

SoberIT

Software Business and Engineering Institute

Identifying and Selecting Users for User-Centered Design

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Introduction

- User involvement is a key principle of user-centered design
- Need to identify and select users for field studies, usability tests etc.
 - Users may not be known
 - Large numbers of heterogeneous users
- The involved users should represent the intended users



Analyzing stakeholders

- Utilizing existing knowledge and documents
- Identifying stakeholders
- Identifying user groups
- Preliminary description



Identifying and selecting users: process

- Brainstorm a preliminary list of users
- Describe user characteristics
- Describe main user groups and prioritize them
- Select typical and representative users from the groups
- Gather information and redesign descriptions



Main user characteristics: Checklist

- Personal characteristics
 - Age, sex, lifestyle, skills, physical constraints etc.
- Task related characteristics
 - Goals, tasks, usage (heavy vs. light, frequency)
- Geographic and social characteristics
 - Location, cultures, communities, organization



Describing users: User/task table

User group	Task	Number
Admission clerk	Collect patient data	25
Nurses	View medical data	490
Administrators	Install and maintain software	12



Describing main user groups

User groups in hospital

Admission clerks

- Collect patient data
- Want effectiveness

Nurses

- View medical data
- Want to heal patients
- Need easy access and accurate data

Administrators

- Install and maintain software
- Love technology
- Want security



Selecting product features by weighing user segments and tasks (Redish & Wixon, 2003)

Users	Relative Market Size		Task Relative Importance		Product	Features	Total
	Hi-3 Med-2 Low-1	High-Level Task	Hi-3 Med-2 Low-1	Interruption Protection	Analyser		
Tecno Bob	1	Install	3	1	0	3	
Newbie Ed	1	Write	1	-1	2	1	
Pract. Sue	3	Download	2	2	2	24	
		Analyse	3	1	2	27	
Sum				23	32		

-1- will confuse users
0-users will not use
1-users mildly positive
2- users strongly positive



Selecting users: Stratified sampling

- The populations is divided into groups
- Random samples are drawn from each group
 - > A representative cross-selection of users



Lead user method

- The most advanced users are selected
- Very effective in finding new innovative product ideas and can be used to understand future needs
- A combination of lead and ordinary users most beneficial
 - The reality of the findings can be checked with ordinary users



Seven case studies

- Real product development cases in six companies in Finland
- The goal was to pilot field studies in real contexts

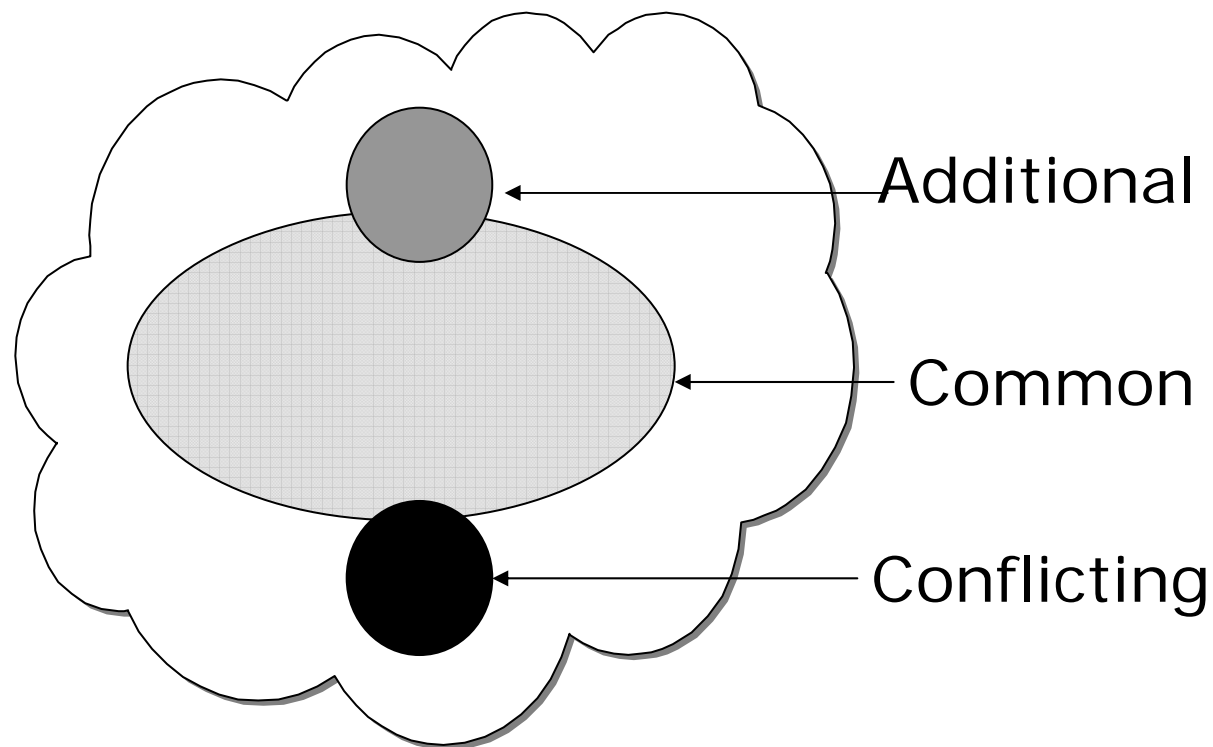


Observations

- Developers underestimated the diversity of users
 - Infrequent and indirect user, summer help, special groups were neglected
- Identification of user groups is an iterative process



Type of user needs identified



Conclusions

- The process helps identify the diversity of users and select representative users
 - We could gain broader information about user needs
 - The core set of common needs+conflicting needs were identified

