirid el gigante del comercio electrónico Amazon.com, por 70 millones de euros en octubre de 2010. Alice.com será la marca resultante de la fusión que ha co con una inversión de 5 millones de euros por parte de varios inversores, más otros 14 millones aportados por la empresa americana para acometer su presencia en Europa. "La empresa no solo generará trabajo directo, ya contamos con 20 empelados, sino que moverá muchísimo empleo indirecto, en distribución, logística, marketing", apunta el nuevo presidente europeo de Alice.com, Nacho Somalo.

# Grifols $3B$ merger

- MedCity News - http://www.medcitynews.com -

## Grifols and Talecris get FTC approval to merge

Posted By Frank Vinluan On June 1, 2011 @ 12:17 pm In Featured Story,MedCity News eNewsletter,Top Story | No Comments

[1]

Grifols [2] (MCE:GRF [3]) $4 billion acquisition of Talecris Biotherapeutics [4] (NASDAQ:TLCR [5]) now has the regulatory clearance to close.

Barcelona, Spain-based Grifols said Wednesday that the U.S. Federal Trade Commission has accepted a consent agreement [6] that outlines the conditions for merger of the blood therapeutics companies. Last month, the FTC and the companies reached a preliminary agreement that identified which assets the companies must sell in order to win the agency's blessing. Within 10 days of the sale, Research Triangle Park, North Carolina-based Talecris must divest to Italian biopharmaceutical company Kedrion [7] the Talecris fractionation facility in Melville, New York, as well as the Talecris hemophilia product Koate. The companies must also sell to Kedrion two Talecris plasma collection centers, one in Mobile, Alabama and the other in Winston-Salem, North Carolina.

The FTC had been concerned that a merger of two of the top companies in the specialized blood therapeutics space would hurt competition and lead to higher drug costs for patients [8]. The FTC raised antitrust concerns in 2009 when it blocked a proposed $3.1 billion acquisition of Talecris by CSL Ltd. [9], the No. 2 company in the blood therapeutics space behind Baxter International [10] (NYSE:BAX [11]). While Kedrion also develops plasma-derived therapies, it is a much smaller player in this space. The agreement with the FTC also calls for Grifols to enter into a contract manufacturing agreement that will support certain Kedrion products to be sold in the United States.

Grifols is now clear to close the transaction without any further FTC action and the company said it expects to complete the deal today or shortly thereafter. When the deal closes, the combined Grifols-Talecris will remain the No. 3 player in the blood therapeutics space, but it will be better positioned to compete against Baxter and CSL. Talecris gives Grifols a better presence in the U.S. market, as well as a slate of established blood therapy products.

# Liderazgo


Telefonica
O2


Telefonica
MoviStar
Beta Privada
tuenti


Telefonica


Sacyr


Banco Santander. Resultados 1º semestre de 2009
4.519 millones € de beneficio atribuido
LIDERANDO LA BANCA MUNDIAL
Santander


Gamesa

# Contribución de los centros de excelencia

cnio
Centro Nacional de Investigaciones Oncológicas

ICFO
The Institute of Photonic Sciences

tecnalia
Corporación Tecnológica

# Nuestros centros son de calidad

| Table 2. Output Indicators[22] | | | |
|---|---|---|---|
| | CSIC | CNRS | MPG |
| Publications ISI (2002-08) | 43,305 | 156,204 | 59,620 |
| Citations ISI (2002-08) | 442,590 | 1,540,966 | 947,874 |
| Citations per document ISI (2002-08) | 10.22 | 9.87 | 15.89 |
| H-Index ISI (2002-08) | 136 | 222 | 227 |
| High IF (2002-08) | 148 | 860 | 823 |
| Patents (2002-08) | 451 | 913 | 330 |
| Publications ISI (2008) | 7,925 | 27,020 | 9,191 |
| Citations ISI (2008) | 19,725 | 60,813 | 33,820 |
| High IF (2008) | 25 | 143 | 120 |
| Patents (2008) | 69 | 95 | 46 |
| Publications Scopus 2003-2007 | 34,828 | 120,269 | 43,118 |
| Citations per document Scopus 2003-2007 | 7.77 | 7.45 | 11.97 |

MENTOS CYD · 12/2010

# I+D académica: España vs UE

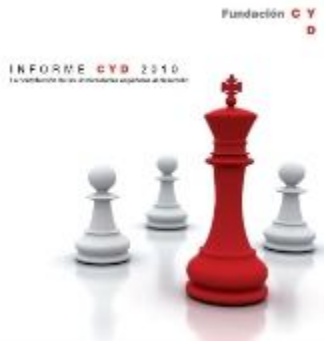
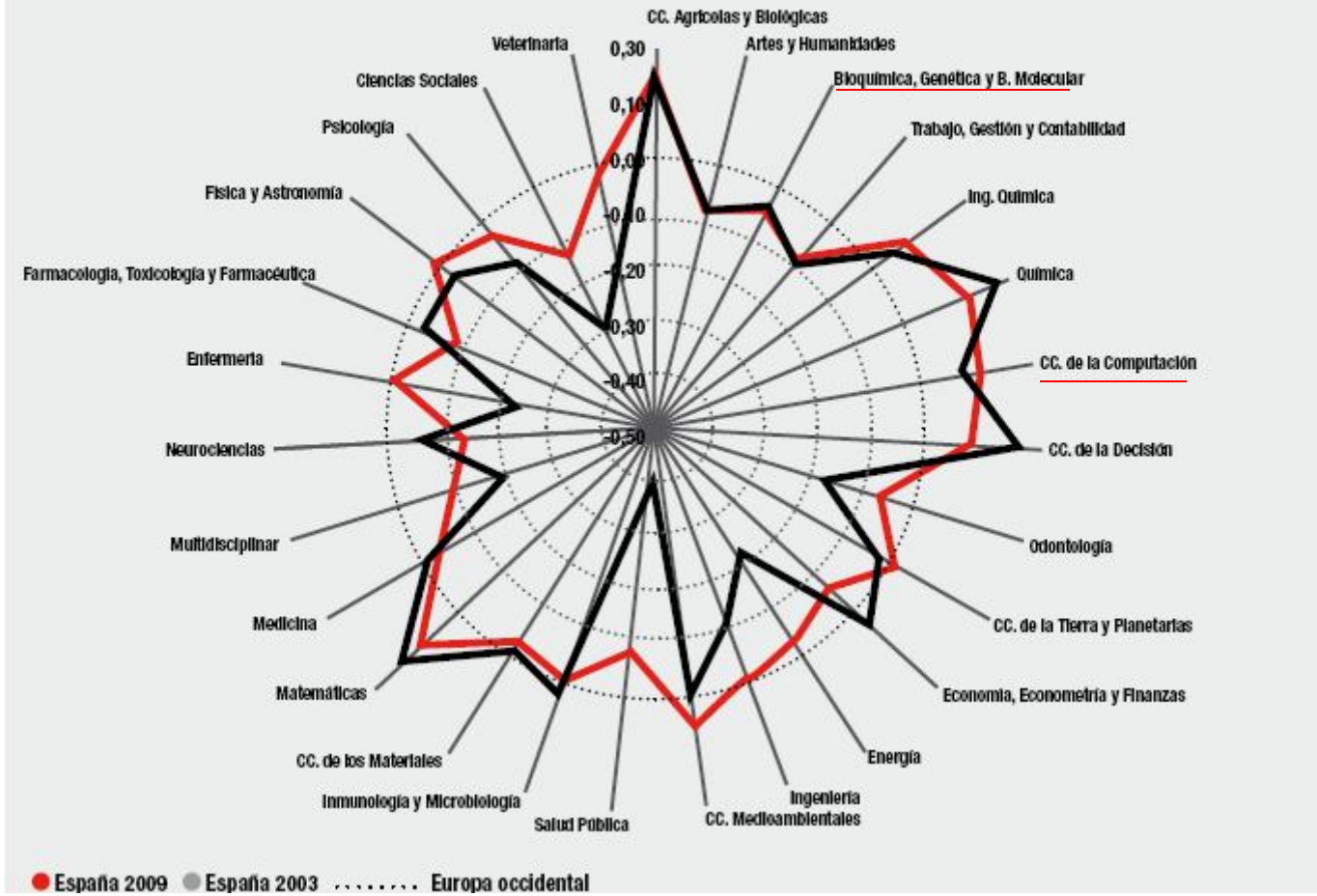



**Gráfico 8. Especialización de España con relación a Europa Occidental por áreas temáticas de la producción científica y tecnológica (índice Europa Occidental=1), 2003 y 2009**



# Pioneros

**EN 2010**

## España entre los diez países europeos más avanzados en gobierno electrónico

Directorio Bélgica Rumanía Hungría Reino Unido

2 Deja tu comentario

**COMPARTE ESTA NOTICIA**

89 30

menea tuenti

+1 1


Foto: EUROPA PRESS

Ampliar foto

MADRID, 3 Jun. (EUROPA PRESS) -

España se situó entre los diez primeros países europeos más avanzados en cuanto a disponibilidad de servicios públicos a través de Internet, por delante de países como Dinamarca, Alemania o los Países Bajos, según señala un informe realizado por el Instituto de Estudios Económicos (IEE).

En concreto, España ocupa el octavo lugar, tras haber logrado un avance entre 2009 y 2010, puesto que el pasado año los organismos públicos nacionales ofrecían un 95% de los servicios básicos mediante acceso 'online', frente al 80% de los ofertados en 2009.

El ranking pone de manifiesto que seis países ya ofrecen el 100% de estos servicios básicos. Así, Irlanda, Italia, Malta, Austria, Portugal y Suecia ya han logrado este importante desarrollo, mientras que otros países como Reino Unido están cerca de conseguirlo, con un 98% de

# ¡No sólo en deportes tenemos nºs 1!




# La bicefália

Spain's economy

## Split personality

### How vulnerable is Spain? The answer depends on which Spain you mean

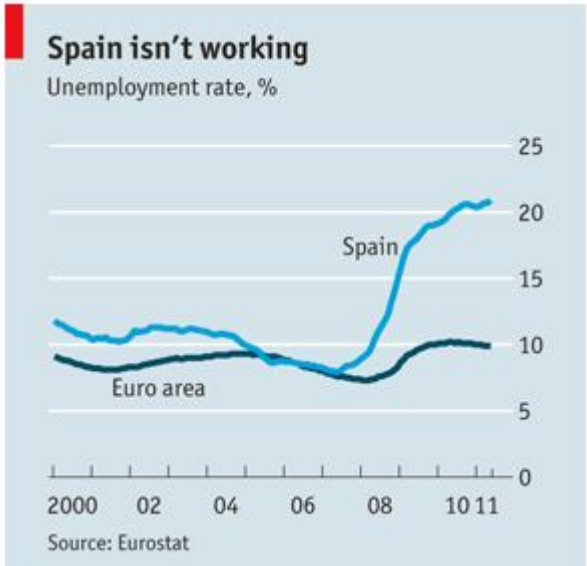
Jul 7th 2011 | from the print edition

Tweet 2 Like

EUROPE'S sovereign-debt crisis has already engulfed Greece, Ireland and Portugal. But the real fear is that it might spread to a large economy. Spain, whose GDP is almost double that of the three rescued countries put together, has long been a source of concern. Although it entered the crisis with relatively low public debt, at just 36% of GDP in 2007, that figure will rise to an estimated 68% by the end of 2011 because of big deficits. Worse, Spain shared several of the smaller economies' weaknesses, like a loss of competitiveness and big current-account deficits.

The immediate threat of contagion from Greece receded on June 29th when the Greek parliament passed a plan for more austerity, opening the way for the country to get another chunk of bail-out money. But just as Greece's problems have not really gone away, nor has Spain's

# El quid de la cuestión



# Agenda

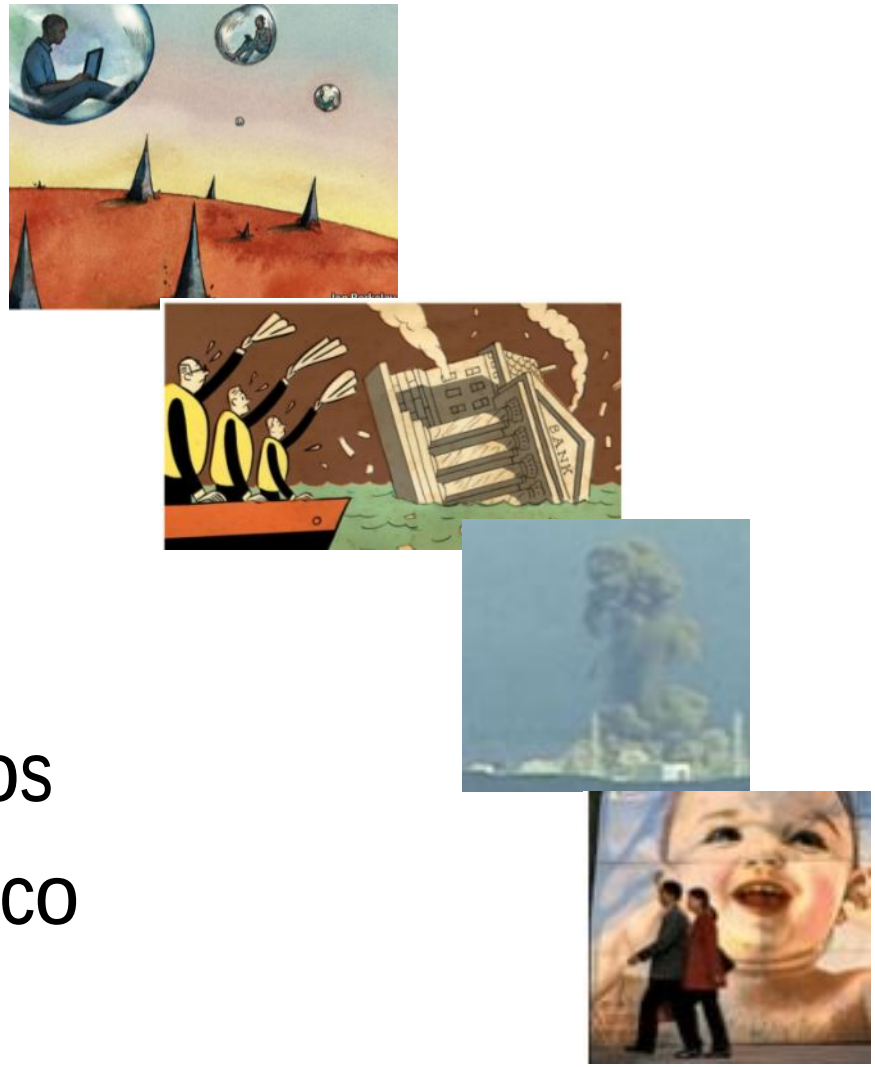
1. ¿Qué empresas, y por qué, hacen I&D?
   La competitividad, la innovación y la I&D
2. Época de grandes cambios
3. El mundo de las start-ups

# 2. Época de grandes cambios

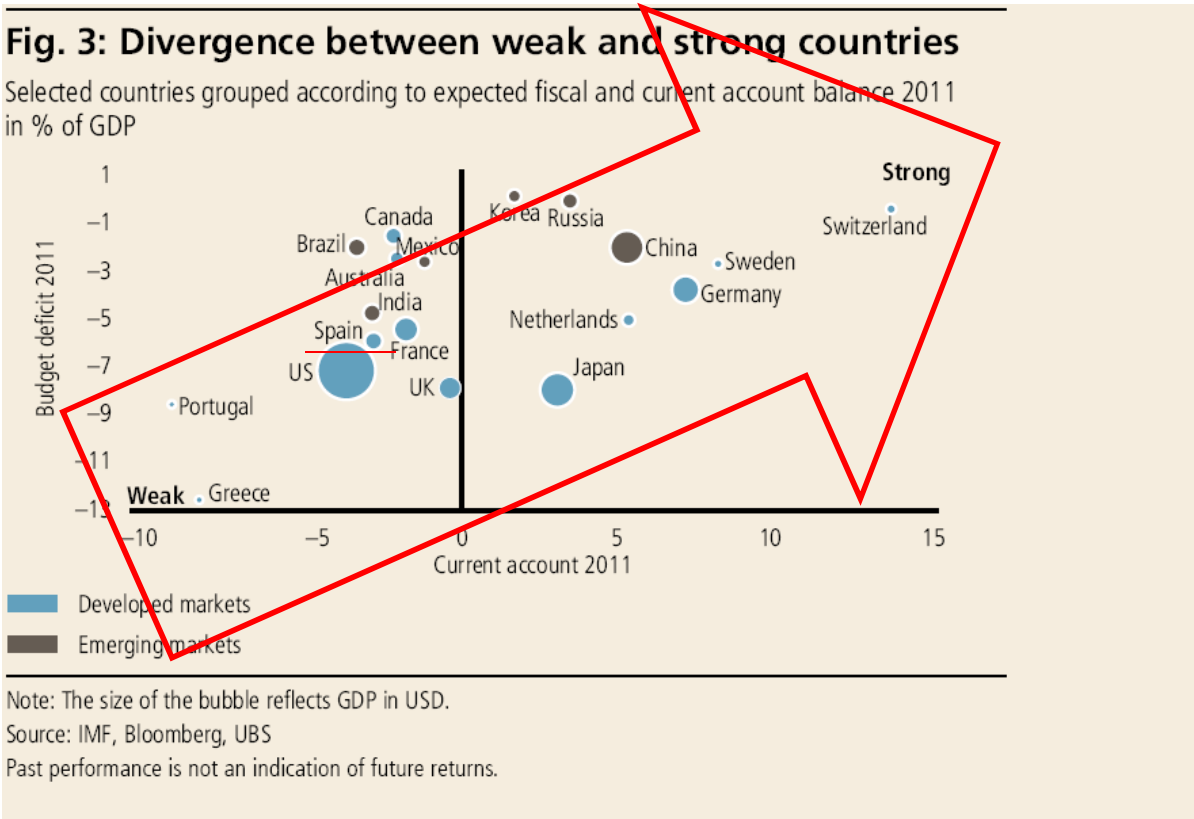
- Las presiones macro-económicas
- El siglo “bio”
- La presión hacia la externalización: Open Innovation

# Las presiones macro-económicas

- Crisis económicas
  - nacional
  - internacional
- Globalización
- Desarrollo sostenible
- Cambios demográficos
- Centralidad del Pacífico



# Crisis: hay que innovar, crecer & exportar



# La globalización

- Apertura arancelaria
- Facilidad de transporte
- Acceso inmediato y universal a la información

# La inmediatez de la información

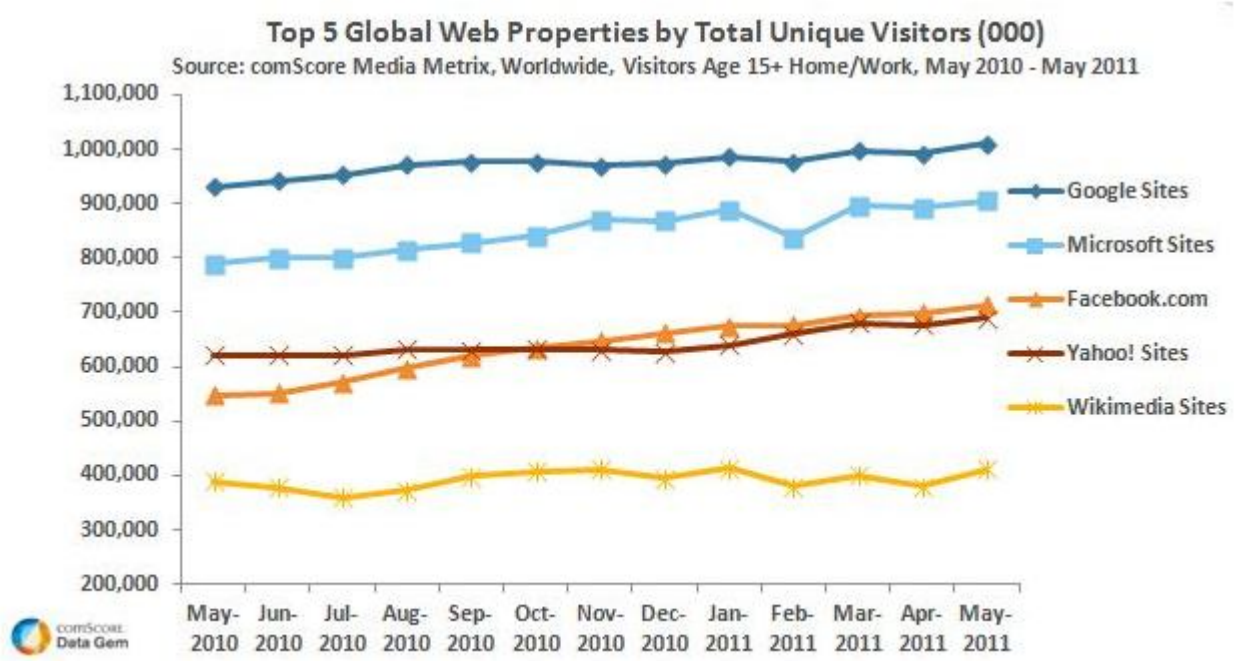
## Google Reaches 1 Billion Global Visitors

– JUNE 22, 2011

POSTED IN: AFRICA/MIDDLE EAST, ASIA/PACIFIC, EUROPE, LATIN AMERICA, NORTH AMERICA, U.S., WORLDWIDE

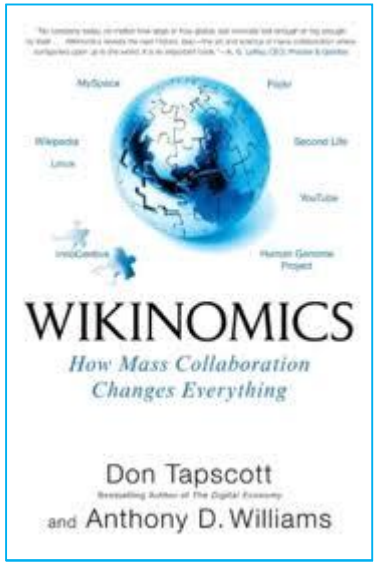
In May 2011, Google Sites became the first web property to surpass 1 billion unique visitors globally. In the past year, Google Sites has seen its audience grow 8% to eclipse the 1 billion threshold. Microsoft Sites was the second largest global web property in May reaching more than 905 million visitors, followed by Facebook.com with 713.6 million visitors.

148 Tweet 32 Share

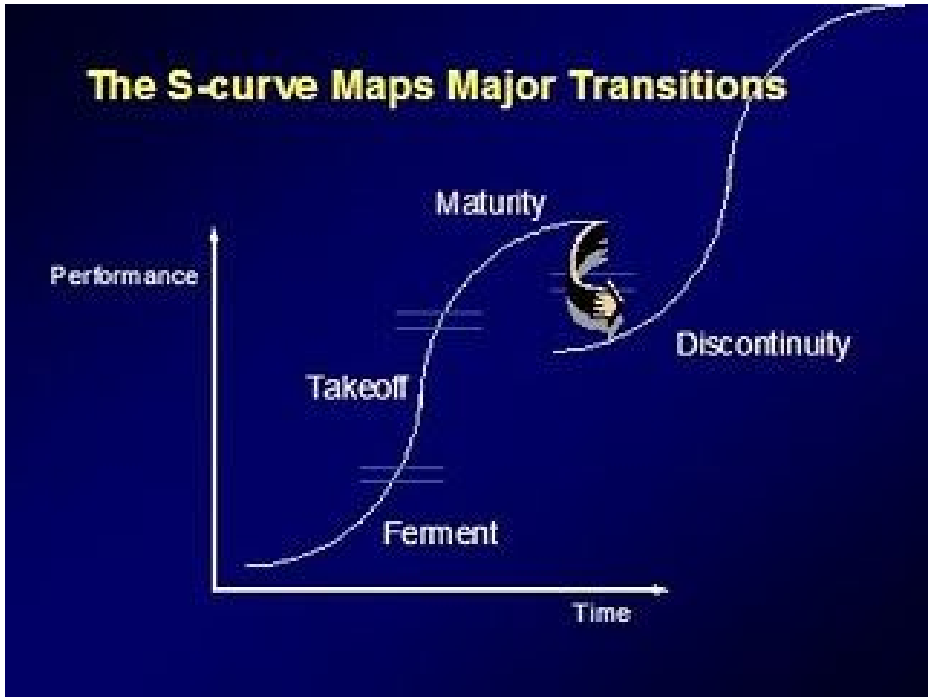


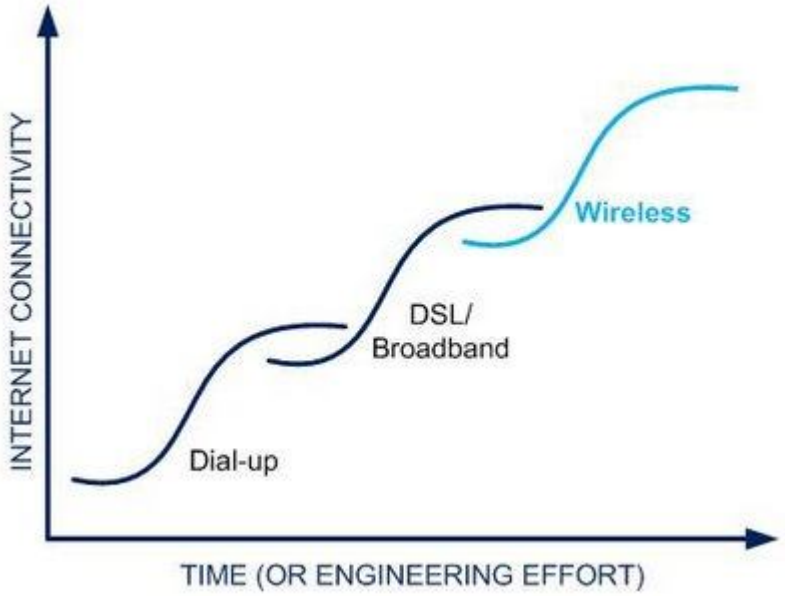
# Crowd sourcing

- Contribuciones voluntarias y gratuitas
- ¡Desde hace 10 años!
  - MIT OpenCourseWare en abierto
  - Wikipedia
- Soluciones “open source”
  - ¿Dónde está el negocio?
  - Publicidad
  - “Freemium”

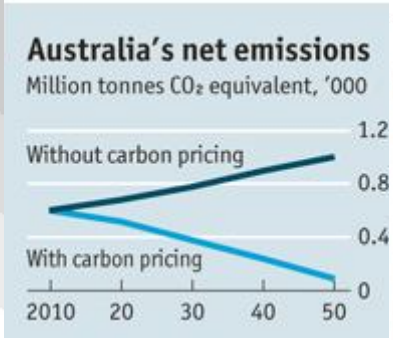
# Ciclos de vida: se acortan



# Desarrollo sostenible

- El calentamiento global está influido por la actividad humana, especialmente a través de los gases de efecto invernadero
- El “carbon footprint”:
  medida, gestión, minimización y mercadeo


# Cambios demográficos

- China
  1.300 millones
  + 10M en edad de trabajo en 2030

- India
  1.200 millones
  + 240M en edad de trabajo en 2030
- BRIC
  40% de la población
  25% de la geografía
  Entre las 4 economías más importantes en 2050

# Del Mediterráneo al Atlántico al Pacífico

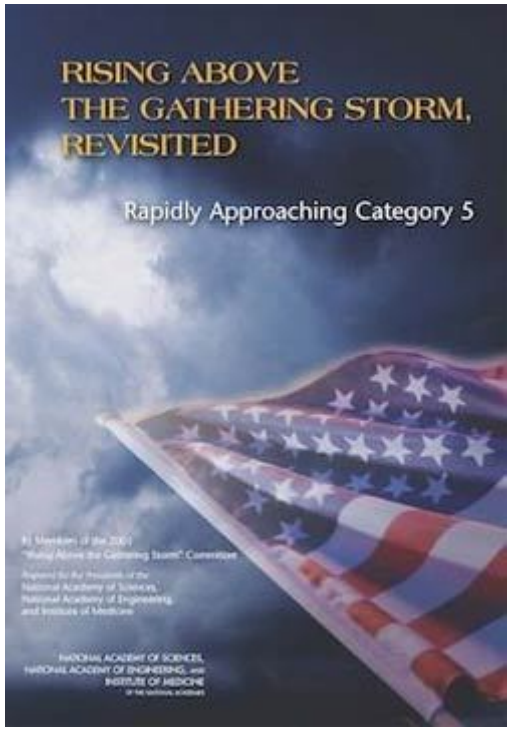
- Exportaciones hi-tech (en % mundial):

| | 2005 | 2010 |
|---|---|---|
| USA | 21% | 14% |
| China | 7% | 20% |

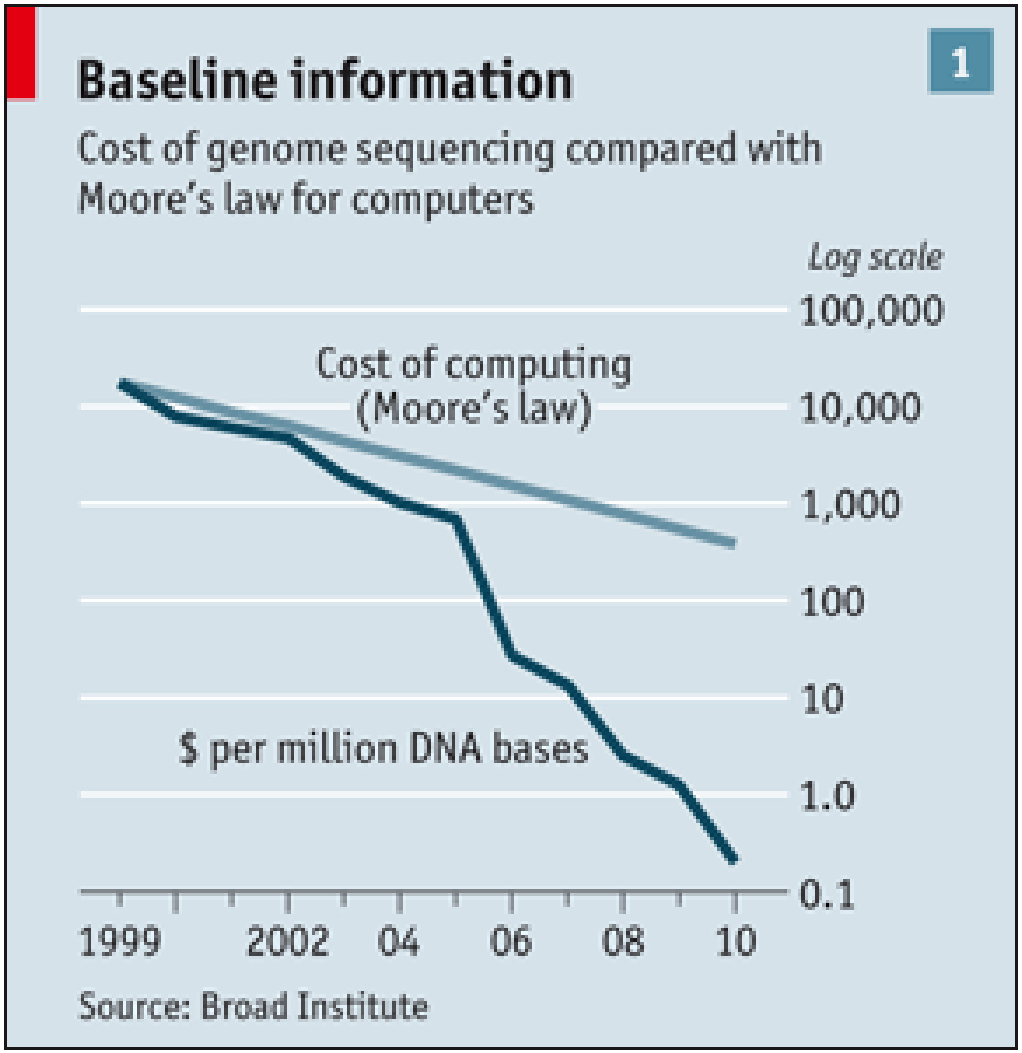
- Origen de los candidatos PhD en ciencias en USA en 2010:

| | |
|---|---|
| USA | 30% |
| No USA (mayoría asiática) | 70% |

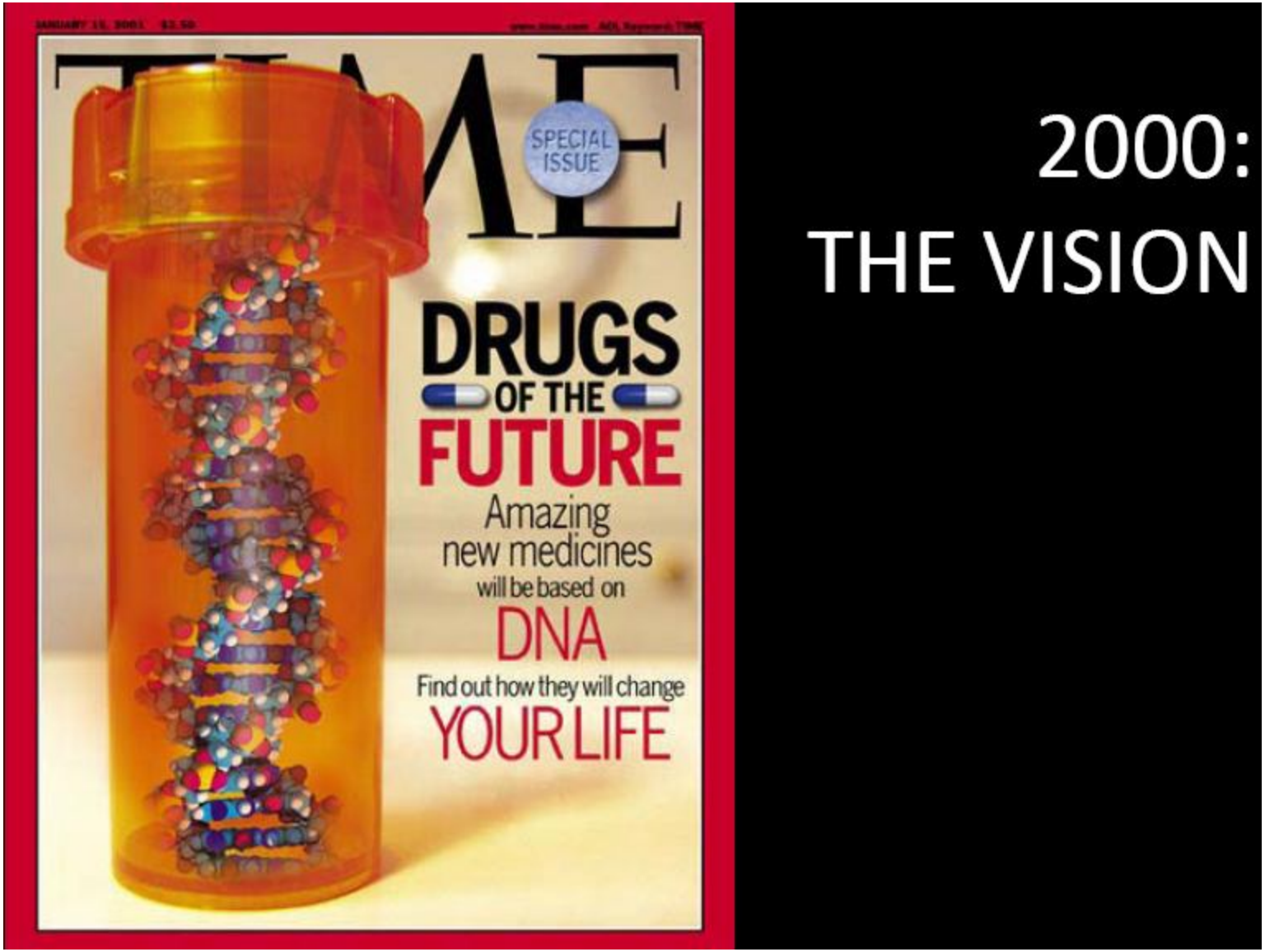
- Número de licenciados en ingenierías con inglés en 2010: China > USA



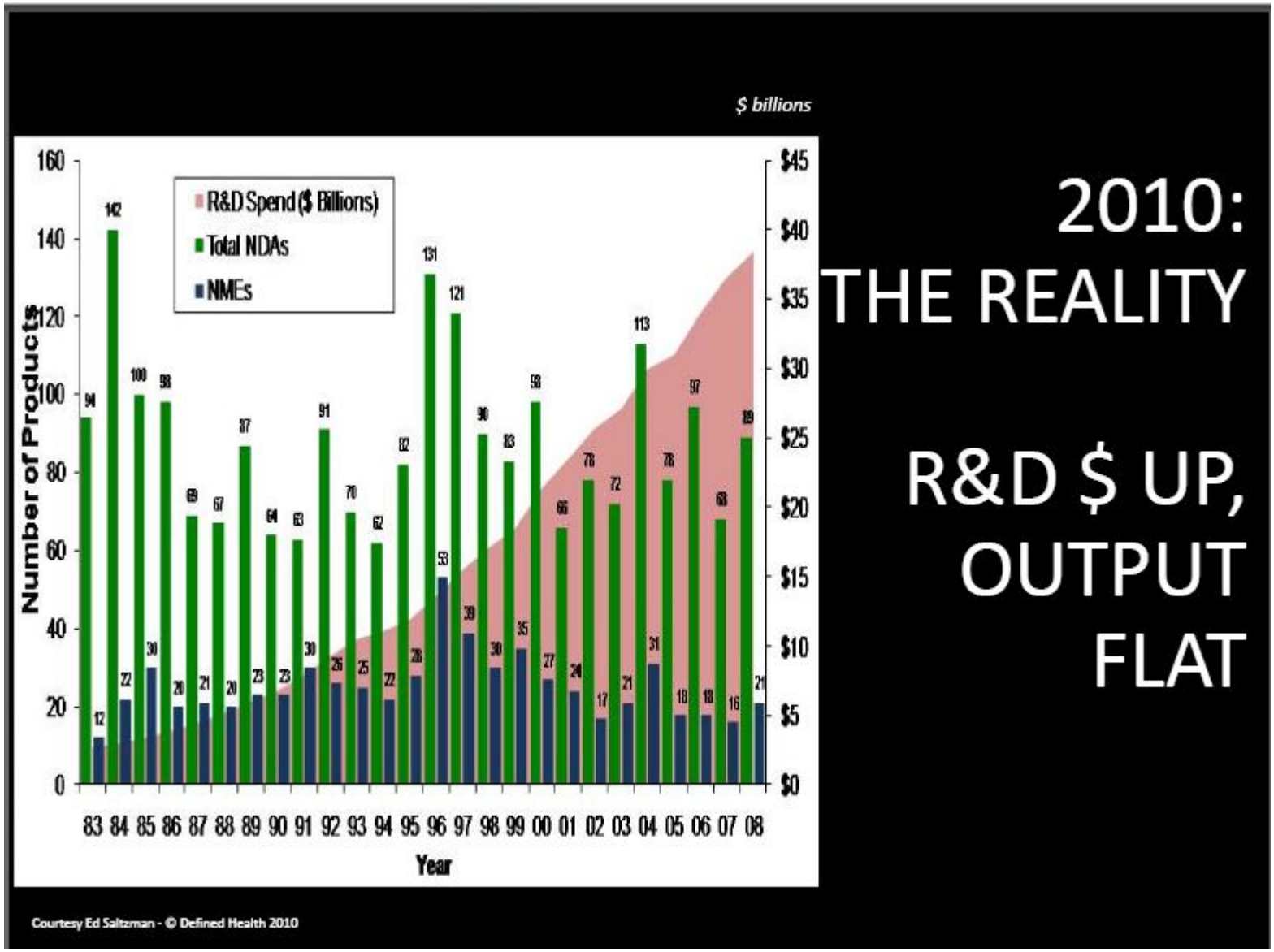
# El siglo “bio”: Ley de Carlson



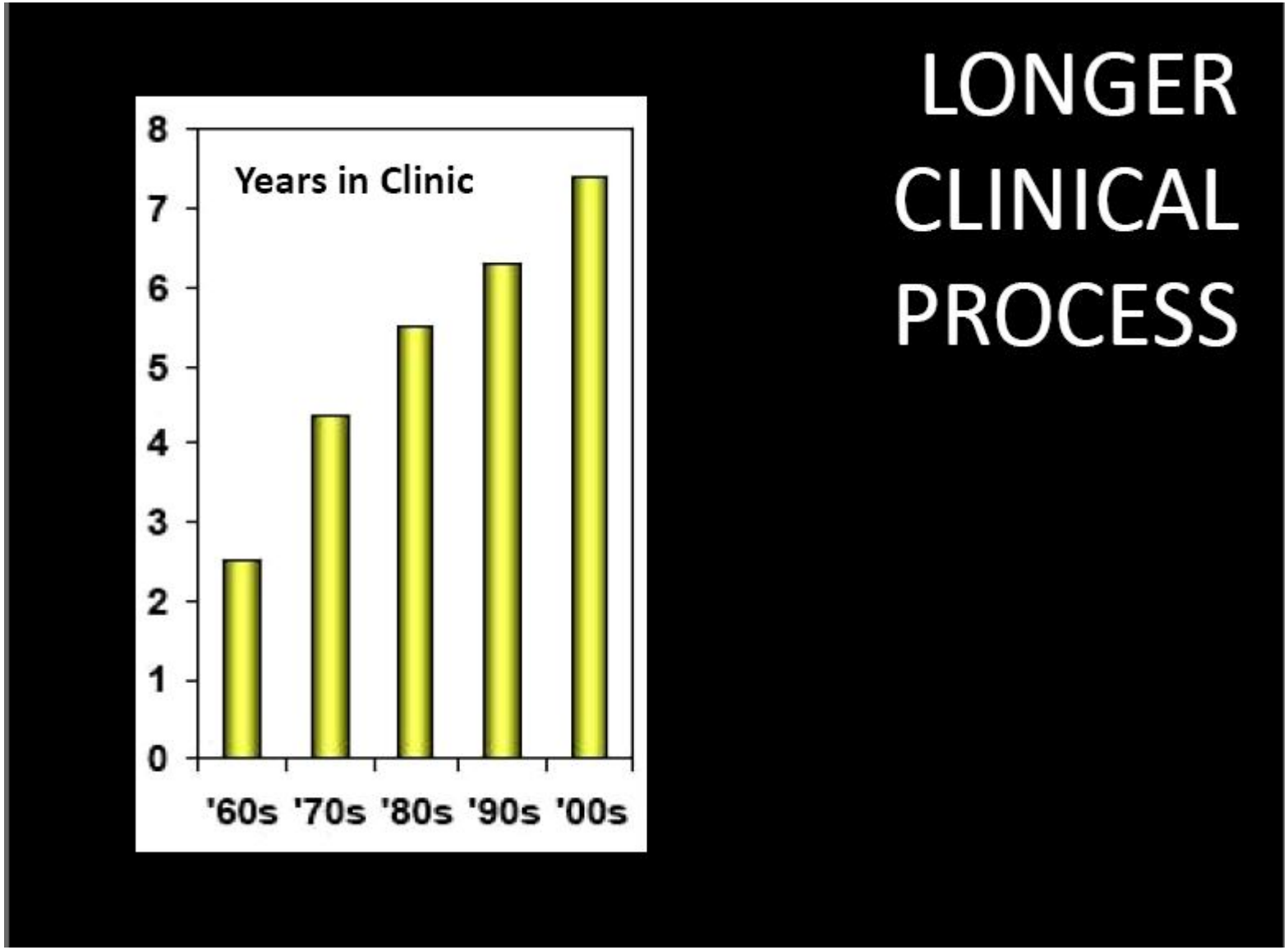

MEDICINE GOES DIGITAL
How the Coming Information Tsunami in Biotech will Transform Medicine
WHAT IS IT TO BE HUMAN IN A BIOTECH AGE?
GREGORY STOCK
Gregory Stock
Barcelona
June 2011




Fuente: G.Stock , BDigital 2011, 1 Junio 2011




Fuente: G.Stock , BDigital 2011, 1 Junio 2011

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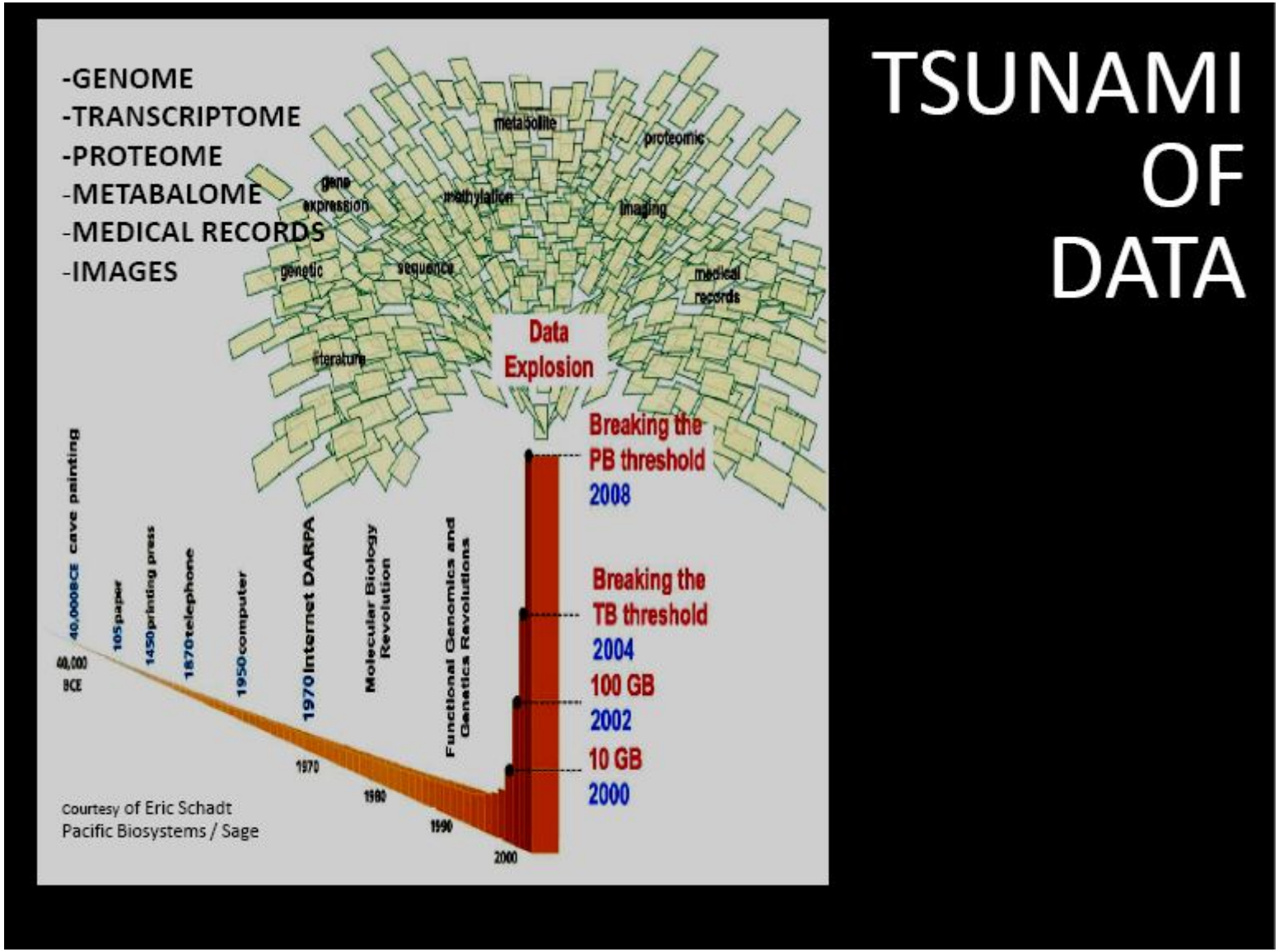



Fuente: G.Stock , BDigital 2011, 1 Junio 2011

# La crisis del E.coli

# Industry braced for information deluge

**Data management**

**The challenge is to make sense of the facts pouring in, says Clive Cookson**

The coming data deluge – an exponentially increasing volume of computer information and analysis – presents a challenge and an opportunity for almost every sector of the economy and society.

But potential risks and rewards may be particularly great for healthcare and medical science, a field that has so far played a relatively small role in the development of information and communications technology.

ICT innovation has until now been driven mainly by a broad spectrum of commercial applications such as entertainment and business processing and by "big science" projects such as sources, to launch a project called IT Future of Medicine (ITFoM). It is one of six shortlisted candidates, from which two will be chosen next year as flagship projects under the EU Future and Emerging Technologies programme.

The ultimate aim of ITFoM is to enable doctors to give their patients the power to have their DNA analysed at each stage of disease management – diagnosis, treatment and follow-up – and to integrate this information with a host of data generated by other medical technologies such as clinical imaging.

Of all diseases, cancer will be the project's biggest challenge, says Prof Lehrach. "The system will need to deal with 12m new cancer cases a year. That is about one genome per second."

Bear in mind that a whole human genome, which new sequencing technologies will soon be capable of reading within a few hours at a ment director at Washington University's Genome Institute, pointed out in a recent paper titled The $1,000 Genome, the $100,000 Analysis? in the journal Genome Medicine.

Last month's deadly outbreak of E. coli food poisoning in Germany illustrates the growing gap between fast genome sequencing and slow subsequent analysis.

Within three days of it becoming clear there was a serious public health emergency, researchers had obtained the full DNA sequence of the O104 bacterial strain responsible, analysing samples from patients with Ion Torrent sequencers from Life Technologies.

> While the cost of DNA sequencing is plunging, follow-up analysis is not keeping pace

**E. coli: genome of new strain was sequenced rapidly** Getty

For the individual scientist faced with a data deluge, a growing number of bioinformatics companies – such as Spain's Integromics and Sweden's Qlucore – are developing software to help analyse and visualise data.

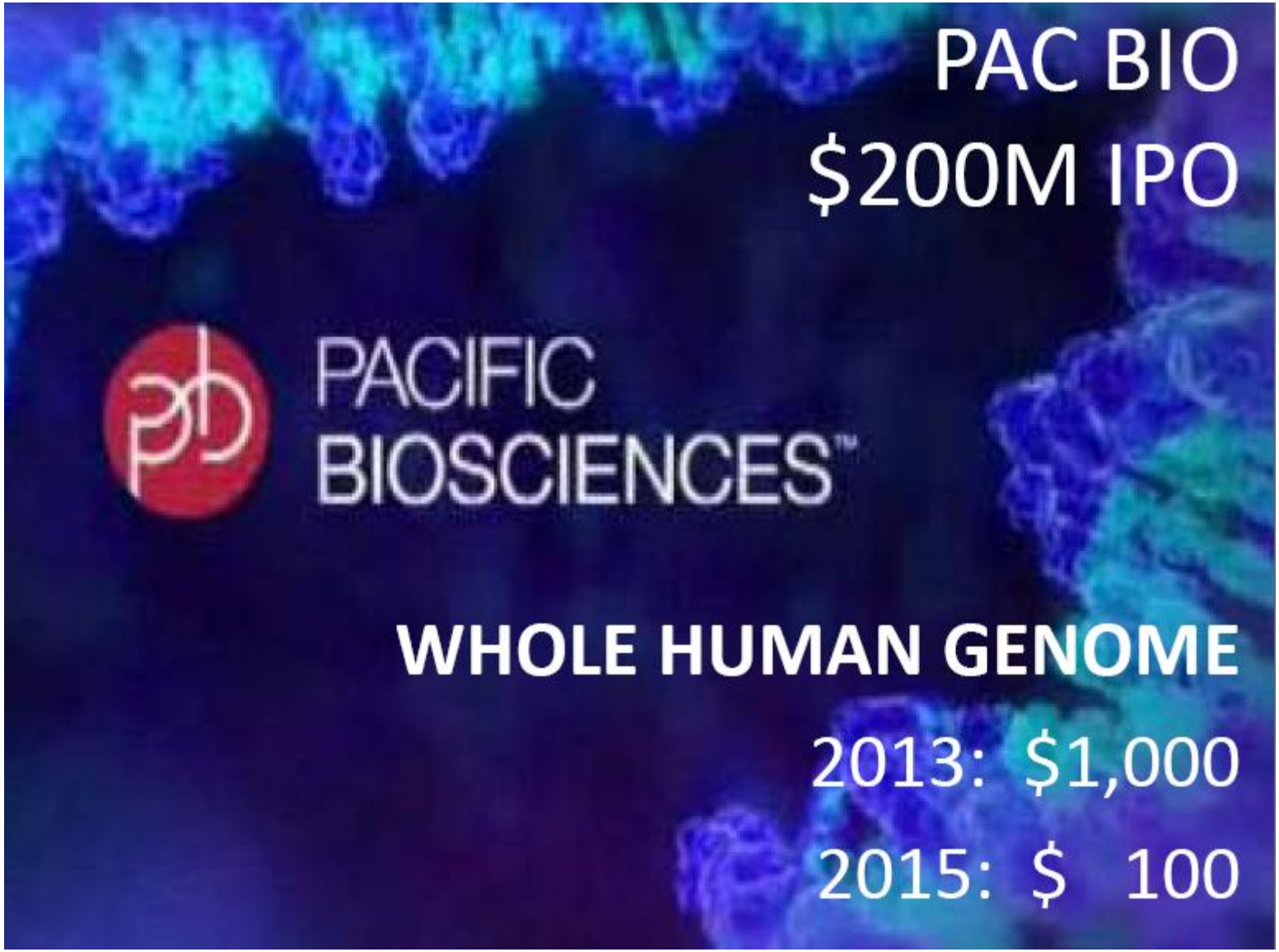
"Researchers have begun to use powerful software engines that enable them to visualise their data as full-colour 3D images that can be easily manipulated on a computer screen," says Carl-Johan Ivarsson, chief executive of Qlucore.

"With this approach, not only can scientists identify hidden structures and patterns more easily, but they can also identify any interesting and/or significant results by themselves, with- bursement," says Dr Yadi. "New business and reimbursement models which recognise the importance of biomarkers and other effectiveness measures will be at the centre of whether new technologies and drugs achieve the market access required by their manufacturers," he adds.

His colleague Jasveen Chugh, PA life sciences expert, also maintains that the healthcare industry needs more fresh data – and the challenge, she says, is where to find them.

"The rise of social media may offer an answer," Dr Chugh believes. "Patients all over the world are using websites to learn about new medication, treatment

Fuente: FT 27 junio 11




Fuente: G.Stock , BDigital 2011, 1 Junio 2011

# Sector farmacéutico USA 2009

| | Anouncement Day | Who | Activity | Target | Activity | Bid amount ($ Bilion) |
|---|---|---|---|---|---|---|
| 1 | January, 26 | Pfizer | Drug Manufacturer | Wyeth | Drug Manufacturer | 68 |
| 2 | February, 9 | Lundbeck | Drug Manufacturer | Ovation Pharmaceuticals Inc. | Drug Manufacturer | 0.9 |
| 3 | March, 9 | Merck | Drug Manufacturer | Schering-Plough | Drug Manufacturer | 41 |
| 4 | March, 26 | Roche | Drug Manufacturer | Genentech | Drug Manufacturer | 43 |
| 5 | April, 9 | Sanofi-Aventis | Drug Manufacturer | Medley | Drug Manufacturer | 0.66 |
| 6 | May, 22 | J&J | Drug Manufacturer | Cougar | Drug Manufacturer | 0.894 |
| 7 | July, 23 | Bristol-Myers Squibb | Drug Manufacturer | Medarex | Drug Manufacturer | 2.1 |
| 8 | July, 30 | Sanofi-Aventis | Drug Manufacturer | Merial | Drug Manufacturer | 4 |
| 9 | August, 24 | Warner Chilcott | Drug Manufacturer | P&G | Drug Manufacturer | 3 |
| 10 | September, 28 | Abbott | Drug Manufacturer | Solvay | Drug Manufacturer | 6.6 |

# Cierre de centros propios…


**Pfizer to close UK R&D site**

**Published on 01/02/11 at 02:52pm**

*Viagra was discovered at the site in Sandwich, Kent*

**Pfizer has announced that it is to close its UK research site at Sandwich in Kent, with the loss of around 2,400 jobs.**

# ...y la expansión de su red externa

JUNE 13, 2011 | VOLUME 89, NUMBER 24 | P. 8

## Pfizer Expands R&D Network

Partnership: Eight Boston research institutions will form a third regional hub

Rick Mullin


AP

*Pfizer executive Sally Susman announces the new research hub at a press conference with Boston Mayor Thomas M. Menino (left) and Massachusetts Gov. Deval Patrick.*

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Related Stories

- Pfizer Reveals More R&D Cuts
- Pfizer Launches Academic Network
- Pfizer Adds NYC To Academic Network

Topics Covered

industry-academic alliances, Pfizer, CTI

Latest News

July 4, 2011

Pfizer Rethinks Plan For U.K. Site
Pharmaceuticals: Firm keeps some U.K. R&D staff while advancing plans for research park.

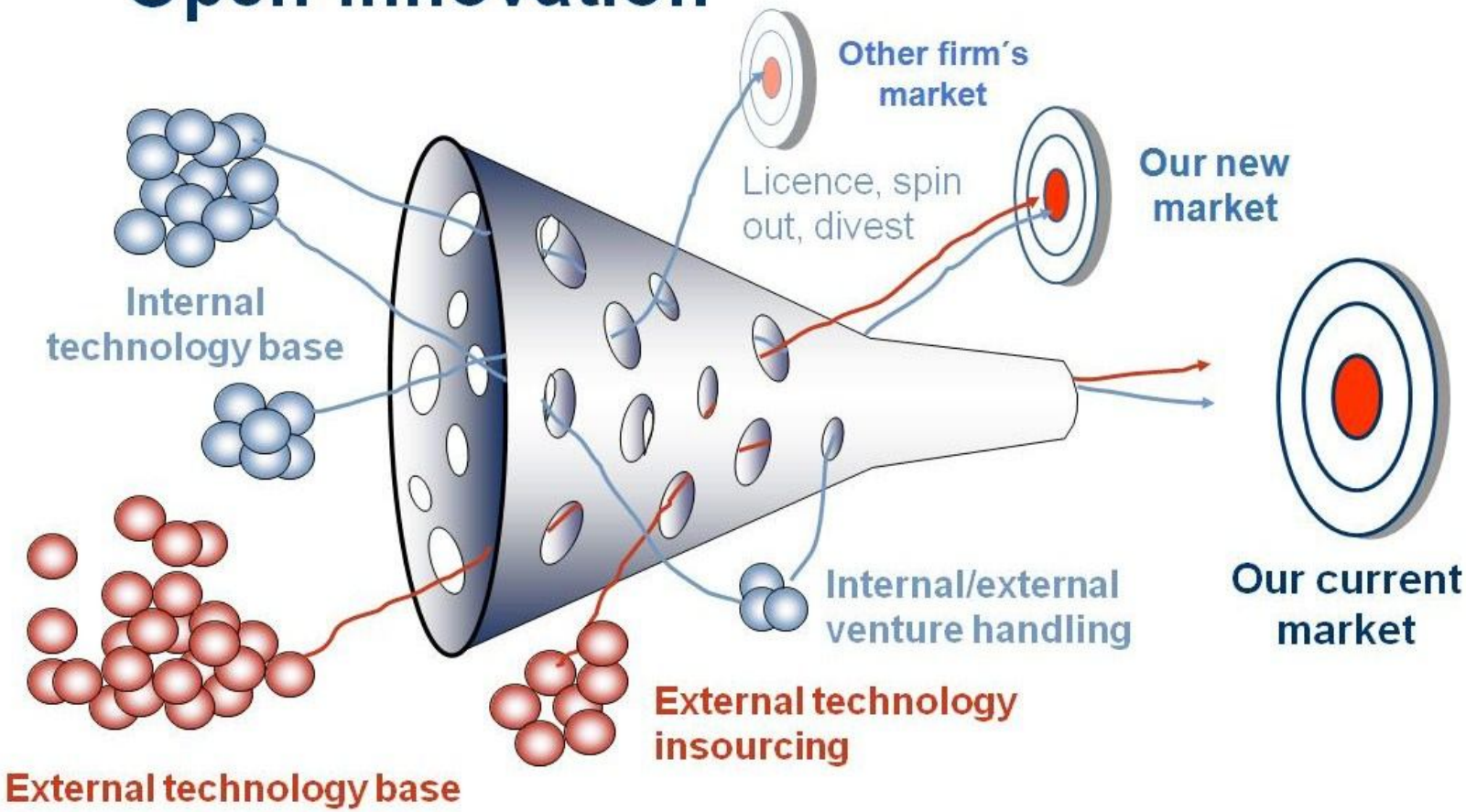
BIO Goes To Washington
Biopharmaceuticals: Annual conference focuses on need for regulatory and policy reform.

Manufacturing Rebirth

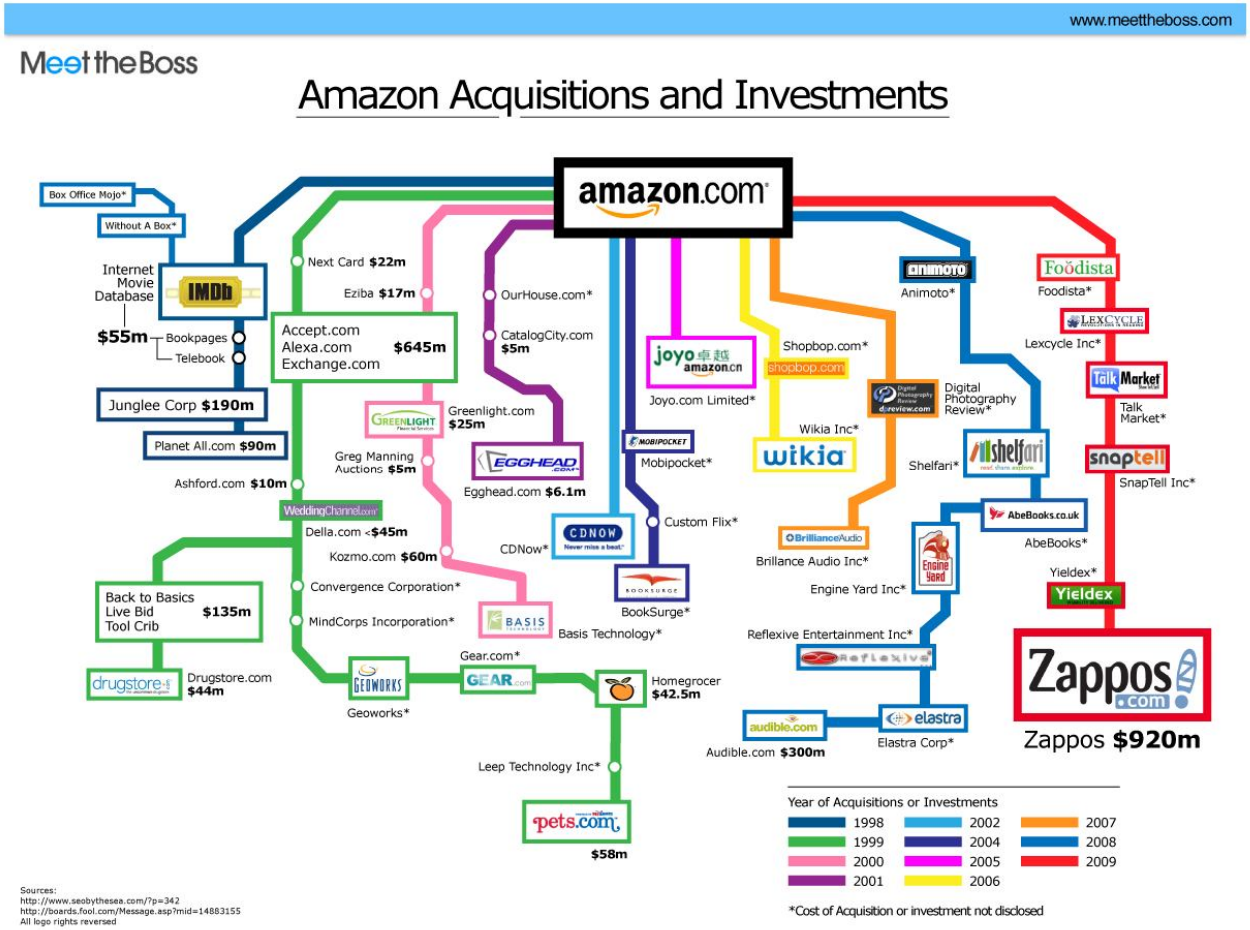
# Open Innovation

- Ampliar el abanico de opciones y variabilizar los costes con recursos externos
  - Sector público
  - Sector privado
- Contemplar diferentes formatos
  - Licenciar
  - Externalizar
  - Alianzas
  - Joint Ventures
  - Fusiones y Adquisiciones

# Open innovation



# Amazon Julio 2009

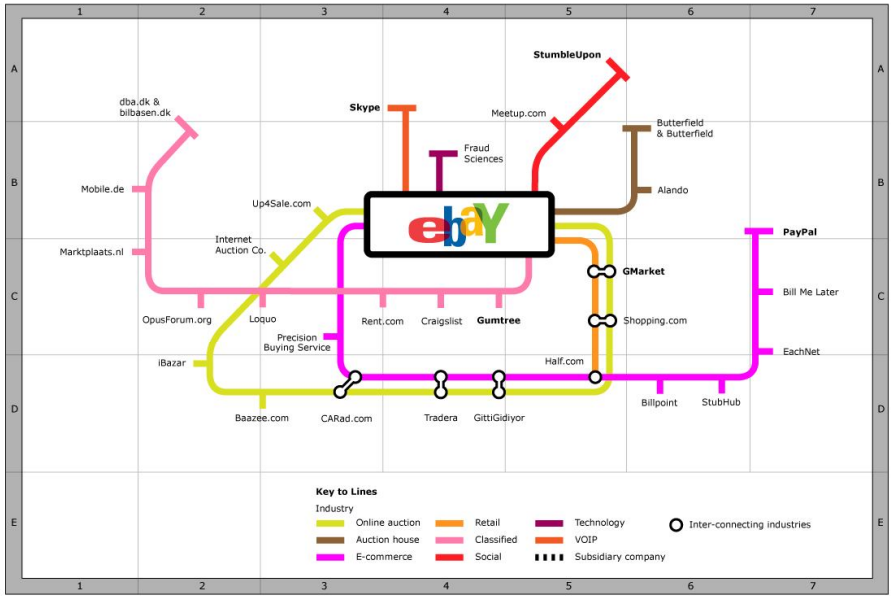


# eBay Sept 2009

www.MeetTheBoss.com

Meet the Boss

## Ebay Acquisitions and Investments




Acquisitions

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Up4Sale.com | B3 | * | Mobile.de | B2 | $149m | StubHub | D6 | $310m |
| Butterfield & Butterfield | B6 | $260m | Baazee.com | D3 | $50m | GittiGidiyor | D4 | * |
| Billpoint | D6 | * | Marktplaats.nl | C2 | $290m | StumbleUpon | A5 | $75m |
| Alando | B6 | $43m | Rent.com | C3 | $415m | Bill Me Later | C7 | $820m |
| Half.com | D6 | $313m | Loquo | C3 | * | dba.dk & bilbasen.dk | A2 | $380m |
| Internet Auction Co. | C3 | $120m | Gumtree | C4 | * | Fraud Scences | B4 | $196m |
| iBazar | D2 | $66m | Shopping.com | C5 | $620m | Gmarket | C5 | $1.2bn |
| PayPal | B7 | $1.5bn | OpusForum.org | C2 | * | | | |
| CARad.com | D3 | * | Skype | A4 | $2.6bn | | | |
| EachNet | C7 | $150m | Tradera | D4 | $48m | | | |

Investments

| | | |
|---|---|---|
| Precision Buying Service | C3 | * |
| Craigslist | C4 | $13.5m |
| Meetup.com | B5 | $2m |

Year of Acquisitions or Investments

1998 1999 2000 2001
2002 2003 2004 2005
2006 2007 2008 2009

* Cost of Acquisition or investment not disclosed

Sources: http://en.wikipedia.org
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LinkedIn Share http://techcrunch.com/2011/07/07/ebay-acquire... Next Article:

# eBay Buys Zong For $240 Million In Cash To Boost PayPal's Mobile Payments Technology

14Comments Like Send +1 43 Tweet 797 Share 390

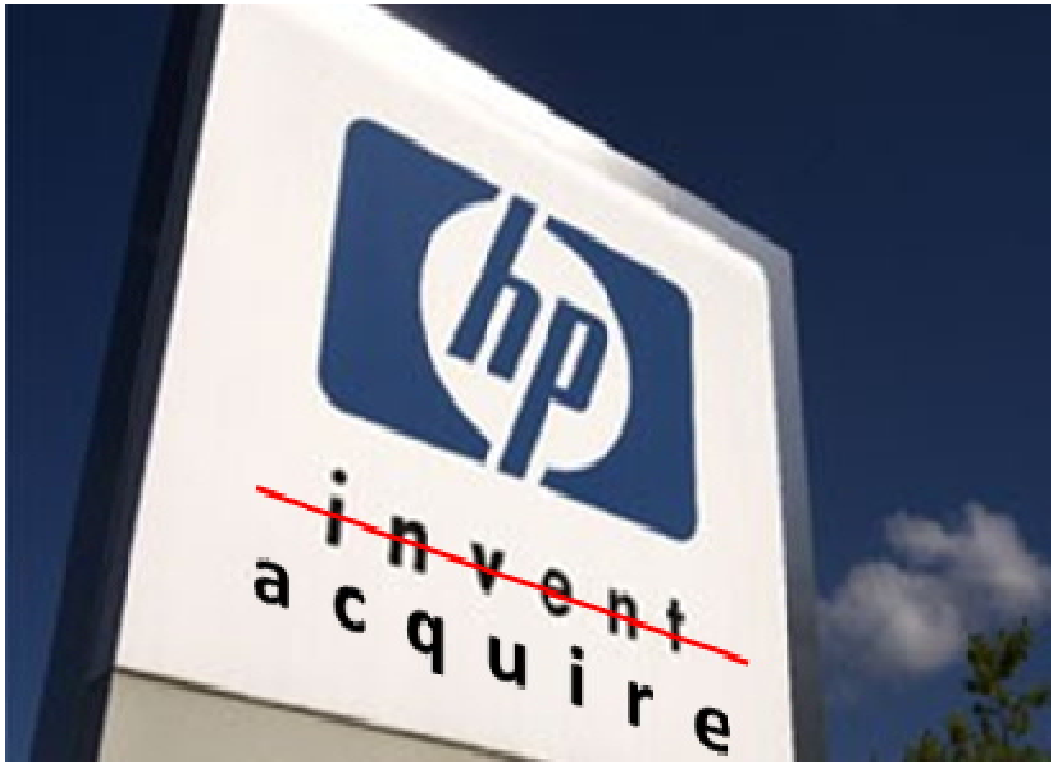
**Leena Rao**

17 hours ago

eBay has **acquired** mobile payments company **Zong** for $240 million in cash. The transaction is expected to close in the third quarter of 2011.

Zong has been one of the pioneers in the mobile payments space, adding a compelling new way for consumers to pay for items online. Simply put, it lets you pay for things, particularly virtual goods online, via direct billing to your mobile phone. Consumers simply enter their mobile phone numbers in the payments process.

When a user wants to purchase an item, he can enters his cell phone number on a site, the site sends a text message to the phone, the user confirms the transaction with a short reply, and all the charges show up on his phone bill. Zong powers this entire transaction. The company has partnered with over 250 carriers worldwide to offer the technology to mobile phone users.


invent
acquire

# Agenda

1. ¿Qué empresas, y por qué, hacen I&D?
   La competitividad, la innovación y la I&D
2. Época de grandes cambios
3. El mundo de las start-ups

# El mundo de las startups

- Desarrollan innovaciones fuera del ámbito de actuación habitual de las empresas establecidas
  - Spinoffs de centros académicos
  - Spinoffs de empresas
  - Startups de nuevo cuño
- Florecen mejor cuando hay una masa crítica
  - Emprendedores — formación, actitud
  - Infraestructura — información, proveedores
  - Financiación — VCs, BAs (+ sector público)
  - Centros académicos — ideas, personal, proyectos
  - Clusters — experiencia, necesidades
- De masas críticas a “mafias”

# Cómo emprender & no morir en el empeño

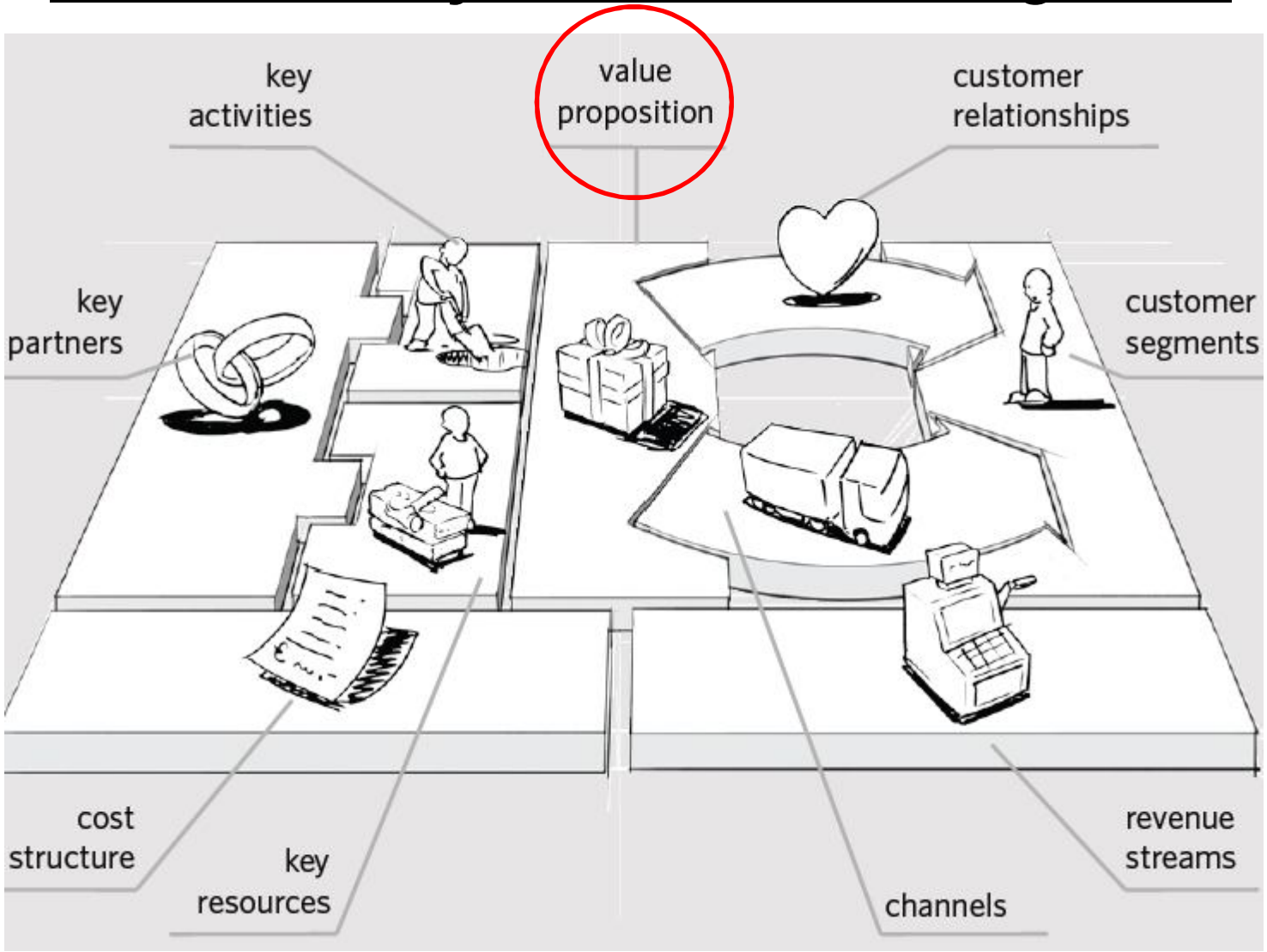
http://www.anella.cat/web/portal/experiencies/-/custom_publisher/yB90/27400122/Com-muntar-una-start-up-i-no-morir-en-l-intent


Steve Blank: serial entrepreneur, now at U.Stanford & UC Berkeley Haas
Bizbarcelona 2011, 15 Junio 2011

# Conceptos útiles

- Una startup es
  una organización provisional que busca
  un modelo de negocio repetible y escalable
- Modelo de negocio
  - "Business Model Canvas"
  - Proceso iterativo de chequeo
  - Identificación del "minimum viable feature set"

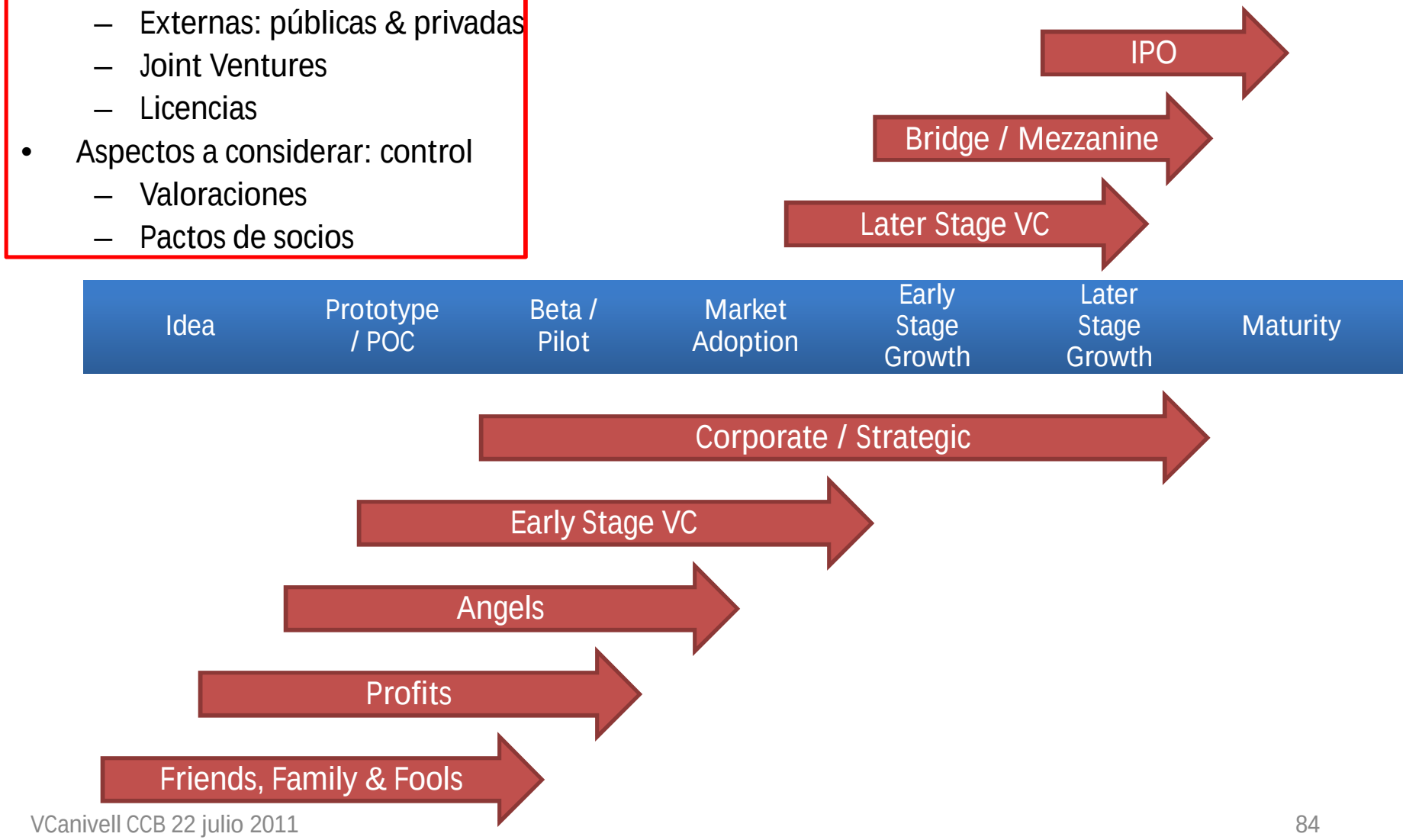
# Entender y validar el negocio




Fuente: A.Osterwalder & Y.Pigneur

# Financiación

- Fuentes:
  - Externas: públicas & privadas
  - Joint Ventures
  - Licencias
- Aspectos a considerar: control
  - Valoraciones
  - Pactos de socios



# Los inversores…

- …invierten en (aprox <1%) proyectos en base a:
  - Equipos humanos
  - Mercados de tamaño importante
  - Propuestas disruptivas:
    tecnologías, productos o modelos de negocio
  - Diferenciaciones que se puedan mantener en el tiempo

- … calculando que tendrán éxito:
  - 1 de 10 startups en fases inciales
  - 4 de 10 startups consolidadas en fases posteriores

# Cómo presentar

**Preparation**

- 10/20/30 = Slides/Minutes/Font
- 3 most important things for VC?
- Why did VC give us a meeting?
- Special questions, issues, landmines?
- VC organizational and people background?
- VC's current efforts?
- Pitch 10 times to friendlies & refine
- Qualified introduction to the VC
- Goal of 1st meeting -> To get 2nd meeting

Fuente: D.Cahill, PlugandPlayTechCenter

**Elements**

1. Title
   - Elevator-pitch
2. Problem
   - Real & Urgent
3. Solution
   - Clear value-prop & ROI
4. Business Model
   - Validation
5. Underlying Magic
   - Sustainable, Measurable, Disruptive
6. Sales & Marketing
   - Bottom-up TAM
   - Strong Strategy, Sound Tactics, Realistic Plan
7. Competition
   - Defensable, Asymmetric
8. Finance
   - 5 year Bottom-up Forecast, Key-Metrics
9. Team
   - Track-record, Cohesive, Differential Insight
10. Status
    - Use-of-Funds, Traction, Invest Now!

# Los Business Angels

ELPAÍS.com | Versión para imprimir — Imprimir

REPORTAJE: Empresas & sectores

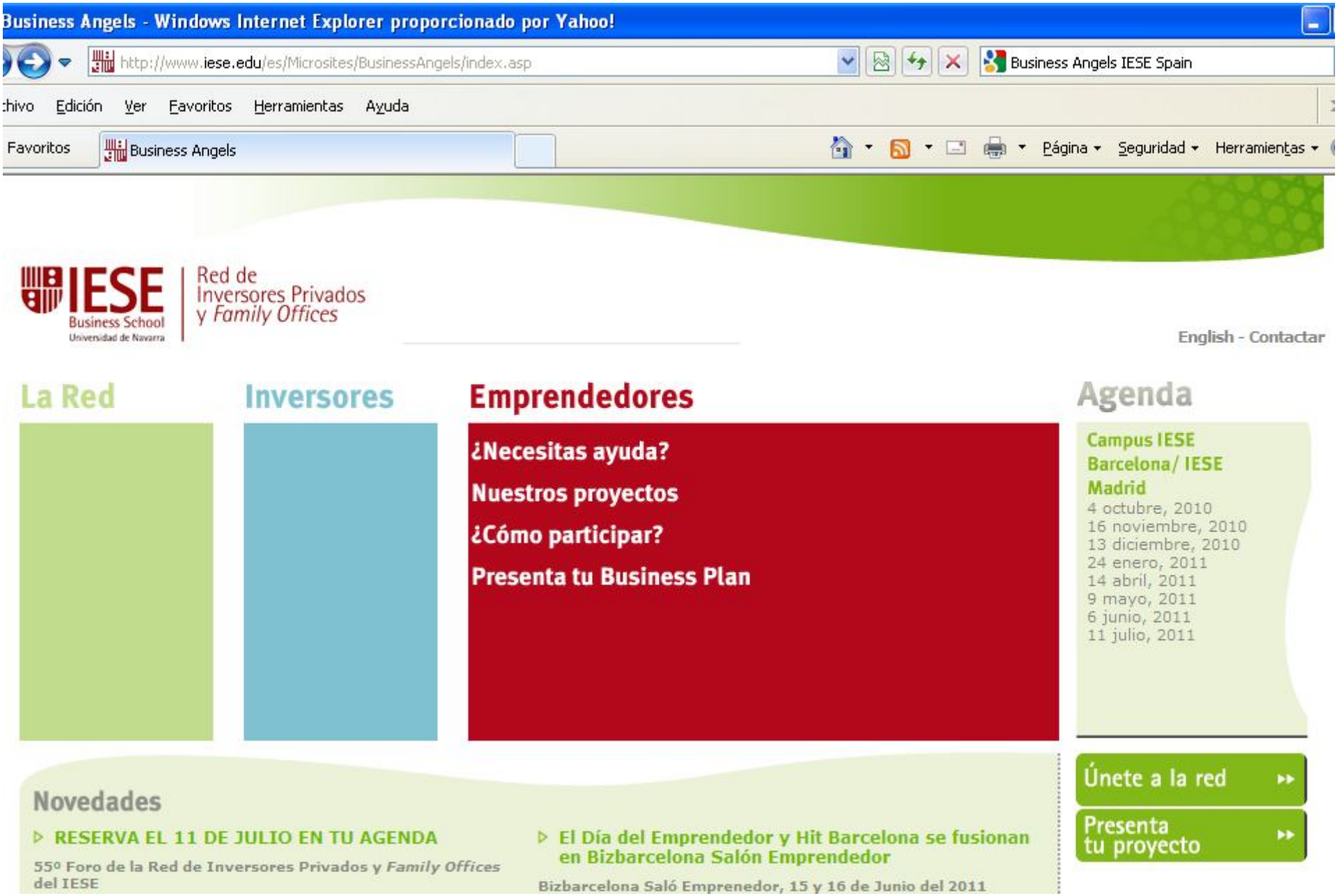
## Los 'business angels' dan alas a la Red

La crisis multiplica inversiones en un sector que solo financia proyectos en Internet

MIGUEL ÁNGEL GARCÍA VEGA 21/11/2010

Los *business angels* extienden sus alas, pues el suyo es un negocio que aprovecha los vientos económicos adversos para crecer. Hay ganas de invertir, hay dinero, tal vez no demasiado, pero hay, y, sobre todo, hay ideas que financiar. Y algunas muy buenas. Eso sí, Internet impone su peculiar dictadura. "El inversor busca proyectos en la Red, que sean fácilmente replicables, es decir, que se puedan implantar en otros países, y que exijan una inversión inicial limitada y que, a la vez, generen ingresos con rapidez", resume Ángel San Segundo, director de alumnos de la Escuela de Organización Industrial (EOI). Y precisa: "La gestión de la caja es vital".

Ver: www.esban.com
www.wbaa.biz


Business Angels - Windows Internet Explorer proporcionado por Yahoo!
http://www.iese.edu/es/Microsites/BusinessAngels/index.asp
Business Angels IESE Spain
Edición Ver Favoritos Herramientas Ayuda
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Business Angels
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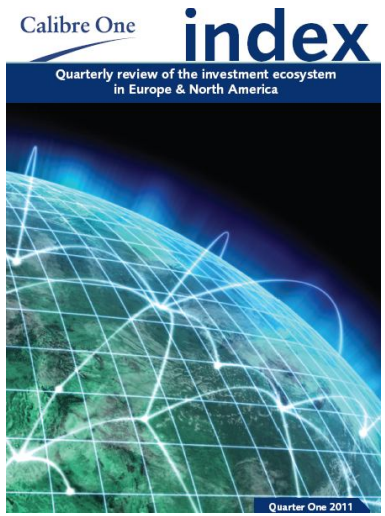
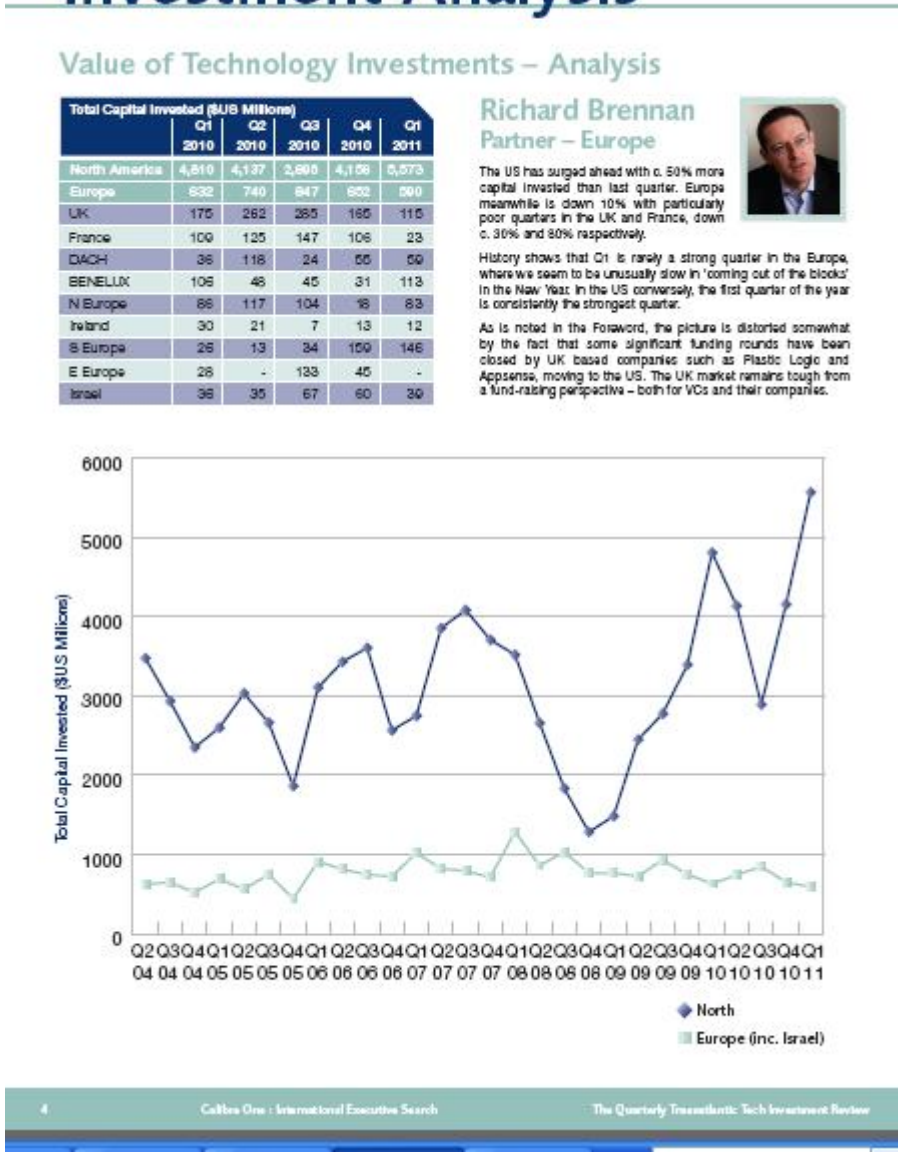
IESE Business School Universidad de Navarra
Red de Inversores Privados y Family Offices
English - Contactar
La Red
Inversores
Emprendedores
¿Necesitas ayuda?
Nuestros proyectos
¿Cómo participar?
Presenta tu Business Plan
Agenda
Campus IESE Barcelona/ IESE Madrid
4 octubre, 2010
16 noviembre, 2010
13 diciembre, 2010
24 enero, 2011
14 abril, 2011
9 mayo, 2011
6 junio, 2011
11 julio, 2011
Novedades
RESERVA EL 11 DE JULIO EN TU AGENDA
55º Foro de la Red de Inversores Privados y Family Offices del IESE
El Día del Emprendedor y Hit Barcelona se fusionan en Bizbarcelona Salón Emprendedor
Bizbarcelona Saló Emprenedor, 15 y 16 de Junio del 2011
Únete a la red
Presenta tu proyecto

# Inversiones de VC

# Inversiones de Q1 en España

Calibre One

## Ireland

| Date | Company | Total ($US) | Investors |
|---|---|---|---|
| 14-Mar | Altobridge | 12,000,000 | Intel Capital, IFC |

| | | | |
|---|---|---|---|
| Total capital invested | 12,000,000 | Total number of investments for the quarter (including undisclosed investments) | 1 |
| Average investment | 12,000,000 | Total number of undisclosed investments | 0 |

## Southern Europe

| Date | Company | Total ($US) | Investors | Country |
|---|---|---|---|---|
| 26-Jan | eToro | 8,300,000 | Spark Capital, Social Leverage, Cubit Investments, BRM Capital, Private investors | Cyprus |
| 16-Feb | Fon | 14,097,900 | Atomico, Coral Group | Spain |
| 7-Mar | Privalia | 124,061,520 | General Atlantic, Highland Capital Partners, Index Ventures, Insight Venture Partners | Spain |
| 14-Mar | Softec-Internet | Undisclosed | Cantabria Capital | Spain |

| | | | |
|---|---|---|---|
| Total capital invested | 146,459,420 | Total number of investments for the quarter (including undisclosed investments) | 4 |
| Average investment | 48,819,807 | Total number of undisclosed investments | 1 |

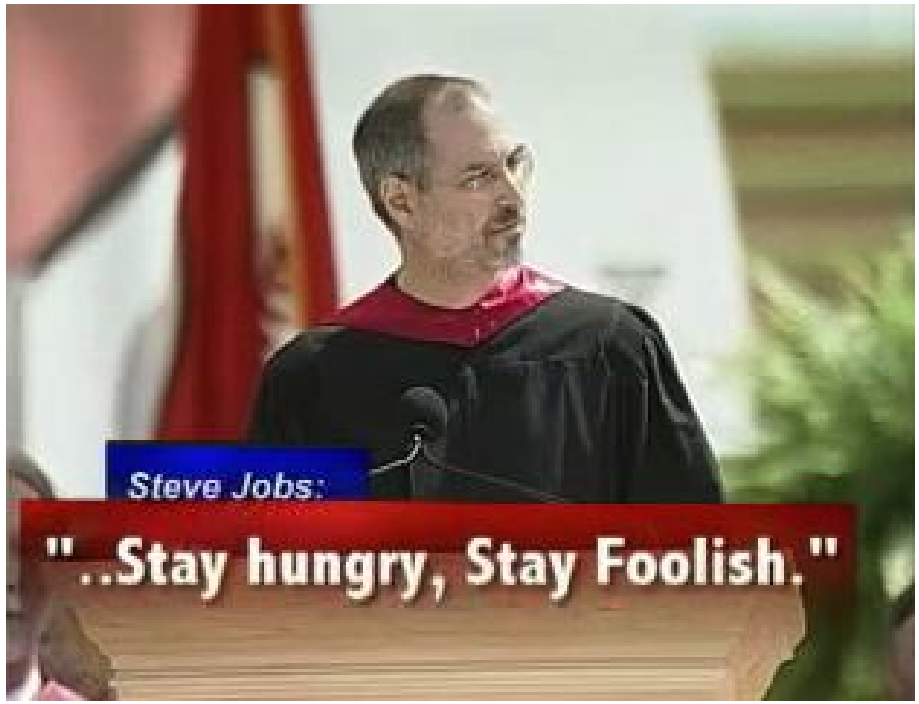
# Las claves

- El equipo
- La visión & la pasión
- La tesorería
- Aceptar las implicaciones de los cambios de estructura & roles en las diferentes fases de desarrollo
- Visualizar las salidas
  - Crecimiento independiente
  - M&A
  - IPO

# ¡Buena suerte!

- Las TIC son fundamentales
  para el desarrollo de todos los sectores empresariales
- Es crucial y gratificante conocer y vivir la innovación en:
  - Centros académicos de élite
  - Empresas en sectores de evolución rápida
  - Las ubicaciones que respiran la I&D y la emprendiduría
- Las startups seguirán multiplicándose
  como alternativas y/o proveedores de
  las empresas establecidas

# Steve Jobs: University of California Commencement Speech 2005




http://news.stanford.edu/news/2005/june15/videos/53.html

# ¿Comentarios?

Gracias por vuestra atención