

# PHILIPS

## Open Innovation around Philips Research

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Philips Research

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# Welcome to Philips

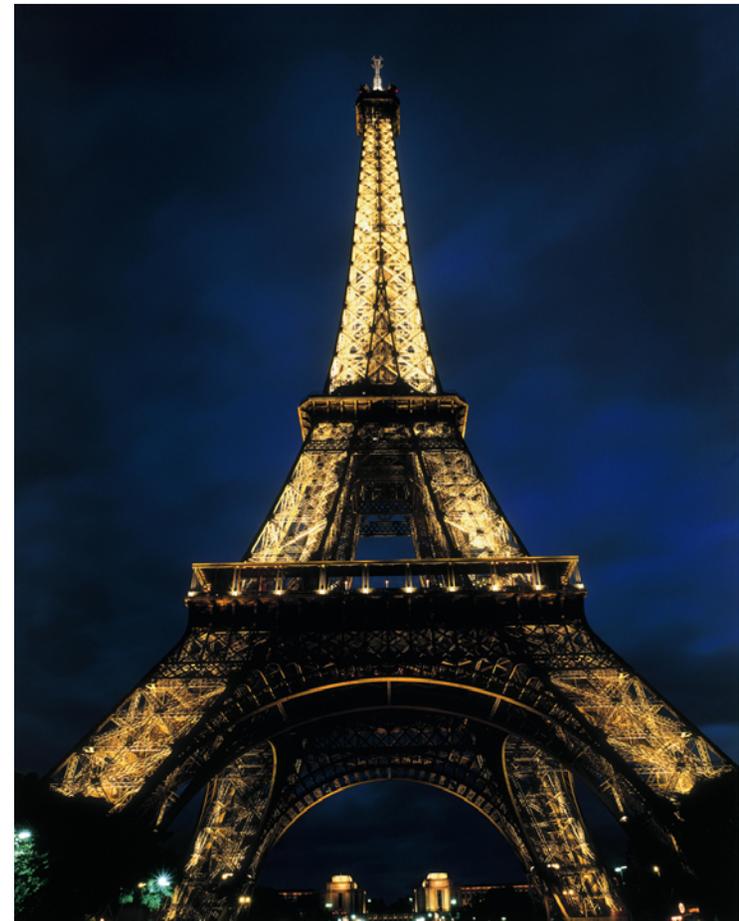


“Ever since our company was founded, 115 years ago, we have dedicated ourselves to improving the quality of people’s lives through meaningful innovation.”

“Today we are a global company, committed to enhancing economic prosperity as well as environmental quality and social equity wherever we operate.”

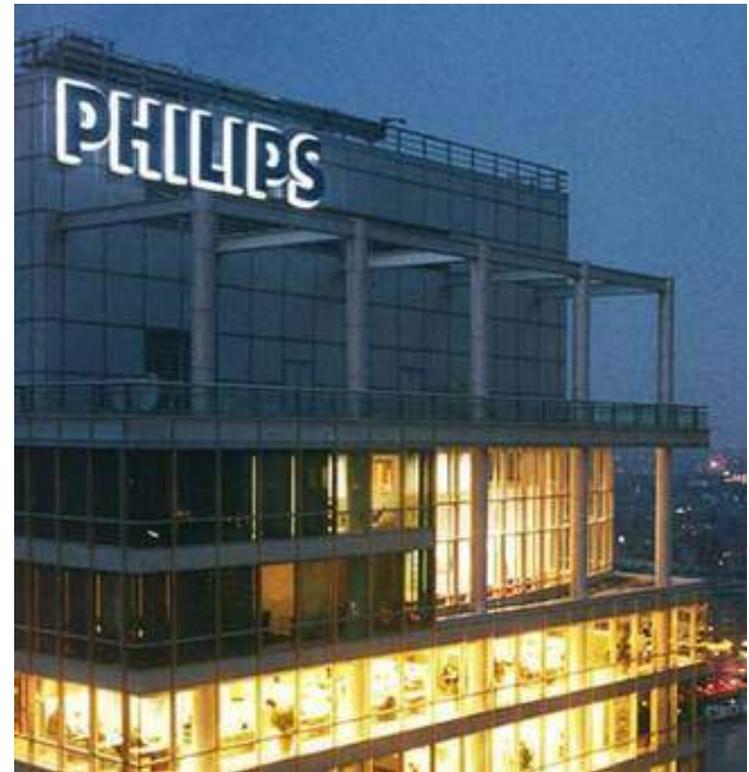
## We are everywhere you go on the planet

- 70% of the top-50 US hospitals have chosen Philips solutions for cardiology
- We light 65% of world's top airports, 30% of offices and hospitals, landmarks such as the **Eiffel Tower**, the Sydney Opera House, the Great Pyramids, as well as 8 of the 12 stadiums in the 2006 FIFA World Cup finals
- One of three cars worldwide includes Philips automotive lighting
- Each day more than a million of our consumer products are purchased. 1 in every 2 U.S. households owns a Philips product



## Royal Philips Electronics

- One of the largest global electronics company with sales in 2006 of EUR 26,976 million
- Founded in 1891
- Multinational workforce of 121,700 employees (January 2007)
- Active in the areas of Healthcare, Lifestyle and Technology
- Manufacturing sites in 28 countries, sales outlets in 150 countries
- R&D expenditures EUR 1,619 mln (2006)



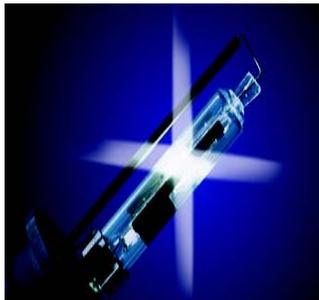
*Headquarters:  
Amsterdam, The Netherlands*

## Royal Philips Electronics today



**HEALTH CARE**

*Medical Systems*



**TECHNOLOGY**

*Lighting*

**LIFESTYLE**

*DAP  
Consumer  
Electronics*

**3-headed  
Cool Skin**



3-D contour-following shaving heads for a very close and comfortable shave

Waterproof design and corrosion-free shaving heads can be used and cleaned in the shower

Cool Skin can be charged in charging stand for cordless use



Moisturising shaving emulsion is applied directly to the face whilst shaving

Click-in cartridge with Nivea for Men moisturising shaving emulsion for a surprisingly smooth result



Neoprene 'wet-suit' travel pouch with storage possibility for 2 cartridges included

Model shown HQ 5620



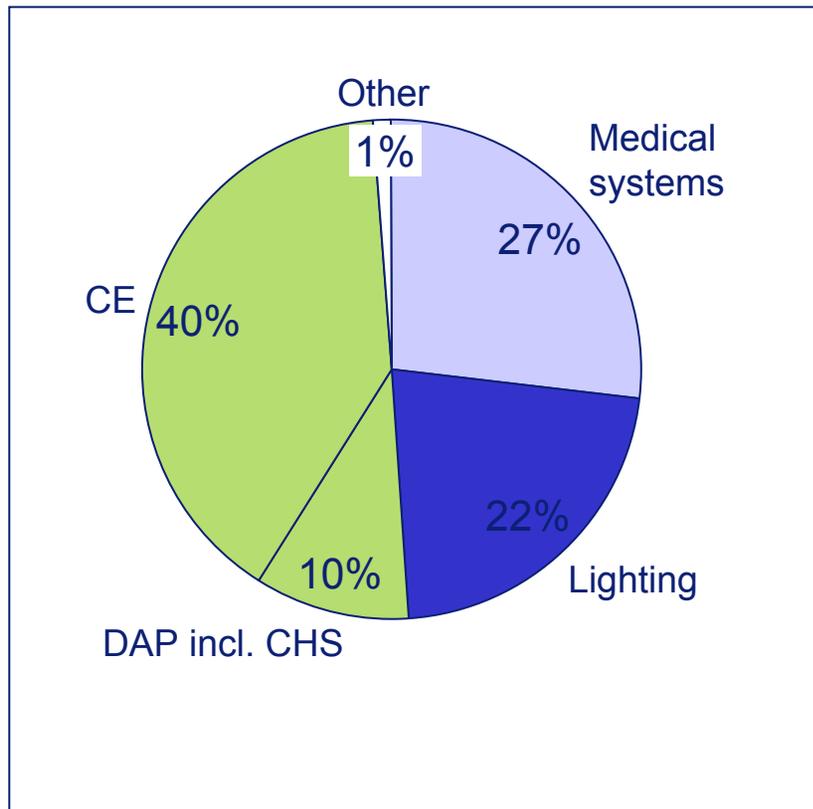
## Performance of the Philips Group

Amounts in EUR million

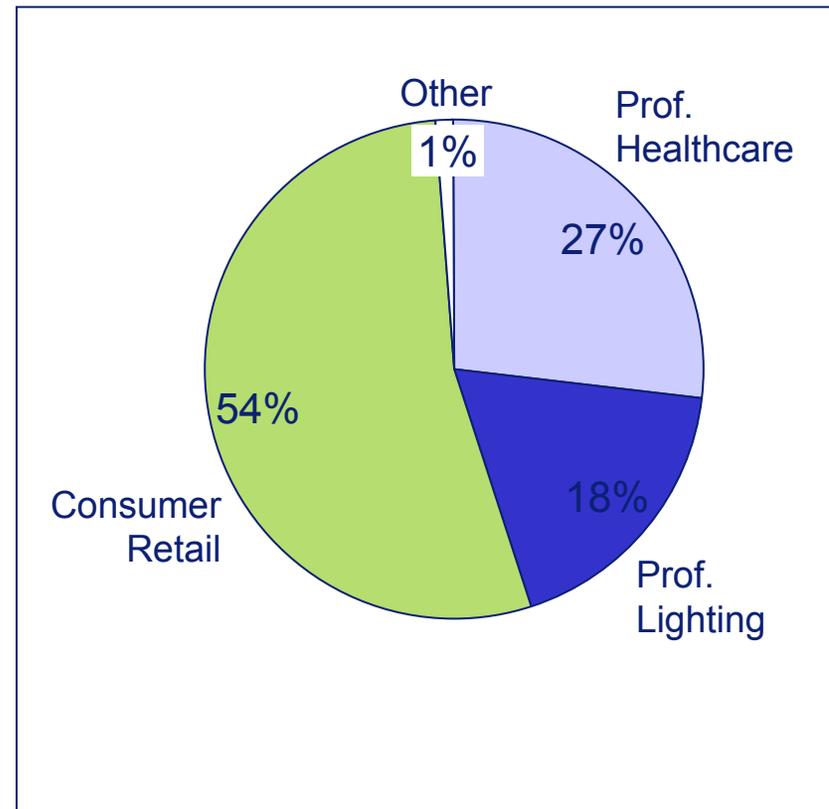
	2005	2006
Sales	25,775	26,976
Earnings before interest & tax	1,472	1,183
Net income	2,868	5,383
Cash flow from operations	1,141	342
<hr style="border-top: 1px dashed black;"/>		
Gross capital expenditures	(644)	(703)
Inventories as % of sales	10.9	10.7
Net debt to group equity	(5) : 105	(10) : 110
Employees	121,809	121,732

## A well-balanced portfolio in consumer retail and professional markets built around the brand

Divisions – Sales\*

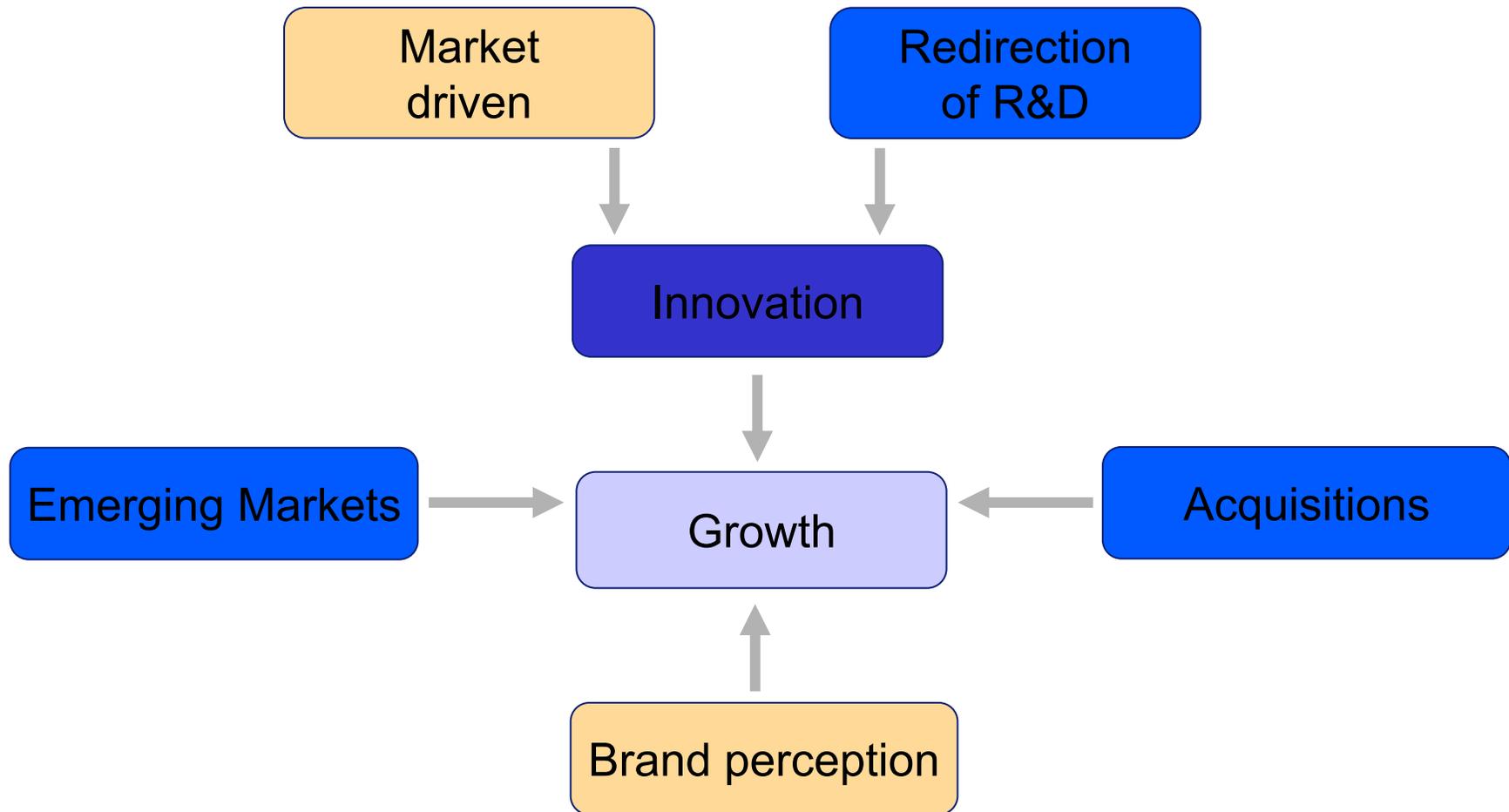


Market spaces - Sales



\* 2006 excluding Mobile Phones and Corporate Investments

# Creating growth opportunities in healthcare, lifestyle and technology



# Adapt peer group to Philips transformation

Existing peer group (until 2006)

Electrolux  
Emerson Electric  
General Electric  
Hitachi  
Matsushita  
Siemens

Existing members



Ericsson  
Gillette  
IBM  
Intel  
LG Electronics  
Lucent  
Marconi  
Motorola  
NEC

Nokia  
Samsung  
Sanyo Electric  
Sharp  
Sony  
Texas Instruments  
Tyco International  
Whirlpool

Proposed peer group (2007-)

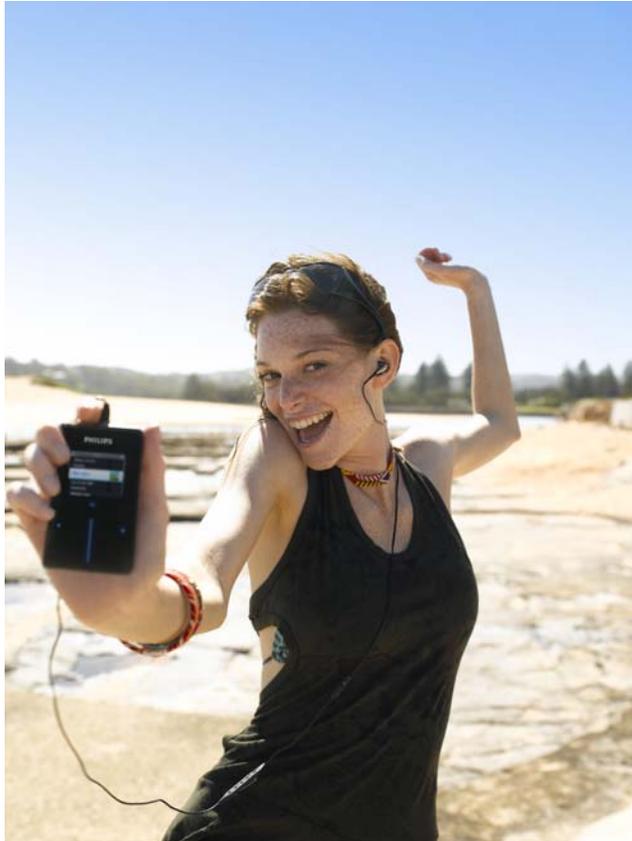
*Existing members*

Electrolux  
Emerson Electric  
General Electric  
Hitachi  
Matsushita  
Siemens

*New members*

Honeywell  
Johnson & Johnson  
Schneider Electric  
Toshiba  
3M

## Our Brand



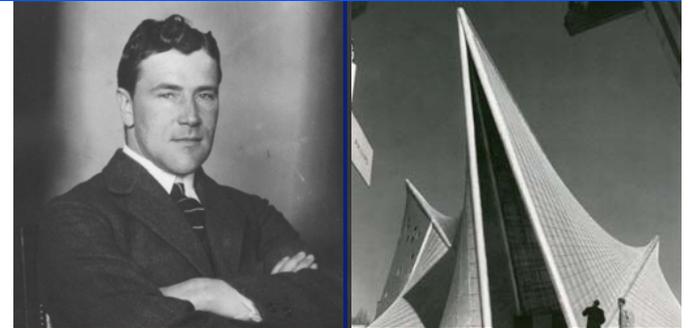
Philips is committed to delivering products and solutions that are:

- Designed around you
- Easy to experience
- Advanced

**PHILIPS**  
sense and simplicity

## Philips Research as of 1914

- Focus on innovation opportunities
  - 2100 people, 1200 scientists
  - Laboratories in the Netherlands, UK, Belgium, Germany, USA, China, India
  - 1.5 patents filed per scientist/year
  - Leading European patent list
  - Top 10 of US patent list
  - Top 5 of Europe's citation index
- 90 years of industrial ambition
- Ambient Intelligence vision



## Philips Research



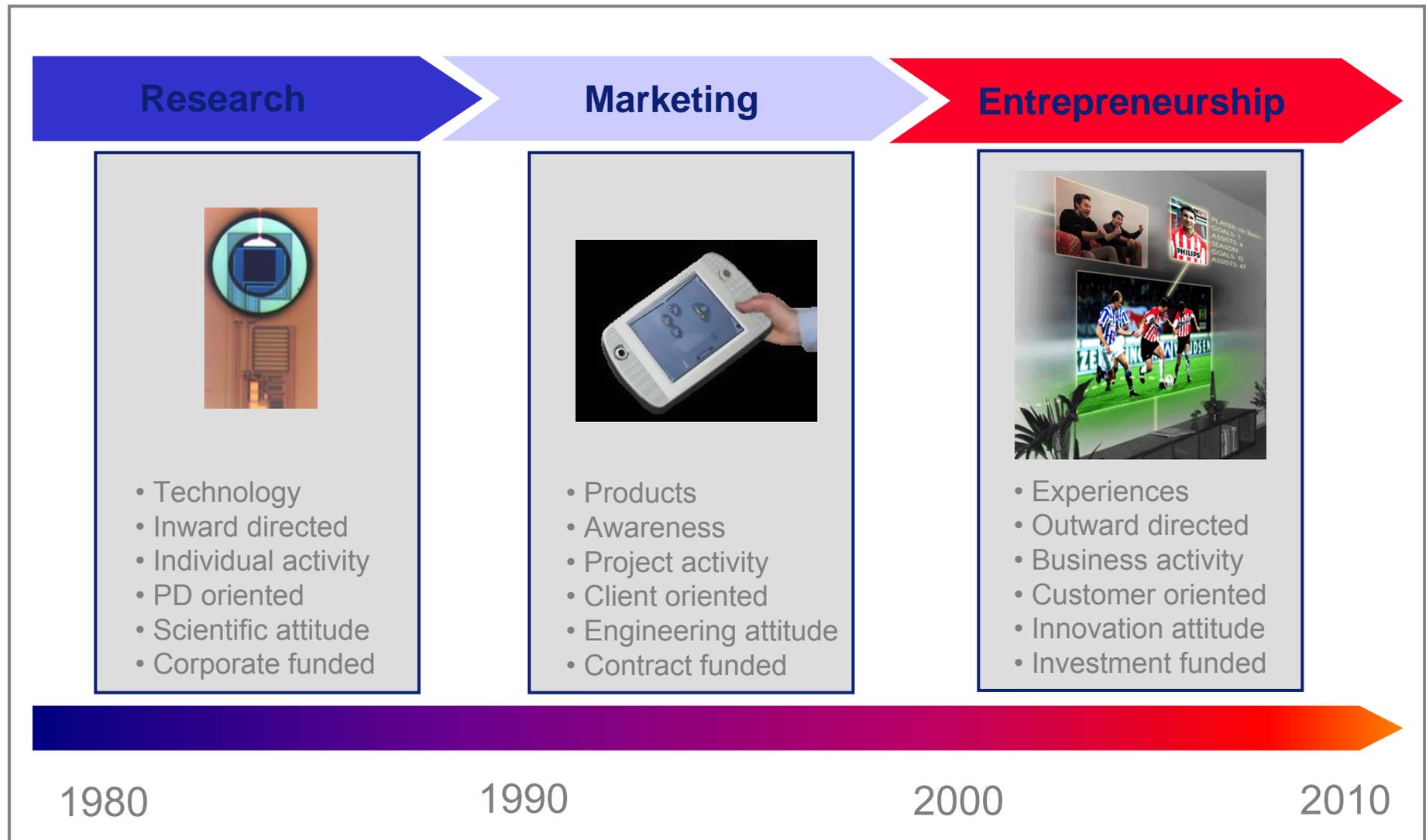
- Corporate organization
- Budget about 1 % of sales
- 2100 employees



## Track record in innovation



## The changing of innovation scope



# Innovation in the areas of:



Healthcare



Lifestyle



Technology

## Bringing simplicity to life

## ExperienceLab

- We develop more optimal solutions by focusing on the needs of the end-user.
- Three laboratories with a distinct focus:

**CareLab**



**HomeLab**

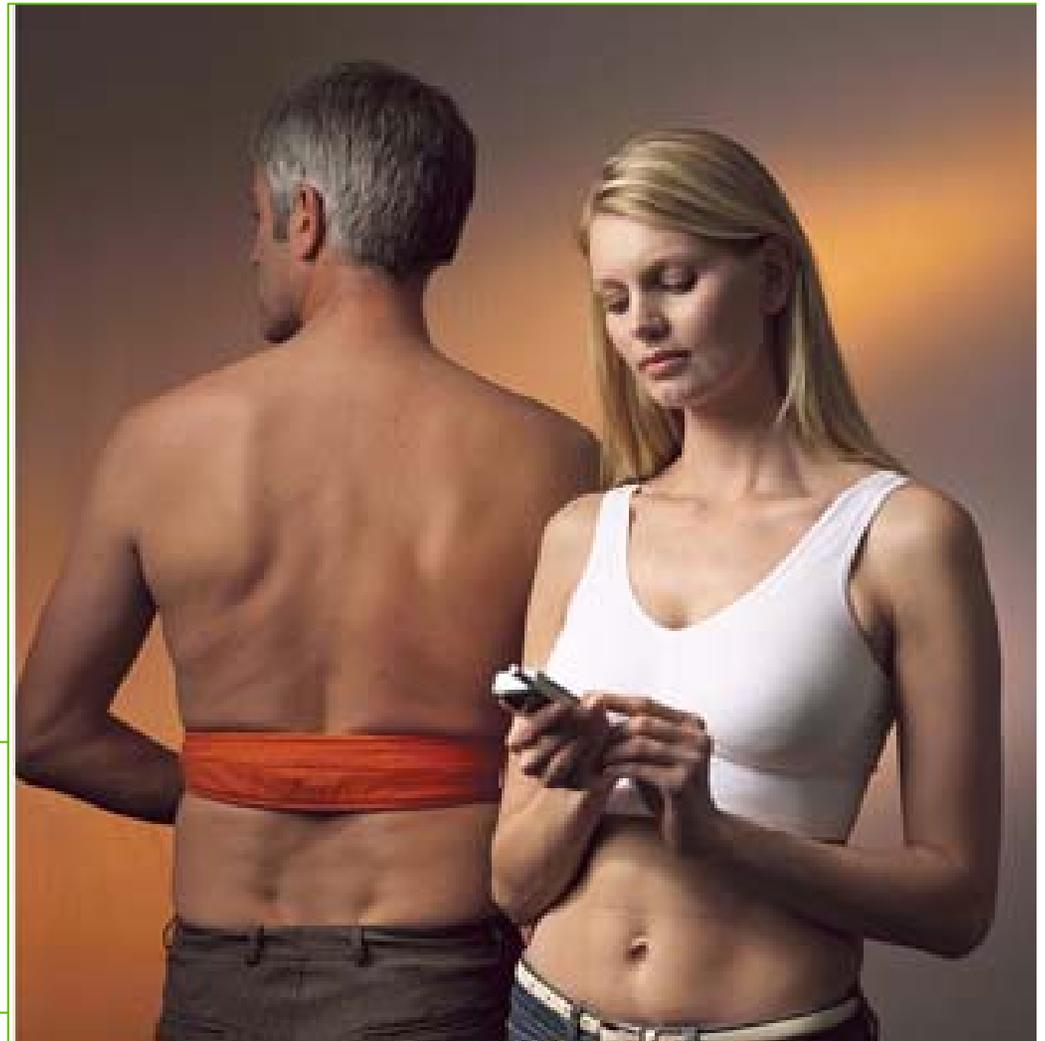


**ShopLab**



# MyHeart

Real-time monitoring of a person's body signals, integrated into wearable garments



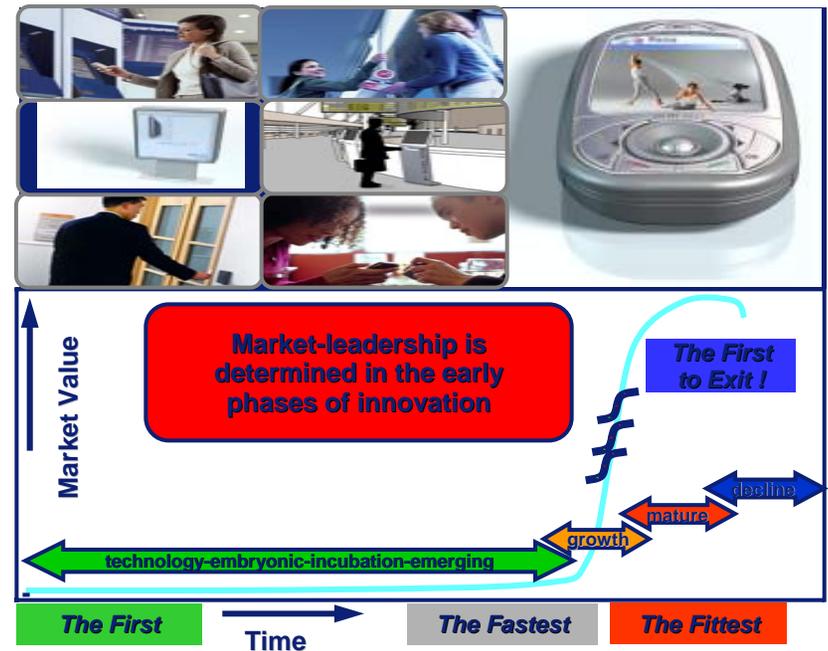
# Lumalive

Light-emitting clothes which express mood, ambiance and give messages to the people around us

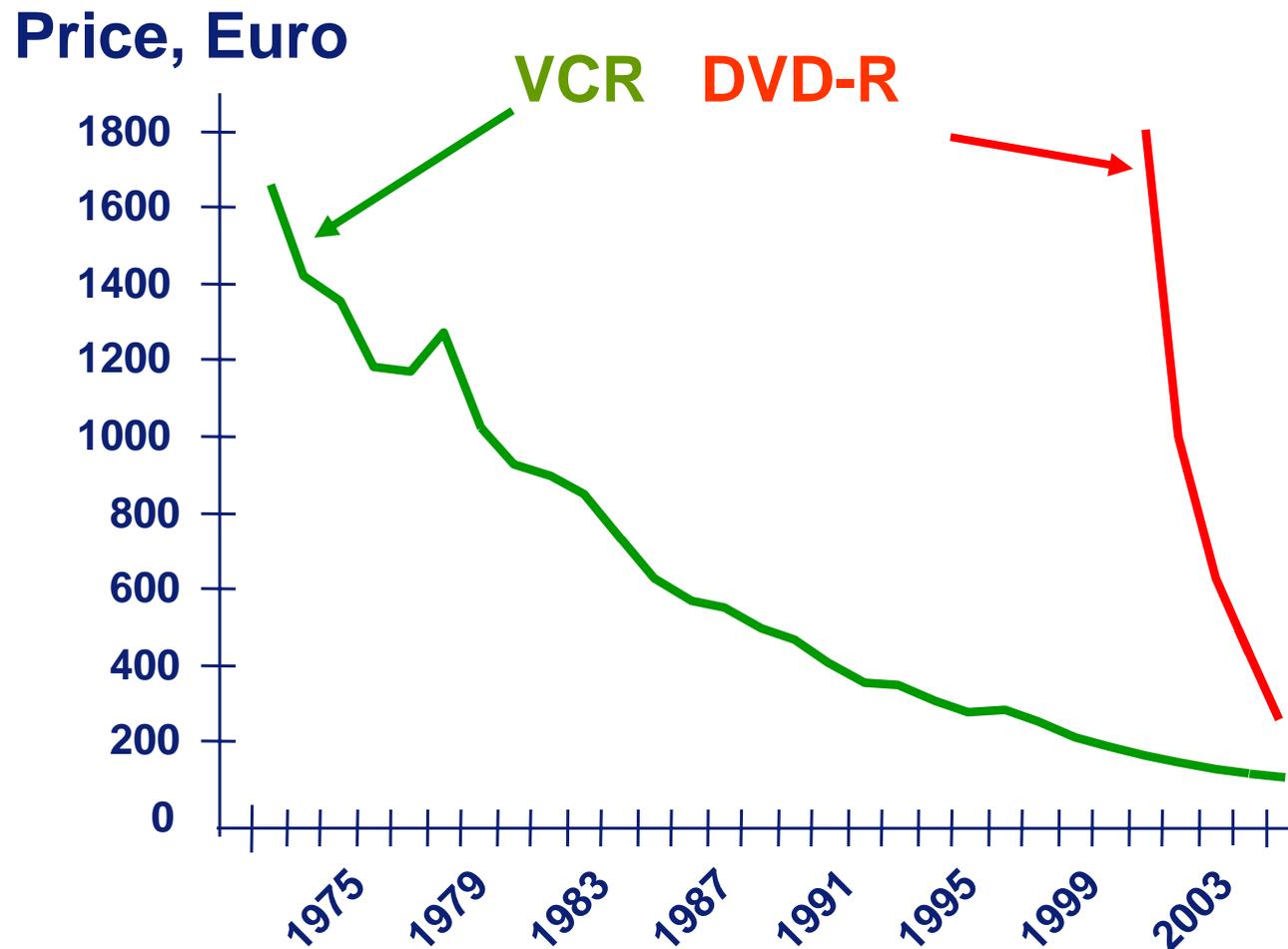


# Business Drivers for Open Innovation

- Rapid expansion of technology pallet
- Explosive growth of applications based on electronics
- 10x acceleration through digitization and globalization
- Business start-ups are more effective than technical solutions
  - Faster way to capitalize on created value
  - Sharing risk by use of venture capital



## Need for speed



## Ambient intelligence

**Digital environments that are sensitive and responsive to the presence of people**

*Embedded*

*Context aware*

*Personalized*

*Adaptive*

*Anticipatory*



# Smarter living

'Ambient intelligence' is an umbrella term for several projects that have catapulted Philips Research into the vanguard of the future. Some of the technologies required still need to be invented, but others have already brought tomorrow's technology into the present. No magic potion is needed – a combination of in-house expertise, smart choice of partners and healthy doses of imagination is all it takes.

*Many invisible distributed devices throughout the environment,*

*that know about their situational state*

*that can be tailored towards your needs and can recognize you,*

*that can change in response to you and your environment, and*

*that anticipate your desires without conscious mediation*



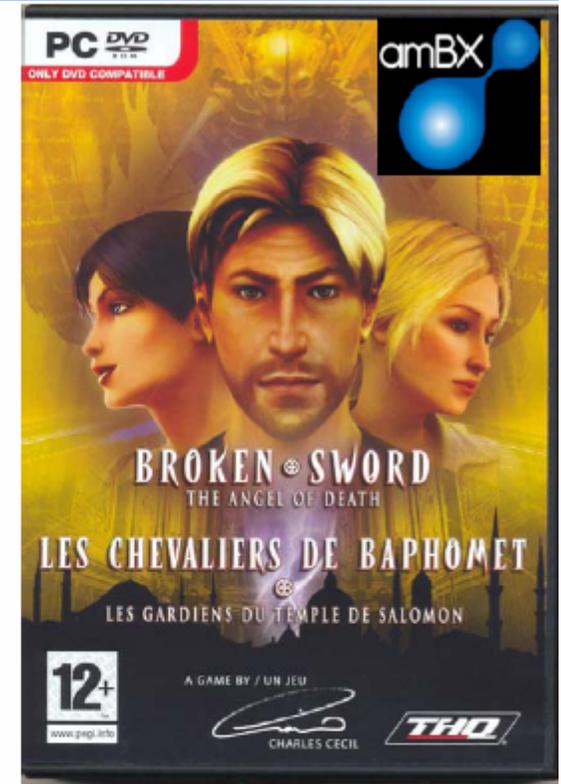
## A complete new hospital experience

- Creating a new hospital experience
- Improving patient comfort
- Reducing anxiety & sedation
- Higher throughput
- A better working environment



## amBX to deliver an engaging experience

- amBX technology links the virtual and real world
- amBX moved to Line of Business stage in the Technology Incubator 1<sup>st</sup> January 2006
- First amBX enabled game on the market
- Technology Tour 2006
- CE amBX enabled products @ IFA Berlin, CES Las Vegas



# From closed to open mindset



Closed

Open

- Smart people work for us
- Discover, develop, ship
- First to discover to market
- Create most IP
- Control IP

- Smart people pop into work
- Claim a portion of IP
- Patents from Researched by others
- Use most IP
- Trade IP

The lab is our world

Not invented here

The world is our lab

Proudly found elsewhere

# Concepts of Open Innovation

- Cooperation, alliances and public-private partnerships
- Concentration of resources and shared facilities in global centers of excellence
- Creation of knowledge networks

## Leading to

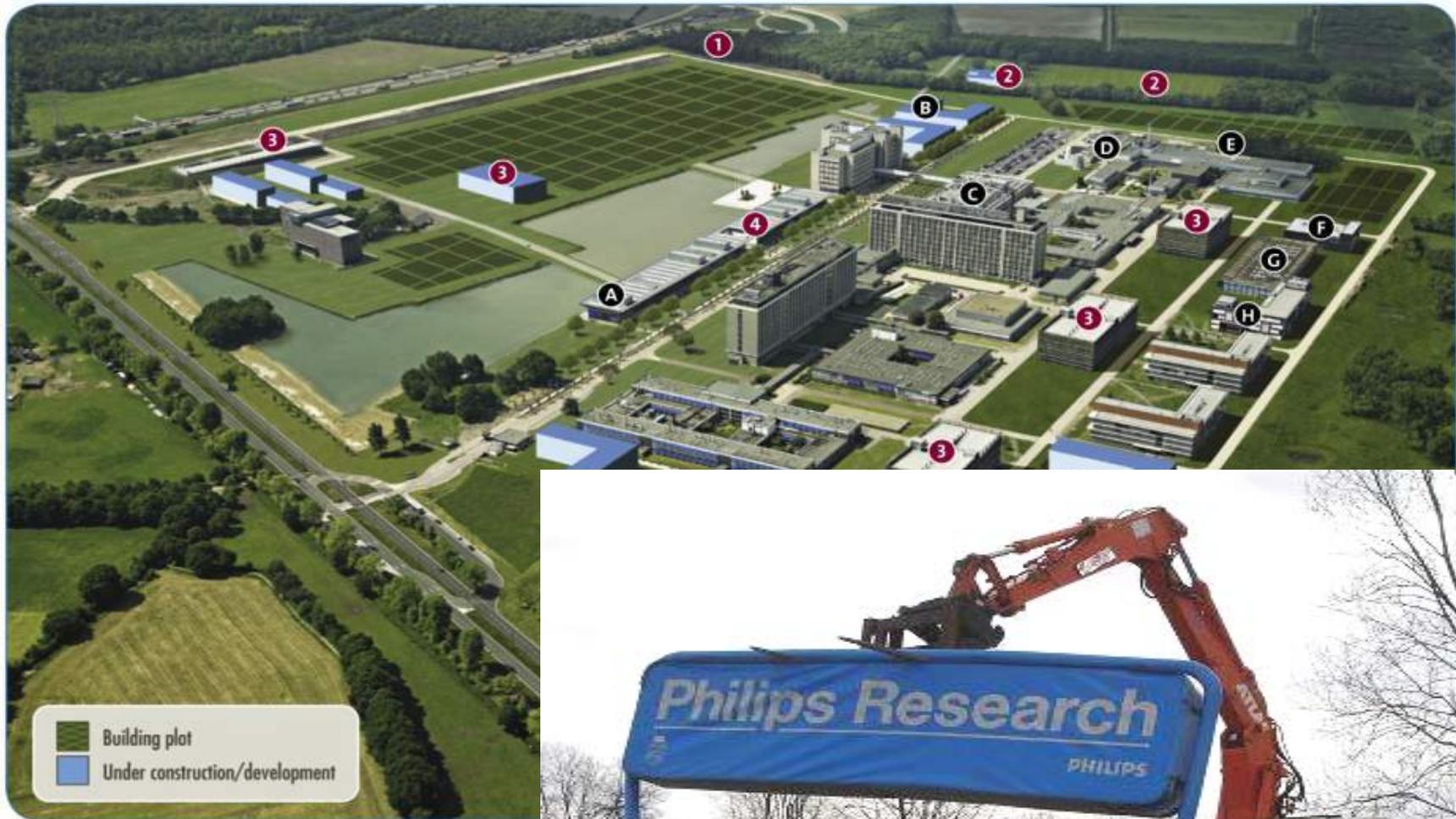
- Shared technology roadmaps and application scenarios
- Shared infrastructure, shared cost, shared risk
- Standardization and generic technology platforms

## R&D partnering in Europe

- Over 200 R&D partnership projects currently running
  - FP, EUREKA, national programmes, e.g. in NL, F, D, A, B
- Some 2.000 partnership links with about 900 different partners via 300 recent/current European projects
- Some 300 contracts for research outsourcing between Philips Research and universities or institutes
- About 40 part-time professors in NL
- Numerous students, R&D trainees, postdocs



# High Tech Campus Eindhoven



- A** Technology Liaison Office
- B** Philips Centre for Industrial Technology  
Campus Technology Centre
- C** Microsystems Plaza (MiPlaza)  
Holst-Centre
- D** Industrial gasses and chemical storage
- E** Centre for Molecular Medicine



● Accelerator Centre



High Tech Campus Eindhoven



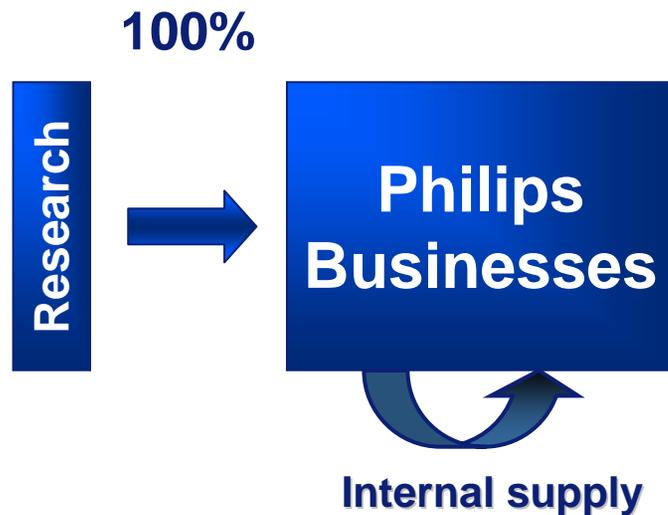
# Philips Research North America

- Leverage US presence
  - Anticipate market development
  - Technology scouting
  - Technology broker
  - Participate in US technology scene
  - Regional technology management
- Healthcare & Wellness program
  - Ultrasound imaging & therapy
  - Biomedical Informatics
  - Interventional Guidance
  - US Clinical Site Program
- Integrated Solutions program
  - Wireless connectivity & networking

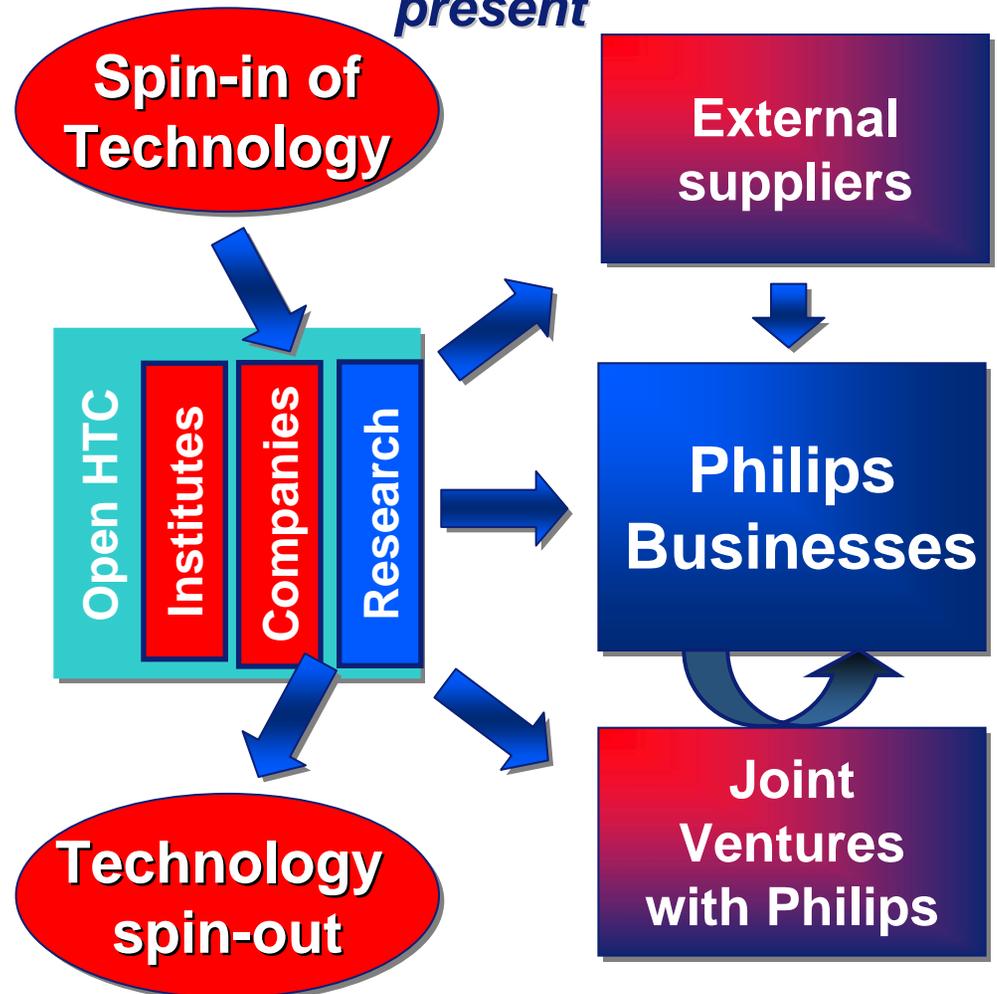


## From Closed to Open Innovation

*past*



*present*





The end

Minds are like parachutes:  
they only function when open