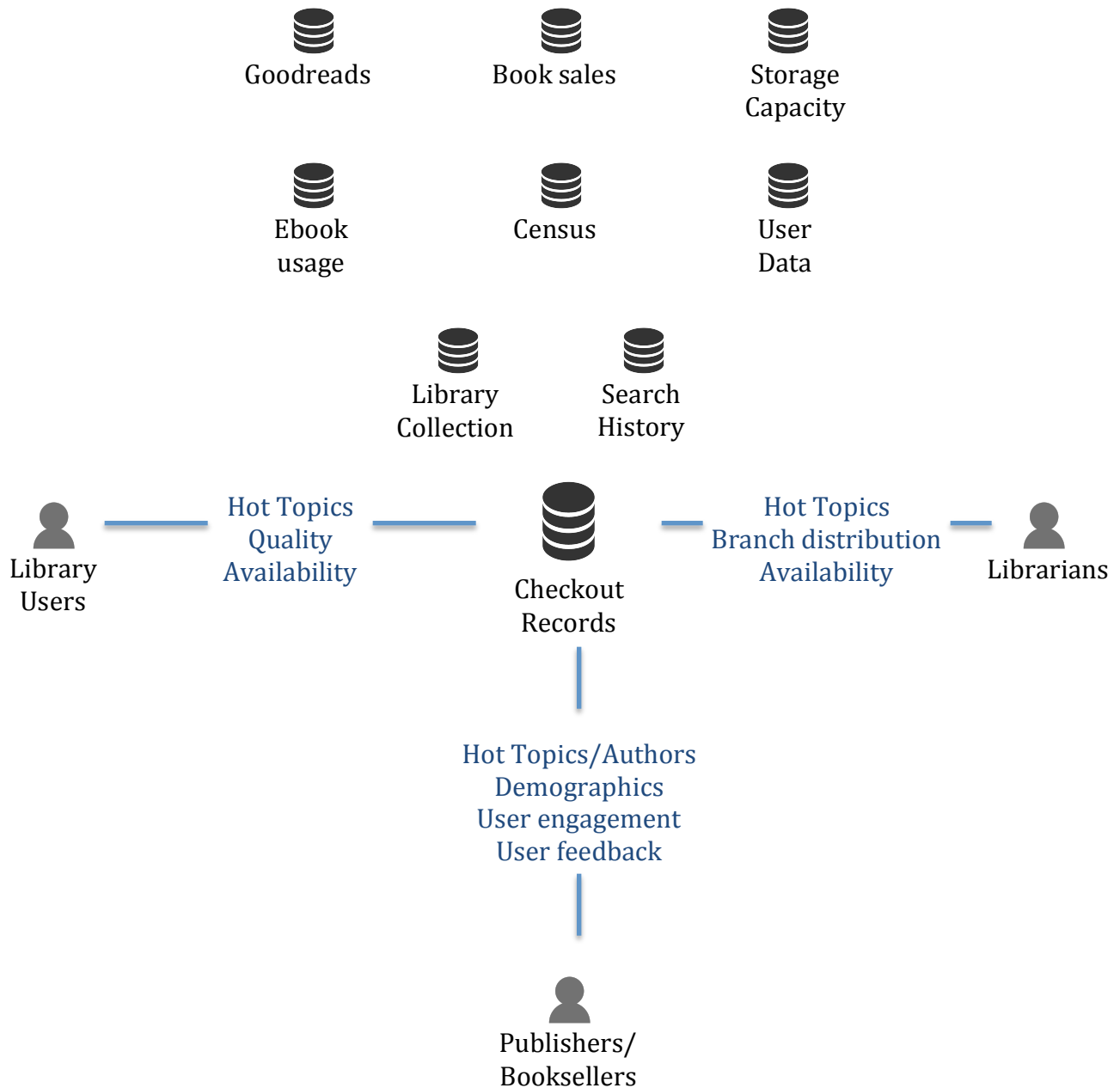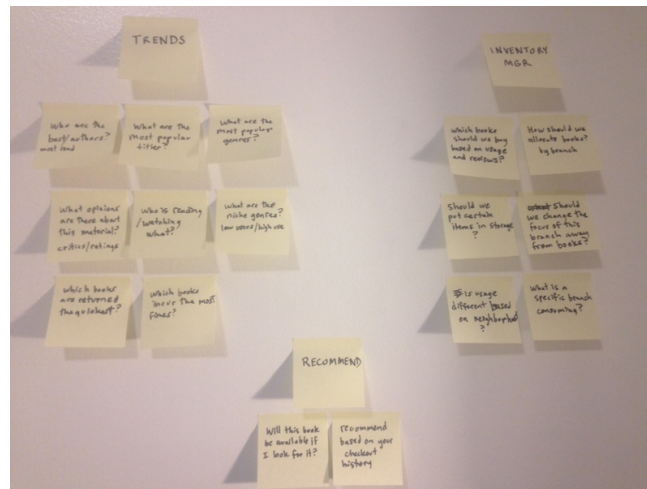# Functional Map

The functional map is a graphical representation of personas, data sources and actions. It helps us to better understand the business context, identify opportunities for use cases and generate ideas.

Goodreads

Book sales

Storage Capacity

Ebook usage

Census

User Data

Library Collection

Search History

Library Users

Hot Topics
Quality
Availability

Checkout Records

Hot Topics
Branch distribution
Availability

Librarians

Hot Topics/Authors
Demographics
User engagement
User feedback

Publishers/
Booksellers

List of Use Cases

Trends

Who are the most authors?
What are the most popular materials?
What are the most popular genres/subjects?
What opinions are there about the material?
Who is reading what?
What are the niche genres? Low users/high use
Which books are returned the fastest?
Which books incur the most fines?
Will the book be available if I look for it?
What kind of manuscripts should we be buying?
What demographics should we be targeting?
What markets will be popular in the next 5 years?

Inventory Manager (1 vote)

Which books should we buy in the future based on usage trends and reviews?
How should we allocate material types within the branch?
How should we allocate materials between branches?
Should we change the focus of the branch?
What are the most/least used books?
Should we put certain items in storage?
Is usage different based on neighborhood?
What does each specific branch consume?

Recommendation system

Based on checkout history and search results what books/movies could the user like?
What are the related materials?

Data Application

Branch usage summarizer and inventory recommender

Objective

This tool helps librarians/library procurement staff get an overview of the usage of their branch materials by providing summary statistics. Using a slider or inputting a desired amount of shelf space, the tool can generate a list that recommends the least used materials that can be put into storage and be replaced by new purchases. A suggested list of books to purchase is also generated. Any branch in the system can be used and the suggestion list also takes into account the materials at other branches that would be better used at the selected branch.

Dashboard and Metrics

Descriptive analytics
Presents tables of most and least used materials. Can be filtered by subjects.

Diagnostic analytics
Shows how metrics compare to other branches and historically.

Predictive analytics
A prediction of number of checkouts is generated for a future time period. This can be broken down by subject or material type and compared to past periods.

Prescriptive analytics
Suggestions of what new materials to buy based on branch usage, book reviews, and shelf-space available. Suggestions on what materials can be put into storage or removed altogether due to low usage.

Mockup