

OPPORTUNITIES AND BARRIERS TO

OPEN INNOVATION IN EUROPEAN SMES

THE ROLE OF ECOSYSTEMS



ISTITUTO
DI MANAGEMENT

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Macro-Regional Innovation Week

*At the crossroads of three European Macro-Regions:
Danube, Adriatic-Ionian and Alpine Regions*

26-30 September 2016
Trieste, Italy





JRC SCIENCE FOR POLICY REPORT

Case Studies on Open Innovation in ICT

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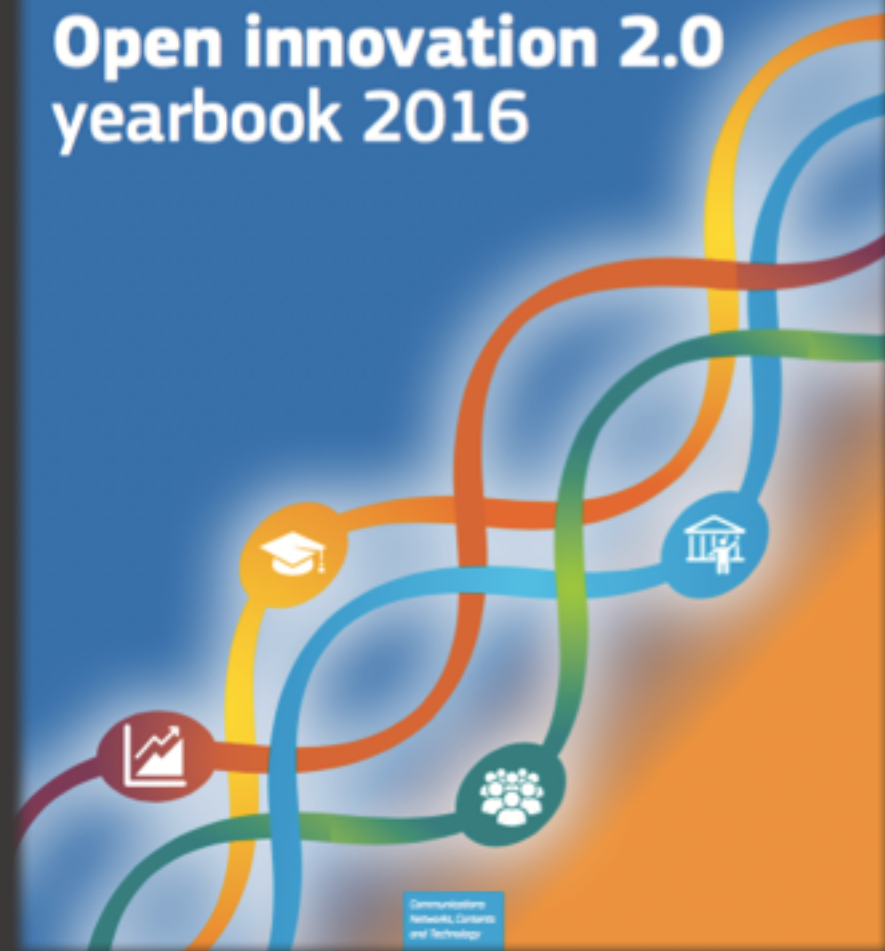
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Communications
Networks, Content
and Technology

FROM THEORY TO PRACTICE:

OPPORTUNITIES AND BARRIERS FOR
EUROPEAN SMES IMPLEMENTING
OPEN INNOVATION STRATEGIES



OPENING UP THROUGH BUSINESS
MODEL INNOVATION

BALANCING OPENNESS
& CLEAR APPROPRIATION STRATEGIES

PARTICIPATION TO LARGE R&D
NETWORKS AND/OR ENGAGEMENT
IN INNOVATION ECOSYSTEMS

OPENING UP THROUGH BUSINESS MODEL INNOVATION

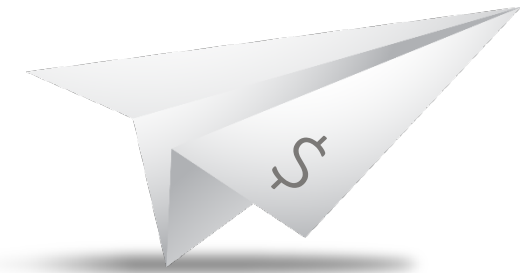
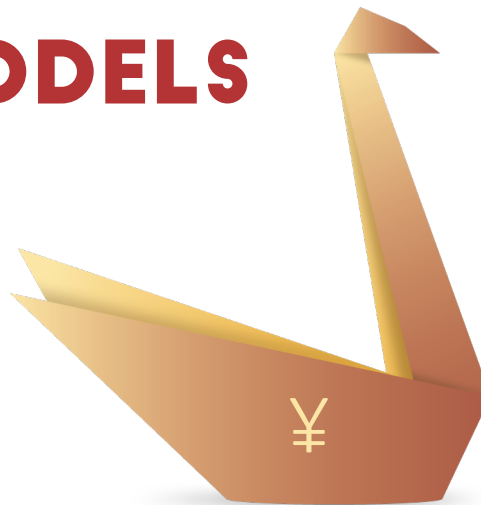
Developing key **technologies** is not enough to go to the market

Business Models are **mediating elements** between technology development and value creation (**integrate** external knowledge, technologies and partnerships)

As companies identify ways to exploit their own technologies, **business models** need to be adapted

BUSINESS MODELS

MATTER



BALANCING OPENNESS & CLEAR APPROPRIATION STRATEGIES

OPPORTUNITY: OVERTAKE SEARCH COSTS
AND THE LOW APPROPRIABILITY OF SCIENTIFIC
KNOWLEDGE



-focus on a specific value proposition
-overcome barriers to entry
(exp. in science based sectors)

RISK: LOSS OF TECHNOLOGY CONTROL

Clear appropriation strategies and formal IP
protection are tools that
facilitate collaboration



PARTICIPATION TO LARGE R&D NETWORKS AND/OR ENGAGEMENT IN INNOVATION ECOSYSTEMS



From a centralized inward-looking innovation

to ecosystem centric, cross-organizational innovation

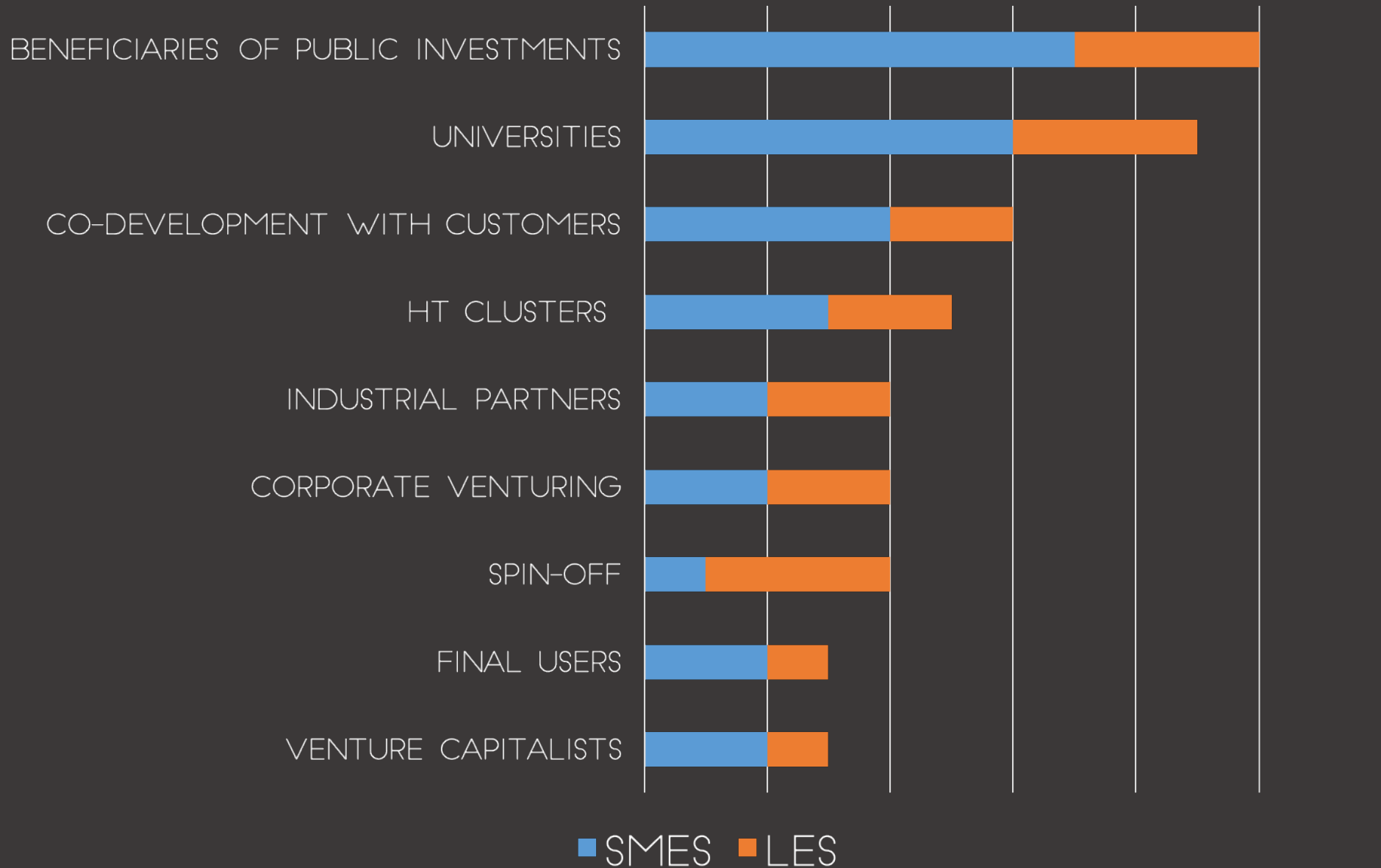


Engaging in large R&D Networks and/or innovation ecosystems helps SMEs to:

- **Set priorities** for R&D investments
- Overcome **barriers to entry** in science-based industries
- **Focus** on a specific value proposition
- Shift from a “**technology push**” to a “**market pull approach**”



NATURE OF COMPANIES' RELATIONSHIPS IN OPEN INNOVATION ECOSYSTEMS



EMPOWERING A GLOBAL ECOSYSTEM THROUGH OPEN RELATIONSHIPS

Physical and **local interactions** play an important role, but competitive advantage needs to be reached on a **global scale**



Define **priorities** for internal R&D processes



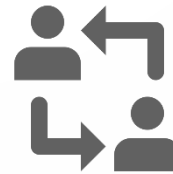
Gather new pre-industrial **knowledge**

INBOUND PERSPECTIVE

Large R&D **networks** and **Research Consortia** with public clients and partners help companies to:



Gain **visibility** and reputation



Foster **expertise** exchange

EMPOWERING A GLOBAL ECOSYSTEM THROUGH OPEN RELATIONSHIPS

EU-financed projects **reduce the risks/uncertainties** of external technology exploitation

Support proactive technology alliances build on top of **SMEs' bottom-up approach** to technology exploitation (access to relevant external knowledge and **complementary assets**)



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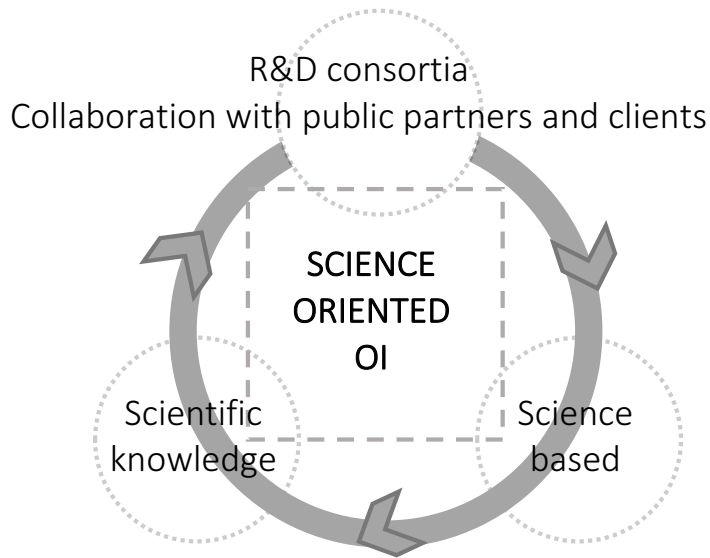
BACK UP SLIDES



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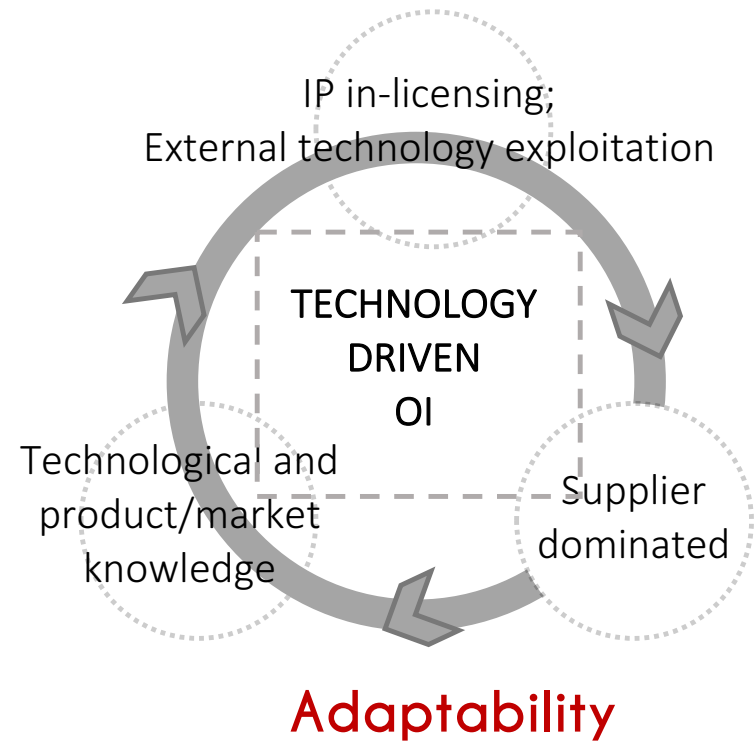
Appropriability

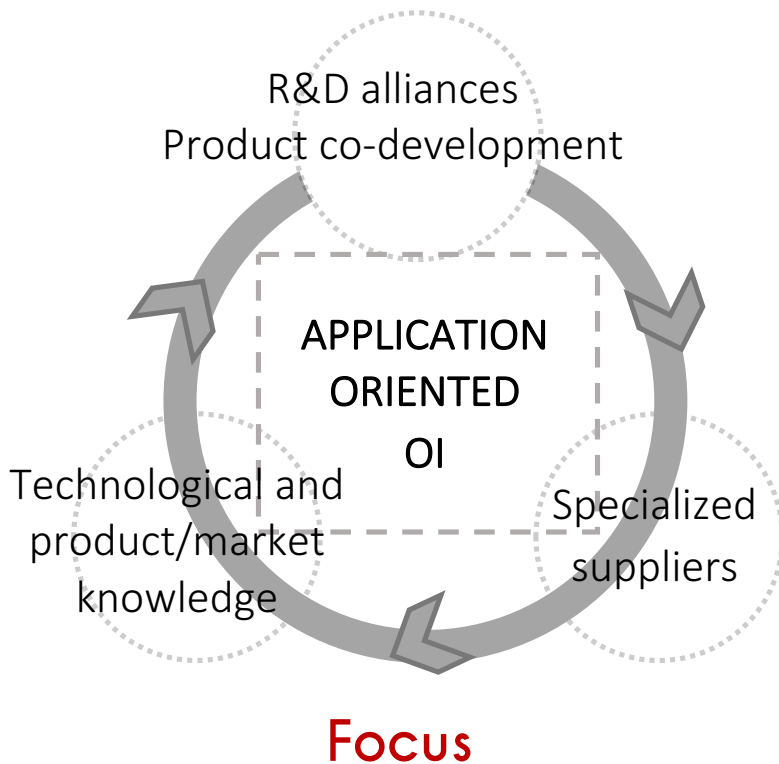
THE (HIDDEN) COSTS OF OPEN INNOVATION in SMEs

Science Oriented	<p>Low level of appropriability of scientific knowledge.</p> <p>Loss of business-critical knowledge (opportunistic behaviour in inter-firm alliances)</p>
Technology Driven	<p>Over-focalisation of the business model on applications for specific market niches</p> <p>A limited evolution of the company's core competencies</p>
Application Oriented	<p>Lack of focus in R&D strategies: rising search costs and R&D costs, challenging the commercial viability of open business models</p>
Community Driven	<p>Loss of technological knowledge shared through platforms</p> <p>Risk of losing technology control while managing cooperation in competitive markets</p>

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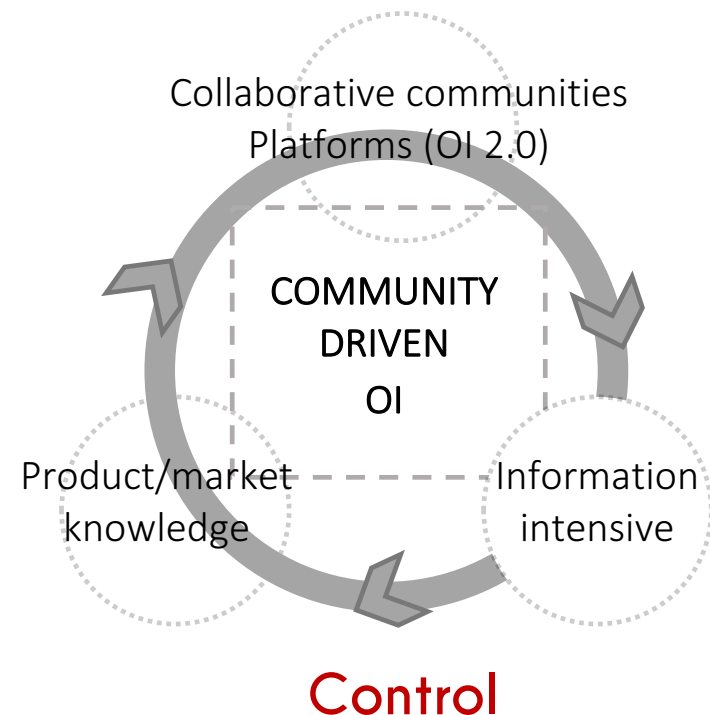


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SELECTED COMPANIES MAP



MORE THAN 40 COMPANIES SELECTED

INTERVIEWED COMPANIES MAP



13 CASE STUDIES CONDUCTED