PROBLEM STATEMENT
With approximately 9,000 public library systems across the United States, the Seattle Public Library (SPL) faces the challenges of identifying a network of similar library systems for collaboration. The current comparison and analytics are somewhat basic and only take library measures into consideration. These measures do not capture the complexity of the diverse communities in which the libraries are rooted.

PROJECT APPROACH
- Standardized the relative scales of the metrics being measured to remove potential biases
- Applied the Euclidean Distance concept to analyze the magnitude of differences between the various metrics
- Tools Used: R Studio & R Shiny

DATA ANALYSIS:
- Market Segmentation, PEST Analysis and previous library studies were used to identify the metrics that would be most relevant for analysis. The library and census datasets were joined using the city and state attributes.

RESULTS
The Library Comparison Tool enables flexible comparison to accommodate various analysis and ongoing studies. Users can select from any combination of 23 identified metrics to use in their search.

IMPACTS:
Enable SPL to identify similar library systems to learn from and collaborate with.

PROJECT GOALS:
- Build on existing measures & incorporate demographic data to enable a holistic comparison
- Apply rigorous statistical analysis methods to improve accuracy

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