



Channel Islands
CALIFORNIA STATE UNIVERSITY

Fast Break to Las Vegas: Using IT to Guide NBA Franchise Relocation Decisions

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Introduction

This project introduces an interactive dashboard toolkit to assist decision-makers in the professional sports industry with franchise relocation scenarios, specifically relocating an NBA team to Las Vegas. Using fan survey data, visualizations, and tools built with Streamlit and Python, the toolkit evaluates market readiness and fan engagement preferences. The project blends sports passion with data analytics to inform smarter, fan-centric business decisions in team relocation.

Methodology

A sample fan survey (sample size = 15) was conducted using **Google Forms** to gather insights on fan preferences regarding relocation, engagement, and pricing. The responses were processed using **Python** libraries such as **pandas**, **plotly.express**, **matplotlib**, and **WordCloud**. **Streamlit** was used to develop an interactive dashboard interface that allows decision makers to visually interpret fan sentiment and market potential.

Las Vegas NBA Fan Interest Survey

This survey collects data to contribute to a successful Capstone Project of mines.

Thanks for your time & cooperation, for real.

Are you currently a fan of any professional sports teams?

- ☐ NFL
- ☐ NBA
- ☐ NHL
- ☐ MLB
- ☐ WNBA
- ☐ MLS
- ☐ I'm not a fan of professional sports

```
import streamlit as st
import pandas as pd
import plotly.express as px
from wordcloud import WordCloud, STOPWORDS
import matplotlib.pyplot as plt

st.set_page_config(
    page_title="Dashboard",
    page_icon="🏀",
    layout="wide"
)
```

```
st.markdown("<h1 style='text-align: center;'>NBA Relocation Toolkit Dashboard!</h1>", unsafe_allow_html=True)

st.markdown("<h3 style='text-align: center;'>Upload your survey CSV and explore key insights from fans</h3>", unsafe_allow_html=True)

uploaded_file = st.file_uploader("Upload CSV file", type=["csv"])

if uploaded_file:
    df = pd.read_csv(uploaded_file)
    st.write("### Raw Data Preview", df.head())

    # Allow user to select important columns dynamically
    st.sidebar.header("Column mappings (select columns for each section)")

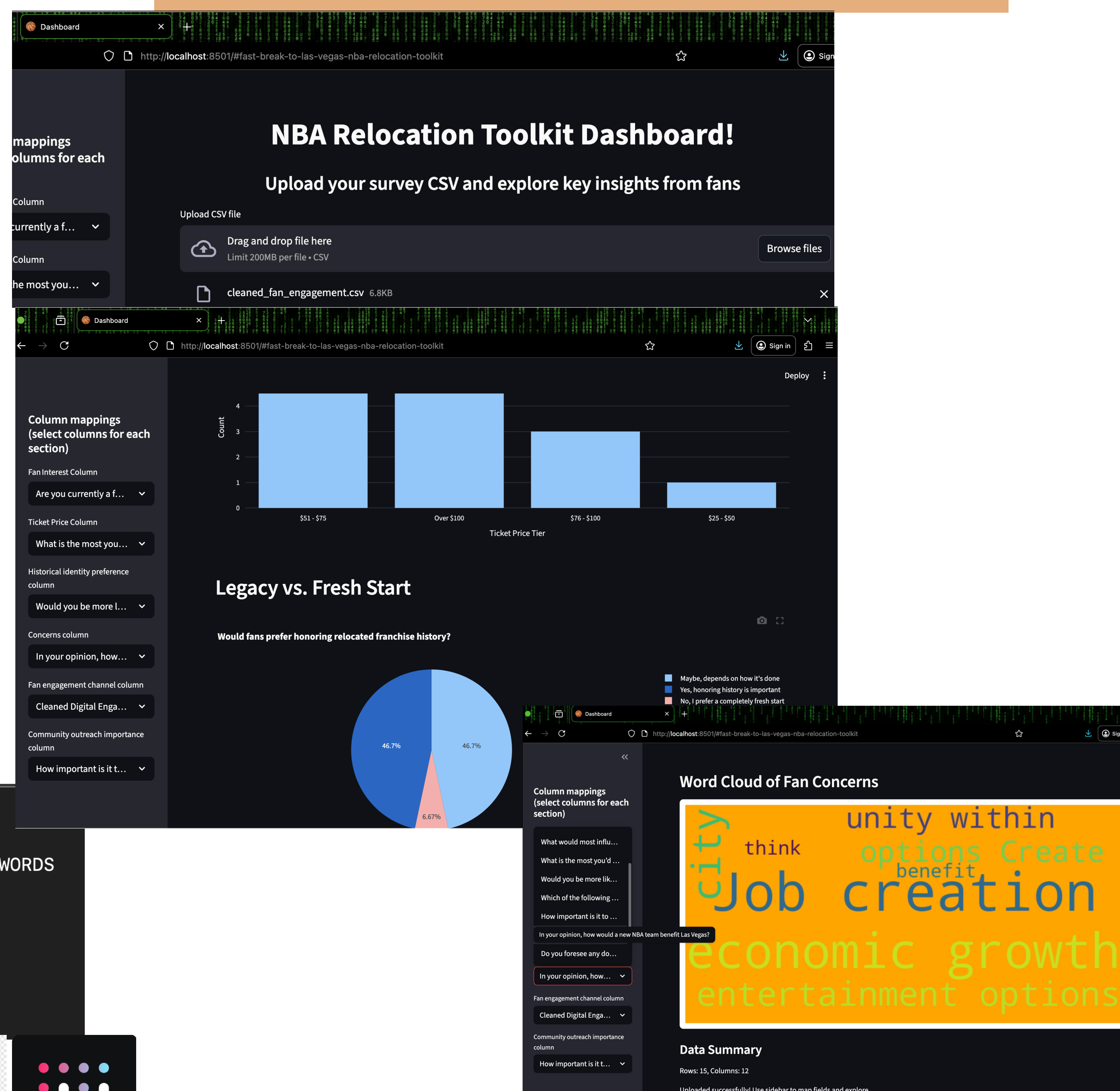
    interest_col = st.sidebar.selectbox("Fan Interest Column", df.columns)
    ticket_col = st.sidebar.selectbox("Ticket Price Column", df.columns)
    legacy_col = st.sidebar.selectbox("Historical identity preference column", df.columns)
    concerns_col = st.sidebar.selectbox("Concerns column", df.columns)
    engagement_col = st.sidebar.selectbox("Fan engagement channel column", df.columns)
    community_col = st.sidebar.selectbox("Community outreach importance column", df.columns)

    # 1. Fan Interest Chart
    st.write("### Fan Interest Levels")
    interest_counts = df[interest_col].value_counts().reset_index()
```



Results

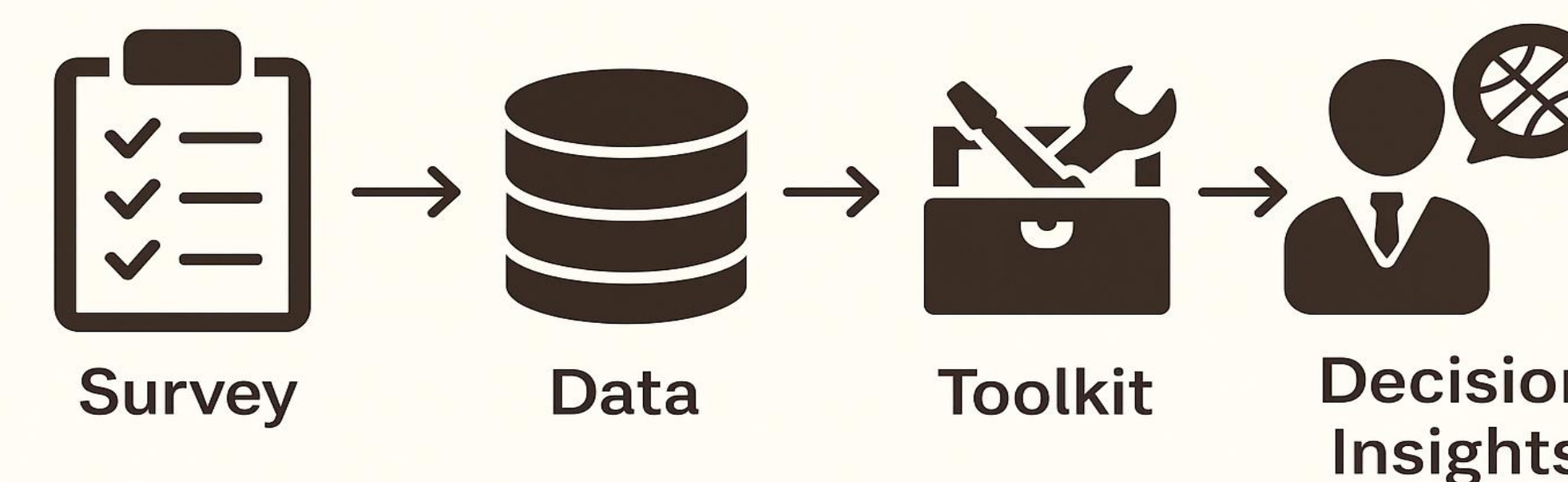
Survey results showed a divide among fans about keeping a relocating team's history. Approximately half supported maintaining legacy elements, while others welcomed change depending on its presentation. Fan engagement preferences leaned toward behind-the-scenes content, loyalty programs, and mobile app integration. Feedback on ticket pricing was mixed, indicating the need for flexible pricing strategies.



Conclusions

The dashboard prototype demonstrates the potential of using IT tools in sports management to inform relocation decisions. Even with a small sample size, insights revealed actionable trends in fan sentiment and engagement. This approach can guide professional sports organizations in aligning business decisions with community preferences, especially during team relocations.

How IT Tools Inform Professional Sports Relocation Decisions



Further Reading

- Streamlit Tutorials: <https://docs.streamlit.io/>
- NBA Fan Engagement Strategy Reports
- Las Vegas Sports Market Analysis

Literature Cited

- Streamlit Documentation. (2025). <https://docs.streamlit.io/>
- Wickersham, S., & Van Natta Jr., D. (2017, April 24). The inside story of how owner Mark Davis moved the Raiders to Las Vegas. ESPN. https://www.espn.com/espn/feature/story/_/id/19143486/the-story-how-owner-mark-davis-moved-raiders-las-vegas

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