

Understanding Requirements of Place in Local Search

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REVISITING LOCAL SEARCH

We revisit a common search scenario & focus on location requirements. Do existing services and research address all user needs encountered?

Goals

- Explore people's requirements for place in a local search
- What factors of location influence decision-making in local social search task?



SURVEY

Online survey deployed via Amazon Mechanical Turk

1-week period in Dec 2013

Survey collected demographic info as well as current location

306 participants

145 female, 160 male
 Average age 33. sd 11.5, mdn 30

Lived across 36 states in the USA

Majority (86%) owned smartphone & used location-based services

RESTAURANT SCENARIO

“Imagine you are searching for a place to eat. It will be tonight, and you will be with a good friend.”

What requirements are important for you in terms of where the restaurant is? ”



Both authors manually coded open text responses

Iterative thematic analysis to find repeating themes

4 KEY THEMES

Getting There	
Transport options (stations, parking)	P281 "It needs to be within a ten minute drive of wherever we meet".
Proximity (time, distance)	P224 "As long as it's within a 25 mile radius." P234 "Somewhere on the same train line I live on or easy to take a cab home from."
Surrounding Area	
Wayfinding: imageability & familiarity	P95 "A neighborhood that isn't ravaged by poverty and crime".
Topological features (e.g. waterfront)	P54 "In an area of town I'm familiar with"
Trajectories: other activities & events	P289 "I'd like it to be in a busy place, near a mall or other shops so that I may have other dining options, in case I want to change my mind and go to another restaurant. Also, when I go out, I usually like to stop at other places besides restaurants."
Safety	
Temporal & Seasonal	
Time of day	P68 "Because it's a weeknight, I'd like the restaurant to be somewhere close to where I live. I don't care about a view because it will be dark"
Seasonality & Holidays	P253 "The weather is bad today, so I would prefer a restaurant on a main road because those are kept clear"
Special Occasions	P165 "In a safe environment, in a quiet setting near the ice skating rink in Cincinnati fountain square with all the holiday lights glowing"
Multi-person & Social	
Social context	P155 "It is important that it is located somewhere both my friend and I would have to drive about the same distance from our homes"
Satisfying or compromising between multiple peoples constraints and preferences	P168 "It is important the restaurant is located between the two of us and easy to get there. It also needs to be a restaurant that isn't too loud and allows us a chance to enjoy our food and chat." P168 "In a central place that is convenient for everyone"

OPEN OPPORTUNITIES

UPFRONT NEEDS
 Defining & predicting user location preferences and constraints upfront rather than requiring multiple searches or multiple steps to be carried out by the user.

MULTIPLE TRAJECTORIES
 Presenting and handling multiple trajectories & combining multiple location trade-offs.

MULTI-PERSONALIZATION
 Local needs are often dependent on social and shared constraints, i.e. the needs & preferences of others. Future local search services could recommend on the basis of these shared constraints.

REVISITING THE 'KNOWN'

Revisiting (extremely) common use cases and stepping back from existing interfaces can provide insights into overlooked opportunities.

We encourage the CHI community to extend this type of study to other use cases (beyond restaurant searches).