

the user. Experience !

Jussi Mantere

**Nokia Design / Aesthetic and ergonomic
engineering**

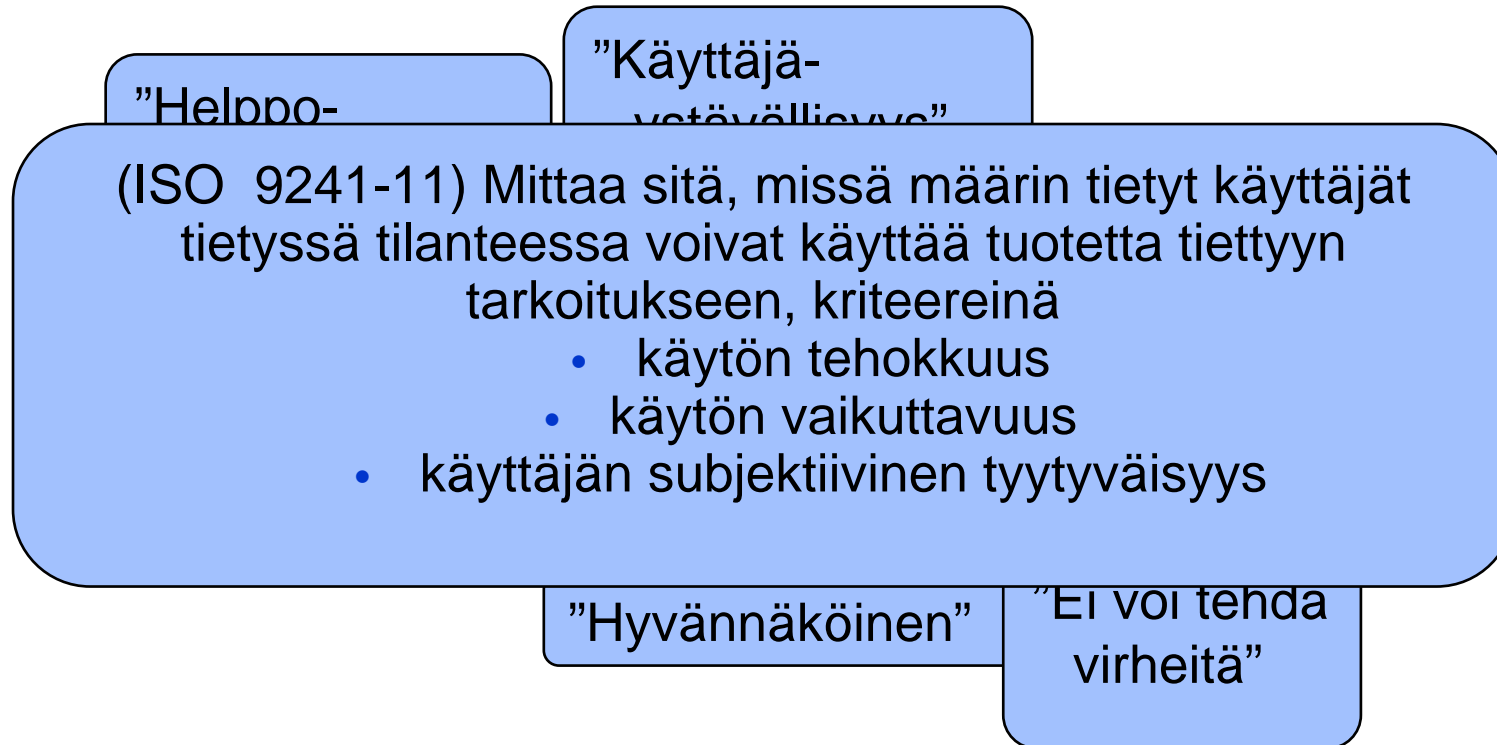
Contents

- Definition of usability
- Evaluating usability
- Meaning of usability
- Creating great products with the user in mind

What is usability?



What is usability?



Evaluating usability

| | Expert evaluations | Usability test |
|-------|---|--|
| When? | With early drafts. With working models. With final design. | With working models. With final design. |
| How? | Usability specialist reviews the system and identifies usability problems based on his/her experiences, knowledge of human behaviour and existing checklists, for example Nielsen's "Usability heuristics." Change proposals created for identified problem areas. | User performs typical tasks and "thinks aloud" while doing it. Test analyzed by experts to find areas where problems occur. Change proposals created for identified problem areas. |
| Who? | 2 or more usability specialists. | One-two test administrators to run the test. 4-5 users (per group). |
| Why? | To find typical problems with minimum resources. | For more in-depth analysis of total system usability, to get real user insight. |

Usability heuristics

1. **Visibility of system status**
2. **Match between system and the real world**
3. **User control and freedom**
4. **Consistency and standards**
5. **Error prevention**
6. **Recognition rather than recall**
7. **Flexibility and efficiency of use**
8. **Aesthetic and minimalist design**
9. **Help users recognize, diagnose, and recover from errors**
10. **Help and documentation**

Nielsen & Molich, 1986

Luentotehtävä: käytettävyyden arviointi ja

Oheinen kuva esittää matkakortin lukulaitetta.

Miettikää luennon perusteella:

1. Yksi yleinen käyttötilanne
2. Oletetun käyttäjän toiminta sitä suorittaessaan
3. Vähintään yksi mahdollinen käytettävyysongelma (“virhetilanne”) tässä suorituksessa
4. Ko. ongelman syy
5. Ratkaisu ongelmaan – millaisella suunnittelulla ongelman voisi välttää?



Usability does not matter!

Why usability would not matter

unmistakable
performance



all-embracing safety features and comfort



enduring quality
and value



The Ultimate
Driving Machine™



“What most competitors can’t provide is the joy of driving, BMW style.”

Why usability would not matter



Why usability would not matter

"I can personally confirm that **BMW also has substandard usability**; my wife had the misfortune of getting a 745i two years ago. Luckily, it's only a three-year lease, so we're now counting the days (347 left) until we can rid ourselves of the Beemer without losing money. **We'll probably never buy BMW again**, despite the fact that my wife was previously one of the company's most loyal customers. Having to use the BMW 745i daily has soured her on the brand forever."

Jakob Nielsen

"it manages to complicate simple functions beyond belief."

USA Today

"iDrive is not simple, no matter how clean it looks to the naked eye. ... Our advice ... Is to ... retain basic manual controls for functions that are used every day."

Auto Review

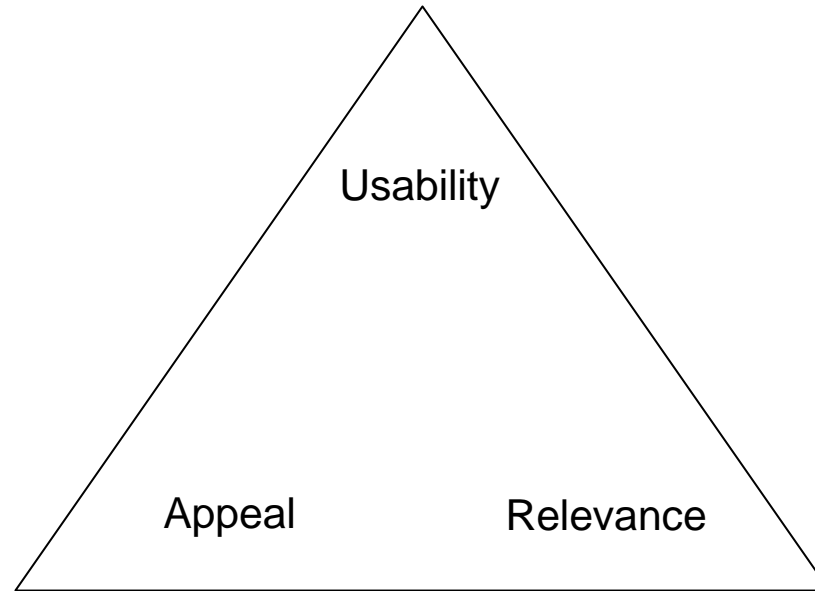
"iDrive takes a fair amount of practice just to get a rudimentary grip on its ... I could not figure out how to pull up a map... while sitting in the passenger seat. ... Even when you've mastered iDrive, you'll have to wade through various menus and sub-menus to finally get to the function that needs adjustment. That function may be one that simply requires you to flick a switch on a conventional dashboard. Whether that's progress is debatable"

Automotive.com



**Usability
ALONE
does not matter.**

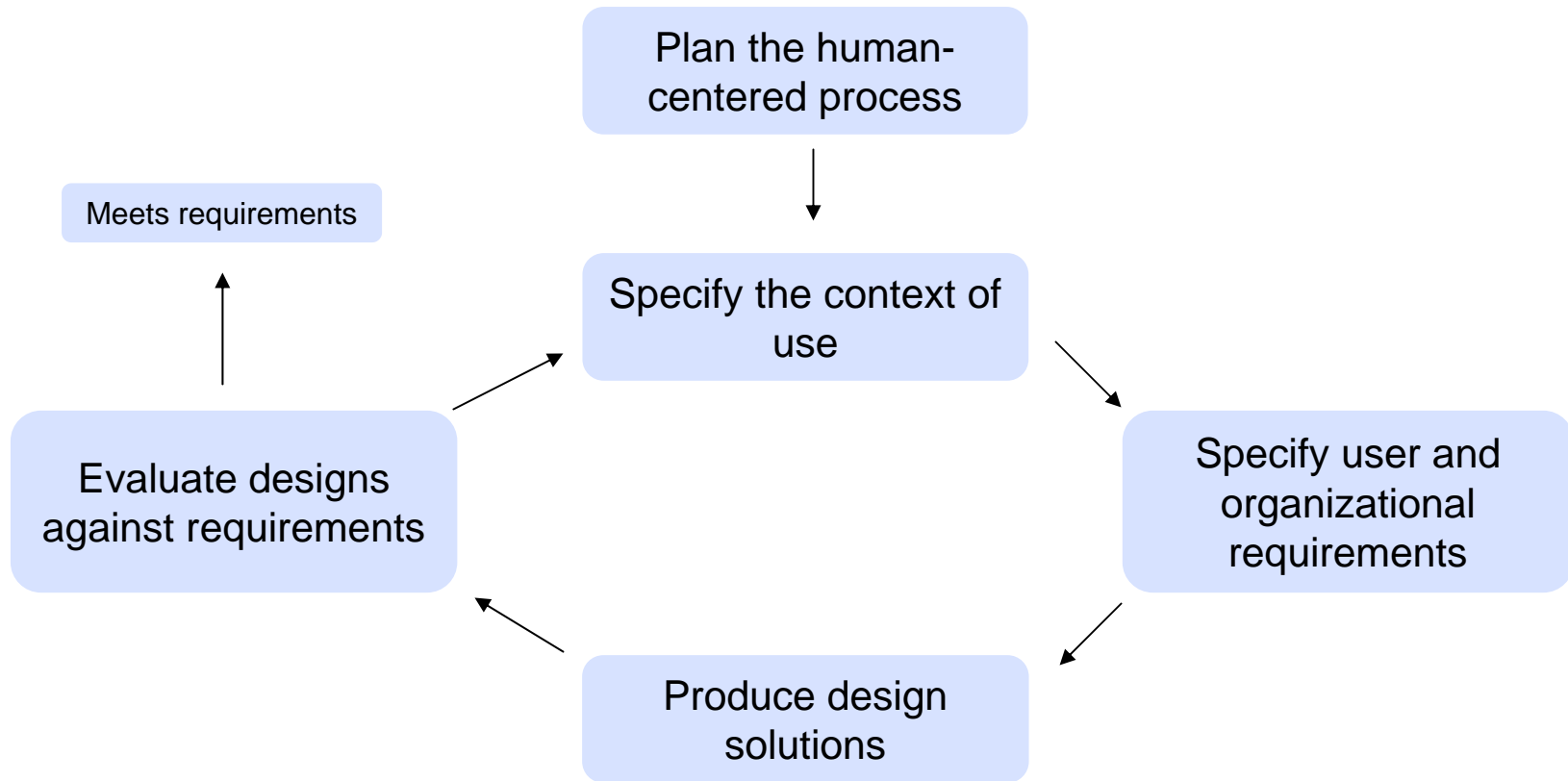
The three dimensions of user experience



Successful product is designed for balance in FLOW, WOW and SHOW.

FLOW makes it usable for the user. WOW makes it appealing to the user. SHOW makes it relevant to the user.

ISO 13407: Human-centered design process

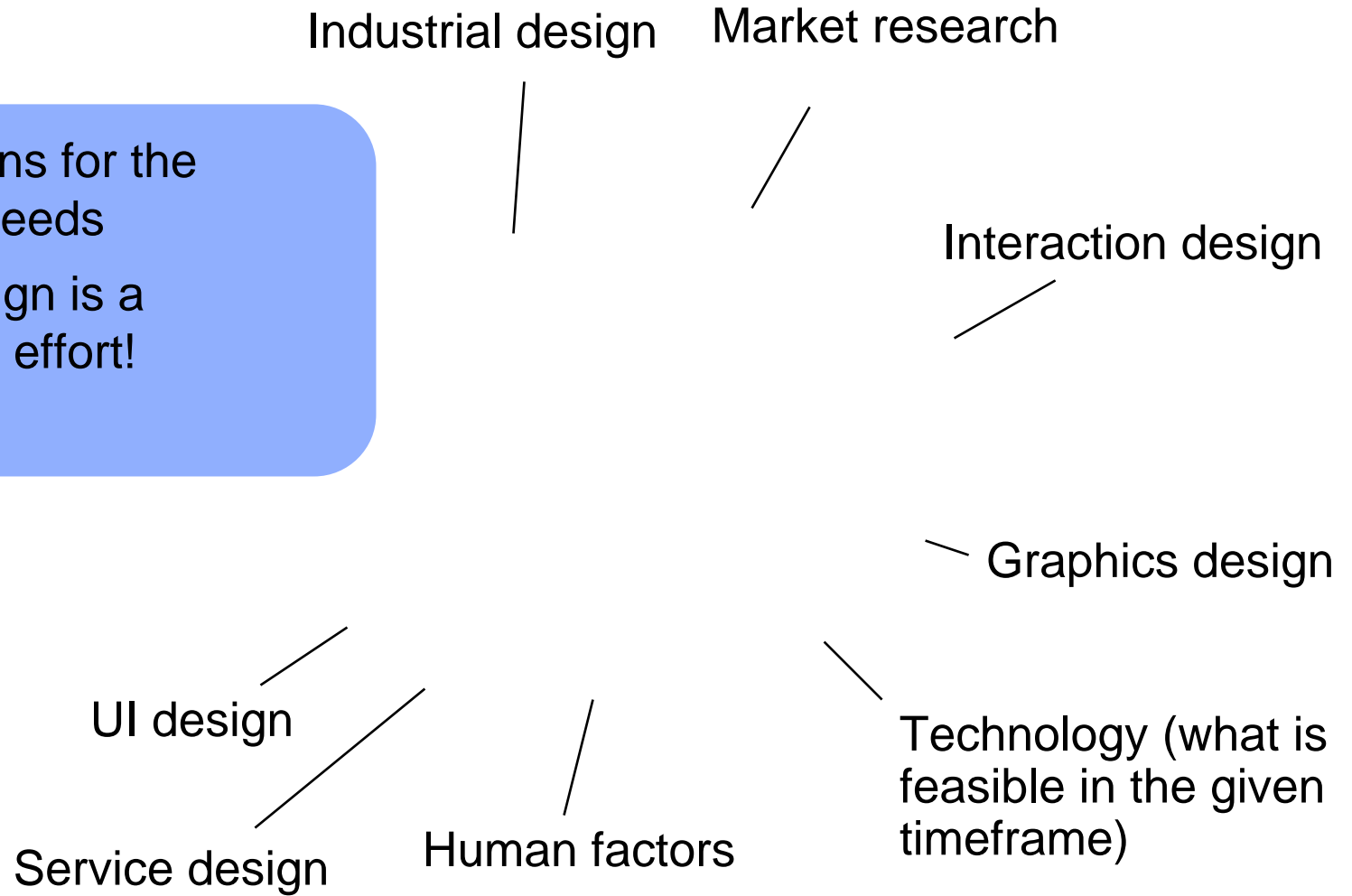


Specify the context and the requirements

- Learn, know and understand:
 - When, where and for what will the product be used? What is the user like? Why would she choose to use it?
- Methods:
 - Interviews, observations, surveys, market research, competitor benchmarks

Produce design solutions

- Innovate solutions for the identified user needs
- Experience design is a multidisciplinary effort!



Evaluate the design

- Evaluate prototypes
 - Is it usable?
 - Is it appealing?
 - Is it relevant?
- ... and **iterate**.

Market research



Usability
testing



Expert evaluation



Summary

- Good user experience comes from a balance of initial appeal, functional and usable design and fit to the user's lifestyle
- User experience is created by designing in a user-centered way
- User-centered design means:
 - Understand the context of use
 - Understand the user
 - Offer the user a (good) solution
 - Accept that you don't get it right the first time
- Designing good experiences is a joint effort

Usability matters... after all.

Thank you!