

# Evaluation

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#### Axes

Definitions

Use Cases

- Data sets
  - differences in using open data

Solutions / Approaches



#### **Definitions**

- Evaluation
  - evaluation vs benchmarking
    - evaluation is for a purpose, benchmarking is generic
    - evaluation is not only part of design but as a continuous quality assurance / monitoring
  - effeciency-oriented
  - effectivenss-orients
  - user-oriented evaluation
    - holistic system evaluation
    - focus groups
    - information seeking behavior
- Keyword-based search
  - semantic keyword is not something that is in the data but something is meant in the data
  - topical search
  - question answering



#### **Use Cases**

 Clear use cases (RepLab) grounded in reality, may be domain specific

- Examples
  - travel planning
  - good weather conditions for surfing (domain knowledge, contextual, ...)
  - real estate market: I want to buy a property in a foreign country plus smart city data
  - catalog for complex products / product configurator



#### Data sets

- Quality / Trust in the data set
- Data set management life-cycle (provenance can inform search for patterns in the logs)
  - curation of the experimental data (explicitly attach the experimental setup)
- Open data sets
  - they may provide a real scenario
  - multisource
- Examples
  - Wikipedia, Eurovoc (resources), Transition Memory
  - System logs
  - **...**



### Solution/Approaches

- real estate market:
  - structure is important, coordinate system framework (depth, dispersion)
  - session-based
  - diversity
- product catalog
  - marketing people, buying guys, engineers
  - CAD drawings, beneficial for the environments, money
  - diversity
  - final goal: number of purchases
- Response time, user feedback
- Usual measures: precision, recall, accuracy, ...
- Ground-truth creation (domain experts, crowd-sourcing and gamification)

## Thank You

