

Gender as a quality criterion in science - Research, Innovation, and Gender

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Fraunhofer Profile in 2011

17 000 employees

€ 1,7 billion research budget

7 Alliances

- Information and Communication Technology
- Life Sciences
- Materials and Components
- Microelectronics
- Production
- Surface Technology and Photonics
- Defense and Security









Unrelenting concentration on value and usefulness for customers

What this means, is:

To enable men and women to do, what they cannot do at

this moment, but what they would like to do, if they

knew that this was possible!







Aspects of gender in the innovation process

Consideration of Gender

High

Average

None

Individualised medical care



 Inability to process higherpitched voices

No women in test groups

DISCOVERGENDER

IDEO trolley

Mobile for the elderly

Atomic Ski

IXUS camera

Water pumps

Voice recognition system

Airbag

Cake mixes

CIM

Heart attack

Innovation phases: from idea to product

Exploration | Initial research Prototypes Early majority

Trend research

Technical realisation

Early adopters

Late majority







Typology on innovation

Group Name	Proportion of EU25 population	BROAD characteristics of Group compared to others*
"Anti-innovation"	16%	Female; aged 55 or over; lower level of education; living alone; principal occupation – taking care of the home or being retired
"Reluctant"	33%	Female, aged 40 or older; tend to be manual workers or not economically active (though not students)
"Attracted"	39%	Male, young, students or white collar workers, living in a large houselhold
"Enthusiasts"	11%	Male, young, students, those with high levels of education, managers

^{*} Group descriptors were assigned based on the largest single contributing demographic subgroup; these descriptors are not meant to comprehensively represent a group's demographic composition

Source: European Commission, Population Innovation Readiness, Special Eurobarometer 236 / Wave 63.4 – TNS Opinion & Social (2005)





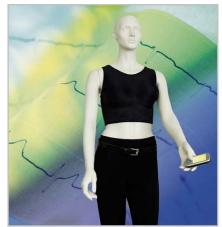


Expectations towards technical systems

"58% of female seniors and 37% of male seniors would like to live with the support of technical systems in their own homes. Technical devices such as an automatic security system for the home, telemonitoring for persons suffering from cardiovascular diseases as well as mobile health assistance devices, e.g. shirts with an electrocardiogram function, receive the highest acceptance rates."

Source: Krüger-Brand, 2009; http://www.aerzteblatt.de/v4/archiv/artikel.asp?id=63398











General perceptions of innovation by gender

Innovation is essential for improving economic growth

A company which does not innovate is a company that will not survive

Innovative products or services often simplify everyday life

A company that sells an innovative product or service improves the image of all its products or services

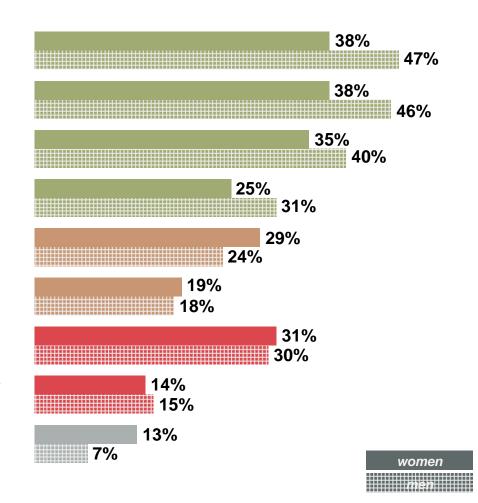
Innovative products or services are a matter of fashion

Innovative products or services are most of the time gadgets

The advantages of innovative products or services are often exaggerated

Purchasing an innovative product or service is risky for the consumer

none of these / not specified / don't know



Source: European Comission, Population Innovation Readiness, Special Eurobarometer 236 / Wave 63.4 – TNS Opinion & Social (2005)





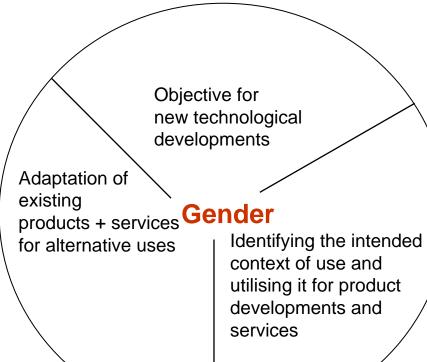


Gender as a chance - in the research and development process

???

Roberta





Service - robotics









Methods and Cases: Gendered Innovations



launch in November 2011 "Gendered Innovations"

http://genderedinnovations.eu







The DFG's Research-Oriented Standards on Gender Equality



"A successful strategy for gender equality delivers significant added value. Gender equality enhances research quality because it enlarges the talent pool, promotes a diversity of research perspectives, and eliminates blind spots regarding the significance of gender in research contents and methods. Thus the inclusion of relevant gender and diversity aspects is a key ingredient of high-quality research. To achieve and maintain gender equality, the DFG member institutions agree on structural and personal standards."

Source:http://www.dfg.de/download/pdf/foerderung/grundlagen_dfg_foerderung/chancengleichhe it/forschungsorientierte_gleichstellungsstandards_en.pdf







published 2010

"Journals can insist that authors document the sex of animals in published papers — the <u>Nature journals are at present considering</u> whether to require the inclusion of such information. Funding agencies should demand that researchers justify sex inequities in grant proposals and, other factors being equal, should favour studies that are more equitable". ... p665



Raising the profile of women in medicine is complex, but identifying, promoting, and publicising female medical leaders and their contributions to medicine, is a priority. Men rarely hesitate to accept an invitation from *The Lancet*. Women, where are you?

"Promoting Women in Science and medicine", Editorial, The Lancet, Vol 376, 2010, p. 1712

THE LANCET

"This interesting study could incite cliniciams to turn to primary prevention of colorectal cancer by aspirin, at least in high-risk populations."









Gender as a quality criterion in R&D

- Identify objectives for new technological developments
- Identify promising markets
- Interest a broader group of people in technology
- Specify quality criteria for new technologies

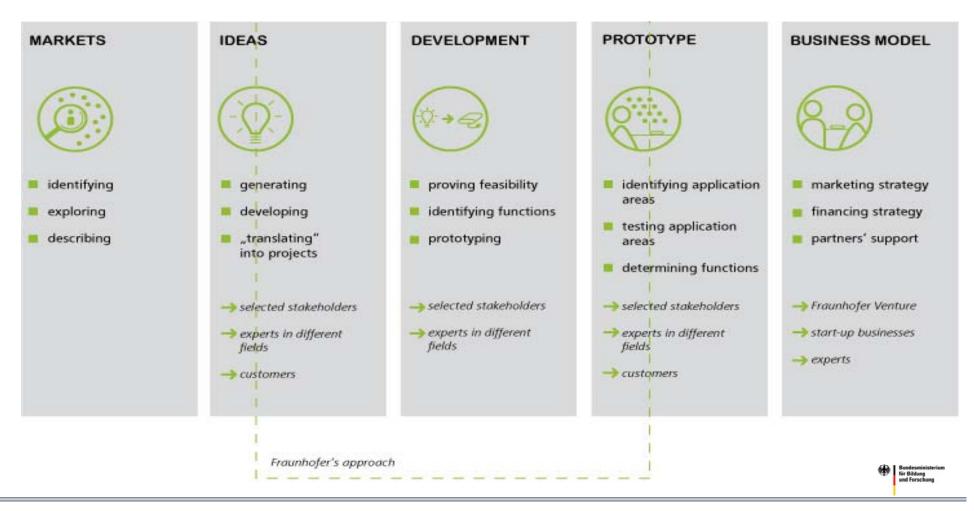






From ideas to marketable products -

The discovermarkets approach of developing technologies











Thank you for your attention!



