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# Exploring Caller Dialogue: Analyzing Information Search through Call Center for Tourism Products

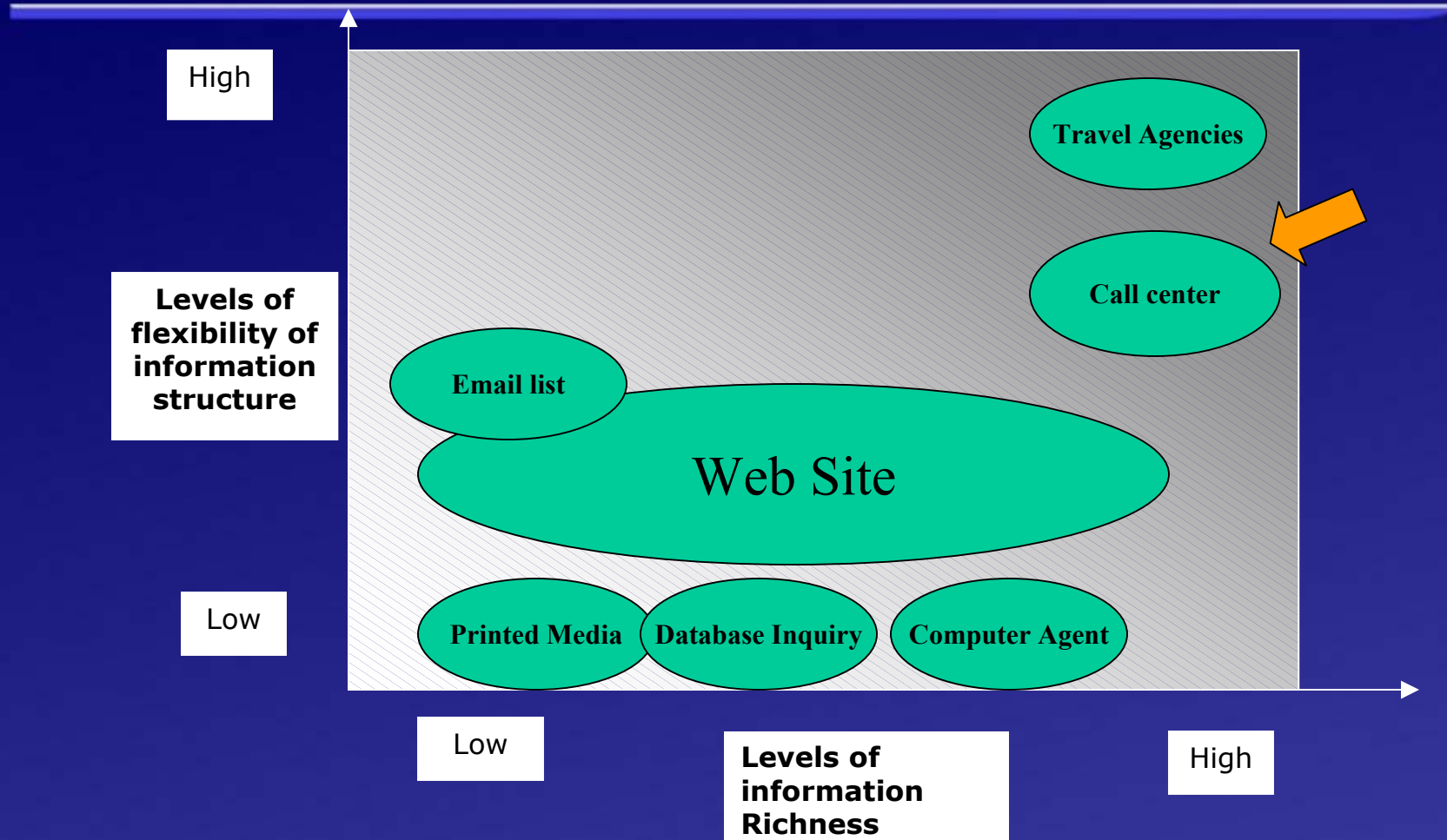
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# Communication Channels with Customers

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- Traditional printed media – books, brochures, etc.
- Travel agencies, etc.
- Computer based - kiosks, etc.
- The Internet (Web sites, email-lists)
- **Call centers**

# Communication Channels with Customers





# Background in Information Search and Decision Making

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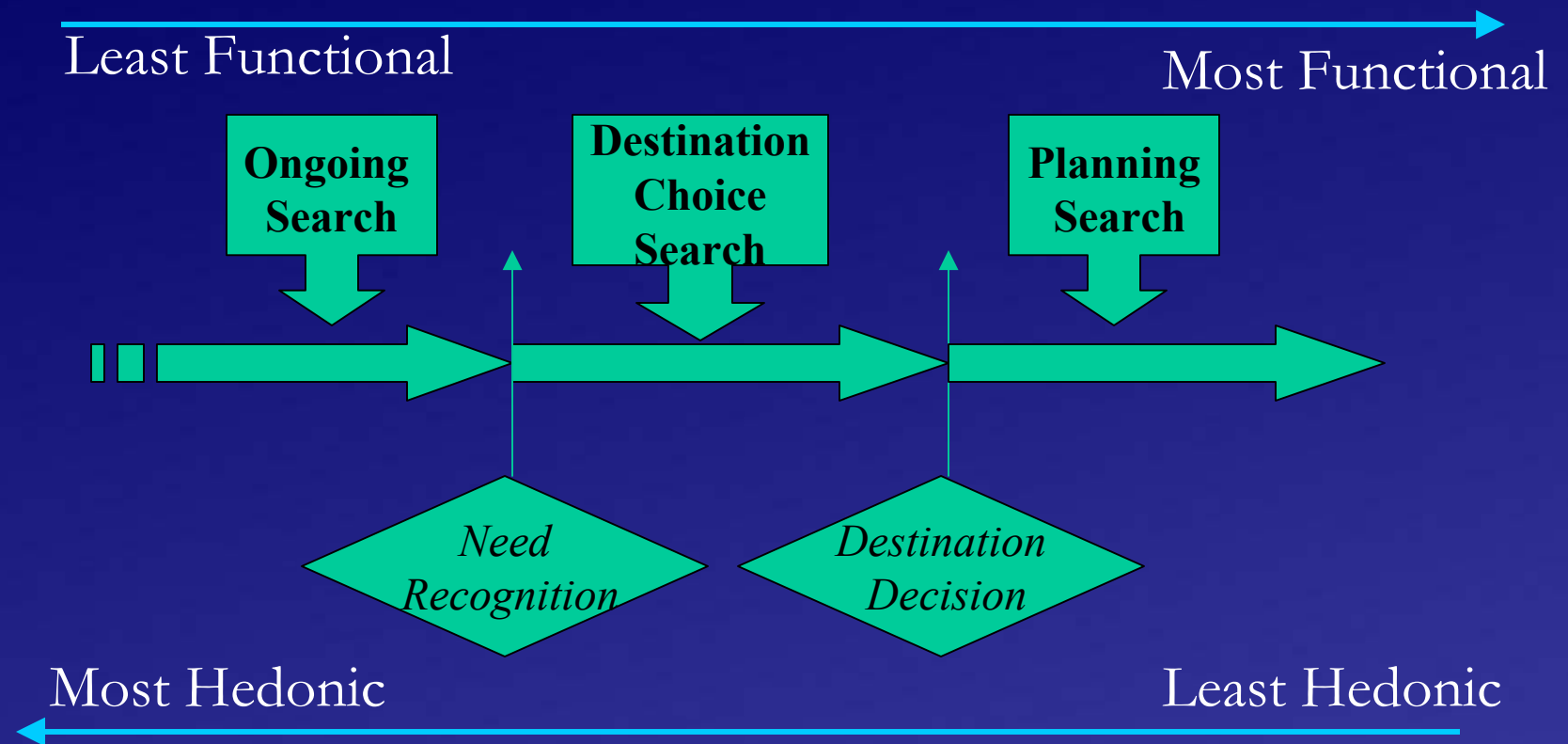
- In rational decision making theory, information searching is used to maximize the utility of the outcome of decision. All the evaluation rules can be classified as either attributes-based or alternative-based (Bettman and etc, 1998)
- Ongoing search vs. prepurchase search (Bloch, 1985)

# Background in Information Search and Decision Making in Tourism

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- Tourists search information for various kinds of needs (Vogt and Fesenmaier, 1998): functional; hedonic; innovation; aesthetic; sign.
- Travel decisions have been shown to be relatively complex, involving a number (10- 18 ) of sub-decisions or facets (Jeng, 1998): destination(s); travel group; timing; route; activities and etc.

# A Framework of Tourist Information Search



# 1-800-2connect

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- Call center: part of Customer Relationship Management System (CRMS)
- Provide up-to-date tourist information about:
  - location: cities/towns, directions/maps, etc.
  - interest: activities, events, etc.
  - amenity: prices/discounts, etc.
- Provide travel counseling services:
  - availability of services, etc.

# Search Format

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<u>ID</u>	<u>Seq.</u>	<u>Location</u>	<u>Amenity</u>	<u>Interest</u>
1	1	Chicago	Hotel	Aquarium
2	1	Chicago	Hotel	None
2	2	Springfield	Camping	

Session and inquiries

# Location and Interest Depth

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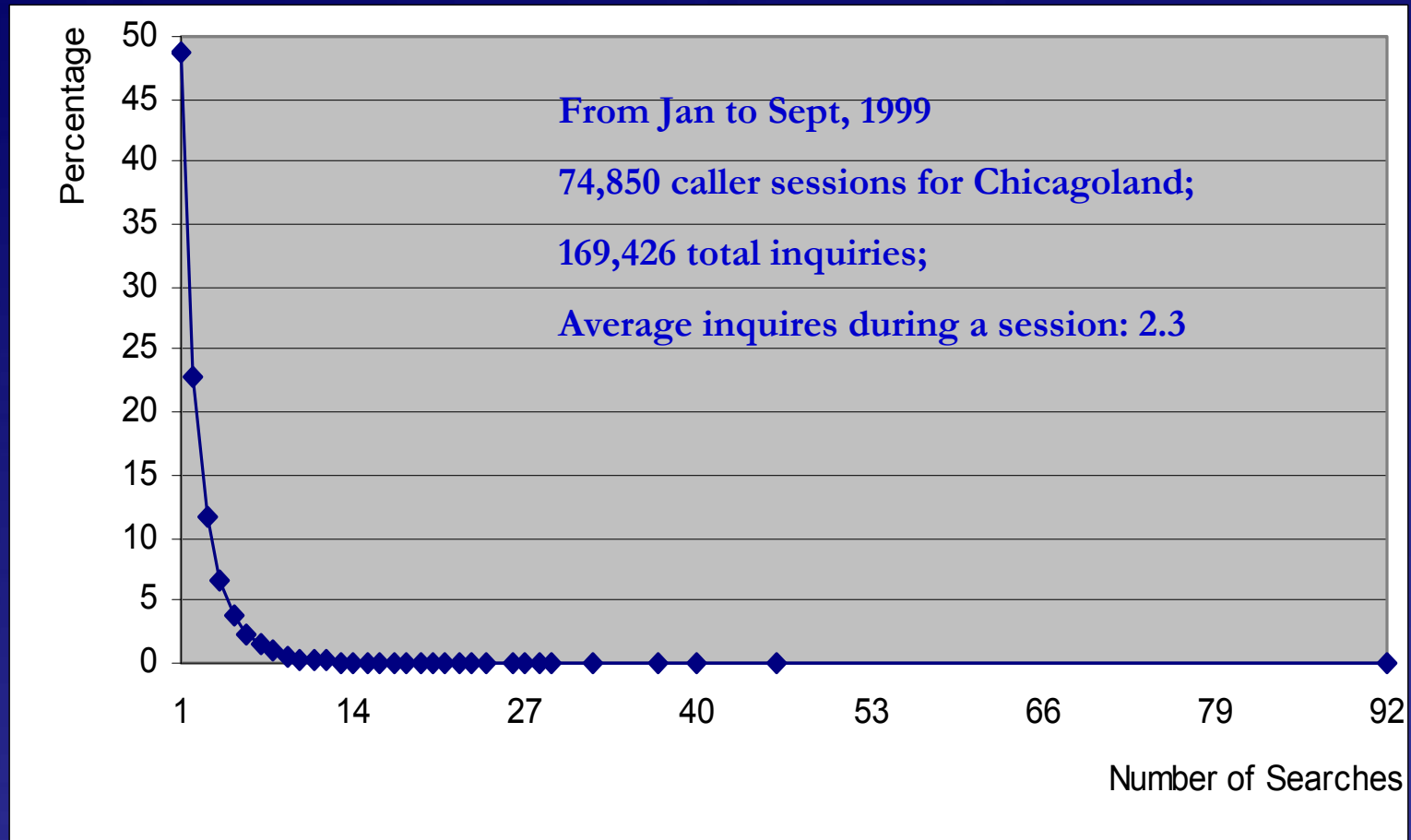
- Illinois General (0)
  - Illinois Regions (1, Chicago Land, Northern Illinois...)
    - Illinois Counties (2, Cook County, Peoria County...)
      - Illinois Cities (3, Chicago, Urbana...)
- General Interest (0)
  - Categorical Interest (1, Accommodation, outdoors...)
    - Detailed Interest (2, Land, Water...)
      - Very Detailed Interest (3, Hunting, Picnicking...)

## Focus of Study

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- Amount of Search (how many inquiries? What elements determined the amount of search?)
- Directions of Search and depth of Search (Location dominated or interest dominated? How detailed are their inquiries? Can we infer different decision stages from the search?)
- Marketing Implications. (How can we use these information?)

# Number of Inquiries



## Top Countries of Inquiries

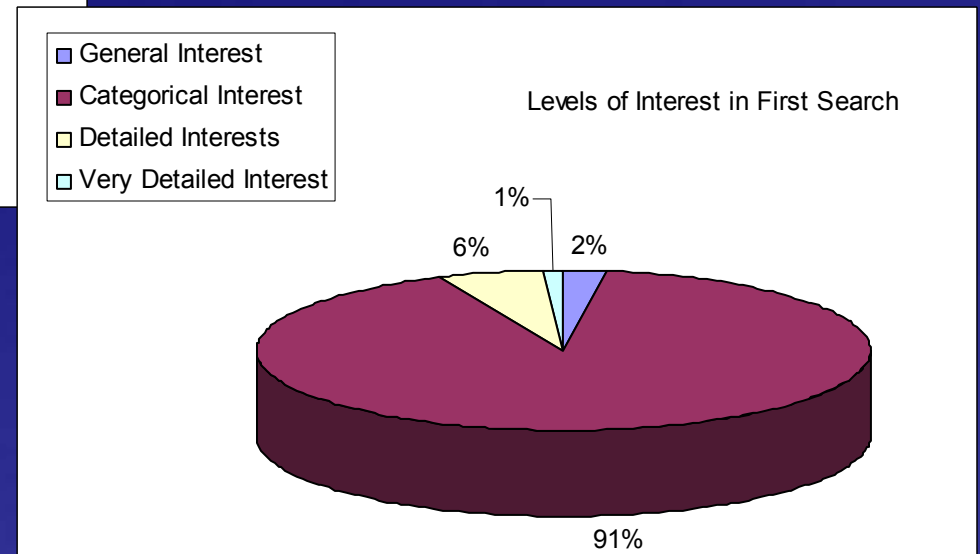
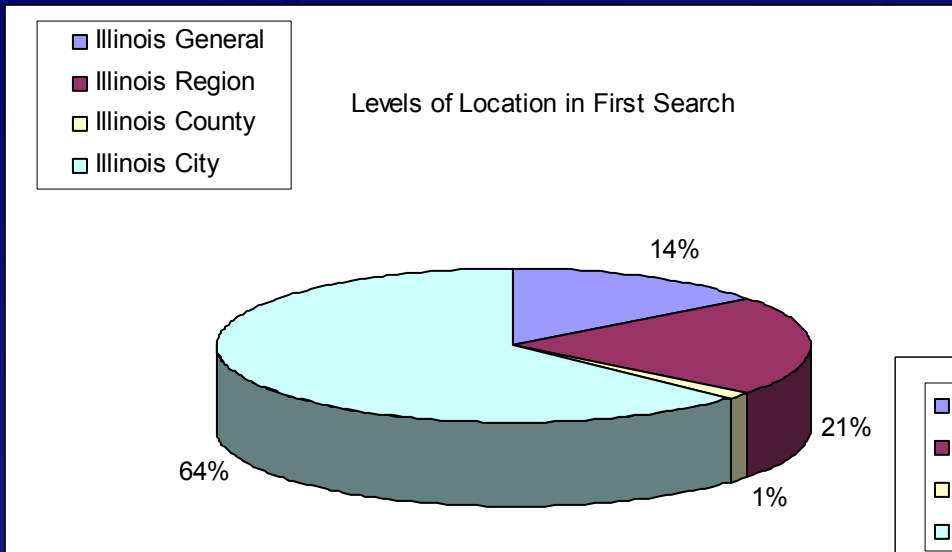
Country	Calls	Percentage	Lasting time
USA	65422	97.99	10.2
Canada	1144	1.71	11.1
United Kingdom	74	0.11	13.9
Germany	23	0.03	10.8
Australia	15	0.02	14.2
Ireland	13	0.02	10.2
France	8	0.01	7.7
New Zealand	8	0.01	8.4
Netherlands	6	0.01	20.4
Puerto Rico	5	0.01	7.7
Brazil	4	0.01	40.1
Japan	4	0.01	8.6
Belgium	3	0	11.7
Iraq	3	0	8.9

# Travel Distance and Inquiries

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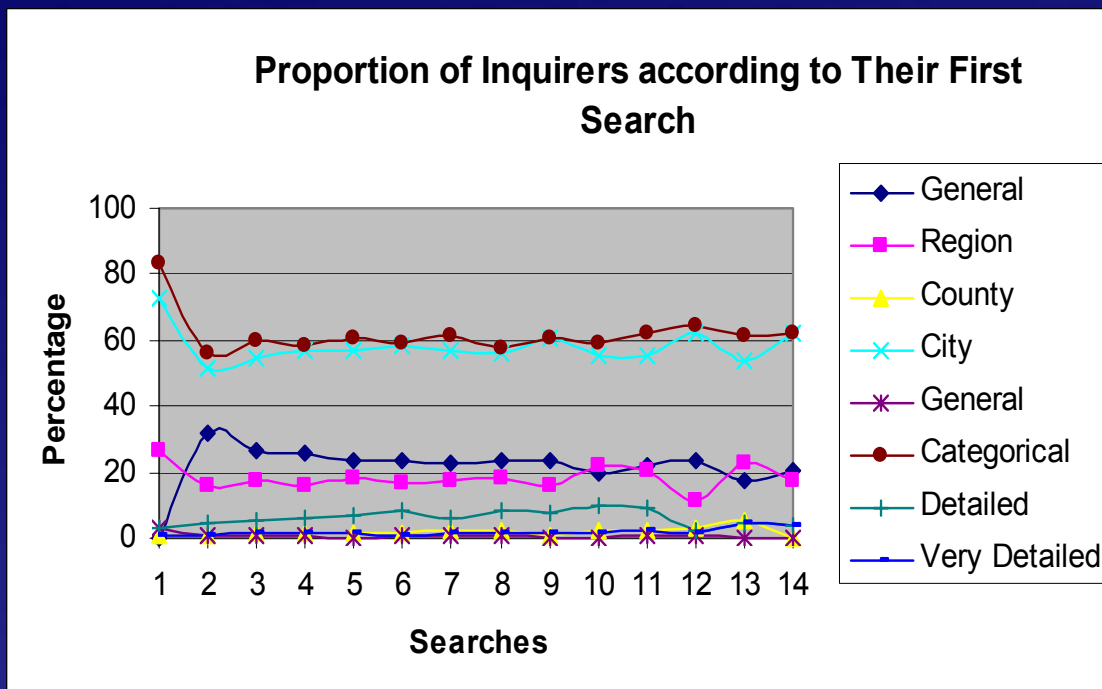
- No significant correlation exists between distance and number of inquiries and between distance and session duration;
- Illinois callers made less inquiries ( significant) compared with all USA callers; USA caller make longer sessions compared with foreign callers (significant)

# The First Inquiry – Location and Interest



# The First Inquiry

- The percentage of those people who made their first inquiry about a city or a categorical interest drastically decrease among the multiple search people.

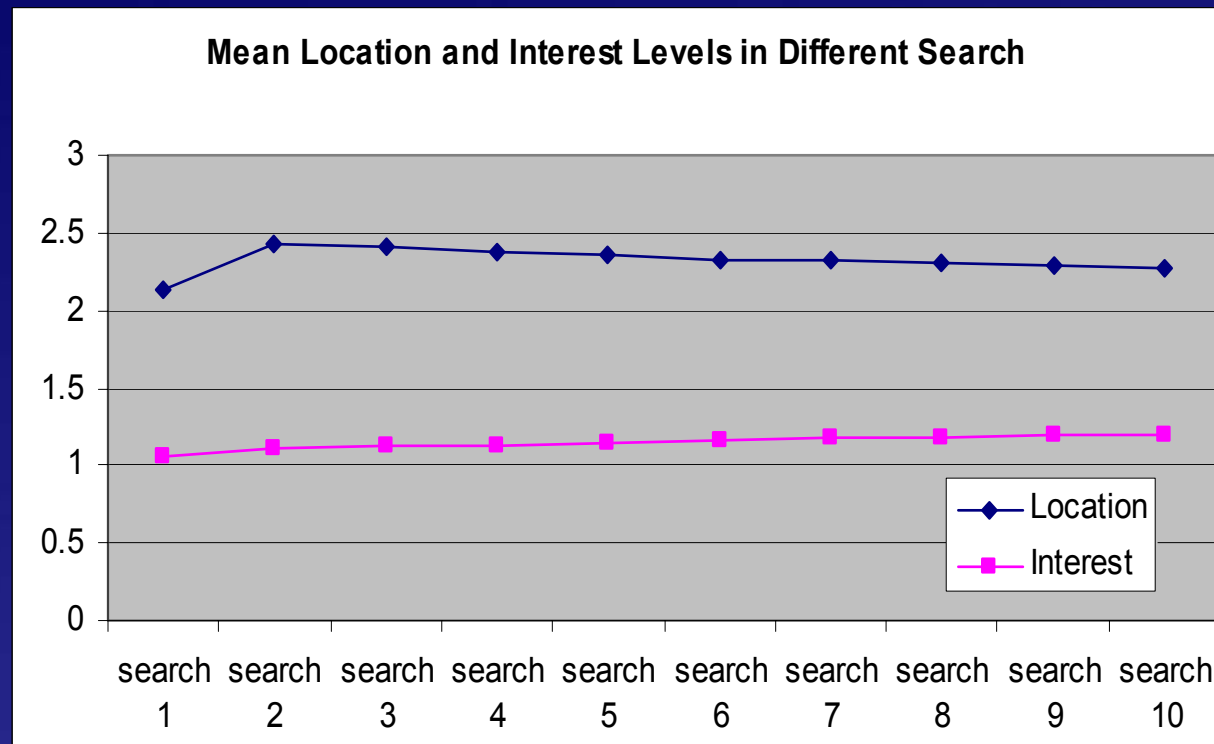


# Distance and Depth of Search

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	Depth of location search of first inquiry	Depth of interest search of first inquiry
F Value	31.26	6.82
Prob > P	0.0001	0.009

# Change of Levels of Location and Interests

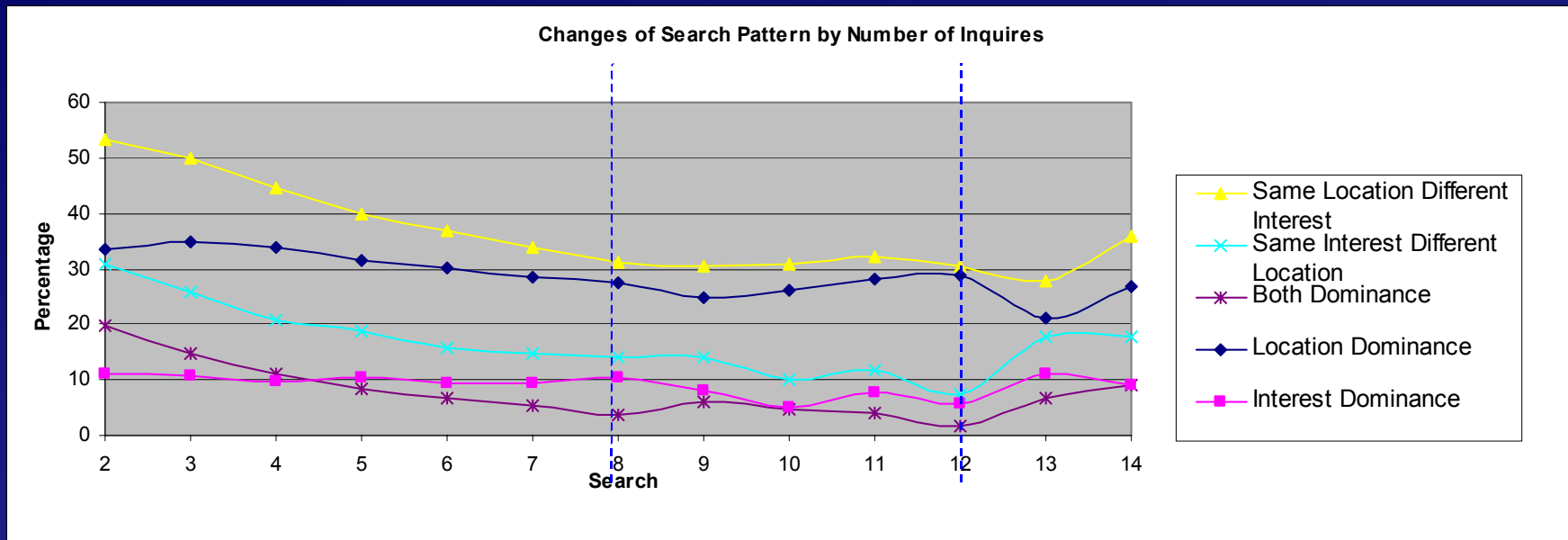


## Different Dominance for Multiple Inquiries

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	Not interest-dominant	Interest-dominant
Not location-dominant	15472	3942
Location-dominant	12343	5581

# Change of Proportions of Different Callers



## Marketing Implications

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- We can infer different search patterns but hard to infer difference search stages;
- Branding at city level seems to be most effective; very few people are using county as search cues;
- The first search has the role of leading to more search; a large amount of first search are mainly functional, focusing on one city and one categorical interest;
- From 8<sup>th</sup> to 12<sup>th</sup> inquiry is the most effective time (largest percentage of prepurchase search) for cross-marketing and cross-selling.

# System Design Implications

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- Information Organization: location-based and interest-based; more direct links from detailed location to more general location (network of locations);
- Most important element for the first search is speed; after the 8<sup>th</sup> element we can more focus on the hedonic part of the dialogue.

# Limitations

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- In-direct inferences;
- System error (more than 20 hours calling time);
- More information is needed to explore the relationship between decision process and the search pattern.