



FACT-Finder®
Usability Study Results:
Search & Navigation

Usability Study Results

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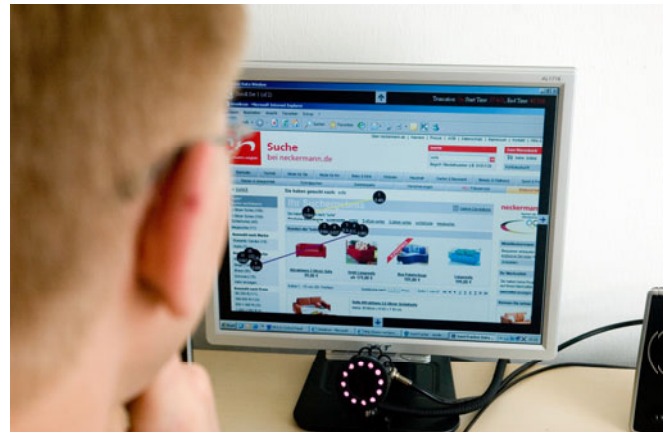
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Usability Study Results

Introduction to the Research Study

Europe's market-leading search and navigation solution for online shops, we wanted to know exactly what types of search and navigation behaviour are actually observed with users in online shops having various different search functions. On the basis of the documented user behaviour, a list of "Dos & Don'ts" can be determined, which shop owners should observe for their own Search and Navigation features. These real-world results may be used to strategically optimise a shop's success.

In order to obtain scientifically reliable answers about the search behaviour of online shoppers, but which are still relevant to actual practice, FACT-Finder commissioned a study by the Usability-Agency eResult in Göttingen, Germany. An intensive usability test was conducted in the agency's laboratory, using a Multiple Method Approach: eye tracking (viewpoint analysis via screen-cam), focused interviews, transcripts of spoken thought processes, and behavioural observations.



From the 29th to 30th August 2007, the behaviour of a total of eight participants (four women and four men)* were intensively tested for 90 minutes per subject. In the course of scenario-based application usage, the analysis team "secretly" observed the click behaviour of the test candidates. Following this, focused interviews were conducted. In addition, activities and statements made by the participants were recorded with a video camera, documented, and then analysed.

Results:

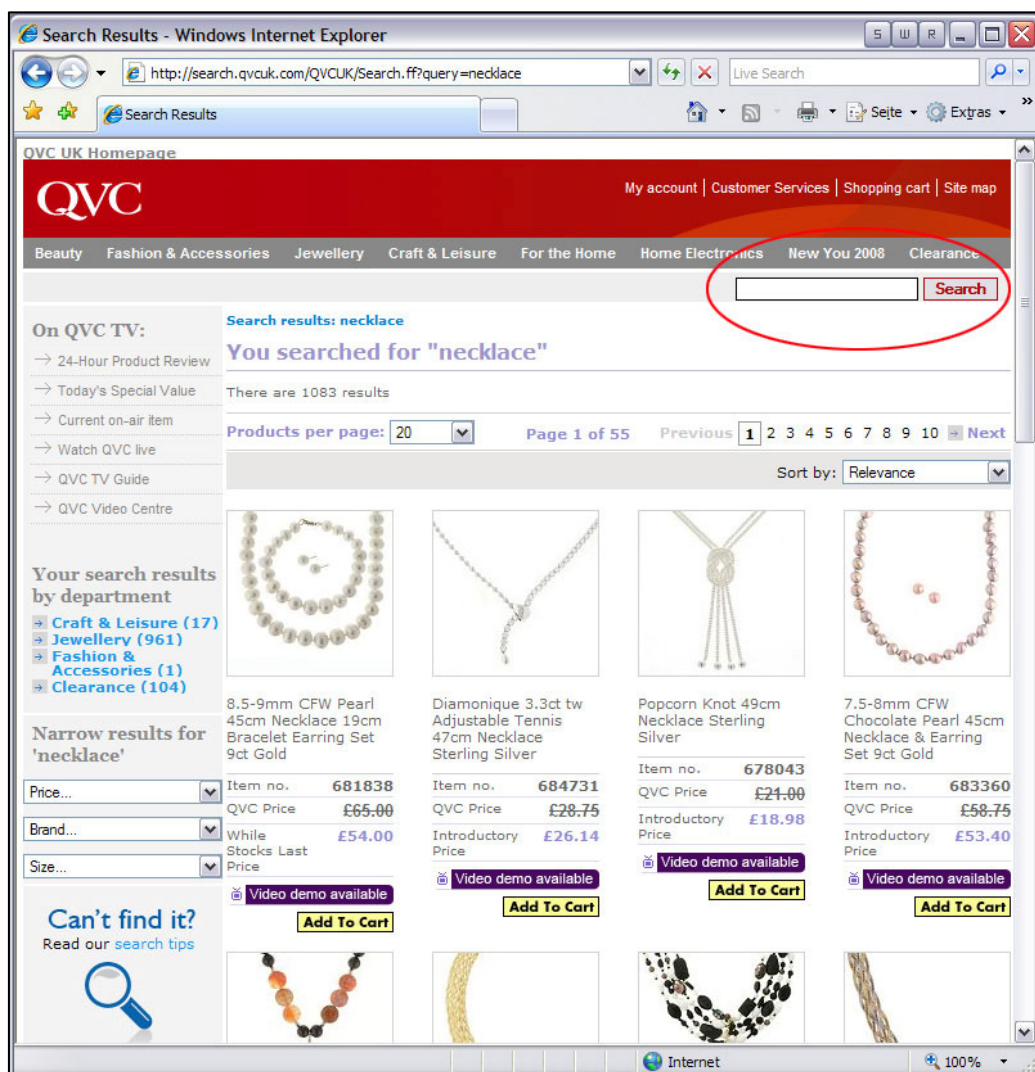
FACT-Finder has prepared comprehensive results of this Usability Study, and collected them to form the following **Practice Guide**, offering shop owners tips about user-friendly designs for searching, which leads to increased customer satisfaction and higher sales.

*Corresponding to AGOF-Data (August 2007) about the socio-demographic structure of German Internet users (age, education, household size)

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Position and Design of the Search Field

- The search field must be immediately visible in the upper part of the page; placement to the left, middle or right is of no consequence.
- The term "Search" or "Find" should appear immediately next to the entry field as an orientation aid for the user, either as a title, a label in front of the entry field, or a button to start the search.
- Search forms with a clearly legible "GO" button were ranked best in the comparison, search forms with a double arrow were ranked worst.
- In addition, a commonly recognisable symbol (magnifying glass) may also be used as an eye-catcher.
- The search form must be clearly separated from other entry fields, for example, a login field.
- Search fields should not be "pre-filled". Users prefer information about entries that may be given to the product search (such as name, article number, etc.) to be placed underneath (and not within) the entry field.

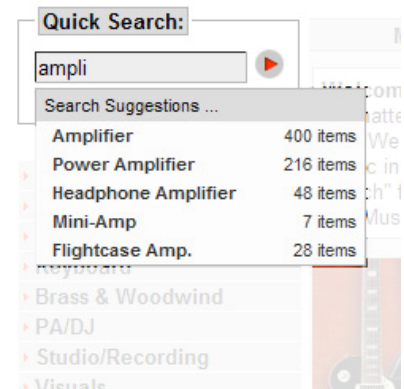


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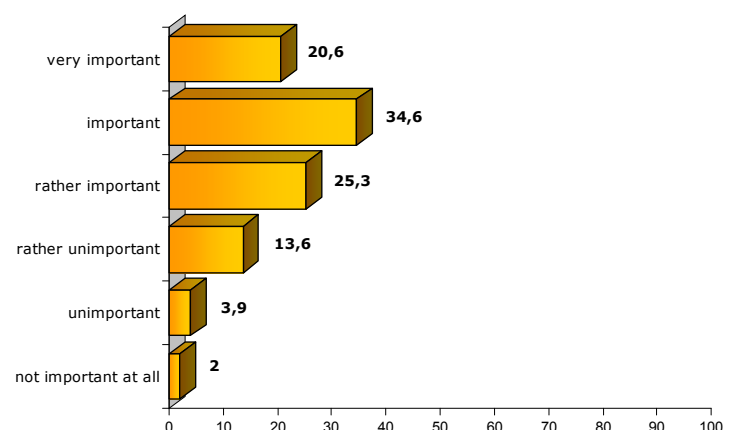
Starting the Search / Recommendation feature

A recommendation feature saves typing long search terms and provides suggestions for possible hits in a selection box (drop-down list, or "layer"), which the shop visitor then only needs to click upon.

- The selection box with recommendations should indicate the exact number of hits (for each suggestion respectively)
- In the hit amounts should only digits should be used (and not words).
- The recommendation feature should avoid duplications (such as singular/plural). Just one term should be used, for instance "digital camera", and not "digital cameras".
- Even given alternate spellings, the user should receive the same suggestions (such as uppercase or lowercase letters, misspelled words, and typographical errors).
- Recommendations must be selectable using either mouse or keyboard (arrow keys).
- The selection box with recommendations should remain (fixed) even when the mouse is moved, so that users have the opportunity to read undisturbed.
- Recommendations should appear in the selection box quickly, ideally as soon as the first two letters of the search term have been typed.



In addition to the test results, users were asked to quantify how important a recommendation feature is. A total of 600 participants were questioned. More than half of all users consider such Web-2.0 functionality to be "important" or even "very important". An additional 25 % consider it to be "rather important".



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Finding in spite of typographical errors

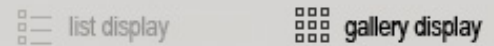
- Even if the user enters a search term differently from the way it is stored in the shop's database, appropriate results should still be displayed.
- Typing and spelling errors, new or old spellings, abbreviations, changed word order, synonyms, etc. should still lead to appropriate results.
- If there are no matches, the user should first be shown a message that the search has failed. Secondly, specific tips should be provided, about how a successful search query might be formulated.
- In addition, a contact form should be offered, in which the user can inform the shop's owner about the products that could not be found.

The screenshot displays the Musik Produktiv website interface. At the top, the logo and tagline "The right gear for everyone!" are visible. Navigation links include "Guitar/Bass", "Other Strings", "Drums", "Keys", "Brass", "PA/DJ", "Studio/Rec.", "Visuals", "Light/Stage", "Accessories", and "Books/Media". A search bar on the left contains the text "percush", which is circled in red. Below the search bar, a dropdown menu shows search suggestions: "Percussion" (5000 items), "Percussion Desk" (3 items), "Percussion Bag" (418 items), "Percussion Case" (329 items), and "Percussion Head" (965 items). The main content area features a welcome message and a grid of product advertisements for Epiphone LP Standard Ebony (408,-), Yamaha YTS-275 (1092,-), and Cort SFX 1 BL Set (256,-). A sidebar on the right lists "Shopping-trolley" (empty) and "Job offers". At the bottom, there are banners for "The megastore in Ibbenbüren" and "Bands2C".

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List display vs. gallery display

- The test demonstrated that candidates were not aware of the option for switching the display (List/Gallery).
- Once it was called to their attention, this selection option was evaluated positively.
- The switching feature should be placed in the upper part of the page.
- If alternate views are offered, the user must be clearly informed as to which view is currently active, and what other options are available.
- In a list displays, the upper search results received the most attention.
- In gallery displays, attention was divided equally among the items shown.
- For a better overview, enough spacing should be allowed between items.



After Search Navigation (filter selections)

- When filter options are offered on the left side of the page, then other navigation elements (such as categories) should not be offered there.
- If more selection options are available than can be shown on the left side of the page, this must be made clear to the user, such as providing a link to "show more", combined with a plus sign (+).
- The number of items found should be shown next to (each of) the filters. This provides more powerful emphasis about the use of filters to the user.
- Filter options must be clearly readable.

A screenshot of a search results page for 'Fender'. On the left, there is a sidebar with 'Our shops' and 'Categories' lists. The main content area shows search results for 'Fender' with 185 results. The first result is 'Digidesign ICON D-Command Expander 16 Fader expander Module' with a price of 12,402.12 EUR. The second result is 'MA Lighting Lightcommander II 12/2 19" Version' with a price of 1,267.82 EUR. The sidebar lists various categories and their item counts, such as 'Guitars' (100), 'DJ' (26), 'PA' (22), 'Computer' (14), 'Light' (14), 'Recording' (5), 'Keyboards' (2), 'Bass' (1), and 'Synthesizers' (1). The 'Categories' section includes 'Digidesign' (7), 'Control' (8), 'Mixer' (15), 'Midi Controller' (3), 'Zubehör' (3), 'E-Guitars' (69), 'Mixing Consoles & Accessories' (1), 'Video' (1), 'Concert-Guitars' (7), 'Western-Guitars' (17), 'Semi-Acoustic Guitars' (1), 'Dynamics / Sound Adjustments' (3), 'Effects' (2), 'E-Guitar Amp.' (1), and 'Plattenspieler' (2).

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Removing filters

If a filtered list of items is shown, then the user should be provided with a number of options to remove the filter:

- Directly at the filter: if the filter is offered at the left edge of the page, it must also be possible to deactivate it there.
- Above the item list: This location is where the user is given information about the number of items and the selected search term. If a filter is set for the current result, then an option to deactivate the filter should also be provided at this location.

Usability Study Results

Summary of test conditions

Multiple method approach:

- Behavioural observations
- Focused interviews
- Transcripts of spoken thoughts
- Eye-tracking

Data collection period:

- From 29 to 30 August 2007
- 90 minutes per candidate
- Sample size: 8 candidates tested

Sample size:

- 8 candidates (4 women, 4 men), corresponding to AGOF-data (August 2007) as to the sociodemographic structure of German Internet Users (age, education, household size)

Data collection location:

- Göttingen, Germany: Usability-Lab eResult GmbH

Hardware Components: normal retail PC, 1047 x 768 resolution, Network connection: DSL (Standard), IE Explorer 6.0 with screen-cam Camtasia and eye-tracker (ERICA using GAZETRACKER analysis software)

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About FACT-Finder®

FACT-Finder is the European market leader for product searches and navigation in online shops. Our error-tolerant high-end solution works independent of language, leading to a continual increase in international usage. FACT-Finder is easy to integrate and runs virtually maintenance-free. All settings and updates may be performed online on the running system. Shortly following installation, Internet shops achieve sales increases of up to 25%, depending on the type of products offered. Our high-performance software is also available as an ASP solution, and offers access via all popular programming interfaces, such as Java, C, .NET, and PHP.

Impressum

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