Company description – Founded in 1891 in Eindhoven, NL Koninklijke Philips Electronics N.V. is today a multinational corporation active in many electronics-related business areas. Since January 2008, after a simplification effort of the company’s structure, the activities are divided into the following four sectors: (1) healthcare (imaging systems, healthcare informatics, home healthcare solutions); (2) lighting (lamps, luminaires, lighting electronics, automotive and special lighting applications); (3) consumer lifestyle (video and multimedia applications, domestic appliances, peripherals and accessories); (4) innovation and emerging businesses (research, design, applied technologies).

Philips Research Eindhoven, based in the High Tech Campus Eindhoven (HTCE), is one of the largest private research organizations in the world and helps Philips introduce meaningful innovations that improve people’s lives. Its activities focus on the three main market sectors of Philips (healthcare, lighting, consumer lifestyle), covering many disciplines, such as physics, chemistry, electronics, mechatronics, embedded software, signal processing, and computer science, in cross-disciplinary fields like biomedical engineering, microbiology, biophysics, system design, psychology, perception, and behavioral sciences. Research activities in all these areas combine to develop new products and advance engineering competencies in a multidisciplinary ecosystem, considering not only the scientific disciplines involved but also the products’ potential application.

Company Status - In 2014, Philips employed approximately 120,000 people. It has an IPR portfolio of 80,000 patents and owns manufacturing sites in 28 countries and sales outlets in 150 countries.

Financial Results - In 2013, Philips’ operating revenues accounted for €23,452M. Due to its wide patent portfolio, the share of intangibles over total assets is very high (36 percent).
## Innovation Roadmap

<table>
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<th>Phase 1: Characteristics</th>
<th>Phase 2: Joint Research</th>
<th>Phase 3: Transfer of Results</th>
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</table>
| Philips establishes its university partnerships according to specific principles:  
  - **Criteria of partner choice**: proximity, quality, commitment.  
  - **One-to-One Agreement** on main principles of the Programme, between Philips and University Institutions. | Once chosen the partner, Philips structures the joint research according to the following elements:  
  - **3 Research Areas**: represented by Philips core businesses (lighting, healthcare, lifestyle).  
  - **4 research teams** per area, each consisting of 4 Ph.D. Students.  
  - **Joint governance** including 3 subjects: 1) CEO of Philips; 2) delegation from Philips; 3) delegation from Technical University. Combined. These 3 subjects constitute the **Joint Steering Committee** of the Programme. | The outputs of Ph.D. Programmes represent a valuable result for Philips: The company puts emphasis on **people**: at the end of the Programme, Ph.D. graduates own skills and competences needed in Philips. They have a priority in company’s hiring procedures. |

The PPPs conducted by Philips show the following main characteristics:  
- Cooperation Programmes on peripheral research area.  
- The core businesses of the company are not involved.  

In conducting joint researches in PPPs, Philips shares facilities, machineries and research activities with its partners to develop new general technologies.  

The management of the results obtained from PPPs follows two main rules:  
- No priority on IP appropriation.  
- Results of the activities shared among partners.
**Innovation Strategy** - After Henry Chesbrough published his book *Open Innovation: The New Imperative for Creating and Profiting from Technology* (2003), Philips decided to start its own OIS policy trying to apply these principles, which moved the innovation strategy from closed to open.

**Open Innovation Relevance** – The shift from closed to open innovation strategy was very gradual. The following highlights some of key elements in Philips’ OIS:

- *Opening its Research Campus.* Philips put its Eindhoven Campus research centre at the heart of its OIS: from being a closed lab, it became an open campus.

- *Gradual Changes.* Philips implemented its OIS gradually and customized the strategy to company’s needs and characteristics. Philips is fully aware that OIS must apply following several subsequent phases and experimenting different methods of implementation. Furthermore, actions of OIS must adapt to the single company because a universal recipe for implementing OIS does not exist.

- *Private Collaboration with Different Partners:* In 2012, Philips reconsidered its OI strategy and decided to refocus on three types of partnerships: supplier, general, and strategic partnerships.

<table>
<thead>
<tr>
<th>Type of Partners</th>
<th>Type of relation</th>
<th>Object of Partnership</th>
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<tbody>
<tr>
<td>Suppliers</td>
<td>Contractual Relations</td>
<td>Non-Core Business</td>
</tr>
<tr>
<td>General</td>
<td>Joint Programmes</td>
<td>Non-Core Business</td>
</tr>
<tr>
<td>Strategic</td>
<td>Joint Programmes</td>
<td>Core Business</td>
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</tbody>
</table>

- *Public Private Partnership with Universities:* Philips works intensively with universities around research projects to develop new IP and keeps the project focused on its business.

- *IP Strategy:* The company highlighted the importance of IP issues in cooperation: IP represents Philips’ achievement; cooperating on core business topics might jeopardize IP rights. When core IP is involved, Philips does not have partnerships with complementary companies because business interests overlap and the risk of losing priorities on the IP is too high.

**Drivers** - *Learning by doing.* The case suggests that a company can build experience and redefine OIS after first initial attempts.

*Accountability of OI.* Relevance of managerial control for successful implementation of open innovation. Centrality of monitoring and planning for resource allocation.
Appropriation Strategy matters. The case suggests that when partners are involved in co-development clear IP rules need to be established for OI to work.

Barriers - Partnership Management. The case suggests that it is difficult and time intensive to find the right partners, preserve reputation, build trust among partners, and avoid misunderstandings.

Interviewee: Ronald Begeer, Programme Manager Research
Ronald Begeer is Programme Manager Research at Philips since 2006, and Member of the Daily Management Committee of Point-One. In this role, he is responsible for the Eureka ITEA programme and the PDC Point-One programme in Royal Philips Electronics. Ronald previously served as Programme Manager (until 2010). Before starting working in Philips, Ronald was SW Development Manager in NXP Semiconductors (2002-2006) and in Philips Creative Display solution (1996-2000). Begeer graduated in Electrotechnics Engineer at Hogeschool Rotterdam.

In Philips, he is currently Programme Manager Research for PPP and he also runs European Programmes (Horizon 2020). He is Programme Manager for the cooperation with the Technical University Eindhoven. He works within the Campus.