Innovation and Technology Transfer at KIT

OECD HIGH-LEVEL EVENT ON THE KNOWLEDGE TRIANGLE: ENHANCING THE CONTRIBUTION OF HIGHER EDUCATION INSTITUTIONS TO INNOVATION

Preconditions for successful innovations

Profile + Invention + Diffusion = Innovation

Markets
Customer
Lead User

Peripheral Innovators
Experts
Employee

Surrounding
Environment

Organisation
outside a particular industrial sector

Supplier
PhD Student
University

Profile (demand situation)
Invention (idea and technical implementation)
Diffusion (market assertion)

An innovation is a successful development of a novelty, a creative idea or an invention with expanded customer and production benefits.


Chesbrough, H., 2003. Open Innovation


Chesbrough, H., 2003. Open Innovation
Key Tasks at KIT: Education & Research & Innovation

**EDUCATION**
- Entrepreneurship Education
- Continuing Education:
  - Business
  - Administration
  - Basic IPR Basics
- Courageous Students as Founders

**RESEARCH**
- Sensitization
- Quality Orientation
- Creativity
- Know-how
- Inventions
- Successful Implementation

**INNOVATION**
- Technology Screening
- Experts of:
  - Inventions & Patents
  - Technology Marketing
  - Licenses & User Agreements
  - Spin-off Companies & Shareholdings
- Mechanisms
- Budget
  - KIT Innovation Fund
  - Other Funds & Private Equity

Overview: The Entrepreneurial HEI / PRI

Science & Technology Research

Students

Ent. Edu

Ent. Research

IP Creation

Bus. Dev.

Founders’ Community

Mentoring

Consulting

Coaching

Spin-offs & Startups

Industry

Innovation @ KIT
IP value chain – The Innovation Management core process

1. RESEARCH: Scientists develop knowledge, inventions, and ideas.
2. TECHNOLOGY SCREENING: IPR PROTECTION
3. TECHNOLOGY MARKETING
4. TRANSFER PROJECTS
5. LICENSING
6. SPIN-OFFS
7. KIT INNOVATION FUND
8. COMMERCIALIZATION: The innovation process and products are presented at the market and generate revenues, which partially or in full return to KIT.
9. REVENUES FROM PP AND FEEDBACK

- Company (GmbH) for the processing of industrial projects as well as for services of management and consulting
- KIT CROWD Funding: Financial instrument for KIT projects of the sectors Technology and Founding as well as Campus & Community

KIT Innovation Tools

- KIT BUSINESS CLUB: Strategic communication platform and a privileged access for industrial companies on a membership-based service (key account management)
- KIT HIGHTECH INKUBATOR: Building with office and laboratory space for hightech foundings and selected transfer projects of the KIT
- KIT CAMPUS TRANSFER: Company (GmbH) for the processing of industrial projects as well as for services of management and consulting
- KIT CENTER FOR INTERDISCIPLINARY ENTREPRENEURSHIP: Contact point for those who are interested in founding and founders at KIT Campus South

Innovation @ KIT
Live-Lab Integrated Product Development

42 students, 7 teams, one development task, one project partner

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<th>Initial Research</th>
<th>Product Profiles</th>
<th>Product Idea</th>
<th>Product Concept</th>
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<td>Understanding the development task</td>
<td>Development of a broad range of alternative product profiles</td>
<td>High variety of product ideas</td>
<td>Development of product concepts</td>
<td>Prototyping of the product concepts</td>
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<td>Narrowing down the search field</td>
<td>Rating and selection of product profiles</td>
<td>Comparison and combination of product ideas</td>
<td>Verification of customer and supplier benefits</td>
<td>Validation of the product concepts</td>
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<td>Development of a broad range of alternative product profiles</td>
<td>Wiki-based knowledge documentation</td>
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kick-off (oktober) 1_MS  2_MS  3_MS  4_MS  project end (february)

Explaining the results based on two innovation projects of the Live-Lab

**IP-Project 2003/04**

Kick-Off Profile Concept Prototype

--- 4 Months --- 18 Months --- Series development within STIHL

**Marked introduction**

Back carrying system RTS HT

**IP-Project 2012/13**

Kick-Off Profile Concept Prototype

--- 4 Months --- 4 Months --- Series development within WITTENSTEIN Apha

**Marked introduction**

Innovative gear rack assembly