Ernst-Abbe-Hochschule Jena University of Applied Sciences

UsabilityCenter

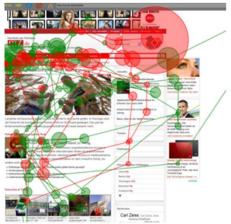
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Expertise

The Usability Center of the Jena University of Applied Sciences (EAH Jena) researches the usability, user-friendliness and functionality of **media** (adverts, cover pages, video clips, websites, online portals, apps), **sales instruments** (online shops, catalogues, product configurators), **products** and more.

Benefits of usability testing

- Improvement of target group orientation by distinguishing between different users for example regular/occasional Internet users or new/repeat customers including distinguishing characteristics of different target groups
- Identification of weaknesses (incorrect positioning of navigation aids, logos, etc.)
- Reduction of operating errors
- O Increase in clarity
- Improvements in the perception and use of important content
- Identification of likes and dislikes (including design suggestions)
- Evaluation of functions, services or content
- O Improving the simplicity of use
- Improving customer and user joy of use
- Increasing the conversion rate

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Usability testing – application examples

Media



Cover pages



Adverts



Websites



Online portals



Mailings



Apps





Online shops



Catalogues



Configurators



Shelf tests



Store tests

roducts







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Adverts / Cover pages

- Perception of all important information
- Eye movements and breaking off
- Perception of relevant areas of interest
- Target-group-oriented design and appeal
- Success optimization
- Evaluation of layout altenitives

Websites / Online portals

- User-friendliness
- Logical/clear layout
- Target-group-oriented visualisation
- Elimination of interference factors
- Joy of use
- Positioning and visibility of key elements
- Navigation/orientation
- Frequentation of a website
- Target-group-oriented appeal

Mailings

- Improvement of attention levels
- Perception of all essential features and benefit messages
- · Recognition of handling problems
- Evaluation of alternative concept suggestions

Apps

- User-friendliness
- Positioning and visibility of key elements
- Navigation/orientation
- Logical layout
- Target-group-oriented design

Usability testing – key issues

Online shops

- User-friendliness
- Positioning and visibility of key elements
- Navigation/orientation and logical layout
- Low abort rates
- Conversion rates
- Target-group-oriented design

Catalogues

- Cover page optimization
- User-friendly design of the orientation pages 2 and 3
- Evaluation of design variations
- Improvement of the page design with regards to
- cross-selling of products
- product arguments/advantages
- Special offers and services
- Cross-media catalogue design
- Target-group-oriented catalogue design
- Preferences of potential and current customers

Product configurators

- User-friendly design of the configurator
- Joy of use
- Identification of typical configuration paths

Shelf tests

- Insight into customer behaviour at the shelf
- Optimization of the form of presentation and/or placement

Store tests

- Perception of the products in a competitive environment
- Optimisation of packaging and visibility
- Effect of additional placements and promotions

Products

- User-friendliness
- Functionality
- Joy of use
- Interface design
- Redundant functions
- Turnover increase through better handling and/or simpler products
- Development of the products based on specific customer requests
- Reduction of return rates

Operating instructions

- Increasing the comprehensibility of operating instructions
- · Improving the perception of
- warning notices
- usage notices
- Differentiation from the competition through understandable products
- Target-group-oriented handling

Packaging

- Increasing overall perception
- Perception of all key elements (e.g. logo)
- Differentiation from the competition
- Problems of comprehensibility and interpretation



Usability testing - relevant analyses with eyetracking

Areas of Interest (AOI)



With the definition of areas of interest (AOI) specific elements of the stimulus (e.g. cover page, advert) are isolated from one another. This allows the individual sections to be more closely investigated.

Scan Path



The fixation of the attention to a stimulus (e.g. an advert or website) as well as the eye movement can be represented with a scan path. Circles represent the fixations on specific areas. The diameter of the circle describes the length of fixation. The connection line (saccade) between the points

define the jumps of the eye from area to area.

Heat Map



A heat map displays in colour the visual points and fixation intensity of a stimulus. Blue represents a short fixation time, green a medium one and red a long fixation time. The analysis can be

undertaken on an individual test person or cumulatively on multiple test persons.

View distribution



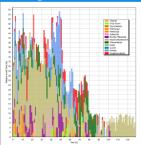
With view distribution the distribution of attention across individual sections (AOI) is visualised across all test persons. This shows whether a specific section of the object under examination generates the necessary attention appropriate to its size and function.

Focus map



In a focus map all fixed points are 'wiped free' and so made visible. All non-fixed points in contrast are blacked out. Focus maps are especially good at highlighting dead areas of a stimulus. The analysis can be undertaken on an individual test person or cumulatively on multiple test persons.

Binning chart



A binning chart gives a statistical overview of how often the defined sections (AOI) are cumulatively fixed in a specific time interval. This allows conclusions to be drawn on how intensively an AOI is viewed in relation to the rest, and how the view distribution has changed over

AOI sequence chart



An AOI sequence chart shows the chronological order in which the individual sections (AOI) are viewed. The analysis can only be undertaken on individual test person.



Usability Lab

Test and analysis area







- Fixed eyetracking system
- Mobile eyetracking system
- Audio and video recordings

Interview area







- Lounge area for in-depth interviews
- o Interactive board
- Magnetic boards for extensive presentations



Contact

Prof. Dr. Günter Buerke

Professor of business administration with focus on market-oriented management

Telephone: +49 (0)3641 205595

Fax: +49 (0)3641 205551

Email: guenter.buerke@eah-jena.de



Prof. Dr. Alexander Magerhans

Professor of business administration with focus on marketing

Telephone: +49 (0)3641 205563

Fax: +49 (0)3641 205551

Email: alexander.magerhans@eah-jena.de



Ernst-Abbe-Hochschule Jena Fachbereich Betriebswirtschaft Carl-Zeiss-Promenade 2 07745 Jena Germany

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