DISCOVERING MARKETS
WITH THE HELP OF CITIZENS
FRAUNHOFER’S PARTICIPATORY METHODOLOGY

Martina Schraudner
Fraunhofer-Gesellschaft

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Die Fraunhofer-Gesellschaft
Locations in Germany

- 66 institutes and independent research units
- more than 22,000 staff
- 7 Alliances:
  - Information and Communication Technology
  - Life Sciences
  - Materials and Components
  - Microelectronics
  - Production
  - Surface Technology and Photonics
  - Defense and Security
Checklist: macro-method requirements for a responsible innovation process

*Responsible Research and Innovation:*

- include relevant societal groups
- ensure societal relevance, acceptability & ethical standards
- care for gender equality
The Discover Markets process addresses three stages of the traditional innovation process:

1. **MARKETS**
   - identifying
   - exploring
   - describing
   - stakeholders
   - professionals (diverse specializations)
   - prospective end-users

2. **IDEAS**
   - generating
   - refining
   - converting into specific projects
   - engineers
   - diverse other professionals

3. **DEVELOPMENT**
   - establishing feasibility
   - identifying specifics
   - prototyping
   - stakeholders
   - professionals (diverse specializations)
   - prospective end-users

4. **PROTOTYPE**
   - identifying application areas
   - testing application areas
   - determining specifics
   - stakeholders
   - professionals (diverse specializations)
   - prospective end-users

5. **BUSINESS MODEL**
   - marketing strategy
   - financial plan
   - partnerships
   - Fraunhofer Venture
   - start-ups
   - professionals (diverse specializations)

Discover Markets’ approach
Discover Markets’ methodology bases on three clearly separated steps

1. **“Co-ideation” – generating ideas**
   participating “end-users” explore their needs and preferences in order to envision potential innovations – in egalitarian workshop settings – gender equality is ensured, if relevant;

2. **Conditioning**
   specialists (not previously involved researchers and engineers) condition the produced ideas and make a preliminary evaluation of their potential;

3. **Prototyping**
   another group of specialists and “end-users” develop initial prototypes; the “end-users” test those mock-ups
The projects’ three-step methodology bases on initial estimates on four categories.

- **Need**
  - Individual
  - Societal

- **Technology**

- **Application areas**

- **User groups**

**Workshop formats**
- **Objectives:** To identify potential applications & prospective user-groups, to estimate & visualize the demand, to develop user-centred approaches & evaluate their technological feasibility, to develop business models, to involve concerned parties (stakeholders)
- **Timing:** Before applying for a grant and/or throughout the entire project
- **Methods:** Collaborative ideation & creation (e.g. "storytelling", prototyping, communication tools)
Case 1: CareJack seeks to explore user-needs to provide care-givers an intelligent orthosis

CareJack: Initial estimates

Purpose: Provide both physical support and ergonomic training on the job

Participants: Engineers, scientists, designers, “end-users” – male and female professional caregivers

Methodology: Storytelling, design prototyping, identifying needs

Results: Possible technological solutions and identified required further research & development
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Method:
Storytelling
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**Method:** Design prototyping
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**Method:**
Identifying needs
Discover Markets successfully integrates diverse user-perspective into the innovation process

- The developed methodology fosters user-directed innovation and is capable of integrating a wide variety of perspectives, both professional and from laypersons, from women and men.

- CareJack and MyRehab exemplify the methodology and demonstrate the value of a participatory approach.

- Directing the creative potential of individuals into innovation poses a particular challenge – but Discover Markets shows that there is a great potential to be captured.

- **Outlook:** A qualitative evaluation is scheduled for 2013 / 2014.
THANK YOU

Contact
Martina Schraudner
martina.schraudner@zv.fraunhofer.de