

### Usability Evaluation mittels Experten Reviews

Expertenevaluation im mobilen Zeitalter

Hans-Joachim Belz Word Usability Day, Burg Lede, November 2015







# Dinge, die man gerne tut, sind



Two people consulting team from Bonn.

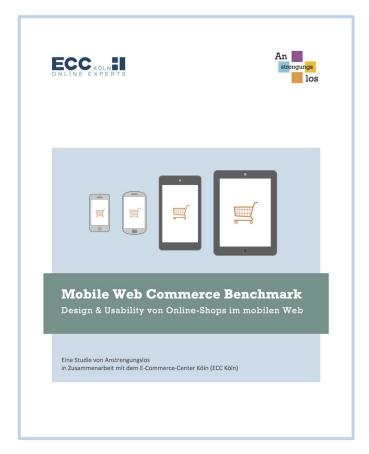
We offer UX consulting and change management.

Our current focuses are mobile commerce and digital transformation.



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## 4 Usability Studien in 2014/2015



Mobile Online Shops,
Anstrengungslos/ECC Köln,
April 2014



Mobile Reiseportale, Sevenval (Anstrengungslos), Februar 2015

# Expert Review – wer macht's?

Welche Erfahrungen gibt es?



- Wer hat schon mal eine Expertenevaluation durchgeführt?
- Wessen Unternehmen betreibt Expertenevaluationen auf regelmäßiger Basis?
- Wer denkt, Expertenevaluation ist ein effizienter Weg, um potentielle Usability Probleme zu finden?

# Expertenevaluation (engl.: Expert Review)

Was ist das?

- A usability evaluation method based on the inspection of a product by one or more usability experts.
- Heuristic evaluation, the original review methodology, was developed by Rolf Molich and Jakob Nielsen in 1990.
- Today there are several different flavors:
  - Heuristic Evaluation
  - Cognitive Walkthrough
  - Scenario / task-based expert review
  - Persona-based expert review
- It's cheap and can be surprisingly effective see CUE studies\*.



WTF? Usability without a user?

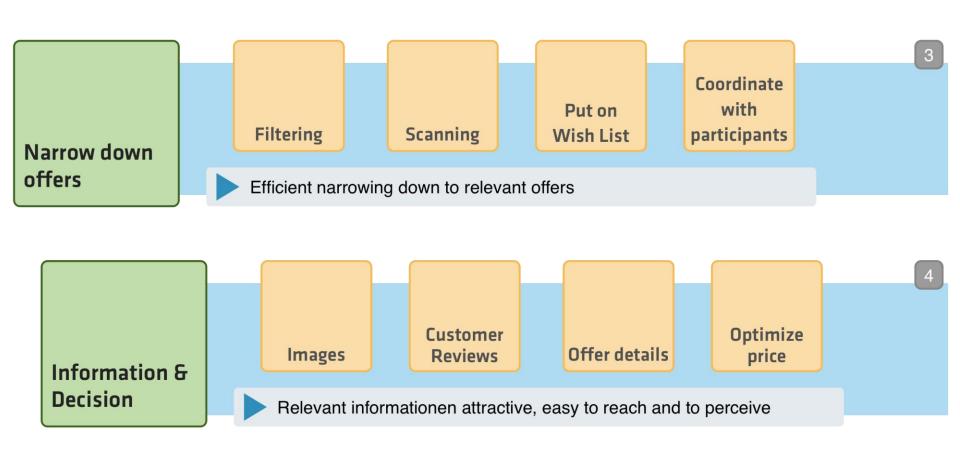
# Why it works

#### The expert in expert

- Reviews do not simply focus on UI design details.
- Good expert reviews take into account
  - User Needs
  - Mental models
  - Typical Perception behaviour
  - ...
- Experts have extensive experience with user behaviour: Lots of hours watching users (in the use lab) plus participating in user research efforts
- In addition, they know their way around design patterns, guidelines, current studies, etc.

# + Pro Tip #1 Create maps of needs & mental models

Excerpt from a phase model of booking a package holiday:



# Pro Tip #2: Multiple experts

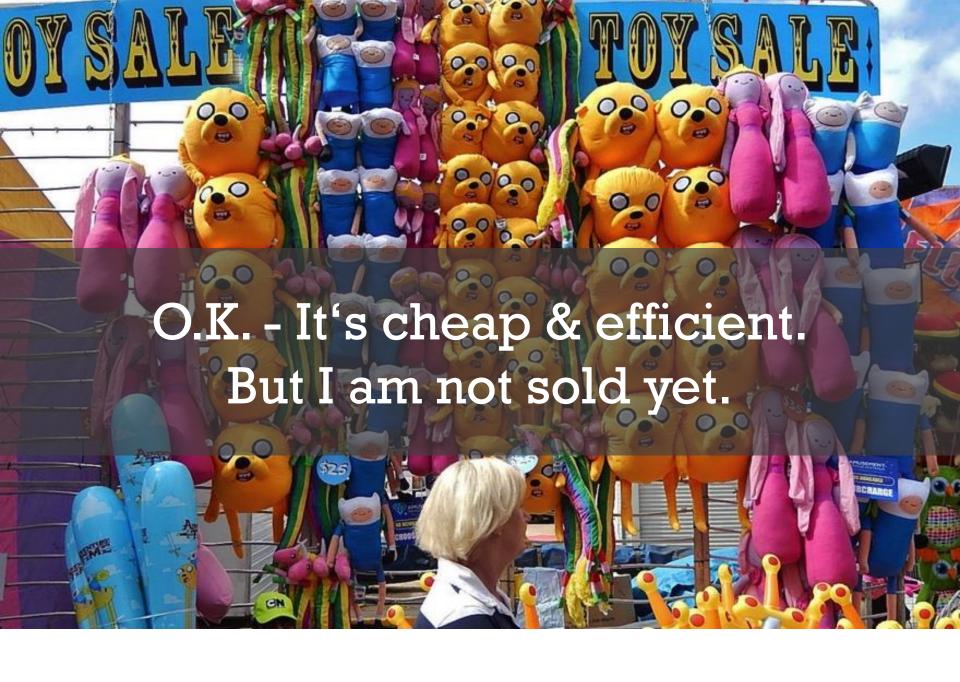
- If possible, let more than one expert review the product.
- Every expert tests independently.
- Build consensus about your test results by a thorough and frank discussion of your observations.

# + Pro Tip #3: Use scenarios (and personas)

Heuristic Evaluation	lacks context (user type, user goal, tools and social context).
Cognitive Walkthrough	with a lot of upfront documentation (detailed task definition, expected action sequence, etc.) not well suited for iterative design.
Scenario-based	A clear <b>task definition</b> with some information about the <b>user</b> and their <b>social context</b> .
Persona-based	adds a rich description of the <b>user stereotype to</b> the scenario-based approach.

### How we do it

- Testing with multiple devices in parallel
- Test Scenario + Criteria Catalogue + User Model Maps (even better: Using Personas)
- Per Step (e.g. product detail page):
  - Independent evaluation by two experts
  - Discussion / consensus building
  - Documenting test results and any further observations (text + screenshots)
- Documenting the user journey of the scenario in a series of screenshots



# The Age of Mobile

Fragmented device landscape, Increased need for relevance, continuum of screens, outrageous oddities, ...

providing sufficient context,



# Design Review

Then and Now

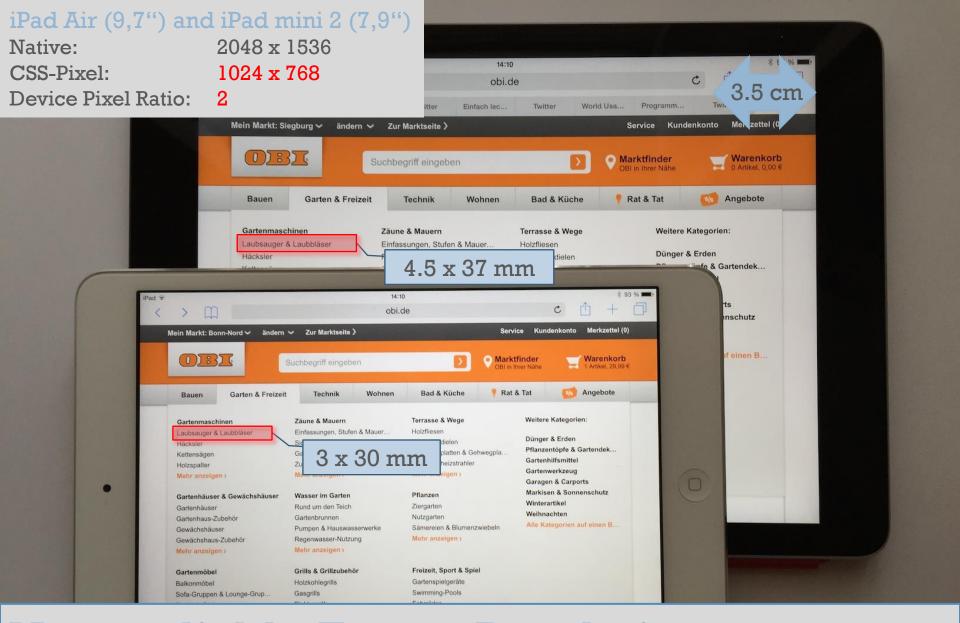


- One PC
- Static layout
- Some browser quarrels



- A myriad of devices
- Dynamic Layout
- Man, don't get me started

# SOME REAL WORLD EXAMPLES:



### Not a reliable Factor: Resolution

Inspection/testing on real devices is the only reliable evaluation method

sheego.de





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★★★★☆ (81) → Bewertungen lesen

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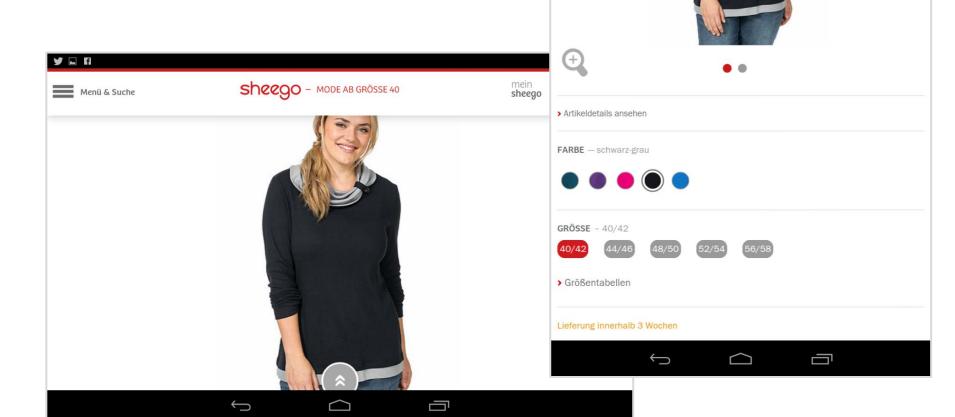








# Nexus 7: Not so great.



# Who is responsible for spotting design issues?

### **Designer?**

Only small range of devices (if any) with focus on the concept

### **UX Manager?**

Small range of devices with focus on user behaviour

### **Developer?**

Bigger range of devices but mostly focused on implementation challenges

#### **QA Tester?**

Maximum range of devices but focus on functionality

### **Content Manager?**

Only small range of devices (if any)



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### To the rescue: The Usability Inspector

# (Small) Usability focused set of test devices

- → Main display sizes, aspect ratios and screen resolutions
- → Leaning towards the more constrained devices



# Agreed set of evaluation criteria including

- Information Architecture
- Interaction Design (perceptible, understandable, touchable,...)
- Domain-specific aspects (checkout, product detail page, etc.)

Evaluating complete user journeys based on scenarios

# SOME SAMPLES FROM OUR WORK:

# Tablet Device Lab for Usability Reviews

- Android Tablets im with aspect ratio 16:10 und 7/8/10 inches
- iPads with aspect ratio 4:3 and 8/10 inches











Further coverage: Windows Tablets, Kindle Fire Tablets





# Excerpt from article page criterion

#### Above the fold evaluation (initial view)

- Is topic and purpose of the page immediately clear?
- Is the product name and part of the product image visible?
- Is immediately recognizable that more content will follow?

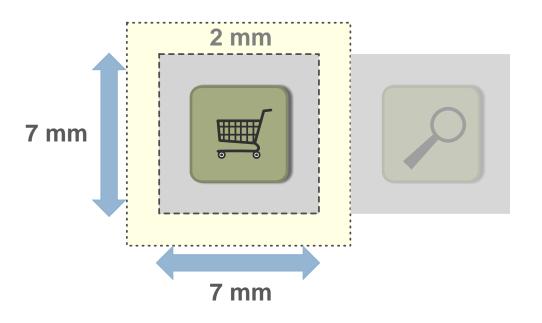
#### Overall page structure

Are the most important elements prominent with a clear visual hierarchy? Important are the core module, user reviews and relevant product details.

#### Core module – has to fit the screen

- Product image (at least partly)
- Product name + Manufacturer
- Product configuration
- Price, availability, delivery information

### Touch ergonomics



Visible Element

**Interactive Region** 

Distance to neighboring interactive region

- Agree on the size of your touch elements in mm – not pixels!
- Verify touch elements on physical screens!
- Allow for cases where space is sparse and the pain of misplaced touch interactions is negligible.



# User scenario for booking a package holiday

A childless couple wants to book a one week trip into the sun in 2 weeks from now. They live in Bonn, so the departure airport should be Cologne, Dusseldorf or Frankfurt. They only want breakfast (no all-inclusive service). The hotel should have at least four stars and they would like to choose something that is popular with couples. Good reviews/recommendations are important to them. They are flexible regarding the fee for the transfer to the hotel depending on the overall price.

# Additional perks of expert reviews

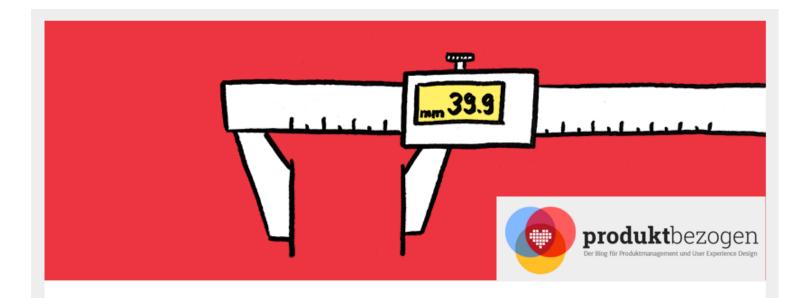
■ Compile and communicate standards for design and ergonomics from a user-centric point of view (vs. pattern library, style guide)

#### Benchmark competitors

- Where are they in comparison to you?
- Identify design elements that might be superior solutions.
- **Track** your criteria coverage over time

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### Additional reading



### **Expertenevaluation im mobilen Zeitalter**

von Hans-Joachim Belz (Gastautor) – 4. August 2015

Expertenevaluation ist so hipp wie Birkenstock-Sandalen. Dabei kann sie gerade in der heutigen mobilen Welt mehr als ihr Ruf: Expertenevaluation ist kostengünstig, wirkungsvoll und gut darin, im mobilen Kontext Usability Probleme aufzuspüren, die mit anderen Methoden schwer zu fassen sind. Das macht sie zur idealen Ergänzung bei der Usability-Evaluierung von mobilem Web und App. Dazu müssen allerdings einige Rahmenbedingungen erfüllt sein. Unsere Tipps aus der Praxis helfen dabei, dass es läuft – auch ohne Sandalen.

### Where can I learn more?



Workshop by Rolf Molich

### **Expert Reviews for Experts**

Great hands-on primer on basic principles of expert review as a usability evaluation method.



### Ask us!

We love to discuss, learn and advise.

If you want more hands-on support, we offer training and consulting.





#### **Kontakt:**

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