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Feasibility Report

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**Product**

The proposed system is a digital check-in service that integrates with the existing Acuity scheduling system from Squarespace utilized by the No-Kill Louisville animal shelter. The service will allow individuals to notify the shelter of their arrival for pet food pickup through a simple text message to a designated number. Upon receiving the notification, the shelter volunteers will be alerted to bring out the pre-scheduled pickup items, streamlining the process and reducing the manual labor involved in the current system.

**Technical Feasibility**

The proposed system hinges on the assumption that the Acuity scheduling system from Squarespace has the necessary API endpoints to support a check-in feature and can integrate seamlessly with an SMS gateway service. This service will facilitate the communication between the clients and the Acuity system, automating the notification process for the volunteers at the shelter.

To validate the technical feasibility, the first step would be to confirm the availability and accessibility of the required API endpoints in the Acuity system. Following this, we will develop a backend service that will handle SMS communications, translating incoming SMS messages to API requests to the Acuity system. This service will be hosted on a secure server, ensuring data privacy and system reliability.

Given the mature technologies surrounding SMS gateways and API integrations, developing such a system is technically feasible, provided the necessary API endpoints are available in the Acuity system. The project will not involve creating a user interface, focusing instead on backend development, which should streamline the development process and reduce potential technical hurdles.

**Social Feasibility**

The introduction of the system will be largely beneficial to both the volunteers and the individuals coming for the pickup. It will reduce the manual labor and time currently required for check-ins. However, it may necessitate a brief training period for volunteers to familiarize themselves with the new system. The current workforce should be able to adapt to the new system with minimal disruption, and no relocation or deskilling is anticipated. To ensure user cooperation, we propose to conduct a series of workshops and provide user manuals for easy transition.

**Economic Feasibility**

The primary costs involved will be the development of the system, including server setup and maintenance. However, these costs will be offset by the reduced labor and time savings in the long run. The new system will also enhance the customer service experience, potentially attracting more individuals to utilize the shelter's services. Applying the payback method, we anticipate the system to break even within a year, given the substantial savings in labor costs.

**Market Research**

Our preliminary market research, based on feedback from the shelter volunteers and users, indicates a strong need for a streamlined check-in process. The current manual process is identified as a bottleneck in the service delivery, causing delays and inefficiencies. The proposed system addresses this gap effectively. Moreover, no similar solutions are currently available in the market, giving us a competitive edge.

**Alternative Solution**

Two alternative solutions considered were:

* Developing a mobile application for check-ins
* Implementing a kiosk system at the shelter for self-service check-ins

After evaluating, we chose the SMS notification system due to its simplicity, lower development costs, and the ability to serve users without smartphones. The alternatives were rejected due to higher costs and potential complexity for the users.

**Project Risks**

Some of the project risks include:

* Technical glitches and system downtimes affecting the service
* Resistance from volunteers in adapting to the new system
* Security concerns regarding the handling of user data

Mitigation strategies will include robust system testing, comprehensive training for volunteers, and adherence to best practices in data security.

With the feasibility study indicating a high likelihood of success, we are prepared to proceed with the requirements analysis and initiate the project.