OWL VISION

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PROJECT CHARTER

Owl Vision Art

**AI Generated image using OpenAI's Dalle-3 and ChatGPT

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SCOPE & OBJECTIVE

Owl Vision is meant to serve as an easy to use platform that can help athletic staff and faculty, specifically the sales and marketing departments, better identify trends and identify potential season ticket holders as well as specific ticket packages such as group tickets which has been very popular in the 2023 football season. This data used in this algorithm can vary but common sources will be alumni, merchandise purchases, previous ticket buyers, athletics mailing list, KSU athletic app users, etc. This data and variables selection will be different and tailored towards the specific group of people we are trying to identify.

BUSINESS OPPORTUNITY

Owl Vision offers a comprehensive solution for systematically selecting potential ticket buyers, among other fan categories, within a user-friendly software interface. This tool not only speeds up the identification of ticket holders but also automates the process, freeing up valuable time for staff.

Serving as an intermediary hub, Owl Vision connects multiple data sources within KSU, laying the groundwork for a future data warehouse. This warehouse will be invaluable for upcoming ventures and projects. What sets this solution apart is its in-house development, allowing customization to meet the specific needs and requirements of the athletic department, a flexibility not typically found in third-party solutions.

BUSINESS OBJECTIVES

1. Increase Revenue
    a. Provide a systematic way to identify potential ticket purchasers.
2. Cost Savings
    a. Reduce operation costs as Owl Vision can reduce time to find and identify potential ticket buyers.
3. Increase Student and Fan Attendance
    a. Quickly reach our goals for sports attendance as we move into C-USA
4. Provide Quick Insight Into Trends amongst KSU Owls fans
    a. Provide real-time analysis into trends amongst owl fans.

VISION STATEMENT

Owl Vision is

For all relevant athletic department staff

Who seek rapid generation and identification of future ticket purchasers

The Owl Vision software is a first addition to a suite of tools

That can be further used by all relevant faculty and staff

Is internal and home grown

Unlike many other third party solutions that aren't only expensive but also don't tailor to the exact and specific needs of the Kennesaw State Owls athletic program and their subsidiaries and departments.

BUSINESS RULES

1. **Data Source Authenticity:** Only official and verified data sources will be integrated into this software project. Sources include but are not limited to alumni records, official merchandise purchase histories, previously verified ticket buyers, authorized athletics mailing lists, and KSU athletic app user databases.

2. **Privacy and Data Protection:** Owl Vision will adhere strictly to data protection regulations that are set forth by the university and her subsidiaries. Personal data will be encrypted and anonymized to the software's users.

3. **Export & Integration:** Owl Vision's exportable data, especially to Excel for business analysis, should be in a consistent and standardized format, ensuring compatibility and ease of further analysis.

4. **Internal Use:** Owl Vision is designed for internal use withing Kennesaw State Athletic Department and all surrounding/relevant departments. Any external sharing or usage should first be approved by respective leaders to ensure data integrity and confidentiality.

5. **Continuous Improvement:** Owl Vision should be built on a framework that allows for easy updates and maintenance based on real world feedback from teams and relevant personnel and staff. This can pertain to algorithm performance or general feature updates amongst the software.

6. **Ease to Retrain Model:** Owl Vision's algorithm should be easy to retrain and refit to current data. As years go on its important that Owl Visions algorithm is retrained and refitted to updated data as it can better recognize changing trends. This is true despite if the model is a machine learning model or rules based model.

7. **Tech Stack:** Owl Vision's choice of coding language, frameworks, and security standards will be up to the standards of the universities policies and will provide and easy to work on and maintain platform for future software engineering and developers to work with.

   Guidelines:
   - **Programming languages**: Python for data analysis, JavaScript for front end.
   - **Frameworks**: Vanilla JS managed with Vite for frontend, Node.JS with express for website backend.
   - **Database:** PostgreSQL for database storage.
   - **Version Control – CI/CD:** GitHub & GitHub actions for continuous integration and continuous development.

   Constraints:

   - All technologies chosen must be compliant with university IT policies.
   - The stack should be chosen with consideration for the skills available within the team.

   Future Proofing:

   - Choose technologies that are robust and have strong community support to ensure longevity and ease of future updates.

Engagement Strategy

Project status reports will be distributed via email at pre-established time intervals. These reports will coincide with the delivery of key project milestones, serving as the main avenue for sharing updates on schedule conflicts, requirement changes, design alterations, and emerging issues. Special bulletins will be issued in the event that significant risks or issues arise. Although we're maintaining an open-door policy to enhance stakeholder satisfaction, this approach also increases the risk of scope creep.

DELIVERABLES

1. **Initial Pre-Production Algorithm**
    - An algorithm will be developed to provide preliminary results based on pre-established inputs. Stakeholder reviews will be conducted to validate these inputs.
        - If the inputs are verified as accurate, the project will proceed to the next phase.
        - If the inputs do not meet expectations, additional refinement will be necessary before moving forward.
2. **Semi-Functional UI Prototype**
    - A prototype of the user interface will be developed. Stakeholder approval is mandatory before progressing to full development.
3. **Pre-Production Prototype**
    - A functional prototype will be deployed for beta testing.
        - If stakeholder approval is obtained, the project will proceed to final development.
        - If not, further refinements will be made based on stakeholder feedback.
4. **Final Software Product and Documentation**
    - Upon stakeholder approval, the finalized software product will be released along with all relevant documentation.

SUCCESS CRITERIA

Financial Metrics

Refinements to these metrics and how they are collected will need to be changed as we dive into this project, but some financial metrics include ROI and revenue generation. While this project is being done for free by a university student time will be a big factor in this ROI metric.

Operational Metrics

Operational metrics include speed of ticket identification compared to traditional methods. Also user adoption rate within the athletic department and relevant sales staff will be used.

User Satisfaction

User feedback will be used to gauge the projects overall effectiveness and functionality.

Quality Metrics

Algorithm Accuracy will be used and measured via the number of correct predictions made.

Resource Utilization

Metrics such as time investment and resource efficiency will be evaluated.

STAKEHOLDER ANALYSIS

Internal Stakeholders

1. **Athletic Department Marketing and Sales Team**
    - **Role**: Primary users of the Owl Vision platform for identifying ticket trends and potential buyers.
    - **Interest Level**: High
2. **Athletic Department IT Administration**
    - **Role**: Responsible for providing access to technical infrastructure, data access, and security measures for Owl Vision.
    - **Interest Level**: High
3. **Campus Engagement Personnel**
    - **Role**: Utilize data and trends from Owl Vision to plan and execute engagement activities, possibly beyond sports.
    - **Interest Level**: Medium
4. **Athletic Department Oversight Staff**
    - **Role**: Executive-level staff responsible for the overall success and alignment of Owl Vision with departmental goals.
    - **Interest Level**: Medium

External Stakeholders

6. **University Board or Governance**
    - **Role**: Approval of project, especially if it involves significant policy considerations.
    - **Interest Level**: Low to Medium
7. **Data Providers**
    - **Role**: Entities providing data to Owl Vision (e.g., alumni associations, merchandise vendors).
    - **Interest Level**: Low
8. **Regulatory Bodies**
    - **Role**: Ensuring the project adheres to data privacy and other compliance standards.
    - **Interest Level**: Medium

ASSUMPTIONS AND DEPENDENCIES

Assumptions

1. **Data Readiness and Availability:** It's assumed that the data sources mentioned (alumni records, merchandise purchase histories, and previous ticket buyers) are available, well-organized, and can be accessed with minimal constraints.
2. **Continuous Data Flow:** As the software relies on data for its operations, its assumed that new data will continuously flow into the system and can be accessed, and prediction made on said data can happen on the fly.
3. **Infrastructure:** The current IT infrastructure of the athletic department and school systems can support the deployment, maintenance, and scaling of Owl Vision.

Dependencies:

1. **Software Maintenance:** The performance and accuracy of Owl Vision will depend on regular software updates to address issues and algorithm tweaks.
2. **Feedback Mechanism:** The refinement and improvement of Owl Vision will be an ongoing process from its conception. A pipeline for recommending improvements and reporting errors will need to be put in place.
3. **Regulatory & Compliance Dependencies:** The software's operation, especially regarding data handling and privacy, will depend on adherence to any regulatory or compliance standards set inside and outside of the schools policies.

DEVELOPER CONTACT

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