

Enhancing Fan Experience: NFL Stadium Survey Data Visualization

Continuus assisted an NFL organization in creating an interactive heat map visualization using Alteryx and Tableau, transforming unstructured survey data from multiple seasons and games into actionable insights for game day operations at minimal cost.

AT A GLANCE

ABOUT THE CLIENT

Stadium Experience team for an NFL organization

PROBLEM

Need to visualize unstructured survey data from multiple seasons and games to gain insights into game day operations and present the findings to executives

SOLUTION

Used Alteryx to clean and integrate the survey data, and Tableau to create an interactive heat map and dashboards that dynamically display survey results

OUTCOME

Obtained deep insights into fan feedback efficiently and cost-effectively, with minimal internal resources, allowing for improved decision-making and enhanced game day operations

FRAMEWORK

- Alteryx Designer, Tableau Desktop
- Data Integration, Data Visualization

PROBLEM

A National Football League organization was in need of a visualization regarding the previous season's NFL stadium survey data. The NFL survey data was unstructured, pulled from an API, and was exported to an Excel spreadsheet. The organization wanted to show the scores to their executives and gain insights into their game day operations and wanted to use data from multiple seasons and multiple home games to ultimately show a heat map of the stadium.

SOLUTION

One Continuus data engineering consultant worked directly with the NFL organization's analytics department to create a narrative, outline, and wireframe for the visualization. First, the consultant used Alteryx to join the survey answers to questions and then build custom question grouping based on common themes. The data also had to be scrubbed of unwanted characters, numbers, and symbols, which was done using Regex. Then, the data was transposed to fit a more desirable structure for Tableau.

Once in Tableau, the Continuus consultant pulled in the stadium shapefile and the clean survey data. The engineer blended the shapefile with the survey data to create a seating chart that shows a heat map of the average score for the selected questions. The final dashboard allows users to select a season, question type, and game, which dynamically changes the stadium map changes, graphs, and charts based on the selection. An additional dashboard was created that links this dashboard via record ID to another dashboard where users can see the results of verbal and written answers to better understand the voice of the fan.

OUTCOME

The NFL organization wants to build a high-quality visualization at low cost with minimal internal FTE used. Continuus provided an experienced engineer to support the project with skills in data integration and data visualization. The organization gained deep insights into the voice of the fans at a minimal cost.