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HE ELMOS PROJECT

User Guide Open Innovation



Electromobility Solutions for Cities and Regions



EMLO^s overall goal:

Overall Goal

to promote more sustainable transport through the development of <u>electromobility solutions</u> for cities and regions.

» A Region of Knowledge project under RP7, funded by the EU

ELMO^S Concept – Social Economic Benefits



Joint Action Systematic Mapping & Business Plan & SWOT Analysis | Honitoring & Impact ____ Assessment Dissemination & Exploitation Development Involvement of Mentoring of Future Concepts Innovators & Investors Improving Regional

Workplan=

Partner & Competences



Inventions out of the Plight of Population





BLOOD BANK

WRISTWATCH



UNZIP



Innovation as Business Field

- » Innovation as business field
- » Innovation is understood as a process of translating an idea/invention into products/services

Evolutionary innovations: continuous innovation involving many incremental changes in technology or processes.

Revolutionary innovations: involving high investment and risk-taking. These are often disruptive but bring higher and faster returns on investment

Linear Innovation Process

» CI regards Innovation as linear: invention, innovation, diffusion



Innovation process [based on Sammerl 2006, p. 30]

Some Steps to Open Innovation

- » Over more then 100 years CI defined companies' world
- » OI was set-up when companies were under pressure to secure future development:

increasing **globalisation/internationalisation**

- » "Fordism", a model of specialisation allowing fast growth
- » "Flexible Specialisation", a model responding to insufficient growth
- » "New Economic Growth", an approach to decrease unemployment by increasing R&D through opening up to outside knowledge sources
- "Triple Helix", regarding innovation as a co-operation between industry, universities and government
- » "Quadruple and Quintuple Helix" including further partners (e.g. civil society and media and culture-based public)

From Closed to Open Innovation

Closed Innovation



Figure 1: The Closed and Open Innovation Model (Chesbrough 2011)

Old paradigm

-Neither academia nor government participation

- -Integrative R&D centres
- -Mistrust
- -"Not-Invented-Here-Syndrome"



New paradigm

-Opening up to external channels

-Inside and outside knowledge flows

-Trust

-"Networks of Innovators"

-Biographies of Innovation

Closed versus Open Innovation

Closed Innovation	Open Innovation
Smart people in our fieldwork for us.	Not all the smart people work for us. We need to work with smart people inside and outside the company.
To profit from Research and Development we must discore, develop and ship it ourselves.	External R&D can create significant value; internal value is needed to claim some portion of that value.
If we discover it ourselves, we will get it to market first.	We don't have to originate the research to profit from it.
The company that gets an innovation to market first will win.	Building a better business model is better than getting to market first.
If we create the most and the best ideas in the industry, we will win.	If we make the best use of internal and external ideas, we will win.
We should control our intellectual property, so that our competitors don't profit from our ideas.	We should profit from others use of our IP, and we should buy others IP whenever it advances our own business model.

Open Innovation Approaches

- » Lead User Method: Lead users set the trends
- » Living Labs: testing technology under real-life-conditions
- » Cross Innovation: transferring from one to other industries

» Crowd-Sourcing: Crowd-sourcing is a form of using collective intelligence. Crowd-Sourcing can be seen as an instrument within the OI process by which companies and customers interact in the context of the innovation process, usually on the basis of web 2.0.

Examples of Open Innovation

1.1 EXAMPLES CROSS INNOVATION

1.1.1 BMW-JOYSTICK

Car cockpits have a complex user interface. There are many buttons for many functions that want to be pushed while driving and it's sometimes difficult to find them without losing your concentration on the streets. So BMW looked for a solution to make the cockpit user-friendly and save for driving.

An analogy to the driving situation was looked for and found: Gamers watch their screen when using different buttons or a joystick. This technology from the entertainment industry was adapted and an accordant gear shifter was developed (Horváth 2012).



Examples from the ELMO^S Project

- » Co-operation with VÉHICULE and Parkeon, a global player in integrated on-street parking management solutions
- » Setting-up a crowdsourcing platform (<u>www.cluster-crowd.com</u>)

Initiative «Imagine a parking meter you love» they reached out to the general public and ICT clusters, asking them to describe what useful services or applications parking meters should offer in the future not only to motorists but also to anyone in the street. The call to clusters and their member companies was sent out by e-mail and encompassed a more complex set of questions and legal documents. This type of call was unfortunately **not successful**. The following hindering factors were identified through the ex post facto analysis:

- » Parkeon was not known to all companies that were addressed in the call
- » the incentive to companies was not sufficiently attractive

Parkeon

- » the time to respond to the call was perceived as too short
- » people who received the call were not always in the position to respond in the name of the company, which raised the level of complexity

- » <u>www.future-mobility.eu</u>
- » <u>www.cluster-crowd.com</u>

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