## Fun with Faceted Browsing 1

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## About me 2

- IBM > ibm.com > user experience > information architect
  - From vision to implementation: personalization, standards, taxonomies, content management, organizational change, …
- Argus Associates
  - IA & Usability specialist
- "Information architecture old fart"
  - 6th IA-focused conference (5th ASIS&T Summit)
  - Retired from: Usable Web, CHI-WEB, SIGCHI, …

## About this presentation 3

- What is faceted browse?
  - Definitions so that we can communicate better
- How is it being implemented?
  - Examples, examples, examples
- What do we know (and not know)?
  - Short literature review, open research questions to help spur dialog
- "Fun"
  - Lots of screen shots

## "Faceted browsing" defined 4

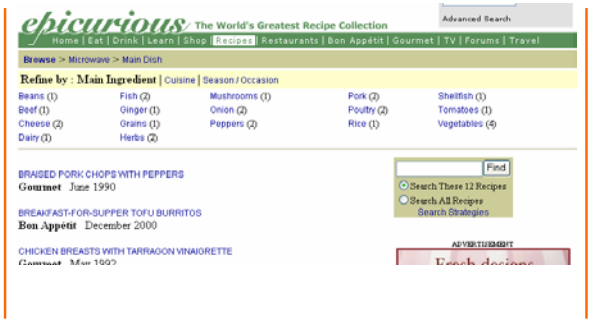
- Interaction style where users filter a set of items by progressively selecting from only valid values
- Facet values selected in any order the user wishes
- Null results are never achieved
- Leverages faceted classification schemes
- "Slow and steady wins the race"
- Model: drill-down choices "naturally" reflect depth so far

## Epicurious.com Recipe Browser 5

## Preparation method = Microwave 6

## Selecting a Course/meal is next 7

## Course / meal = Main dish 8

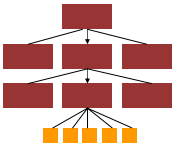


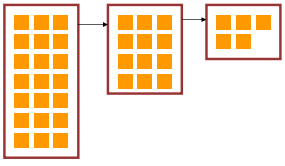

## Scanning the 12 items so far 9

## Chicken main dishes you can prepare in the microwave 10

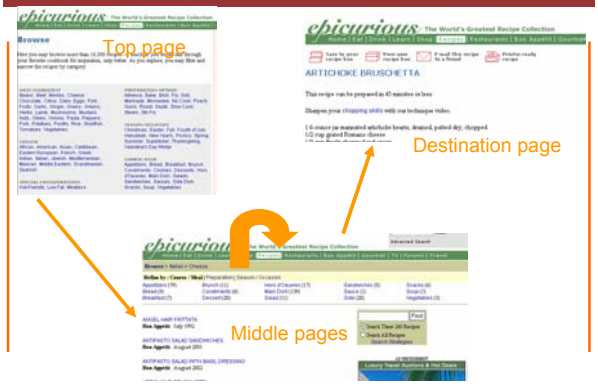
## Part of a trend: Filtering instead of Hierarchies 11

- Old days: Click-click-click on categories and finally get to the goodies *at the leaf nodes*
- Trend: One click, get a sample of results ("1-10 of 149"), select a category to get fewer results





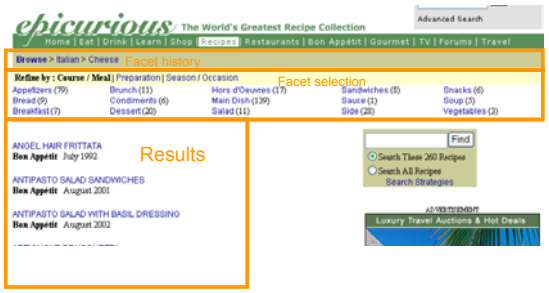
## The pieces of the faceted browse flow 12



## The pieces of the faceted browse user interface 13

- Facet selection: How do you select a facet value?
- Facet history: How do you know what you have selected? How do you undo it?
- The results: How are results displayed? How are they laid out wrt the facet selection and history?
- Item: the basic unit of information, what you are looking for, what gets classified along different facets
- (The classification): behind the scenes but very, very important

## Pieces of the user interface 14

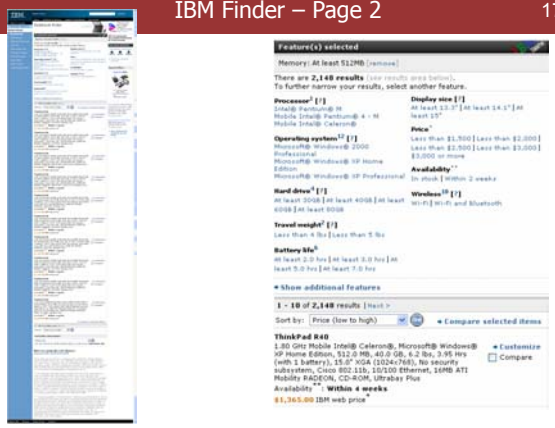



## Related terminology 15

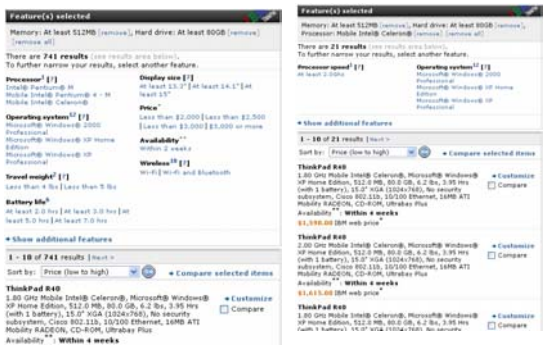
- Faceted browsing (what caught on within IBM)
- Faceted metadata search & browse (searchtools.com, Flamenco)
- Guided navigation (Endeca)
- Facetmap (facetmap.com)
- Faceted classification: the back end stuff (vs. my user interface stuff here)
- Finding = Searching/box + Browsing/links + Querying/form

## Example 1 – IBM product finders 16

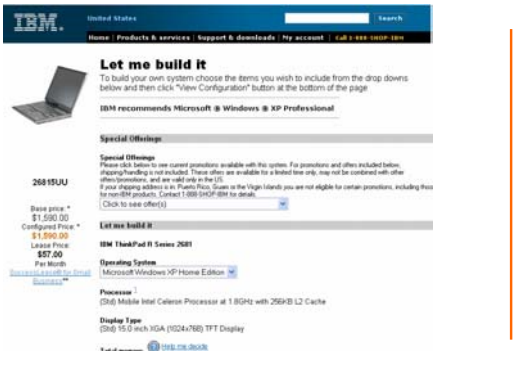
## IBM Finder – Page 2 17



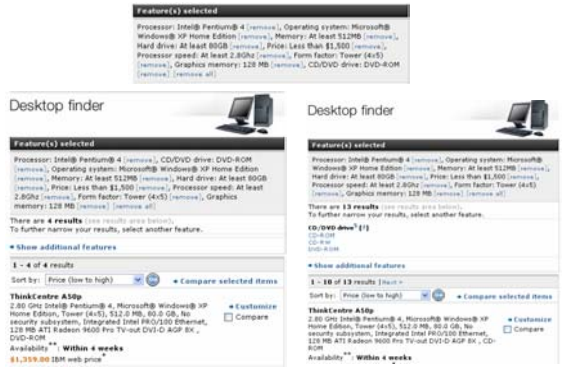
## IBM finder - 3 18



## IBM finder – Some results lead to configurators 19



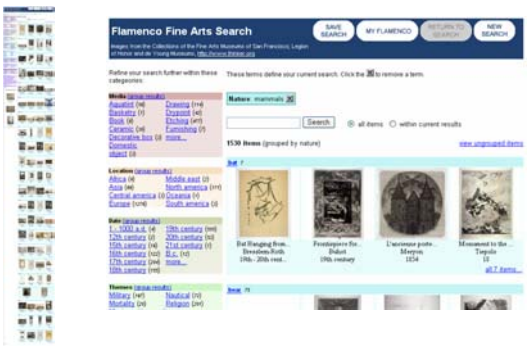

## IBM finder – Facet history 20




## IBM finder – Additional facets 21

## Example 2 – Flamenco (fine arts) 22

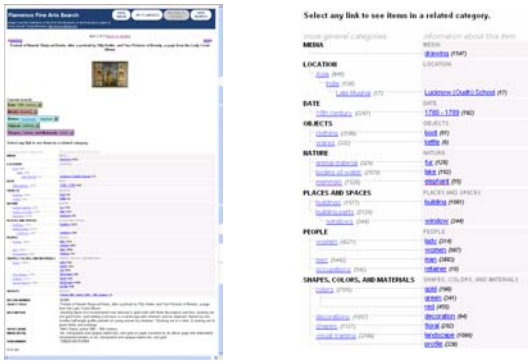
## Flamenco – Middle pages - Mammals 23



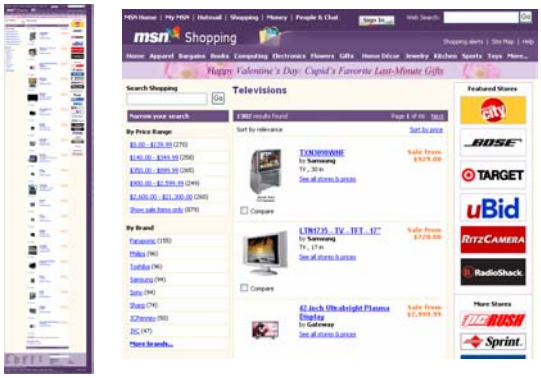

## Flamenco - Elephants 24

## Flamenco – 3 elephants 25

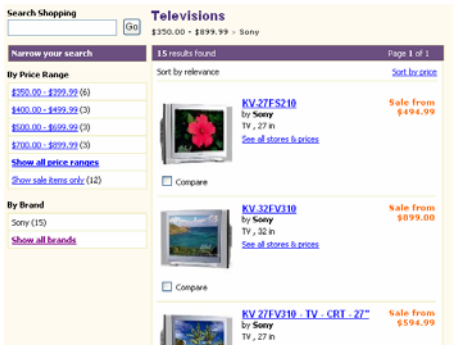
## Flamenco – An item 26



## Example 3 - MSN shopping (TVs) 27



## MSN – Middle page 28



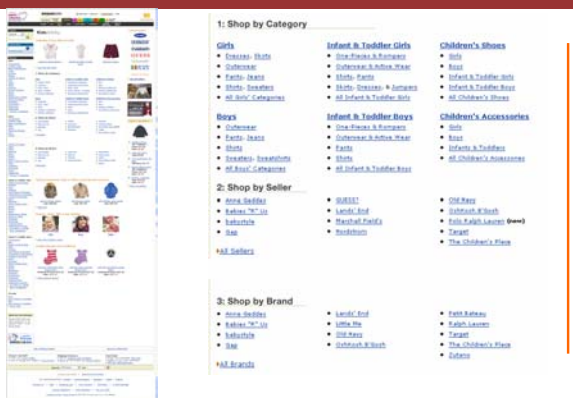
## Comparing examples 29

| | Epicurious | IBM | Flamenco | MSN |
|---|---|---|---|---|
| Top page (no results) | Yes | Yes | Yes | No |
| Facet selection | 1 facet at a time<br>Top | More facets<br>Top | Left | Left<br>"More brands" |
| Facet history | Breadcrumb | Commas [remove] | Blocks [x] | Dead breadcrumb<br>"Show all" |
| Results | | Sort<br>Compare | Grouping | Sort<br>Compare |
| Destination pages | Islands | Islands | Exposed values | Islands |

## Near-examples & Non-examples 30

- Amazon.com Shop-by browsing
  - Shop by brand: not FB
- Yahoo! Electronics Finder
  - "Faceted querying"
- IBM software Find-by
  - Just a gateway to sub-sites
- Dick's Sporting Goods Shoes
  - 3 steps: Brand is contextual to size
- CNET Shopper Filter-by
  - Filter values are generic

## Amazon.com Shop-by Browsing 31

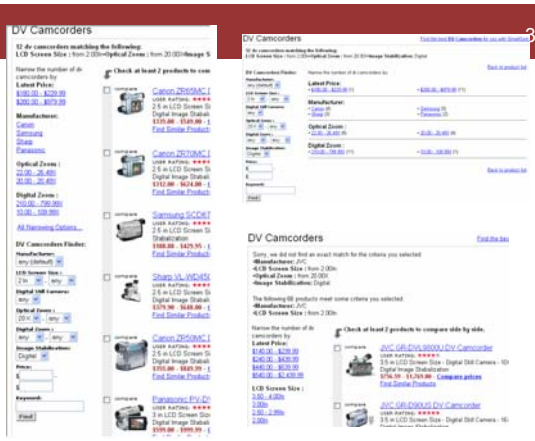



## Amazon.com Shop-by Browsing 32

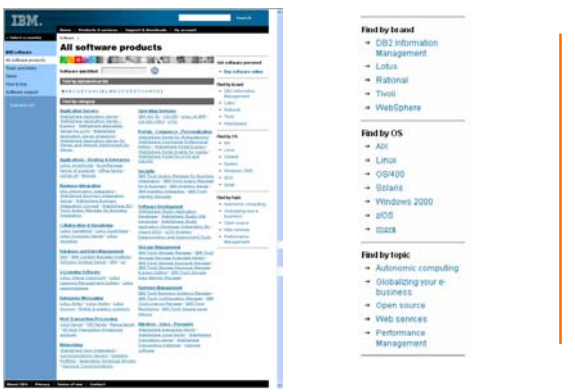
## Yahoo! Electronics Finder (Query interface) 33

## Yahoo! Electronics Finder 34

## 35



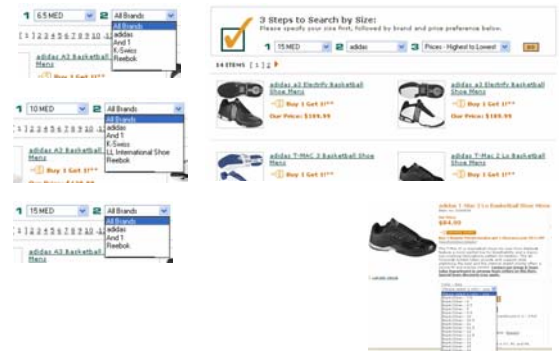

## IBM Software Find-by 36



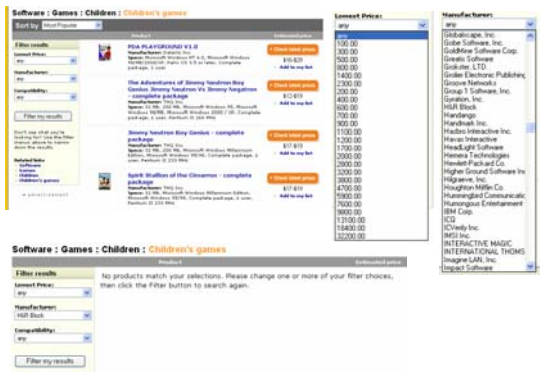
## IBM Software Find-by: Just a gateway 37

## Dick's Sporting Goods: Shoes by Size & brand 38

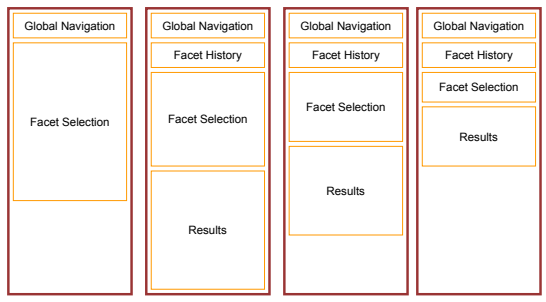
## Dick's Sporting Goods: Shoes by Size & brand 39




## CNET Shopper: Filter results (by all software facet values) 40




## The model – "natural" selection? 41




## High level questions re: Faceted browse 42

- What is the best flow?
  - Top page: good or bad?
  - How integrated should the destination pages be?
- How should the elements be arranged on the page?
  - Facet selection on top vs. left, for example
- How easy is this to learn?
  - Special words or phrases to clue users in?
- What contexts does this work well in?
  - "Finders" vs. "Configurators"
  - Shopping by (physical) attributes
  - More abstract/diverse objects: how homogeneous?

## Facet selection questions 43

- What if you have too many facets?
  - Show / hide or eliminate?
  - How many is too many?
- What if you have too many facet values?
  - Selected set and "show all"?
- Do you show the hits on the links?
- What if users need to select more than 1 value for a given facet?
- Can we think of keyword search as just another type of facet selection?

## Facet history questions 44

- Are breadcrumbs a good user interface for this?
  - vs. "undo" metaphor
- Do users understand what they are doing when they undo?
- How useful is the "remember what you chose" aspect?
- Should history be integrated with selection?

## More tough questions 45

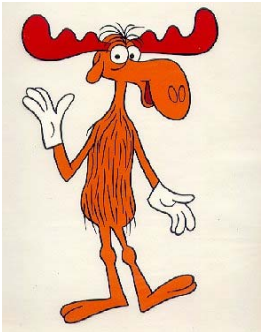
- Which is better: menus or lists of links?
  - Menus: less real estate
  - Many choices at once: that is better, no?
- How does FB fit into the top-down IA of a site?
  - Just an overlay on items vs. integrated items

## (Bottom-up) IA of FB 46

- How does the faceted classification & user interface work go hand-in-hand?
  - Classification first and then UI?
- Determining facets
  - Hierarchical facets, # of facets, usefulness of each facet
- Facet values
  - Labels, thus, user interface
- "Spectrum" (numerical facets)
  - Range-making at the UI layer

## Next steps 47

- Learn more at this summit
  - Stream 1, esp. facet analysis NEXT
- If you are a student/professor who wants to do *research* in FB, contact me
- IAslash.org – blog FB there
  - http://iaslash.org/taxonomy/page/or/166
- http://user-experience.org/uefiles/facetedbrowse/

## Concluding Remarks 48

- Thanks!