Aalto University
School of Science

CS-E4900 User-Centered Methods for Product and Service Design

Qualitative Data Analysis, part II
Communicating results

11.11.2024

Mika P. Nieminen

Things You Will Learn Today

- You will learn the difference between user profiles and personas, and how to make them
- You will learn about scenarios and task analysis
- You will learn what are your deliverables for this week

Comments regarding QDA / Affinity Diagramming

- **Bottom-Up or Top-Down**
- **Documentation**
- **Describing the classification ≠ itemized data**

Announcements

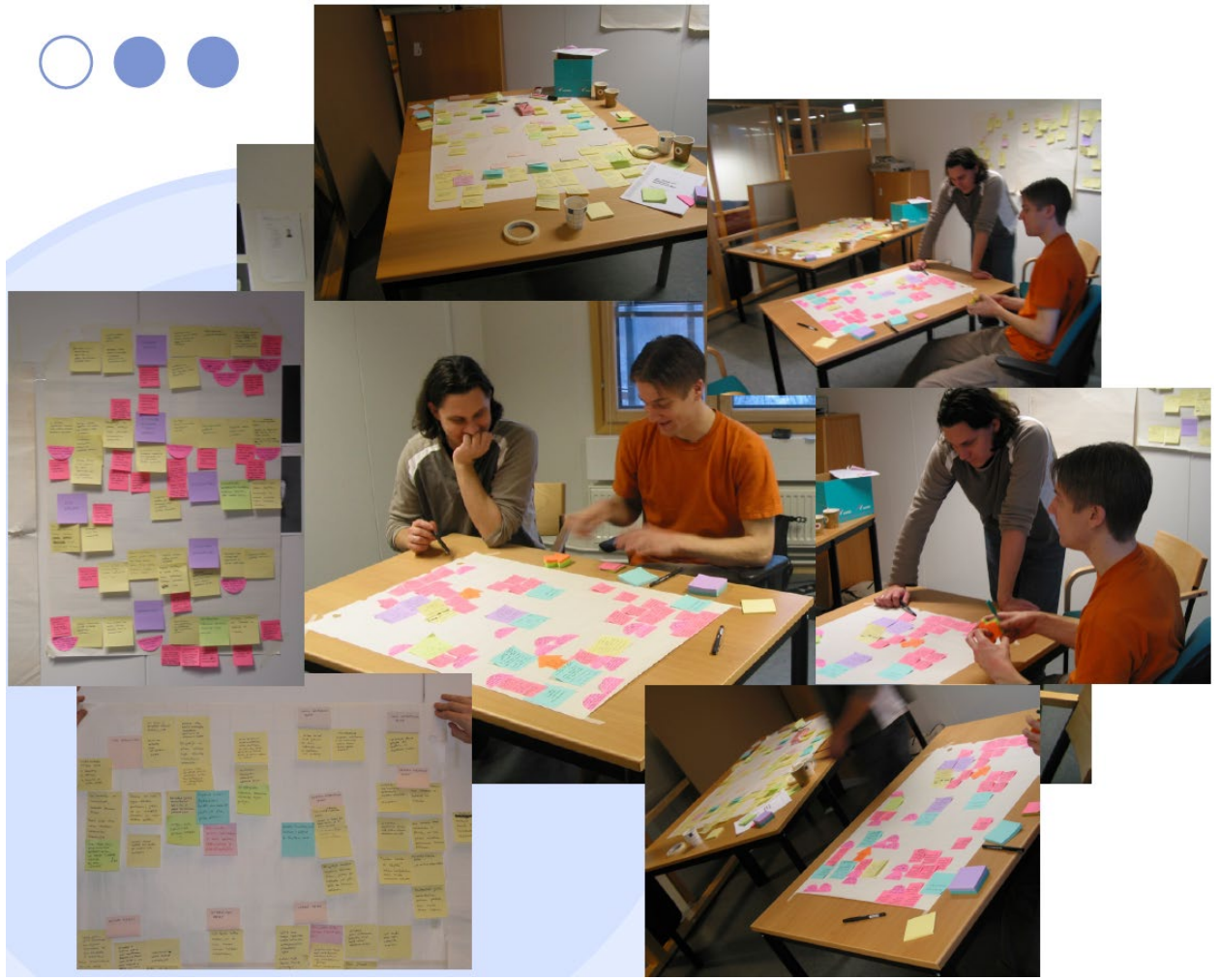
- **Sanity Check survey, DL Wed 13.11. 10:00**
  - Let us know that you are OK, and especially if you are not

User Research Phases

1. Planning the study
2. Data collection and processing
3. Data Overview
4. Detailed analysis
5. Reporting the results

3. Data Overview

You Should Have: Affinity diagrams



4. Detailed Analysis

- Goal: transform data to user needs, requirements and limitations
- Phenomenon (pl. phenomena) = reoccurring event or activity, other interesting observation
- Need = enabler derived from phenomena
  - What user need to do better, be happier, work faster, …
- Requirement = demand for a product feature based on users, their actions or context of use
- Limitation = most often restriction to use or users imposed by environment or context

4. Detailed Analysis

- You as a user researcher are the lens!
  - Use your body and mind
  - Be aware of your own assumptions
  - You do not have to agree, but to understand and emphatize

- Condense, condense and condense
- Seek alternative viewpoints

5. Reporting the results

- Goal: Describe the target in sufficient detail to inspire and justify your future design decisions
  - Outline in equal measure requirements (must-haves), limitations (cannot-haves) and opportunities (could-haves)
  - Maintain good traceability to backtrack a decision if necessary

5. Reporting the results

- User profiles, personas
- Context and environment descriptions
- Task and sequence models
- Stories, quotes, narratives and scenarios
- Depictions of most interesting phenomena

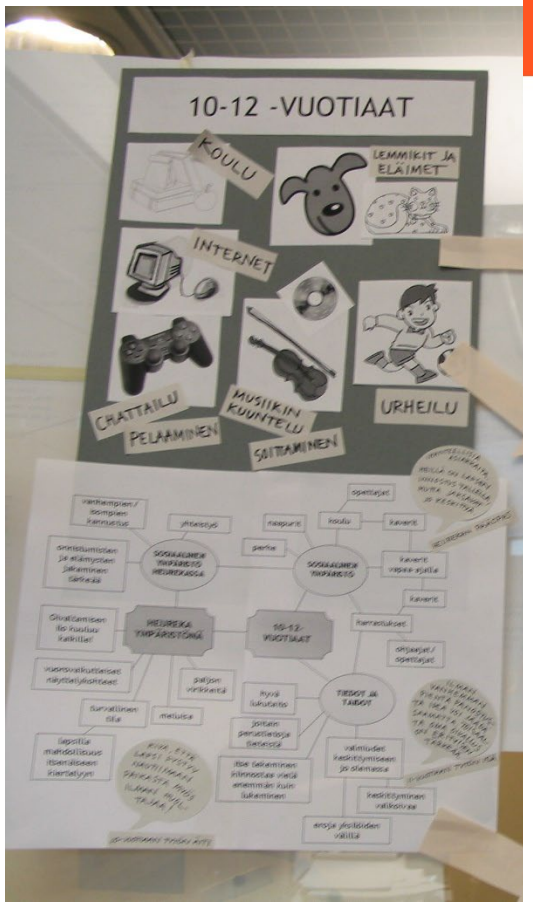
- Both content and presentation of results always depend on the subject and used methodology

Comparison of User profiles, Personas and Scenarios

Document	Definition	Purpose	Content
User Profile	Detailed description of your users' attributes	To ensure that you know who you are developing your product for, and who to recruit for usability activities	• Demographic data • Skills • Education • Occupation
Persona	A fictional individual created to describe the typical user based on the user profile	To represent a group of end users during design discussions, and keep everyone focused on the same target	• Identity and photo • Status • Goals and tasks • Skill set • Requirements and expectations • Relationships
Scenario	Story that describes how a particular persona completes a task or behaves in a given situation	To bring your users to life, test to see if your product meets the user needs and develop artifacts for usability activities (eg. Tasks for usability tests,…)	• Setting • Actors • Objectives or goals • Sequence of events • Results

Courage, C., Baxter, K., 2005. Understanding Your Users: A Practical Guide to User Requirements Methods, Tools, and Techniques. Gulf Professional Publishing.

User Profile vs. Persona



cc: UCCD course, TKK 2004

TOBI DAY

PERSONA TEMPLATE

AGE 26
OCCUPATION Record Store Manager
STATUS Single
LOCATION New York, NY

TIER Enthusiast
ARCHETYPE The Maestro

Ambitious | Admired | Focused

"If I had a way to share projects and collaborate in real time, that would make my workload so much easier to manage."

MOTIVATIONS

- Incentive
- Fear
- Acheivement
- Growth
- Power
- Social

GOALS

- To grow a strong industry reputation
- To build an audio-pro portfolio
- To keep track of everything

FRUSTRATIONS

- Slow download times
- Data crashes
- Poor communication

BIO

Tobi has a day job at a record store, but on the side she does all kinds of production work for up-and-coming artists. She never hesitates to learn something new and she often acts as tech support for her friends and clients. She is usually working on a dozen projects at a time and is trying to establish herself in the industry, so she hates data crashes or anything that makes her look bad. Because she works alone and in her home, collaboration is everything.

PERSONALITY

Extrovert — Introvert
Sensing — Intuition
Thinking — Feeling
Judging — Perceiving

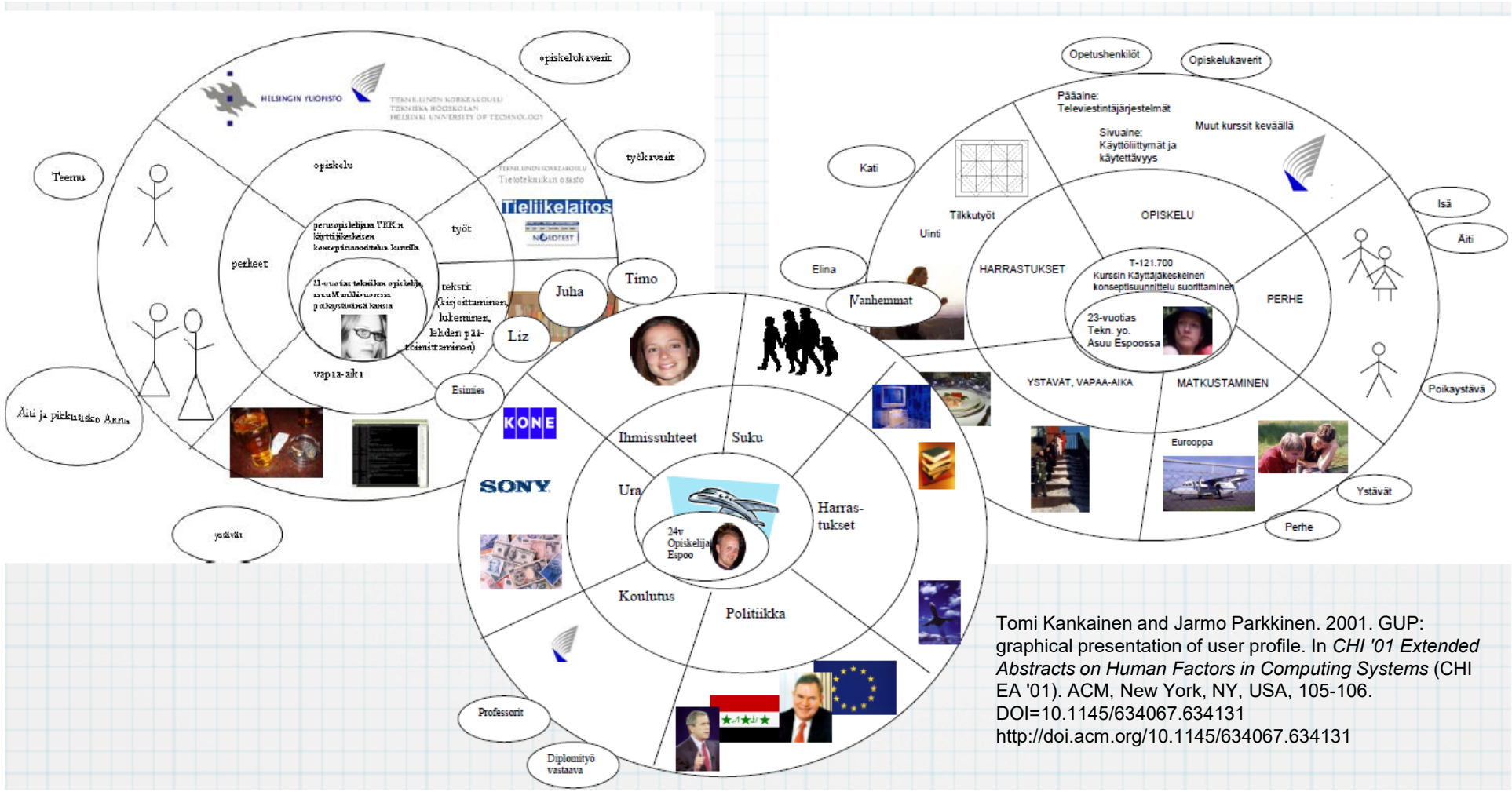
TECHNOLOGY

- IT and Internet
- Software
- Mobile Apps
- Social Networks

Audi
Coca-Cola
SONY
PreSonus

cc: http://fakecrow.com/free-persona-template/

Graphical User Profile



Tomi Kankainen and Jarmo Parkkinen. 2001. GUP: graphical presentation of user profile. In *CHI '01 Extended Abstracts on Human Factors in Computing Systems* (CHI EA '01). ACM, New York, NY, USA, 105-106. DOI=10.1145/634067.634131 http://doi.acm.org/10.1145/634067.634131

Scenarios

- **Textual narratives of interesting events**
  - Personal stories of users' activities
  - Passive description of tasks
- **May use personas as actors**

Context and Environment

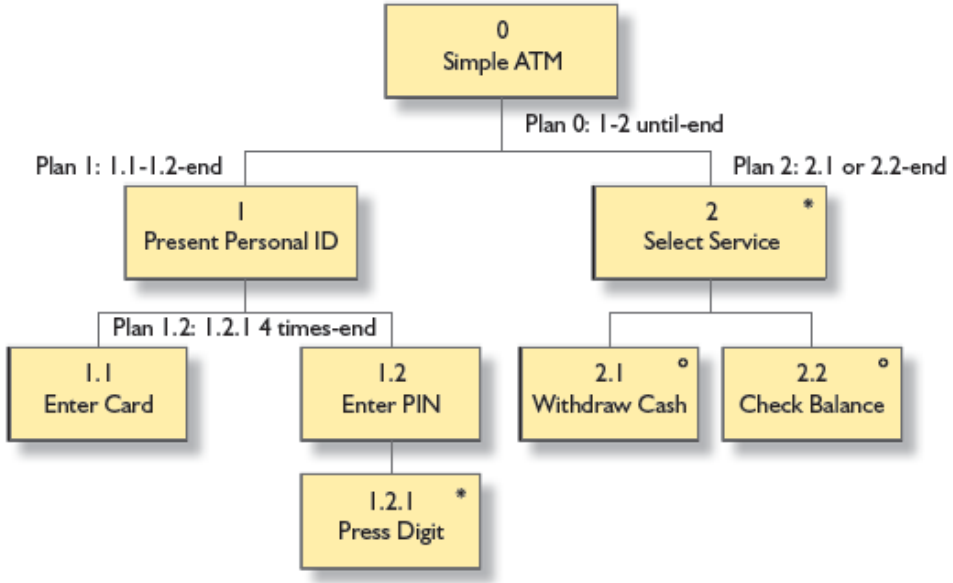
Customer insights: location analytics to discover what customers search for, where they go, and how long they stay. © Wifarer.com

A map about how people walk about before going into the movie theatre in Lasipalatsi, when they are going alone.

(Agger, Häyrynen, Liikka, Romppanen, Peltonen, Salovaara: UCPCD course at HUT 2001)

Task Analysis

- **Cognitive Task Analysis**
  - decision-making, problem-solving, memory, attention and judgement
  - Cognitive walkthrough, GOMS
- **Hierarchical Task Analysis**
  - Decomposition of a high-level task to subtasks
  - May also visualize as flow charts



Benyon, D., Designing Interactive Systems: A Comprehensive Guide to HCI and Interaction Design, 2 edition. ed, 2010. . Pearson Education Canada.

Things to Consider

- Is it a fact, interpretation or an opinion?
- Why is it interesting?
- Does it help with the problem or just change behaviour?
- What would <persona> do?

What To Do Next

- **Define your user groups in profiles (2-4)**
- **Create a persona for each of your main user groups (2-4 altogether)**
- **Define and visualize your users' main tasks**
- **Write a reflective or projective scenario**
  - Describe problems in the current system
  - Envision behavior in the improved system

Workshop Wed 13.11. 12:15 – 14:00

- at CS Building Learning Hub, T5 & T6
- Puuhaboksi (Post-Its, markers and such) will be at LH

Did You Learn Today?

- The difference between user profiles and personas, and how to make them?
- About scenarios and task analysis?
- What are your deliverables for this week?