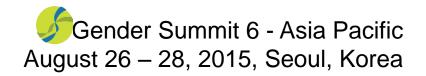
DEVELOPING LEADERSHIP FOR SOCIO-ECONOMIC IMPROVEMENT THROUGH GENDERED INNOVATIONS



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Fraunhofer-Center for Responsible Research and Innovation

Develop Leadership for socio-economic improvement through gendered innovations from different starting points

Def:: "An **innovation** is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method inbusiness practices, workplace organisation or external relations."

Oslo Manual, Guidelines for collecting and interpreting innovation data, 3. Edition, OECD 2005

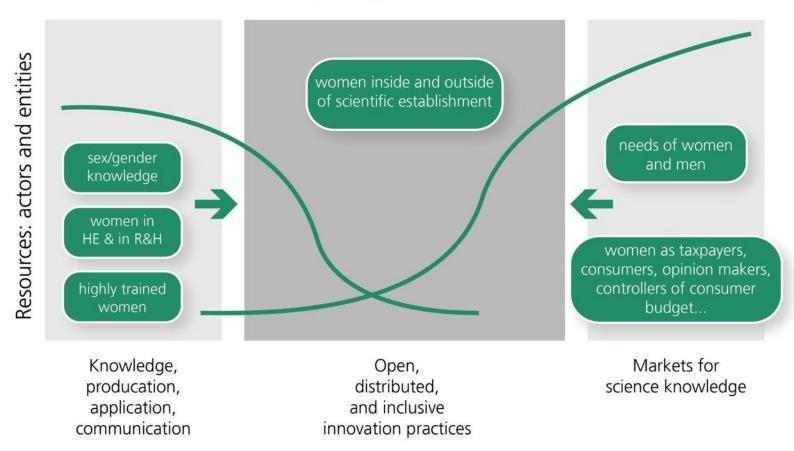
- quality of research via improved protocols
- increasing the percentage of women in decision making positions
- influencing the innovation processes on **new entrance points** where socioeconomic needs can be directly addressed



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Gender Dynamics in Innovation Ecosystems

"Valley of Death"



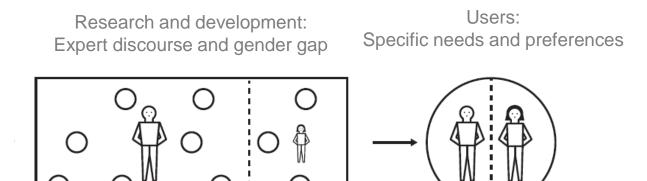
Source: Elisabeth Pollitzer, Martina Schraudner (2015): Gender dynamics and women's careers in innovation ecosystems and knowledge practises; The 2015 Annual Conference of the EU-SPRI Forum in Helsinki, Finnland, Tagungsband S. 25-29



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Societal acceptance is essential for the success of innovations

Technology and Society create socio-technial systems »Scientific-technical inventions are not automatically relevant to society. [...]. It is not enough to offer inventions, they must address societal needs and requirements.« (A. Grunwald 2012: 75)





Where are women involved? Stages of research and commercial innovation

		Who?	Influence of women
Defining Res	earch Project		
	research question	% women in funding agencies	medium
		% women grant applications	medium
	research area	% Women Professors	low
	research question	% Women Professors	low
Doing Resea	ırch		
	organisational framework	% women in total	low
	milestone approvement	% women in leadership positions	low
	interpretation of results	% women in research	medium
Transfer of re	esearch results		
	scientific publishing	% women authors	low
	transfer to commercialisation	% women in start ups	low
		% women patent holders	low
		% women in venture capital	low
Impact			
	communication	% women interested in innovation	low
	commercialisation	Women's market adressed	sometimes
	science education	% women studying science	medium - low



Starting points for socioeconomic improvement

• Quality of research

Gendered Innovations

- Market potential
- Pool of talents
- scientists
- entrepreneuers



Svein Sjøberg and Camilla Schreiner: The ROSE project. Overview and key findings, 2010, http://roseproject.no/ network/countries/n orway/eng/nor-Sjoberg-Schreineroverview-2010.pdf





Societal acceptance is essential for the success of innovation

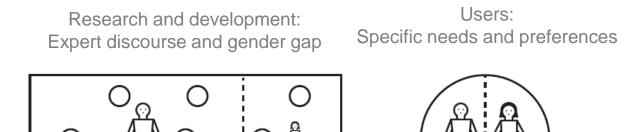
Discussion about technologies

Socially shared vision



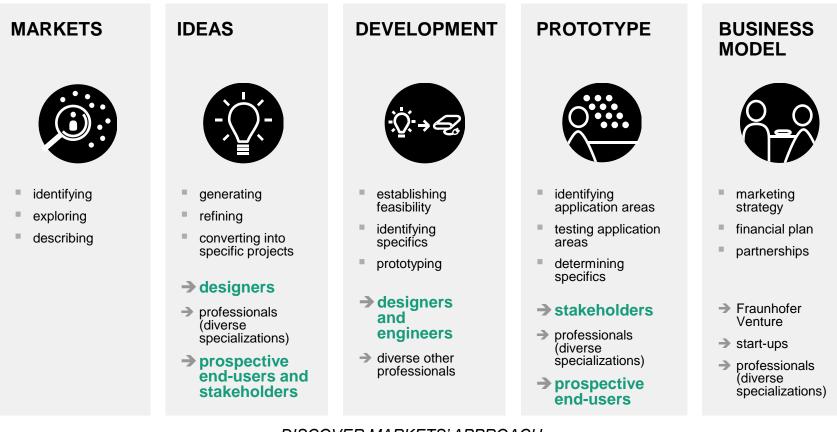


Societal acceptance is essential for the success of innovation





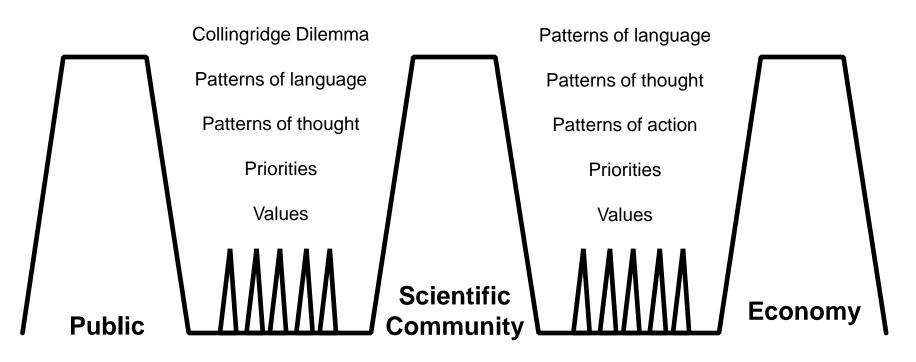
»Discover Markets« includes users, engineers and stakeholders at early stages of the innovation process



DISCOVER MARKETS' APPROACH



However, the demand for a participative and interdisciplinary dialogue raises large problems





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Participant – feedback

"The morning after the workshop, ideas and visions kept going through my mind. It is important to be able to envision future challenges as manageable and to shape them into desirable outcomes. It is this approach, I believe, that makes your project so appealing." (women)



Support from the European commission: Responsible research and innovation is defined as sine-qua-non feature of current research

> "Responsible research and innovation' is 'a transparent, interactive process by which societal actors and innovators become mutually responsive to each other regarding the ethical acceptability, sustainability and social desirability of the innovation process and its marketable products."

> > von Schomberg, 2013

Von Schomberg, René (2013): A Vision of Responsible Innovation. In: Owen, Richard; Heintz, Maggy & Bessant, John (Eds.), Responsible Innovation. Managing the Responsible Emergence of Science and Innovation in Society . John Wiley: London, p.19.

"Public engagement is needed in order to test and contest the framing of the issues that experts are to resolve. Without such critical supervision, experts have often found themselves offering irrelevant advice on wrong or misguided questions."

Jasanoff, 2003

Jasanoff, Sheila (2003): Breaking the waves in science studies: comment on H.M. Collins and Robert Evans, 'The Third Wave of Science Studies'. *Social studies of science 33(3)*, pp. 389-400.



Policy Priorities of the European Commission

From "Science in Society" to "Science for Society, with Society"

- 1.Engagement Choose together
- 2.Gender Equality Unlock the full potential
- **3.Science Education** Creative learning fresh ideas
- 4.Ethics Do the right "thing" and do it right
- 5.Open Access Share results to advance
- 6.Governance Design science for and with society



Concluding remarks

Developing Leadership for socio-economic improvement

-through a common understanding of science as an enabler for a socially shared vision of the future which include women's perspectives and interests.

Do we have further starting points to create the change?



THANK YOU

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