

Seminar: Web-Qualitätsmanagement

Web Usability - Allgemeine Bewertung mit einem Fragenkatalog

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Gliederung

- ◆ Was ist Usability ?
- ◆ Testmethoden
- ◆ Fragenkatalog/Fragebogen
- ◆ Beispiele
- ◆ Zusammenfassung

Was ist Usability ?

- ◆ Jakob Nielsen: „Usability ist der Grad an Qualität, in welchem ein Benutzer die Interaktion mit etwas erlebt“
- ◆ beinhaltet viele Merkmale (Benutzerfreundlichkeit, Gebrauchsgüte, Einfachheit etc.)
- ◆ „less is more“ und „Ease of Use“



Was ist Usability ?

- ◆ für Webseiten:
 - Design, Lesbarkeit, Verständlichkeit,
 - Information, Determinismus ...
- ◆ Problem: meist unerfüllte Forderung
 - > lange Verweilzeiten der Nutzer
 - > nicht gefundene Daten
 - > Frust beim Nutzer

Testmethoden

◆ Heuristische Evaluation:

- erfolgt durch Experten (meist 3-5 Personen)
- decken 60-70% der Usability-Probleme auf

◆ Usability-Testing:

- erfolgt durch Personen der Zielgruppe
- frühzeitige Erkennung von Problemen
- Klassifizierung der Probleme

Fragenkatalog/Fragebogen

- ◆ Methode zum Erheben, Speichern und Sammeln von Informationen
- ◆ Fakten-, Meinung- und Einstellungsfragen
- ◆ Vorteile: Sichtweise des Nutzers
 - weitestgehend unabhängig, günstig
- ◆ Nachteile: nur Nutzerreaktion
 - keine Gesamtanalyse

Fragenkatalog/Fragebogen

- ◆ Fragebogen als ontologisches Model
- ◆ konkrete Aufgaben zur Bewertung
- ◆ Aufgeteilt in 4 Ontologien:
 - Web-Applikation
 - Funktionalitäten und Aufgaben
 - Attribute
 - Fragebogen

Beispiel - Practical Heuristics for Usability Evaluation von Gary Perlman, 1997

LEARNING	1	2	3	4	5	6	7		NA
1. Help and Documentation Design for use without documentation. Provide easy-to-use task-oriented help <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
2. Adopt the User's Viewpoint Speak the user's language (avoid jargon). Make use of existing knowledge (familiar mental models). <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
3. Simple and Natural Dialogue Avoid extraneous information, steps, actions. Information should be in a logical, natural order. <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
4. Design for Advancement Provide shortcuts (quick keys, customization). <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
ADAPTING TO THE USER	1	2	3	4	5	6	7		NA
5. Provide Maps and a Trail Give the user a way to preview where to go, what will happen. Give the user a way to review / return-to previous contexts. <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
6. Show the User What is (Not) Possible Provide affordances to indicate what can be done. <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
7. Intuitive Mappings Design good response compatibility between controls/actions. <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
8. Minimize Memory Load Remove the need to remember across dialogues. Provide multiple views for easy comparisons. <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
9. Consistency in the System and to Standards Make sure the same term/action has one meaning. When there is no better way, conform to a standard. <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
FEEDBACK AND ERRORS	1	2	3	4	5	6	7		NA
10. Feedback Provide timely feedback about all processes, system status. <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
11. Prevent Errors Make it difficult to make errors. <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
12. Error Messages Diagnose the source and cause of a problem and suggest a solution. <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
13. Clearly Marked Exits and Error Recovery Make sure the user can get out of an undesirable state easily. Design assuming that people will make errors and need to recover previous states. <input type="checkbox"/>	BAD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GOOD	<input type="radio"/>
	1	2	3	4	5	6	7		NA

Beispiel – Computer System Usability Questionnaire von J.R. Lewis, 1995

		1	2	3	4	5	6	7	NA
1. Overall, I am satisfied with how easy it is to use system <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
2. It was simple to use system <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
3. I can effectively complete my work using system <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
4. I am able to complete my work quickly using system <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
5. I am able to efficiently complete my work using system <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
6. I feel comfortable using system <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
7. It was easy to learn to use system <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
8. I believe I became productive quickly using system <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
9. system gives error messages that clearly tell me how to fix problems <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
10. Whenever I make a mistake using system , I recover easily and quickly <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
11. The information (such as online help, on-screen messages, and other documentation) provided with system is clear <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
12. It is easy to find the information I needed <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
13. The information provided for system is easy to understand <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
14. The information is effective in helping me complete the tasks and scenarios <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
15. The organization of information on system screens is clear <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
16. The interface of system is pleasant <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
17. I like using the interface of system <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
18. system has all the functions and capabilities I expect it to have <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
19. Overall, I am satisfied with system <input type="checkbox"/>	DISAGREE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	AGREE <input type="radio"/>
		1	2	3	4	5	6	7	NA

Zusammenfassung

- ◆ Web Usability Erfolgsfaktor im E-Business
- ◆ Messung von Web Usability sehr schwierig
- ◆ Kosten/Nutzen abschätzen der Methoden
- ◆ Aufstellung von Fragebögen komplex
- ◆ subjektive Ergebnisse bei Fragebögen

Quellen

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- ◆ „A Concept-Based Approach for the Design of Web Usability Evaluation Questionnaires“, *Juan Manuel Cueva Lovelle, Bernardo Martin Gonzalez Rodriguez, Luis Joyanes Aguilar, Jose Emilio Labra Gayo, Maria del Puerto Paule Ruiz*, ICWE 2003 Springer-Verlag
- ◆ Webseite von Jakob Nielsen <http://www.useit.com/>
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<http://www.ucc.ie/hfrg/resources/qfaq1.html>