

7/6/19

Exploratory Search - How Search Behav. changes as search becomes difficult.

→ 23 users lab study; Obsv tested with 179 past exp. to do 100 tasks completing an avg of 22.5 tasks
→ srch difficult → diverse queries used

→ use of advanced operators

→ longer time on srch page (revisits)

* Notable / observable changes in user behavior on difficult search ⇒ give up; body lang chgs (frown, lean closer to monitor, ...)

* Successful v/s unsuccessful Srch by Expert - Novice users.
→ search logs analysed to understand patterns from a failed Srch v/s succ. search

∴ avg # (Query terms) = 2.35 - 2.6 / Query

→ also 2.93 (iphones / qphs)

→ Most x simple keyword; only 10% use adv. ops.

→ adv ops used more in US than Europe;

→ Most adv ops do not increase precn. (Query)

→ 7.78 sec spent on res. page (more in diff srch)

→ Web (Srch) Sessions x Short - 2 Qry / session

→ 2 users: Explorer v/s Navigator type.

{ Highly variable behavior

{ Complex sense srch ops

{ consistent, revisit domain

{ Well defined fact finding tasks

→ Expert strategies x Those give higher success

↳ Spend lesser time than novice.

↳ reformulate queries, use qry format tools

→ depth first srch / bottom up

Experts:- 5 yrs / Comp Waze; 4.5% Web use;
5 hrs brow / week, ...

- * fact finding tasks - well defined / systematic behavior
— successful search - small & ref. refinements
- * Random behavior, random refinement in less successful search.

- * adv users query less freq. in a session
 - compose longer queries
 - click the result list further
 - They are more directed in behavior
 - search trails & shortcuts
 - More successful - visited more relevant

Difficult tasks:- Dave Matthews Band - Virginia study

- * — outside Charlottesville in mountain
? St Name [difficult query]
- * — Names of model who fell in provida fashion
- * Sturd by me - based on Steph King story [difficult]
- what is it (easy query)

- (*) UNSUCCESSFUL SEARCH:- * users formulated more question based queries * adv. users more often
* longer time on search pages - on avg. & max time
in search session * longest query in search task middle
(succ. search) * longest query towards search session end
* larger prop. of task time spent on results page.

- * On errors less likely in open ended goal tasks
- * Specific search - less frustration

→ on failing - query refinement is less systematic
slower exhaustive searching observed with failed searches.

→ scroll up/down - frustrated user; landing page in random fashion (no intent to read page)
→ persisting early visited pages - disp. user time.

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