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› USABILITY EVALUATION & TESTING

Introduction to usability testing

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CONTENTS

› CHAP. 1: ESSENTIALS

Focus on the user
Definitions of usability and usability testing
When to conduct small studies?
Conducting small studies
When to conduct large studies?
Practical considerations

FOCUS ON THE USER
... NOT THE PRODUCT!

- What works for the user?
- What does not work for the user?
- What pleases the user?
- What puzzles the user?
- What frustrates the user?

Does the product match the expectations of the users...
.... and does it support their goals?

DEFINITIONS: USABILITY
... ACCORDING TO ISO 9241-11

The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use.

- specified users
  The product needs to be designed for specified end users
- specified goals
  The product needs to support the achievement of a specific goal
- specific context of use
  The product needs to work in a specific environment

DEFINITIONS: USABILITY
... ACCORDING TO ISO 9241-11

The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use.

- effectiveness
  Completeness and accuracy with which a specific goal is achieved
- efficiency
  Effort needed to achieve a specific goal, in relation to completeness and accuracy
- satisfaction
  Subjective satisfaction of a user

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DEFINITIONS: USABILITY
... ACCORDING TO QUESENBERY: *THE 5ES*

Dimension	Definition
Effective	How completely and accurately the work or experience is completed or goals are reached
Efficient	How quickly this work can be completed
Engaging	How well the interface draws the user into the interaction and how pleasant and satisfying it is to use
Error tolerant	How well the product prevents errors and can help the user recover from mistakes that do occur
Easy to learn	How well the product supports both the initial orientation and continued learning throughout the complete lifetime of use

http://wqusability.com/

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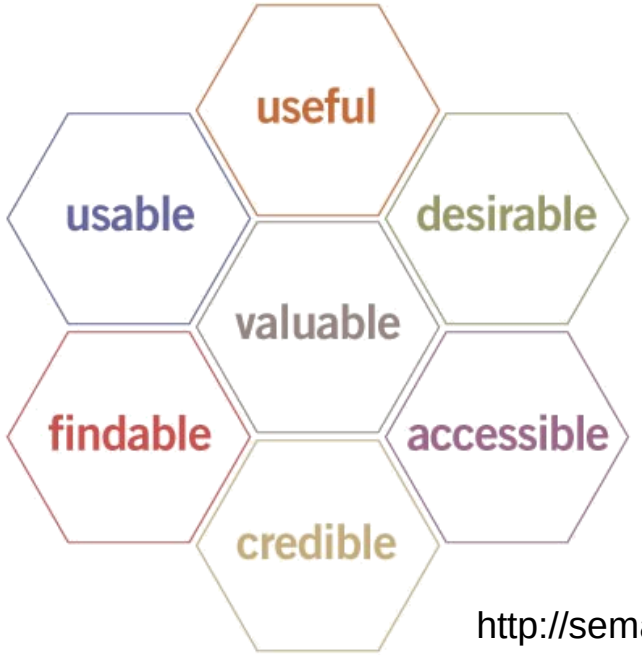
DEFINITIONS: USABILITY
... THE “USER EXPERIENCE HONEYCOMB”



http://semanticstudios.com/user_experience_design/

All these aspects should be addressed when designing a product

DEFINITIONS: USABILITY TESTING

“[...] the activity that focuses on observing users working with a product, performing tasks that are real and meaningful to them.” Barnum (2010)

- observing users
  collect data of user behavior (observation, video, logging, recording, ...)
- working with a product
  the user needs to actively use the product
- real and meaningful tasks
  the user needs to work closely to reality (physical environment, workflows, data, ...)

DEFINITIONS: USABILITY TESTING
FORMATIVE TESTING

- When?
  Repeatedly during product development.
- Purpose?
  Diagnosing and fixing problems.
- Number of participants?
  Typically few.

DEFINITIONS: USABILITY TESTING
SUMMATIVE TESTING

- When?
  After the product is finished.

- Purpose?
  Establishment of baseline metrics.
  Validation that the product fulfils requirements.

- Number of participants?
  Generally large numbers for statistical validity.

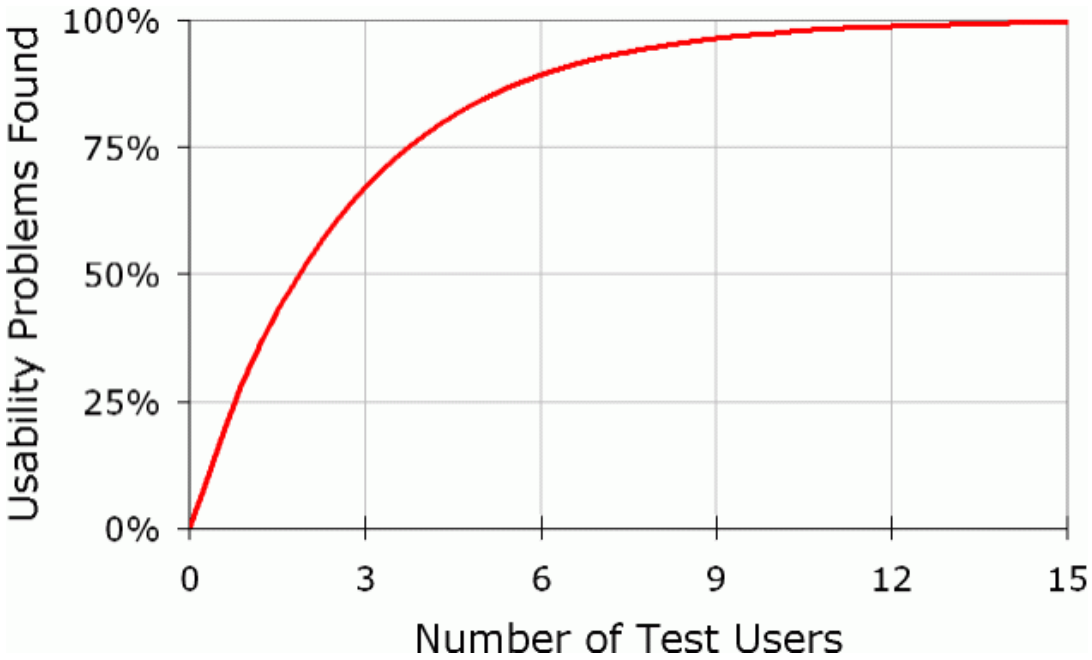
HISTORY: THE “MAGIC NUMBER 5”

The first usability tests were conducted according to strict guidelines of psychological laboratory experiments ➔ strictly controlled & many testers ➔ expensive ➔ no testing.

Research on the cost-benefit ratio of individual testers in the 90s ➔

“Discount testing”

Nowadays: depending on the test purpose…



Bevan, N., Barnum, C., Cockton, G., Nielsen, J., Spool, J., & Wixon, D. (2003, April). The magic number 5: is it enough for web testing?. In *CHI'03 extended abstracts on Human factors in computing systems* (pp. 698-699). ACM. (see Ilias)

WHEN TO CONDUCT SMALL STUDIES?

➔ “informal” studies, generally in the category of formative testing.

Repeated during product development ...

➔ What does not (quite) work? ➔ fix!

➔ What do the users like? ➔ note down and save for later

Informal does not mean undocumented!

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CONDUCTING SMALL STUDIES

Essential elements for this kind of tests

- User profiles
- Task-based scenarios
- Data collection procedures
- Iterative testing

CONDUCTING SMALL STUDIES

User profiles (see chap. 5)

- Complete listing and description of all user groups
- With 4-5 testers: create a profile für one user group and recruit participants based on this profile.
- With 7-8 testers you can test two user groups, from 9-10 three groups etc

Task-based scenarios (see chap. 5)

- All users need to work towards a goal within the specified context of use
  ➔ Comparability of individual users behaviour

CONDUCTING SMALL STUDIES

Data collection procedure (see chap. 7)

- “Think out loud” is often used in these small studies (*why* is a user taking an action?) ➔ Audiotape or video recording, or notes of the test administrator. May also be evaluated qualitatively in this context.
- can be complemented with logging or other recording of user actions ➔ Mouse, keyboard, eye-tracking, ...

Iterative testing

- Problems are discovered and fixed gradually, progress can be documented based on the tests

WHEN TO CONDUCT LARGE STUDIES?

➔ generally in the category of summative testing.

At the end of a development cycle

➔ Establishment of baseline metrics (error rates, average time on task, optimal navigation, ...), e.g., for further development

➔ Validation that the requirements are fulfilled.

However, large studies may also be necessary under different circumstances…

WHEN TO CONDUCT LARGE STUDIES? ... EXCEPT FOR AT THE END!?

- When testing large, complex systems (complex websites as well)
  ... especially for many diverse user groups

- When testing systems for which high usability is system critical or operating errors can have serious consequences
  ... all usability problems need to be uncovered, even those that might only happen occasionally

- When the management will not be convinced that a small study produces reliable results…

With large studies, quantitative data can be collected and analyzed (see chap. 8)

SUMMARY

- Focus on the user, not the product!
- Usability = effectiveness + efficiency + satisfaction
- Usability testing
  - Formative tests: few testers, during product development, rather qualitative
  - Summative tests: many testers, especially at the end for validation, quantitative

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› CHAP. 2: TESTING ENVIRONMENTS

Laboratory tests
Laboratory equipment
Informal laboratories
Field testing
Remote testing
Choosing the right method

TESTING ENVIRONMENTS

Do you need a lab to do usability testing?

Do you need to be with the user to do usability testing?

Do you need to be present to do usability testing?

LABORATORY TESTS
BENEFITS

- No need for booking a testing room, and the equipment can be stored
- Demonstrates an organization‘s commitment to usability testing
- As its own physical space, it can be included in software maintanance and upgrades
- Can be designed to create the ideal testing environment
  - Quiet
  - Space for observers (if needed indirectly via a second room)
  - Special equipment can be installed permanently (e.g., tracking)

LABORATORY EQUIPMENT
THE ESSENTIALS

- Room with enough space for:
  the user, a moderator, and 1-2 observers

- A desk, and a chair for every person involved

- A computer (laptop, smartphone, ...)
  if needed with internet connection (tests of websites, client-server applications, ...)
  if needed with further equipment for the product tested

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LABORATORY EQUIPMENT
FURTHER EQUIPMENT

- A camera for recording the testing session (webcam or mounted camera) when only few observers are present; to better objectively quantify the behaviour and replicate assessments if needed
  - if needed multiple cameras for multiple perspectives
  - if needed screen capture to record the screen
- Microphone for recording the user and any sound output of the product
- A computer for notes of the observers
- Logging software, tracking computer, or similar to record the session

LABORATORY EQUIPMENT
FURTHER EQUIPMENT FOR A 2ND ROOM

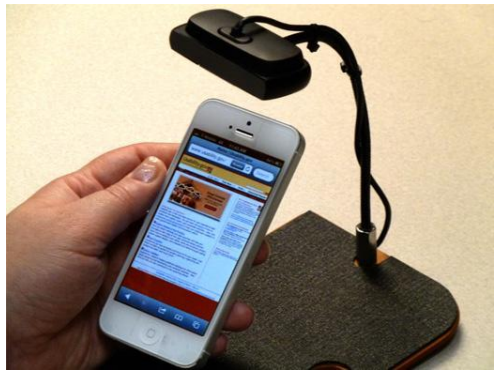
- Room 1 (testing room): tester; Room 2 (control room): observers, moderator if needed
  - Connected by semi-permeable glass or
  - Observation of the tester via camera
- Headset: for hearing the tester in the other room
- Telephone or intercom between both rooms
- If needed a white-noise generator, especially when the test room is not sufficiently soundproof

LABORATORY EQUIPMENT
SPECIAL EQUIPMENT

- Eye-tracking equipment
  Eye gaze of the user
  ➔ attention

https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content-discovered/

- Equipment for testing mobile devices



https://www.usability.gov/how-to-and-tools/methods/mobile-device-testing.html

https://thenextweb.com/dd/2015/01/04/practical-tips-web-mobile-usability-tests/

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INFORMAL LABORATORIES

A laboratory can be set up anywhere!

... In the minimum case, space for 2 persons and a computer with the product to be tested is sufficient…

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FIELD TESTING

= Usability test in the users‘ environment
if necessary even with the user‘s own device

From “no equipment”, well, at least something to take notes with (e.g., writing pad and pen) to a “portable lab” with cameras, logging computers, eye-tracking glasses etc.

FIELD TESTING
ADVANTAGES

- The product is tested in the actual context of use
  - Office or at home: lighting conditions, environment, internet connectivity etc
  - “in the wild”: environmental influences such as other people, hectic, light, noise, temperature, …
- comparison between laboratory tests and field testing may be possible if needed
- Discussion: for what kind of products is field testing essential?

FIELD TESTING
DISADVANTAGES

- No control over the environment
- No separation between tester and observer is possible
- Distractions are possible
- Additional working time for the journey to the test locations
- More data is collected (environment) and has to be analyzed; potentially no comparability between testers can be established and therefore n quantitative evaluation is not possible

REMOTE TESTING

= Tester and moderator / observer are fully spatially separated; usually the tester is at their own workplace or in the office

- Moderated testing (synchronous)
  The moderator interacts with the tester via speech, chat, application
- Unmoderated testing (asynchronous)
  A web-based application is used to conduct the test (➔ throughput!)

Automatic logging / tracking the user is becoming increasingly important ➔ automation!

CHOOSING THE RIGHT METHOD DISCUSSION

When do you use which kind of testing?

SUMMARY

- Laboratory tests – laboratory equipment, fully controlled
- Informal laboratories
- Field testing – in the usual environment of the tester
- Remote Testing – spatial separation between tester and moderator / obserber
  - Moderated tests
  - Unmoderated tests: fully automated

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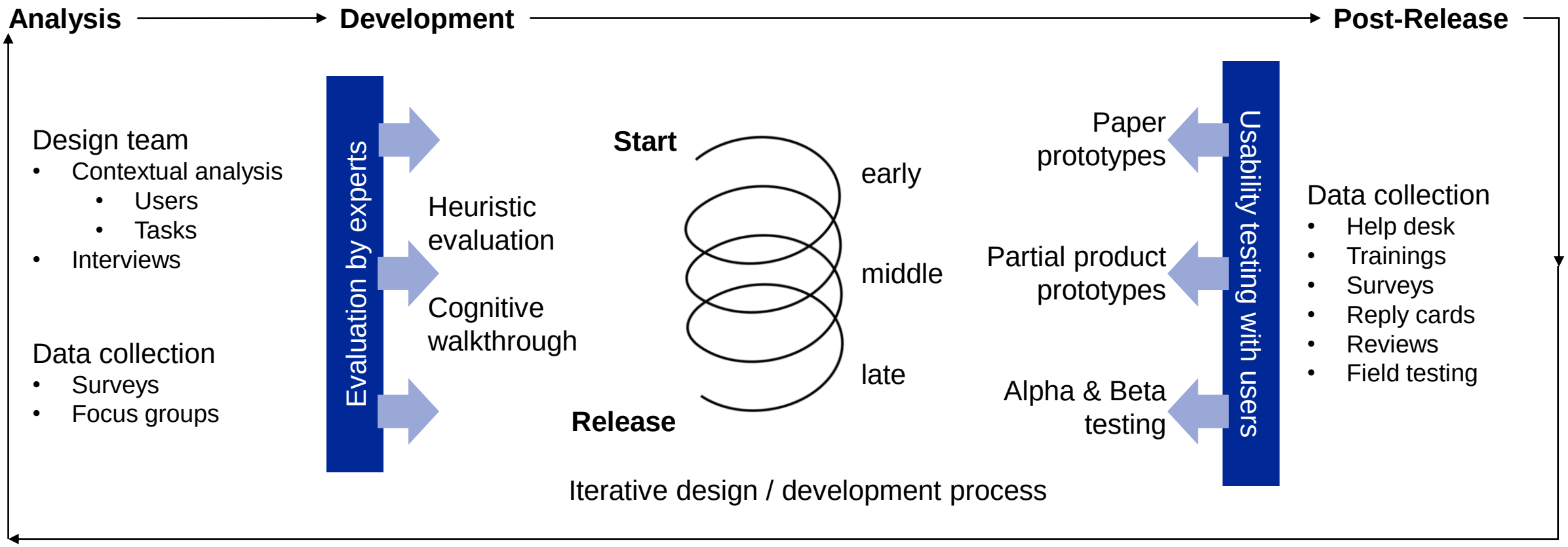
› CHAP. 3: USABILITY IN THE SOFTWARE DEVELOPMENT PROCESS

User-centered design process
The methods toolkit
Heuristic evaluation
Usability testing *vs* heuristic evaluation

USER-CENTERED DESIGN PROCESS



THE METHODS TOOLKIT
ANALYSIS TOOLS

Market research

- Focus groups
  Moderated group discussion following a guideline (semi-standardized interview). Attitudes towards a product are probed and new products / features are outlined and discussed.

- Surveys
  Standardized questions, large number of responses from customers is possible, e.g., via web-based surveys

- Blogs
  Solicit direct feedback on potential new designs and the like

THE METHODS TOOLKIT
ANALYSIS TOOLS

Internal information about users

- Technical support / customer support
  ... knows where the users‘ “pain points” are
- Training department
  ... knows what is hardest to learn for the users
- Technical communicators
  ... charged with describing the product
- Sales
  ... hears what customers want

THE METHODS TOOLKIT
ANALYSIS TOOLS

Site visits / contextual inquiry
Gather information about the environment, products used, processes, ...

- Interviews
  structured or semi-structured
- Shadowing a user
  Follow the user around for a day to understand daily activities
- Critical-incident technique
  Descriptions of situations or proceedings by the user
- Scenarios and role-playing activities

THE METHODS TOOLKIT
DEVELOPMENT TOOLS

- Card sorting
  Development of the information architecture of the product by the users, e.g., for websites or menu structure navigation
- Participatory design
  Active involvement of users in the whole design process
- Heuristic evaluation
  An expert review of a product (see later)
- Cognitive walkthrough
  Mental walk through a work process on a prototype
- **Usability Testing**

THE METHODS TOOLKIT
POST-RELEASE TOOLS

- On-site usability testing (field testing)
- Log data analysis
  Automated analysis of, e.g., website visits and more information beyond these visits
- Longitudinal study
  Repeated usability testing with a group of users, from development until after the release
  Diary study: the user documents every activity about their use of the product, possibly with pictures, over a longer period of time.

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OVERVIEW METHODS

Source: Barnum (2010)

... and their results

Further information:
https://www.usability.gov/how-to-and-tools/methods/index.html

HEURISTIC EVALUATION

Techniques used by usability professionals	Usage 2007	Usage 2009
Informal usability testing	77%	68%
Heuristic/expert review	77%	74%
User research, such as interviews and surveys	74%	75%
Interface/interaction design	73%	70%
Creating prototypes (wireframes or low-fidelity)	73%	69%
Personas and user profiles	66%	61%
Requirements gathering	63%	63%
Information architecture	63%	61%
Task analysis	60%	58%
Usability testing (in a lab)	54%	54%
Usability testing (remote, moderated)	42%	42%
Usability testing (remote, unmoderated)	NA	18%

Data from the *Usability Professionals' Association 2009 Salary Survey*, which includes questions on "Techniques" and compares the results from the 2007 survey with the results from the 2009 survey.

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HEURISTIC EVALUATION

A product is reviewed by an expert (usually a usability expert or an expert in the domain of the product) using heuristics.

1. Visibility of system status
   The system should always keep users informed about what is going on

2. Match between system and the real world
   The system should speak the users language, with concepts familiar to the user (rather than system-oriented terms). Information should appear in a natural and logical order (for the user!).

https://www.nngroup.com/articles/ten-usability-heuristics/

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HEURISTIC EVALUATION

3. User control and freedom
   Exiting a function without problems at any time needs to be supported. Support undo and redo.

4. Consistency and standards
   Wording and icons should follow platform conventions.

5. Error prevention
   Guide users to prevent incorrect operations and present users with a confirmation option before commiting to critical actions.

6. Recognition rather than recall
   The user should not have to remember information that is currently not visible . All necessary information needs to be visible or easily retrievable.

https://www.nngroup.com/articles/ten-usability-heuristics/

HEURISTIC EVALUATION

7. Flexibility and efficiency of use
   Use accelerators for experienced users and allow users to tailor frequent actions, e.g., through setting shortcuts

8. Aesthetic and minimalist design
   Irrelevant information competes with relevant information ☹

9. Help users recognize, diagnose, and recover from errors
   Error messages need to be expressed in plain language, precisely indicating the problem, and suggest a solution

10. Help and Documentation
    Help needs to be easy to search, focused on the user‘s task, and short

https://www.nngroup.com/articles/ten-usability-heuristics/

HEURISTIC EVALUATION
FORMAL EVALUATION

- Three to five evaluators
- Training session for evaluators without domain knowledge
- The evaluators agree on the user of a target group
  - or use personas to help them walk in the shoes of their users
- In some cases, a scenario or a set of tasks are given to guide the evaluation
- Each evaluator reviews the product at least twice
  - to become familiar with it
  - to inspect it against the set of heuristics
- Then: collection and discussion of the results

HEURISTIC EVALUATION
FORMAL EVALUATION

- Severity codes are assigned to the findings, based on their likey impact on the UX, e.g.
  - Catastrophe / show-stopper
  - Major problem – has severe impact on usability
  - Minor problem – low priority, but should be noted
  - “Cosmetic” problem – can be fixed if there is time

Result: report with a listing of the usability problems and the assigned severity code. Ideally, additional recommendations for fixing the problems are also delivered.

HEURISTIC EVALUATION
EXPERT REVIEW

... Some people use it as synonym for “formal evaluation”, but it can also mean:

- A single evaluator – the expert – conducts the review
- A review that does not involve specific heuristics, usually performed by experts using their own set of (informal) heuristics based on experience

HEURISTIC EVALUATION
INFORMAL EVALUTION

Useful 5 step method

1. Do not look at the product (yet)!
   There is no second chance for the “first look”

2. Write a short story
   - Who is using this product?
   - Why are they using the product?
   - How do they feel about using the product?
   - What do they expect to happen?
   - How are they different from me?

HEURISTIC EVALUATION
INFORMAL EVALUTION

3. Use the product (following the story)
   - Start from “Why is the person using this product”?
   - What is it they are trying to do?
   - What questions do they have?
   - What else do they want to know?
   - Can they find the information they need?

4. Now look at the product under these four aspects
   - Do business goals and user goals align?
   - Were headings and text helpful and informative?
   - Was the interaction with the application intuitive?
   - Was the visual design appealing and helpful?

HEURISTIC EVALUATION
INFORMAL EVALUTION

5. Writing a report
   - What problems were found?
   - Find at least one positive point

USABILITY TESTING *VS* HEURISTIC EVALUATION

- No review process can predict user problems as well as actual usability testing
- Usability experts are better at identifying more severe errors, compared to developers or non-experts
  - but also many more minor problems (false alarms?)
- Usability experts are also better at predicting users‘ reactions to errors than developers or non-experts
- Usability experts are helpful at identifying improvements for the product
- Usability testing and reviews often lead to complementary results

COMBINATION OF USABILITY TESTING AND HEURISTIC EVALUATION

1. Conducting a heuristic evaluation
   ➔ Eliminate the most severe usability problems (if possible)
   ➔ Identify good goals for usability testing

2. Conducting a usability test
   ➔ What additional problems emerge for real users?
   ➔ Are previously identified (and not yet fixed) issues, in fact, a problem for users?

When there is money but insufficent time, conduct both methods in parallel, then combine the findings.

SUMMARY

Methods toolkit

- Analysis tools
- Development tools
- Post-release tools

Heuristic evaluation

- Can be formal or informal
- Usually complements usability testing

› CHAP. 4: UNDERSTANDING USERS AND THEIR GOALS

People are goal-oriented
Experience and expectations
Personas
Scenarios

PEOPLE ARE GOAL-ORIENTED

Good to know:

- People want to act right away.
- We need to know why we have to know something (particularly if it seems to get in the way of taking action)
- We learn best when the outcome is of immediate value.
- We develop mental models of how things are done, and apply these when we learn how to use new products.

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EXPERIENCE AND EXPECTATIONS

How long have you experienced the internet?

Would you consider yourself an experienced user?

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EXPERIENCE AND EXPECTATIONS

Characteristics of experienced users

- Physical movements, such as using the mouse and scrolling, are smooth
- Confident at clicking
- Better at searching and use search frequently
- Faster in using familiar websites

BUT

- On unfamiliar websites, they many still act like “beginners”!

EXPERIENCE AND EXPECTATIONS

Where do you expect

- About us
- Site search
- Internal links
- Advertisements
- Back to home

Figure 4.1 Users expect common web objects to be in specific locations on a website.

EXPERIENCE AND EXPECTATIONS

Figure 4.1 Users expect common web objects to be in specific locations on a website.

EXPERIENCE AND EXPECTATIONS
PEOPLE WANT TO ACT...

Websites are rarely read ...

... until there is a trigger word that matches the user‘s goal.

A website is like a conversation with the user

- User: How do I ...?
- Where do I find out about ...?
- May I ....?

And the website responds with

- the specific information the user wants

EXPERIENCE AND EXPECTATIONS
FIRST IMPRESSIONS MATTER

What is the critical factor for people to stay on a website?

Credibility / trust!

And how do you obtain it?

... depending on the user group

- Experts in the subject: reputation and information sources
- Consumers: professional design

Tips for creating trustworthy websites: https://credibility.stanford.edu/guidelines/index.html

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EXPERIENCE AND EXPECTATIONS
GENERATIONAL DIFFERENCES

Common definition of generations

Generation Name	Birth Years	Current Age
Generation Z / Google Generation	> 1992	< 29
Generation Y / Millenials	1977-1992	30-45
Generation X	1965-1976	46-57
Boomers	1946-1964	58-76
Silent Generation	1937-1945	77-85
G.I. Generation (esp. USA)	< 1937	> 85

EXPERIENCE AND EXPECTATIONS
GENERATIONAL DIFFERENCES

Characteristics of elderly users (compared to younger user)

- Less efficient web search
- Reading more content
- Easily distracted by movement and animation
- Having difficulty reading small, narrowly spaced text
- More difficulty in recalling previous navigation and previously visited websites
- Contrast sensitivity may be worse
- Fine motor skills may be worse and therefore difficulty with using a mouse / touchpad
- Hearing may be worse

EXPERIENCE AND EXPECTATIONS
GENERATIONAL DIFFERENCES

Characteristics of the Google generation

- Very fast web search
  ➔ little time is spent on evaluating information for relevance, accuracy, or source
- Poor understanding of their information needs ➔ no effective search strategies
- Having access to technology for information retrieval does not mean having the ability to handle (locate and evaluate) information
- Preference for searches in natural language rather than working with effective keywords
- Unable to assess long lists of results effectively
- Prefer search engines over libraries
- ... the other generations are increasingly adopting these habits

EXPERIENCE AND EXPECTATIONS
GENERATIONAL DIFFERENCES

Characteristics of children

- Often coping better with websites intended for adults rather than websites for children
- Often impatient, leave sites quickly
- Animations and multimedia effects work well
- Rarely scroll
- Unable to distinguish ads from content, accordingly often click on ads

https://www.nngroup.com/articles/childrens-websites-usability-issues/

Rank	Gen Y	Gen X	Younger Boomers	Older Boomers	Silent Generation	G.I. Generation
1	Email	Email	Email	Email	Email	Email
2	Search	Search	Search	Search	Search	Search
3	Research product	Research product	Research product	Get health info	Research product	Get health info
4	Get news	Get health info	Get health info	Research product	Get health info	Make travel reservations
5	Watch video	Buy something	Get news	Buy something	Make travel reservations	Research product
6	Buy something	Get news	Make travel reservations	Get news	Visit gov't site	Buy something
7	Get health info	Make travel reservations	Buy something	Make travel reservations	Buy something	Get news
8	Visit SNS	Bank	Visit gov't site	Visit gov't site	Get news	Visit gov't site
9	Make travel reservations	Visit gov't site	Research for job	Bank	Bank	Get religious info
10	Get job info	Research for job	Bank	Research for job	Research for job	Bank
11	Create SNS profile	Watch video	Watch video	Get job info	Get religious info	IM
12	IM	Get job info	Get job info	Watch video	Rate product	Play games
13	Download music	Download music	Get religious info	Rate product	Play games	Rate product
14	Bank	IM	Rate product	Get religious info	IM	Read blog
15	Visit gov't site	Get religious info	IM	Play games	Watch video	Watch video
16	Research for job	Play games	Auction	Auction	Read blog	Download video
17	Play games	Visit SNS	Read blog	Read blog	Auction	Get job info
18	Read blog	Rate product	Play games	IM	Download music	Podcast
19	Download video	Read blog	Download music	Download music	Download video	Research for job
20	Rate product	Download video	Download video	Download video	Get job info	Auction
21	Get religious info	Auction	Visit SNS	Podcast	Visit SNS	Create blog
22	Auction	Create SNS profile	Podcast	Visit SNS	Podcast	Download music
23	Podcast	Podcast	Create SNS profile	Create SNS profile	Create blog	Visit SNS
24	Create blog	Create blog	Create blog	Create blog	Create SNS profile	Create SNS profile
25	Visit virtual world	Visit virtual world	Visit virtual world	Visit virtual world	Visit virtual world	Visit virtual world

Above this line, over 50% of internet users in the given generation engage in this online activity

Key: % of internet users in each generation who engages in this online activity
90-100%
80-89%
70-79%
60-69%
50-59%
40-49%
30-39%
20-29%
10-19%
0-9%

PERSONAS

Egocentric intuition fallacy: the misguided notion of developers to intuitively assume a user would behave similar to themselves or to “simply” imagine how a user would behave.

Remedy: personas

A persona is a fictive character – who could, however, be a real person! – with particular wants, needs, desires, skill levels, and contexts of use. Personas are created based on data about users and usually represent a specific user group as an archetype.

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PERSONAS

Name and picture	Representative name and stock photo
Demographic information	Age, education, ethnicity, family status
Job title or main focus of activity	e.g., pupil, student, retired person, ...
Goals	Related to product and experience
Environment	Context of use of the product
Technical or product domain expertise	Could also include attitude toward technology, the product, the company, …
A quote that sums up what matters most to the persona	Ideally an actual quote taken from interviews, blogs, …

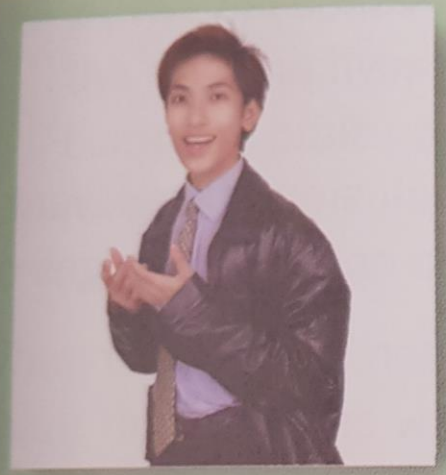
Source for the design of personas: The analysis tools of the last chapter

PERSONAS

Example Holiday Inn China

Information provided by User Experience Manager of the hotel group (+ research + interviews)

- Key markets in China: Peking, Shanghai, Guangzhou
- Brand presence in China: InterContinental, Crowne Plaza, Holiday Inn
- Target customers: domestic and international travelers
- Demographic information: ages 24-55, middle class to upper middle class
- Type of travel: business (well established), leisure market (growing)



Tai "Tony" CHEN

Male
27 years old

Tony is single. He lives in an apartment in downtown Shanghai.

"All I need is to book a room as quickly as possible. I need information about directions from the airport to the hotel and from the hotel to my clients."

Occupation: An account executive of a joint venture in Shanghai. Frequently travels to other domestic big cities, such as Beijing, Guangzhou, and Dalian.

Salary: ¥400,000 ($50,000)

Technical profile: Very comfortable with technology. Apple iMac (about 1.5 years old); a laptop assigned by the company for business usage; high speed internet at home; 4-6 hours/day online

Internet use: Email, entertainment, and social networking

Hobbies:

- Playing Nintendo Wii, watching sport games, and surfing the internet on weekday nights
- Going to clubs or nice restaurants with friends on weekends

Tony is the only child of his family. He visits his parents 2 or 3 times a month. He loves them.

Tony is a China's Me generation. He graduated from Shanghai Fudan University, one of the top universities in China. He is now one of the young elites in the company.

Tony travels frequently to other big cities for business purposes. He always books hotel rooms online. He has trouble doing it every now and then, but he can figure it out quickly.

Tony drinks Starbucks coffee and wears Nike.

Figure 4.5 Tai "Tony" Chen is a young Chinese account executive in a British–Chinese joint venture company. He travels regularly as part of his job.

PERSONAS

How many personas are enough?

- Minimum 1 per user group, rather 2 to 3, maximum 12

Personas should be visible during development and taken into consideration

- Photos in the project office, wiki-space for the personas, ...

Caution! Use personas for the development (of the software and the test) – but do not see your testers as personas!

SCENARIOS

Use case *vs* scenario?

- Task-specific, focuses on the interaction between the user and the system
- User-specific, focuses on the user in pursuit of a goal

Task *vs* goal?

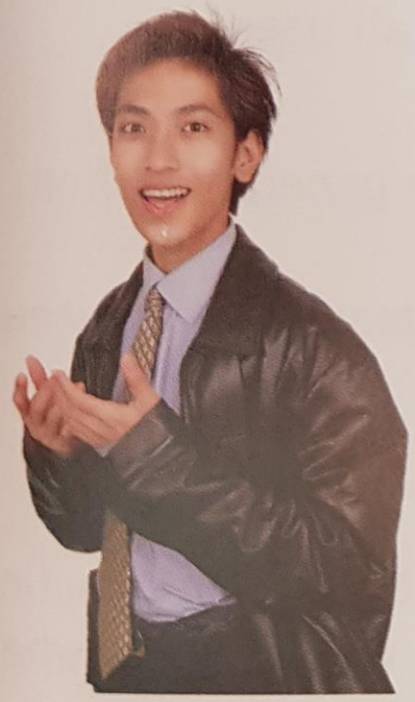
- Task: steps a user needs to take in order to achieve a goal
- Goal: the results of a task / a series of tasks, the motivation of the user

SCENARIOS

- The persona is the central character of the story
- A problem or situation should be established
- The scene should be familiar, users of the group should be able to identify with it
- Description of the user‘s main goal
- The real data from the analysis forms the basis for the scenario, such that it is grounded in reality
- The story should be memorable and vivid

SCENARIOS

What matters to Tony when booking a hotel



Tony travels regularly for his job in China, and he is very comfortable making the arrangements himself. In fact, he prefers doing this himself because he is very particular about the location of the hotel and its amenities. If the company books the hotel for him, they tend to go with the cheapest rate, but Tony knows what he is allowed to spend, and when he books his hotel room himself, he gets more of what's important to him.

For Tony, that means a big hotel that has a full restaurant, preferably one that serves Western/international food, and a bar or nightclub, if not in the hotel, then nearby. Tony does not want a hotel for tourists, so he looks for a hotel with a good business center. Of course, it goes without saying that Tony's room needs to have high-speed Internet access and a flat-screen TV with cable. It's a plus if the hotel has a shuttle to/from the airport.

Tony is comfortable using his credit card when he books a hotel, and he expects to be able to complete the booking process quickly and efficiently. He likes staying at name-brand hotels, particularly when they have a loyalty program that earns him room upgrades. So, he checks out his favorite hotel brand first to see what they have available. Because he often has to book a room at the last minute, he needs to know room availability right away.

SUMMARY

- People are goal-oriented ➔ everything they do with the product is motivated by the pursuit of their goal.
- (Internet-) users bring their experiences and expectations to your website (/ software / product).

- Personas are the archetypal users of a product, making the users tangible during the development of a product.
- Scenarios embed personas into a story that reflect how they want to use the product based on their needs and goals.