Accelerated Innovation

Jim Andrew, Chief Strategy and Innovation Officer
Henk van Houten, General Manager Philips Research

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Key takeaways

- Innovation is at the core of our strategy and the primary driver of long-term value creation

- We will drive increasing value from our insights, competencies and world-class innovation capabilities

- We are accelerating our ability to deliver ideas to market and a return on investment

- We have a robust pipeline of meaningful innovations that will deliver growth and increase value

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Innovation is the core of our Mission and Vision

Our Mission

Improving people's lives through meaningful innovation

Our Vision

At Philips, we strive to make the world healthier and more sustainable through innovation. Our goal is to improve the lives of 3 billion people a year by 2025.

We will be the best place to work for people who share our passion.

Together we will deliver superior value for our customers and shareholders.

Improving people's lives through meaningful innovation

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Philips has an unrivaled ability to innovate – now focused on capturing more value
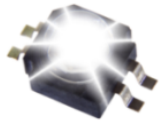
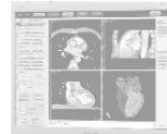| 2008 **LED phosphors**	2010 **Lumea**	2010 **IntelliVue monitoring**	2011 **AirFloss**	2011 **FreeStreet**	2011 **iCT Scan**
1995 UHP & low Mercury TL/CFL	1996 High resolution MR	2002 Flat detector for cathlabs	2002 Blu-ray	2003 Multi-slice CT	2006 3D displays
1918 Medical X-ray tube	1932 Sodium street lamps	1939 Rotary heads	1963 Compact Cassette	1966 Local oxidation	1981 Compact Disc
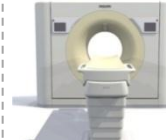
Long track record of innovation…

- Core value of our people
- Very strong capabilities and competencies
- Creates new businesses

…and taking action to drive superior return from EUR 1.7 billion R&D spend

- Clearer business and innovation strategies
- Aligned resourcing and pipelines
- Better execution

4

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We have a unique collection of innovation capabilities

Innovation capabilities

- Unique **insights** into individuals, societies, workflows and user interaction. Excellence in creating innovative, **people-focused designs** (~350 people)

- Global research organization with world-class **multidisciplinary technological expertise** and an extensive network of **partnerships** (~1800 people)

- World class **intellectual property** organization that supports our growth, competitiveness and profitability (~400 people)

- Enabling organization with broad **technical engineering**, equipment development and **prototyping** skills, and state-of-the-art facilities (~1000 people)

- Domain-specific **product development** capabilities coupled with **application and market** knowledge (10,000+ people)

- Cross-sector product development in Bangalore with strategic focus on **mobile, connected devices, big data, and local markets** (~1100 people)

Supporting evidence

- **121 years** of meaningful innovations for global and local markets

- **54,000 patent rights,** 39,000 **trademarks**, 70,000 **design rights** and 4,400 **domain names**

- **EUR 435 million license revenues** in 2011

- **99 International awards** for design excellence (2011)

- Highly valued partner in mechatronics, software, materials and measurement for Philips businesses and **100+ external high-tech** companies

- Steady stream of new products that create strong businesses: **~50% of our sales** in global leadership positions

- Rapid product development cycles for **value segment products** (e.g. ClearVue Ultrasound, India Clinical Informatics, AirStudio, EnvisionTouch)

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These capabilities, when we execute well, drive globally-leading business positions

Business	Innovation enablers	Market position
Male Grooming	• Deep understanding of interaction between hair and skin and the shaver • Extremely precise metal forming in mass production to produce shaving heads • Deep competencies in design ,materials, and finishing	• Global leader with close to 50% market share of the electric segment
Automotive Lighting	• Industry-leading quality of our halogen, xenon and LED technologies • Application know-how and design-in: optics and thermal/mechanical management at module/device level • Technical feature innovations (bulbs) and new technological platforms (modules/ solutions) for aftermarket	• Global leader with 31% market share
Patient Monitoring	• Integration of powerful clinical decision support capabilities • Enterprise-wide interoperability • Extending monitoring onto non-monitored patients • Mobile access to rich clinical data	• Global leader with 46% market share • Gaining share in Middle East, India, Brazil, North America

The same applies to our other leadership positions such as sleep therapy systems, ultrasound, rechargeable toothbrushes, garment care, professional luminaires and high power LEDs

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We innovate in areas far beyond product technologies

Product

Solar-powered LED road lighting for rural areas that are off-grid. Most reliable, efficient and cost effective per km of road. Installed in Morocco, Philippines, China

Customer experience

Philips Retail Solutions immersive, multisensory shopping experiences using light, sound, video, touch, smell and interactivity; to bring joy for consumers and success for retailers

Process

Male grooming in China increasing local relevance with local development team. Speeding up time to market by 30-50%. New innovation process builds on existing platforms

Business model

Ambient experience pay-per-use for private clinic in Austria. Complete technology and service solution, reduced risks around upfront capital investment, and differentiation from competitors

Service

eICU provides continuous monitoring and intervention technology to enable remote care teams to provide focused clinical oversight to ICU patients day and night

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Accelerating "Idea-to-Market" to substantially increase innovation returns

Strategy
- Utilizing new and demanding process to create robust business strategies
- Making clear strategic choices - with explicit link to value creation
- Ensuring business strategy drives innovation strategy

Portfolio management
- Rigorously managing portfolio based on risk/reward and strategy
- Clearly stage-gating investments, and killing the "walking dead"
- Investing in acceleration of most attractive opportunities

Capabilities
- Integrated all front-end capabilities: effectiveness, efficiency, leverage
- Building global competence networks and centers of excellence
- Actively leveraging broader networks of external innovation sources

Execution
- Established explicit targets for speed, taking out the bottlenecks
- Installing DfX company-wide
- Measuring and relentlessly improving our innovation productivity
- "Leaning out" both overheads and E2E value chains

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Our innovation pipeline follows our vision and strategy

Grand societal challenges – Some examples

Access to health **Global warming** **Ageing society** **Healthy food**

Business Strategies
Starting Positions > < Capabilities
Assets

Strengthen the core

Create new businesses

| Sustaining Innovation | Game Changers | Adjacencies | Emerging Business Areas |

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Some of our recent innovation successes

Sustaining	Game changer	Adjacency

Phosphors in CFLi lamps

IntelliVue cableless monitoring

BlueTouch

USP	• Highest quality, lowest costs • Sustainability: substantial phosphor reduction	• Monitoring everywhere • 24/7 vital body signs	• Natural back pain relief • Wearable device for increased mobility
Core of innovation	• Value engineering • Process redesign with partners	• Wearable sensors • Reliable signal extraction	• Biochemical reactions triggered by blue light • LED in textile technology

Challenge: Rapid rise of Cardio Vascular Diseases

Today, 30% of all global deaths are caused by CVD[1]
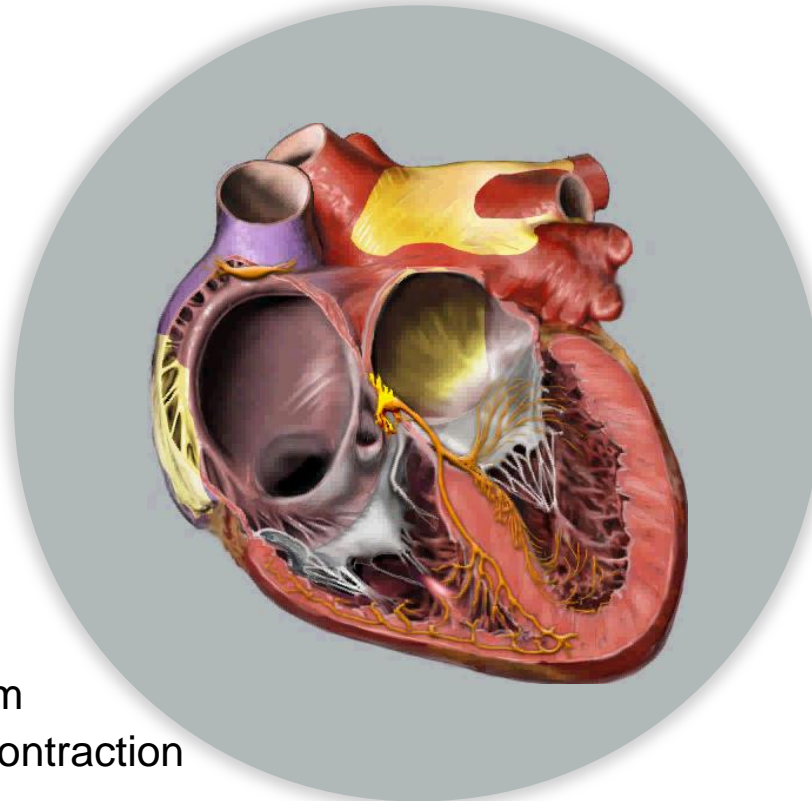*By 2030, about 24 million people will die from CVD*
Estimated annual cost of CVD 310 EUR billion (US), 169 EUR billion (EU), 31 EUR billion (China)

Electrical signal disorders

Atrial fibrillation
Sudden cardiac arrest

Valve problems

Inefficient blood circulation

Blockage of coronaries

Damage of myocardium
Insufficient power for contraction

Damaged myocardium

Insufficient contraction
Insufficient output

Source: World Health Organization
[1]Cardio Vascular Diseases

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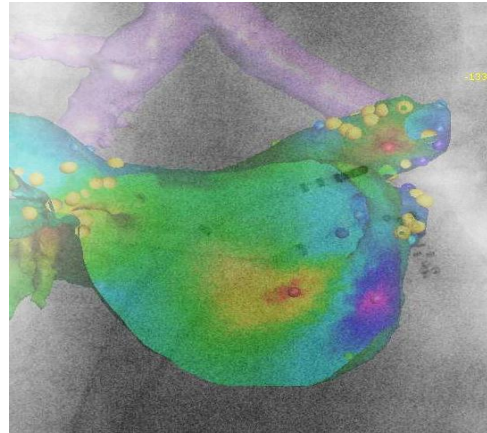## Philips innovations: towards first time right minimally invasive cardiac procedures

Sustaining

We are leader in Interventional Imaging for the cath lab. Key innovations:

− Ultra low dose 3D X-Ray imaging

− Sharp images through noise reduction algorithms

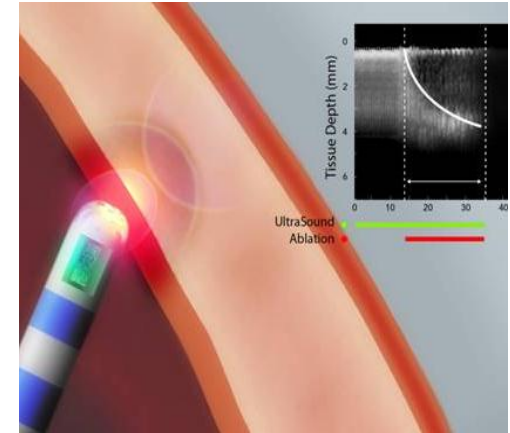− 3D real time Ultrasound Imaging

Game changer

Workflow integration through unique software applications with real-time visualization and guidance for catheters

− Heart navigator for valve replacement

− EP navigator ablation of atrial fibrillation

− EchoNavigator for mitral valve repair

Adjacency

Making catheters smart adding in-body sensing and imaging functionality

− Cardiac ablation depth monitoring for EP via ultrasound transducers integrated on catheter tip

− Real time 3D shape sensing with optical fibers

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We are uniquely positioned to capitalize on this challenge
First time right image guided minimally-invasive cardiac procedures

Leveraging our unique capabilities

- Trusted innovation partner with strong clinical network

- World leading in low dose interventional X-Ray imaging, 3D US transducers, physiological modeling, image processing, smart algorithms

- Unique platform in miniaturized sensor and in-body imaging technology with strong IP

- Pipeline of unique technologies (e.g. fiber optical shape sensing, photonic needles)

Creating a strong business

- Building on our global leadership position in Interventional X-Ray and premium ultrasound

- Dedicated New Business Creation Team for in-body imaging and sensing

- Partnering with catheter and interventional robotic companies, e.g. Boston Scientific, St Jude Medical, Biosense (J&J), Hansen Medical, Corindus, Medtronic

- Continuing our track record in bringing minimally invasive cardiac interventions to market (e.g. EP cockpit, Heart Navigator)

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Challenge: Make mega cities sustainably safe and comfortable

Today, 50% of all people live in cities
By 2050, another 3 billion people will have moved to urban areas

Urbanization

High density population
City planning

Costs of infrastructure

Installation & maintenance
Energy efficiency

People's city

Unsafe places
Better experience

City ecosystem

Remote management
ICT Connected light

Philips innovations: Intelligent city lighting solutions

Sustaining	**Game changer**	**Adjacency**

Making cities pleasant and safe by using appropriate lighting in public spaces:
– Energy consumption reduction up to 80% by state of the art LED technology and controls
– Optimum light distribution
– City beautification

Interactive lighting control to detect need of light, and provide safety:
– LumiMotion: ambient intelligent LED street lighting
– Dynamic highway lighting control
– Urban interactive lighting (night-time playtime)

Connected lighting enables central management and control of city lighting, with cost savings on maintenance and energy.

A connected public lighting infrastructure enables value added services like sensing air quality, security, and intelligent parking management

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We are uniquely positioned to capitalize on this challenge
Transforming cities through intelligent outdoor lighting

Leveraging our unique capabilities

- Leading trusted brand in lighting

- Deep lighting application knowledge

- Global reach to customers

- Strong IP and technologies

- World class in illumination, the effect of light on people, LED modules, embedded intelligence

- Pioneer in ambient intelligence

- Driving interoperability standards

Creating a strong business

- Building on our global leadership in automotive lighting and outdoor lighting, including creative architecture lighting and city-beautification

- Creating a full pipeline of new business projects on combining lighting with safety, sensing and traffic

- Installing innovative lighting solutions in UK, Czech Republic, Netherlands

- Participating in innovative eco-city programs, e.g. Tianjin

Challenge: healthy teeth, gums and a beautiful smile

Worldwide, 60–90% of school children and nearly 100% of adults have dental cavities. The most common cause of tooth loss after age 35 is gum (periodontal) disease. 80% of population have gingivitis (bleeding gums). 30% of people experience bad breath.

Gum (periodontal) disease

Tooth loss
Gingivitis

Dental caries

Tooth decay

Halitosis

Impactful inhibitor in social context

Dental aesthetics

Teeth whitening
Social pressure

17

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Philips innovations: Solutions that contribute to oral health, hygiene and beauty, fitting into people's daily rituals

Sustaining	Game changer	Adjacency

- Deep consumer insights combined with strong IP and technological competence

- Superior cleaning of teeth

- Smart easy to use interactions, stimulating adherence/compliance

- Superior performance professional whitening

- Accelerate: develop innovative superior solutions for mass home teeth whitening

- Expansion into interdental cleaning and better biofilm management

- AirFloss based on innovative 'micro burst droplet' technology is market success

- Recommended by dental professionals

- Synergizing existing Sonicare brand franchise

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We are uniquely positioned to capitalize on this challenge
Creating solutions for a life with better oral healthcare

### Leveraging our unique capabilities

- Leading consumer brand in oral health care

- Strong endorsement by dental professionals

- Partnerships in place with dental experts and institutes

- Deep understanding of consumer needs

- Strong portfolio of IP

- World class competencies in device miniaturization, physics , life sciences, device-tissue interaction, signal processing, system integration

- Premier competencies in Design

- Worldclass competences in Power Oral Care ⇔ superior performance

Creating a strong business

- Building on our #1 position in ultrasonic tooth brushes

- Leveraging Discuss acquisition to move to mass at home consumer teeth whitening

- Dedicated innovation team developing strong innovation pipeline

- Expanding our market presence across geographies

- Capturing economies of scale and using strong distribution network

- Successfully launching and marketing breakthrough innovations like Airfloss

We leverage our competences across innovations
Protected by strong IP portfolio
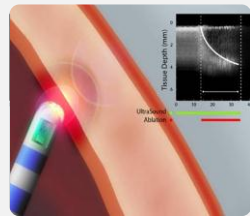
	Smart catheters for cardiac procedures	AirFloss	Ambient intelligent LED lighting	Blue-Touch pain relief
• User interaction and workflow	✔	✔	✔	
• Physiology and biophysics	✔	✔		✔
• HW/SW architecture	✔	✔	✔	✔
• Intelligent control algorithms	✔	✔	✔	✔
• Signal/Image processing	✔	✔	✔	
• Microsystems and packaging	✔	✔	✔	✔
• Optics and photonics	✔		✔	✔
• Sensors and actuators	✔		✔	✔

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Our challenge – answering "what's different this time?"

- Holding ourselves accountable for execution and delivering results

- Ensuring tight alignment of innovation and business strategies

- Accelerate! – reducing time-to-market by 40%

- Leveraging our local capabilities, driving more locally-relevant innovations, while leveraging global scale

- Rigorously measuring innovation results and returns, and reallocating spending

- Taking an End2End view to ensure ideas generate payback, and the next wave of growth

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