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Vienna University of Technology

Gender expertise as knowledge transfer for better project design

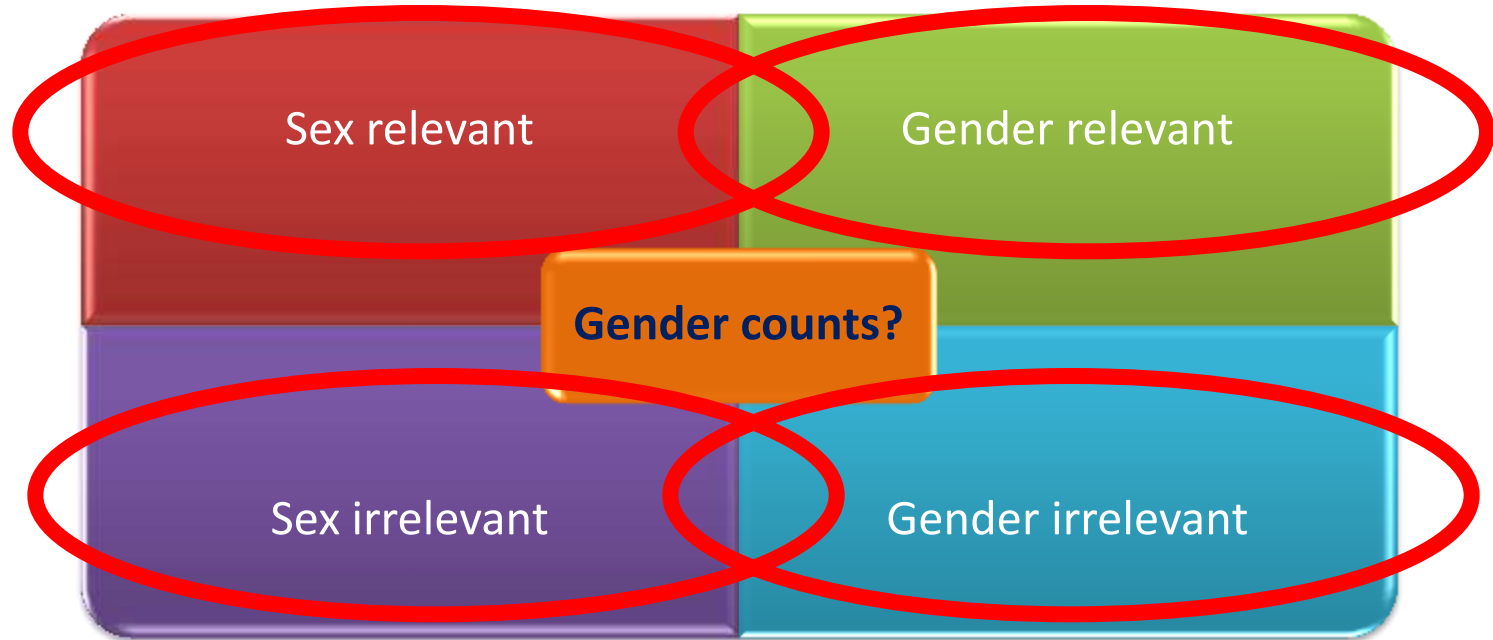
Brigitte Ratzer

Center for Promotion of Women and Gender Studies

How to realize quality in research and innovation?

- Does the product succeed in business ?
- Does the product meet ecological standards?
- User-orientation: for whom is this research beneficial – who is/remains excluded?
- Problem-orientation: In which world do we live? – What do we need?
- Design-orientation: In which world do we want to live? – What do we need therefore?

How does gender enter research and innovation?





With or without Gender expertise?



GENUINE

- Gender Inclusive Design in User Interface (UI) Development.
- Project duration: July 2011 - June 2013
- Project Goal:
 - development of a specification list for gender-inclusive UI development;
 - create a tool that supports gender-inclusive UI design and make it available to software-developers as an open source tool.



Project Team



David Raneburger
PhD student-
Electrical Engineering



Astrid Weiss
Project-Leader
Post Doc – Social
Scientist



Barbara
Weixelbaumer
Master student –
Anthropologist



Roman Popp
PhD student-
Electrical Engineering



Nicole Mirnig
PhD student –
Communication Studies



Jürgen Falb
Post doc -
Electrical Engineering



Brigitte Ratzer
Post doc –
Gender Expert



Central research question

Without Gender Expert

- Do men and women display differences when interacting with UIs ?

Gendered

- Do men and women display differences when interacting with UIs or are characteristics like age, education or previous experiences with ICTs of greater importance?



Theoretical suppositions

Without Gender Expert

Gendered

- Hypothesis from Evolutionary Psychology



Hypothesis from Evolutionary Psychology

- Women should have the tools for underestimation and thus show lower self-efficacy levels than men.
- Men should show higher levels of self-assessment regarding computer activities.
- Men and women should show different navigation styles and strategies when seeking for online information.



Theoretical suppositions

Without Gender Expert

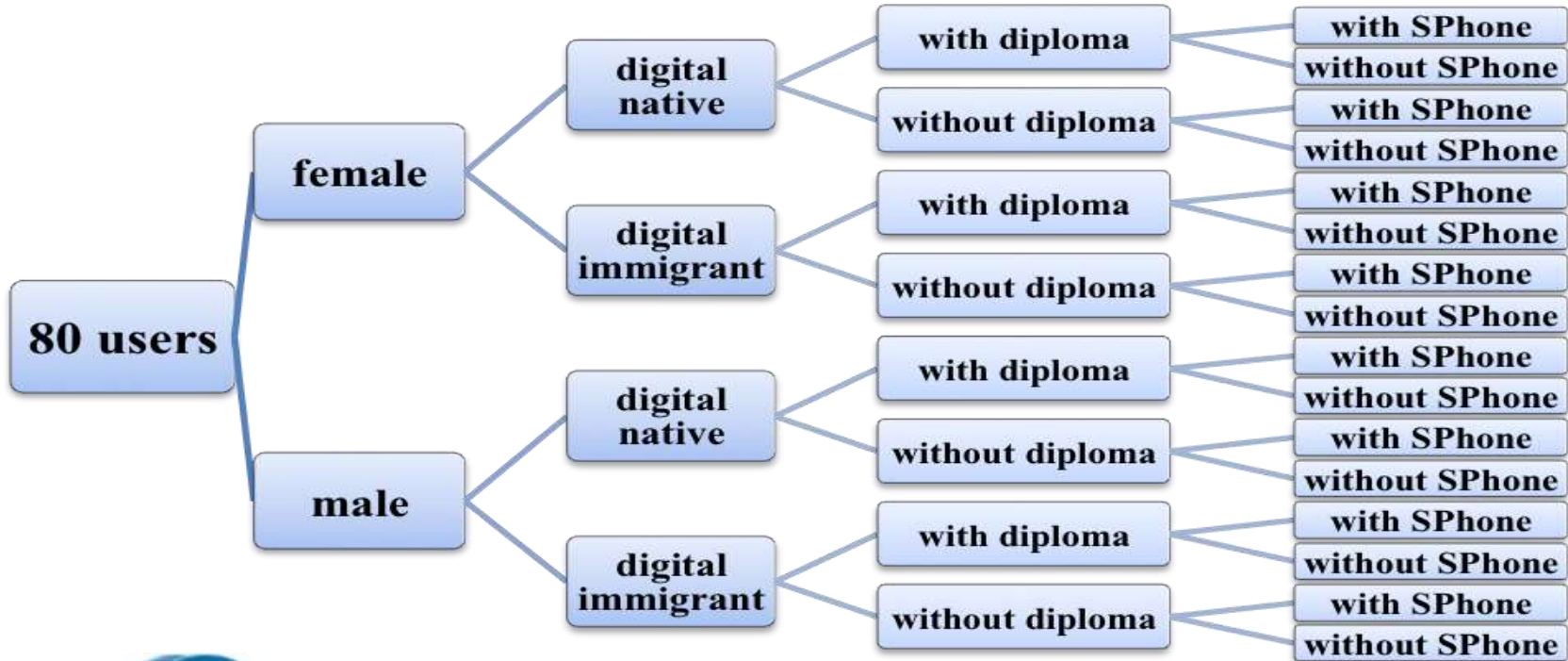
- Hypothesis from Evolutionary Psychology

Gendered

- No ex ante hypothesis is generated



Usability Study: Sampling





Expected results

Without Gender Expert

| | Men ♂ | Women ♀ |
|-----------|-------|---------|
| Feature A | X | |
| Feature B | | X |
| Feature C | | X |
| Feature D | X | |
| Feature E | X | |
| Feature F | | X |

Gendered

| | ♂ | ♀ | <30 | >40 | Edu + | Edu - | Exp + | Exp - |
|---|---|---|-----|-----|-------|-------|-------|-------|
| A | x | | | | | | | |
| B | | | x | | | x | | |
| C | | | | x | | | | |
| D | | x | | | | | | x |
| E | | x | x | | | | | |
| F | x | | | | x | | | |



First Results

| Guideline | male | female | young | old | experienced | in-experienced | educated | un-educated |
|---|------|--------|-------|-----|-------------|----------------|----------|-------------|
| Define the navigation clearly (provide wizard support). | x | | | | | | | x |
| Start with the essentials and end with the details. | | | | | x | | | |
| Place Menus on the left side of the UI. | | | | x | | | | |
| Place search fields/masks on top and/or in the middle of the UI. | | x | | | | | | |
| Place recurrent widgets consistently. | | | | | | | x | |
| Provide a navigation bar, especially on mobile devices. | | | x | | x | | | |
| Use intuitive and consistent wording. | | x | | x | | | | |
| Less is more. | | x | | | | | x | |
| Tailor the UI to the used device (e.g., desktop, tablet, or smartphone). | | x | | | | | x | |
| Avoid scrolling on desktop UIs. | | | | x | | | | x |
| Make clear which input is processed with which action. | | x | | | | | | |
| Make page loading times for Web-pages as short as possible, especially on mobile devices. | | | x | | | | x | |
| The first impression of a UI is important. | | x | | | | | | |
| Experienced men like map widgets for geographical data visualization. | x | | | | x | | | |
| Educated users like text search fields. | | | | | | | x | |
| Uneducated users do not care so much about icon design. | | | | | | | | x |
| Experienced users do not care so much whether (calender) widgets work correctly or not. | | | | | x | | | |



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Thank you for your attention!