User Interface Design Trends
for Faceted Search

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Overview

- **Goal:** Increase relevance for the user

- **Two interactions:**
  - **Refinement** is about starting with large sets and narrowing... a *relevance* funnel
  - **Browsing** is about *exploring the structure* of data to find areas of interest

- **Common uses:**
  - eCommerce / catalogs
    - Lots of structured data, complete, curated
  - Large, structured information spaces
    - Again, lots of structured data, somewhat complete, curated
  - Mobile search
    - Controls to refine user relevance

- **Implicit expectation-setting**
  - Help the user understand the scope and focus of information space

- Daniel Tunkelang: [Faceted Search](#)
- Marti Hearst: [Search User Interfaces](#) and Flamenco
- Peter Morville and Jeff Callender: [Search Patterns](#)
Facet Refinement
What type of interaction?

Simple list

- SHOP CATEGORY
  - Audio (12)
  - Magnolia Home Theater (10)

- YOU'VE SELECTED:
  - Price: $750 - $999.99
  - Collection: Magnolia Home Theater
  - Clear all selections

- NARROW YOUR RESULTS BY:
  - Check Stock In Stores Near Me
  - Customer Reviews
  - Top-Rated (1)
  - Current Offers
  - On Sale (2)
  - Financing Offers (22)
  - Marantz (4)
  - Onkyo (4)
  - Pioneer Elite (4)

- Query

Layered

- Online Media Frequency Alphabetical
  - Finding aids + - [22]
  - Images + - [19]
  - Online collections + - [4]

- Type Frequency Alphabetical
  - Archival materials
  - Collection descriptions
  - Photographs
  - Drawings + - [14]
  - Manuscripts + - [12]
  - Scrapbooks + - [8]
  - Works of art + - [11]
  - Brochures + - [10]
  - Clippings + - [8]
  - Sketchbooks + - [9]

- Multi-select

Progressive

- Discipline
  - Chemistry
  - Economics
  - Medicine/Physiology
  - Physics

- Relationship
  - alumni
  - professor
  - research

- Shared?
  - no
  - yes

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Some Design Questions
Top or Column?

- Focuses user attention
- Guides novice users through category scheme
- More flexible real estate
- Doesn’t impede the user from their main goal ~ the content
- Commonly used
User controls & visibility

What I did

Facets

Clear here?

Select here…
Predictability

<table>
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<tr>
<th>SUBCATEGORY</th>
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<tbody>
<tr>
<td>Heels (5841)</td>
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<tr>
<td>Sneakers and Athletic Shoes (4679)</td>
</tr>
<tr>
<td>Flats (2970)</td>
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<tr>
<td>Clogs and Mules (1591)</td>
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<tr>
<td>Loafers (879)</td>
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<td>Oxfords (476)</td>
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<td>Boat Shoes (99)</td>
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<td>Loafers (22)</td>
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<tr>
<td>Oxfords (7)</td>
</tr>
</tbody>
</table>

[Image of a diagram with options for features and settings]
Other Faceted Interfaces
Facet Browsing – follow model relationships

UI

Category model

Content
Expanding

KAYAK

Stops

☑ nonstop $209

Look for more stops

Stops

☑ nonstop $209

☑ 1 stop $231

☐ 2+ stops

Interacting with models

Anticipating hierarchy

flamenco search

LOCATIONS

Africa (1440)
Antarctica (37)
Asia (2864)
Australasia & Pacific Islands (186)
Central America
Eastern Europe

Subcategories:
Queensland
New South Wales
Canberra
Ayers Rock
Adelaide Foothills, nr
New Zealand
Melbourne
MacDonnell Ranges
Yirrkala
Kempsey
Papua New Guinea
Kakadu
Oceania
Victoria

Visual relationships

Relation Browser
Semantic relationship browsing

- Flexible – add new data types and relationships any time
- Expose relationships for greater user control
Following relationships

Flexible filtering

Visual expansion

Secondary relationships

Connections from the topics on this page:

- Quotations (698)
- Things named after this (102)
- Subject (14)
- Officeholder (145)
- Inauguration (20)

more connections »
mSpace and the user's mental model

- Composer → Creates → Songs → Heard on → Albums
  
  "I’m interested in a particular Bach concerto. What album can I get to hear it?"

- Composer → Featured on → Albums → Contains → Songs
  
  "I’m looking for a gift for someone who loves Bach. What has rare compositions?"

- Period → Includes → Instruments → Played on → Songs → Heard on → Albums
  
  "I love the harpsichord. What modern music still uses that instrument?"
FaThumb

Microsoft Research

1 Thai & Vietnamese
100 Friends of Houston
101 Auto Sales
101 Deli & Grocery M
1031 Advantage
(206) 634-3526
(206) 433-3074
(206) 769-5800
(425) 271-4868
(206) 533-9640

1 Thai & Vietnamese
100 Friends of Houston
101 Auto Sales
101 Deli & Grocery M
1031 Exchange Coord
(206) 634-3526
(206) 433-3074
(206) 769-5800
(425) 271-4868
(206) 533-9640

Category (38772)
Distance (38772)
Location (38772)
Favorites (0)
Shortcuts (0)

Achieving
East Side
(20394)
(14112)

Boomstep

EXPERT KNOWLEDGE GRID
results - I am NEUTRAL
Knowledge Grid Web Wild

WHAT KIND OF WHISKY

Jack Daniels: Jack Daniels, the famous rock 'n roll whiskey is a brand of Tennessee... - TODAY

Ardbeg 10 years: Ardbeg, Ardbeg made in Scotch whiskey distillery on the south... - TODAY

Glenfiddich 12 Years: Glenfiddich 12 Years, Glenfiddich is the biggest selling malt. - TODAY

Highland Park 12 Year: Highland Park 12 Year, Who doesn't like Highland Park? Bating... - TODAY

Find your favourite Whisky

EXPLORE FOOD & DRINK

Explore food and drink

DRINK

WHAT kind of Whisky Find your favourite Whisky - TODAY

Mix drinks Search Drinkrecipe - TODAY

GET help mobile drink sites

DRYCK

WHAT kind of whisky Find your favourite Whisky - TODAY

Cocktailguiden p5 Cocktailguiden.com hittar du recept på många goda drinkar... - TODAY

Systembolaget Systembolaget.gets mobiltänst ge dig drink information om sortiment... - TODAY

Uppfack mobile sidor om dryck

Choose at least two parameters to get personalized recommendations from the selection

Single Malt Scotch

19 - 12

Very

Moderate

Not

Sweet

Fruity

Search

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