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## **"Discover Gender" and beyond**

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# Fraunhofer Gesellschaft



## Joseph von Fraunhofer (1787 - 1826)

Discovery of  
"Fraunhofer Lines"  
in the sun spectrum

New methods of  
lens processing

Head of  
Royal Glass Factory



## Fraunhofer Gesellschaft Today

Applied Research for State and  
Industry

MP3; white LED; "Roberta"

Research budget 1,4 billion €



# Fraunhofer in Germany

57 institutes

15 000 employees

at 40 different locations





# Unrelenting concentration on value and usefulness for female and male customers

What this means, is:

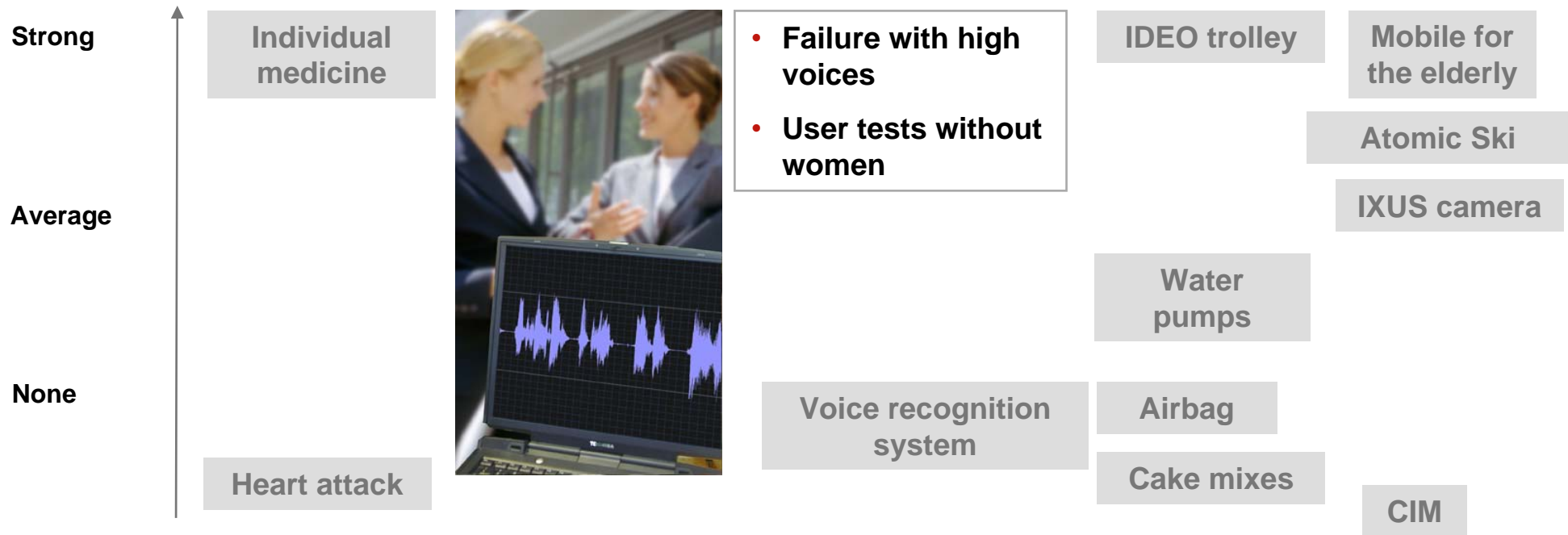
To enable female customers and male customers to do, what they cannot do at this moment, but what they would like to do, if they knew that this was possible!

**DISCOVERGENDER**

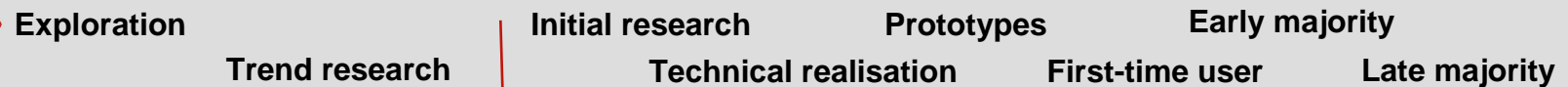
# Gender and diversity aspects in innovation processes



Paying attention to aspects



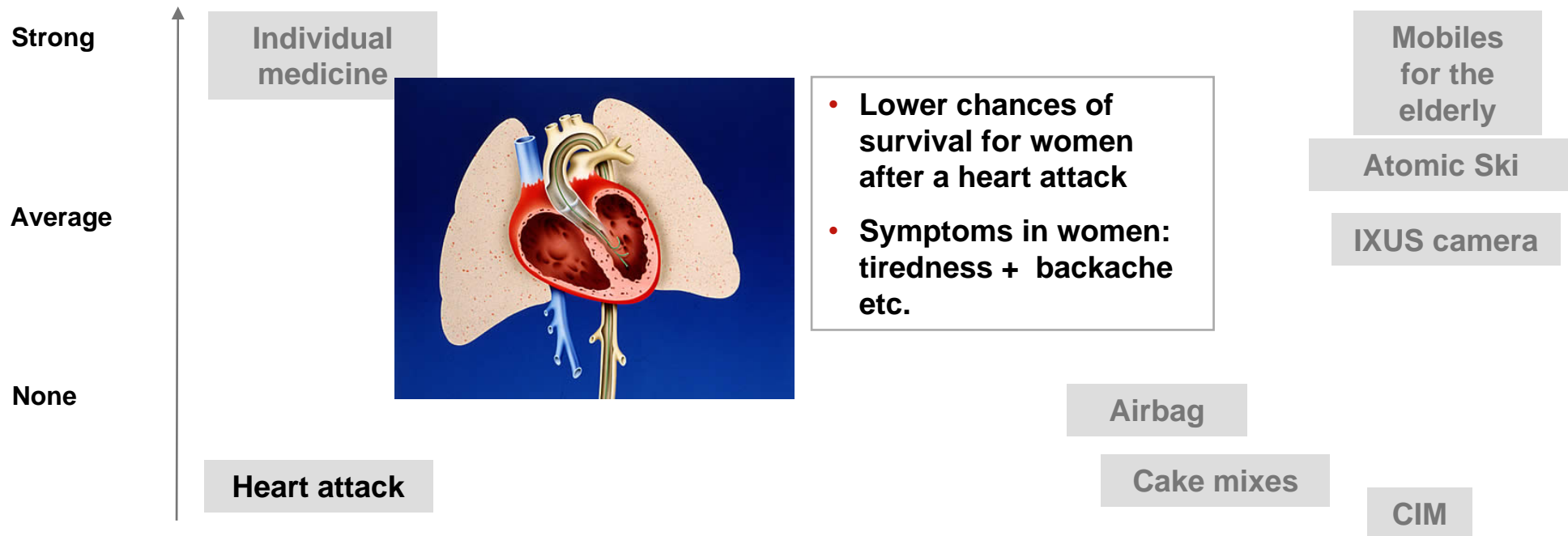
## Innovation phases: from idea to product



# Gender and diversity aspects in innovation processes



Paying attention to aspects



## Innovation phases: from idea to product

Exploration

Trend research

Initial research

Technical realisation

Prototypes

First-time user

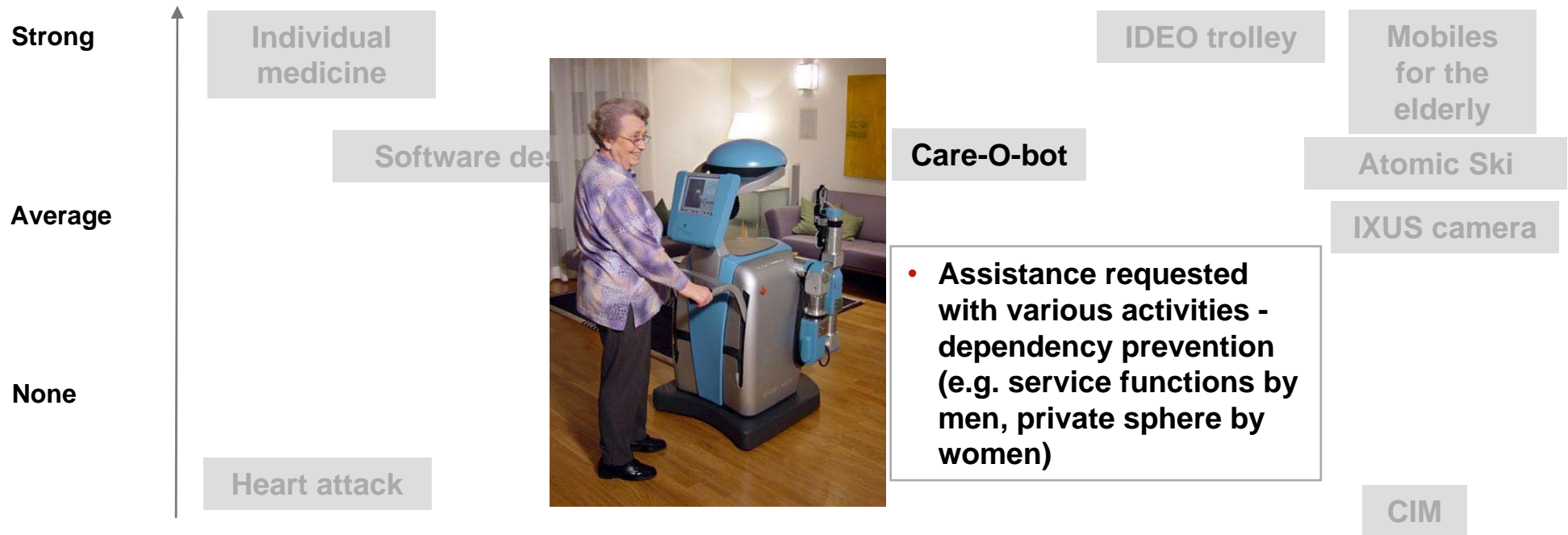
Early majority

Late majority

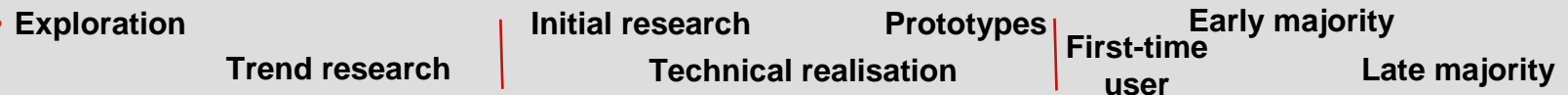
# Gender and diversity aspects in innovation processes



Paying attention to aspects



## Innovation phases: from idea to product





# Gender-sensitive Development of Technology

- Avoiding stereotypes and stereotyping males and females
- In-depth analysis of target groups
- Taking social user contexts into account
- Taking trends in society into account
- Securing participation of all prospective users
- Increased awareness about differences and similarities between the sexes

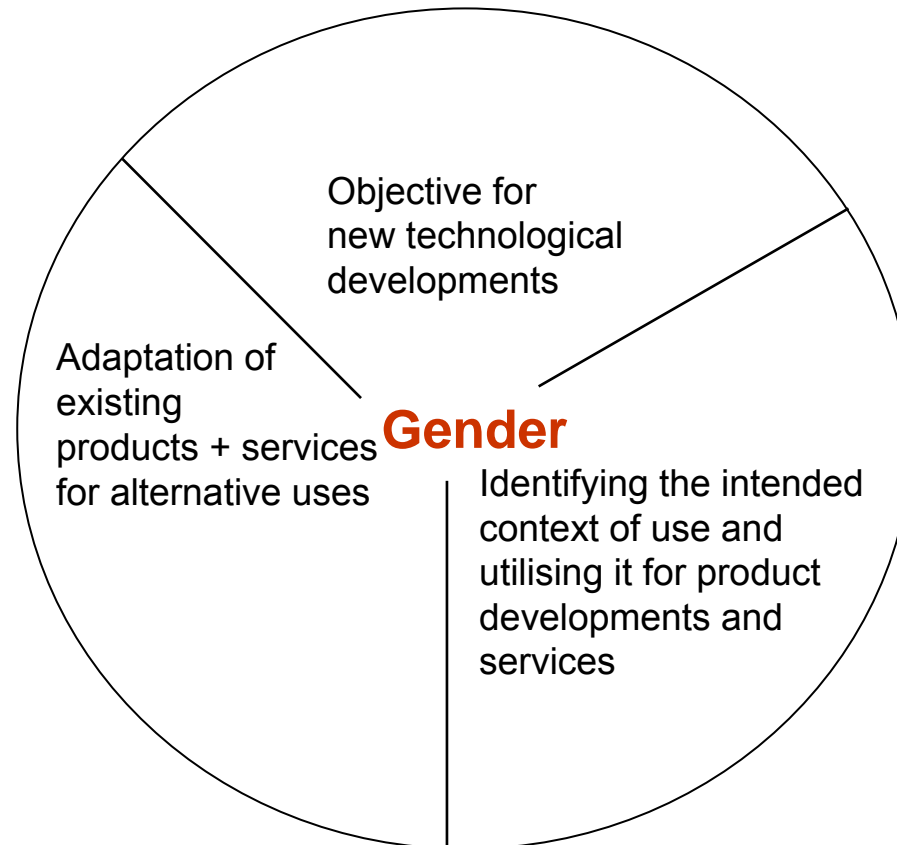




# Gender as a chance - in the research and development process

???

Roberta



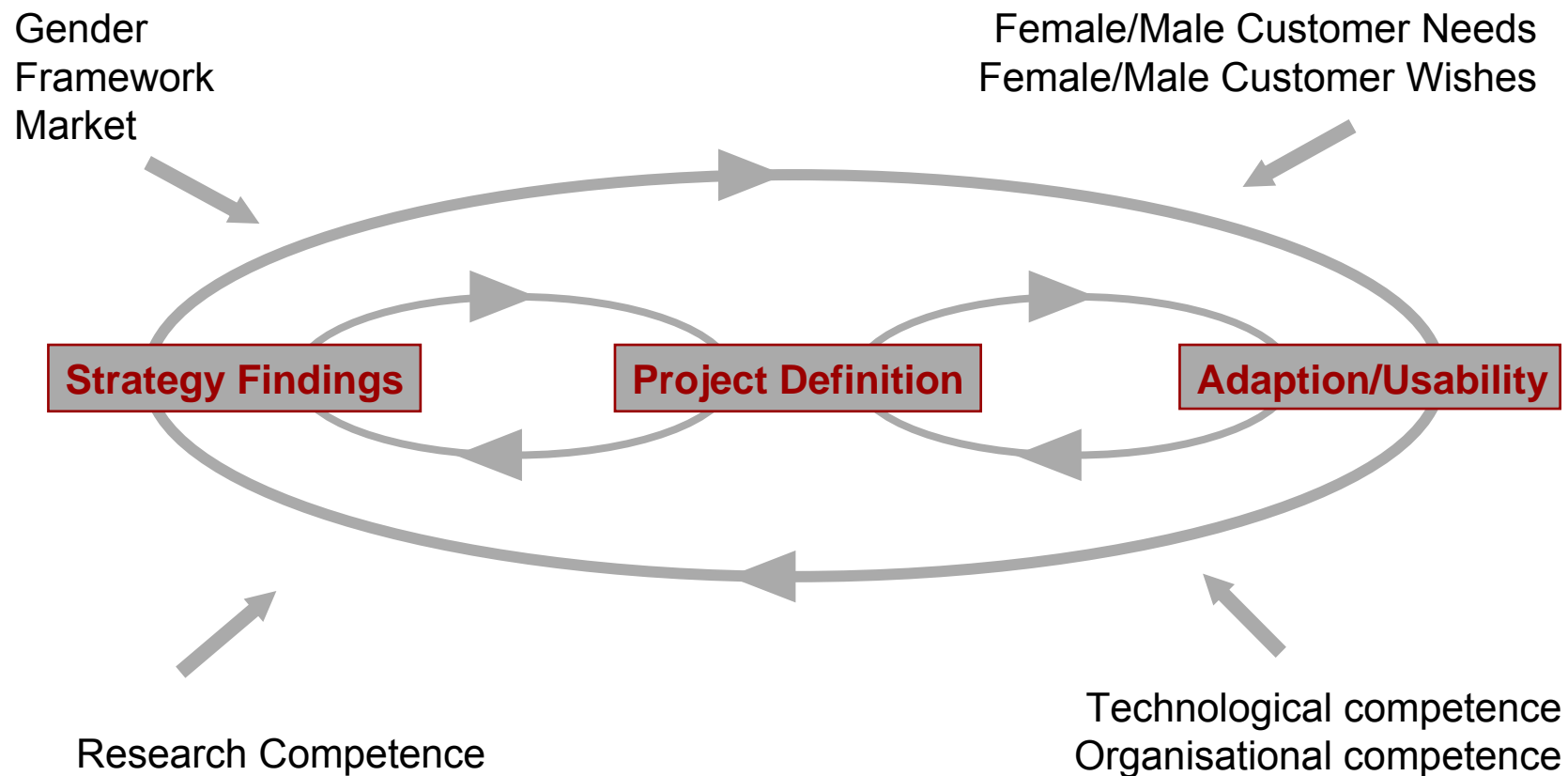
Service - robotics



DISCOVERGENDER<sup>™</sup>



# „Guard rails“ in research planning





# Expectations towards technical systems

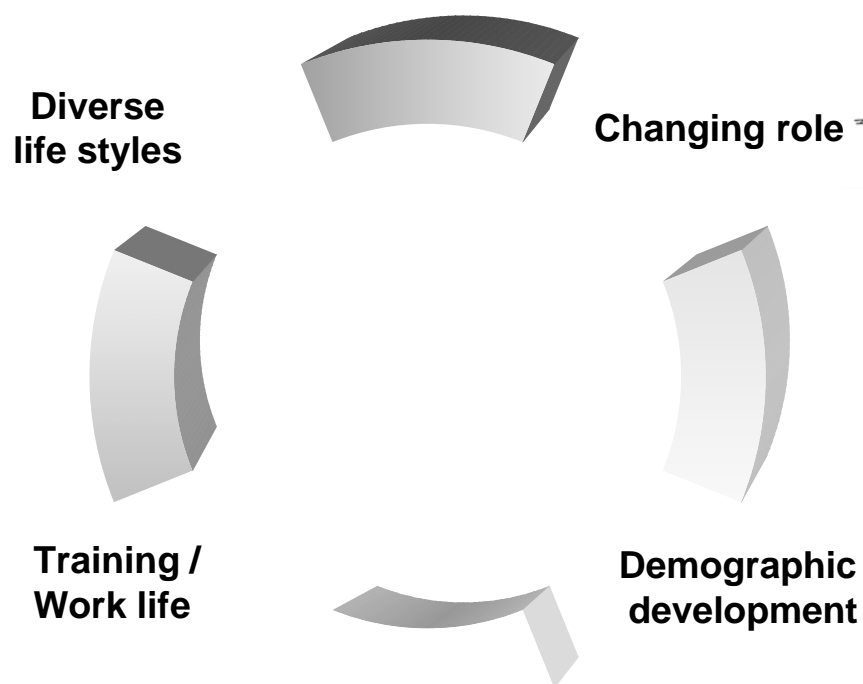
"58% of female seniors and 37% of male seniors would like to live with the support of technical systems in their own homes. Technical devices such as an automatic security system for the home, telemonitoring for persons suffering from cardiovascular diseases as well as mobile health assistance devices,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



Source: <http://www.aerzteblatt.de/v4/archiv/artikel.asp?id=63398>



# Pull Factors: Changes in Society



- 85% of purchasing decisions are made by women.
- $\geq 50\%$  of the university degrees within Germany are awarded to women.
- Demographic development – from 2015, the number of students will be decreasing dramatically.



## Push Factors: Legal guidelines



Initiative of Excellence by the Federal Government and the Federal States for the Advancement of World Class Research

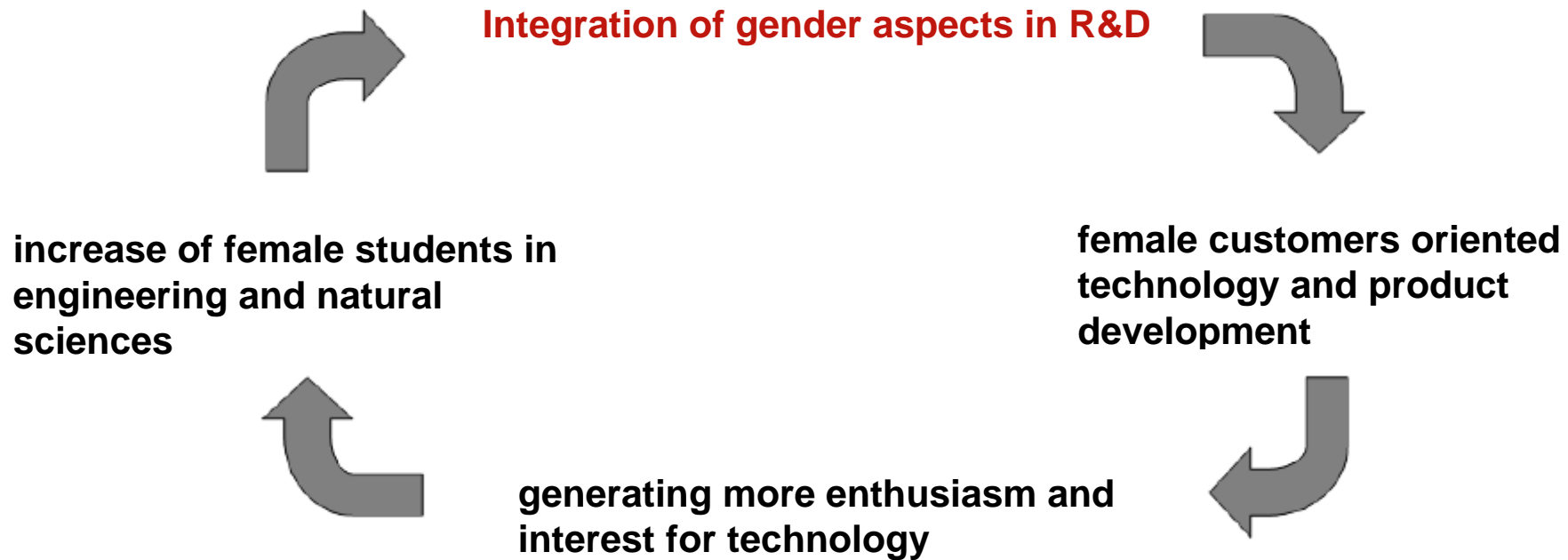
Selection of 6 elite universities in 2008 – strategic measures for equal opportunities were requested by the **international review committee**.



Research oriented equal opportunities standards by the members of the German Research Foundation to increase the representation of women in science

**Adhering to these standards is a decisive factor in the approval** of collaborative research centers (in analogy to „good scientific practice“)

# Taking Gender into Account - a Chance





## Factors for a successful implementation process

- The implementation process must be flexible and adjusted to the fields of activity of the organisation and/or organisational unit.
- Motivational designs of employees and incentives, which are specific to the organisation, must be identified and taken into consideration.
- Awareness of target groups must be triggered by arguments and (precise) examples - both must be related to the innovative capacity of the organisational unit.
- Support and participation of leaders (top-down-principle).
- Participation of employees / groups to guarantee long-term effects: top-down-principle needs to be connected to bottom-up strategies.
- It is desirable that individual employees develop the competence to collect gender-relevant knowledge and give support in the implementation process.

# Conclusion



- The German and the EU government's requests on gender equality (Lisbon strategy), reflected in the guidelines for research funding, have triggered a thorough review of our institutional mechanisms and approaches.
- These requirements triggered German research organisations and universities to develop new gender mainstreaming concepts. This process is ongoing at the moment. Different concepts are in a testing phase at the moment.
- The legal requirements have positively influenced research concepts, in the domain of applied research but also in industry, and have helped to open new markets.
- Furthermore, we observe movements towards a more stringent diversity management in companies, excitingly enough also in the field of R&D.



Thank you for your attention!