

# Use Case 5.1: Research guided by community usage

*Example story: As a researcher, I want to find what is being used (read, annotated, bought by libraries, etc.) by the scholarly communities not only at my institution but at others, and to find sources used elsewhere but not by my community*

This use case requires understanding of the relevant community of the user. This would require them to be authenticated and community inferred by some means/data from their identity, or for community to be specified as part of the discovery process, or for community to be inferred as part of the discovery process.

Out of scope: n/a

## Potential Demonstrations

A. In institutional and/or consortial catalog discovery UI, return search results in order of usage rank, and allow filtering on usage-rank ranges. (Metrics of usage ranking can vary across institutions, and lesser used is more meaningful than least used since the long tail is of zero usage)

B. In catalog UI, use heat-mapping within virtual shelves of selected clusterings of catalog items (by subject, uniform title, author's works, Wikipedia catalog buddies, works by an academic dept. etc.) to visualize usage rank

C. In catalog UI, allow users to see raw component scores of scaled usage rank

D. In catalog UI, have feature for exporting result sets in preferred format (CSV, JSON, XML, etc.). Rob/Simeon: This seems generic, remove from this use case unless we have a specific offline data analysis story?

E. In consortial catalog UI, have feature to allow viewing comparative usage data across institutions - Including seeing works heavily used at one university but not at another

## Data Sources

- Bibliographic and holdings records
- Usage data (expressed as a scaled score) and including whichever of the following might be available at the local institution:
  - Circulation data (checkouts, checkins, renewals, recalls), transaction patrons described by status category (faculty, grad student, undergrad, etc.)
  - Course reserves data
  - Course text data
  - Acquisitions data (how many libraries acquired the resource)

## Ontology Requirements

- Ability to represent sharable usage data

## Engineering Work

- Demonstrations A, B and C prototyped at [stacklife.harvard.edu](http://stacklife.harvard.edu)
- Each institution would choose for its scaled score implementation its own data components and weighting and aggregation algorithms

## Who will do what?

- Harvard has this in Stacklife -- bib data with stack score -- and on top of Solr
  - so could use linked data to populate Solr and could make a cross-institutional instance
  - David -- could add institutional faceting
- Could there be an initial, limited-scope cross-institutional search fronted in Stacklife, with a slice of data? Would require a adjustment of the Stacklife back end and UI adjustment but if the Solr index is structured the same way as now, it should be possible. If we explore this the perhaps start with some small set of catalog records from each institution and Paul could indicate what he needs to work with