

SECOND BITE

Saving the world one bite at a time.

Managing A.I. with the South

Naoise Law

A decorative vertical panel on the left side of the slide, featuring a complex, wavy, liquid-like pattern in shades of black and white.

INTRODUCTION

The - platform aims to integrate with existing inventory management systems of businesses to track the expiry dates of goods. When items are close to expiring, the platform will notify staff or management to consider donating these goods to local charities, food banks, or schools.

The platform will partner with local or national organizations to handle the collection and distribution of these goods. Additionally, charities can access the platform to make specific requests or plan in advance using AI predictions.

PROBLEM

Food waste is a significant issue faced by businesses such as grocery stores, restaurants, and other food retailers. These businesses often struggle to sell everything leading to a substantial amount of food being discarded. This not only results in financial losses but also contributes to environmental degradation and missed opportunities to support communities in need. Additionally, charities and food banks often face challenges in predicting and planning for food donations, leading to inefficiencies in distribution and support.



Our AI-powered Food Donation and Inventory Management Platform addresses these challenges by integrating with existing inventory management systems of businesses to track the expiry dates of food items. The platform provides real-time notifications to staff or management when goods are close to expiring, encouraging timely donations to local charities, food banks etc. By partnering with local and national organizations, the platform enables the collection and distribution.

SOLUTION

Key Features

What we offer

Integration with Inventory Systems: Seamless integration with businesses existing inventory management systems to track expiry dates.

Notification System: Alerts staff or management when goods are nearing expiration.

Partnership Network: Collaboration with local and national partners for collection and distribution.

Charity Access: Charities can view available goods, make requests, and plan using AI predictions.

Why would businesses do this with us?

Tax Incentives: Businesses can write off food donations on their taxes.

Public Relations: Positive PR for businesses by reducing food waste and helping the community

A.I Functionality

Expiry Date Tracking and Alerts:

Functionality: This tool integrates with businesses' inventory management systems to monitor the expiry dates of food items. It uses AI to analyze data and send real-time alerts to staff or management when items are nearing their expiration dates.

Benefit: Ensures timely action to either sell or donate the food, reducing waste and maximizing the use of perishable goods.

Donation Recommendations:

Functionality: The AI analyzes the type and quantity of food nearing expiration and recommends suitable local charities, food banks, or schools for donation. It considers factors such as the type of food, the needs of the charity, and logistical aspects.

Benefit: Streamlines the donation process, ensuring that the right food reaches the right place efficiently.

Tax Savings Calculation:

Functionality: This tool calculates the potential tax savings for businesses based on the value of the donated food. It takes into account the depreciation of the food items over time and provides detailed reports for tax purposes.

Benefit: Provides financial incentives for businesses to donate food, making the process more attractive and beneficial..

Other Ideas I came up with but not sold on.

Demand Forecasting:

Functionality: AI can analyze historical sales data, seasonal trends, and other factors to predict future demand for various food items. This helps businesses optimize their inventory levels, reducing overstocking and understocking.

Benefit: Minimizes waste by ensuring that businesses order the right amount of stock, improving efficiency and profitability.

Dynamic Pricing and Discounts:

Functionality: AI can dynamically adjust the pricing of food items based on their shelf life, demand, and other factors. It can offer discounts on items that are close to expiring to encourage quick sales.

Benefit: Helps reduce waste by incentivizing customers to purchase items that are nearing their expiration dates, while also maintaining profitability

Supporting Stats

1. **Global Food Waste:** Approximately one-third of all food produced globally is wasted, amounting to about 1.3 billion tons per year.
2. **Economic Impact:** Food waste results in economic losses of around \$940 billion annually.
3. **Environmental Impact:** Food waste generates about 8% of global greenhouse gas emissions, equivalent to the emissions of the entire global transport sector
4. **U.S. Food Waste:** In the United States, an estimated 38% of food—around 89 million tons—goes unsold or uneaten, contributing to significant environmental and economic impacts
5. **U.S. Food Waste Reduction Goal:** The U.S. aims to cut food loss and waste in half by 2030, as announced by the USDA and EPA
6. **UN Sustainable Development Goal 12.3:** The United Nations aims to halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains by 2030
7. **AI in Food Market Growth:** The global AI in food and beverages market size was valued at USD 8.45 billion in 2023 and is projected to grow at a CAGR of 39.1% from 2024 to 2030
8. **AI-Driven Waste Reduction:** AI solutions like Shelf Engine and Afresh have led to a 14.8% average reduction in food waste per store in pilot studies
9. **Economic Opportunity:** AI can generate an estimated economic opportunity of up to \$127 billion a year by reducing food waste.
10. **Food Security:** Reducing food waste is essential in a world where around 821 million people suffer from hunger and malnutrition.

Why does this work

1. **Legal Framework:** The UK has regulations that allow the donation of food that is past its "best before" date but still safe to eat. This helps reduce food waste and supports those in need
2. **Charity Partnerships:** Many restaurants partner with charities and food banks to donate surplus food. Organizations like FareShare and The Felix Project play a significant role in redistributing food to those in need
3. **Food Safety Standards:** Donated food must meet certain safety standards. Restaurants ensure that the food is stored and transported properly to maintain its quality and safety
4. **Tax Incentives:** Restaurants can benefit from tax deductions when they donate food to registered charities. This encourages more businesses to participate in food donation programs
5. **Community Impact:** Donating surplus food helps support local communities, providing meals to homeless shelters, food banks, and other charitable organizations
6. **Environmental Benefits:** Reducing food waste through donations helps lower the environmental impact of food production and disposal. It contributes to sustainability efforts and reduces landfill waste
7. **Corporate Social Responsibility (CSR):** Many restaurants include food donation as part of their CSR initiatives. This enhances their reputation and demonstrates their commitment to social and environmental causes
8. **Logistical Challenges:** Coordinating the collection and distribution of surplus food can be challenging. Restaurants and charities work together to establish efficient systems for food donation
9. **Volunteer Involvement:** Volunteers often play a crucial role in the food donation process, helping with the collection, sorting, and distribution of donated food
10. **Awareness Campaigns:** Various campaigns and initiatives raise awareness about food waste and encourage more restaurants to participate in food donation programs
11. **Technology Integration:** Some organizations use technology to streamline the donation process. Apps and online platforms connect restaurants with charities, making it easier to donate surplus food
12. **Government Support:** The UK government supports food donation initiatives through policies and funding. This helps create a supportive environment for food donation program

CRITICAL ANALYSIS

Strengths:

Social Impact: Addresses food waste and food insecurity, benefiting both businesses and communities.

Efficiency: Streamlines the donation process, making it easier for businesses to contribute.

Technology Integration: Utilizes AI for predictive analysis, improving planning and reducing waste.

Tax Benefits: Provides financial incentives for businesses to participate.

Weaknesses:

Finding Partners: Establishing a reliable network of partners for collection and distribution can be challenging.

Scale of Food Waste vs. Demand: Balancing the amount of food waste with the demand at food banks and charities may be difficult.

Awareness and Adoption: Convincing businesses to adopt the platform and integrate it with their existing systems could require significant effort and resources.

CRITICAL ANALYSIS

Opportunities:

Expansion: Potential to expand to various sectors, including restaurants, hotels, and schools.

Community Engagement: Hosting events and workshops to raise awareness about food waste and the platform.

Government Support: Seeking grants and support from local governments for sustainability initiatives.

Threats:

Regulatory Challenges: Navigating food safety regulations and ensuring compliance.

Competition: Other food donation platforms and inventory management systems may pose competition.

Economic Factors: Economic downturns could affect the willingness of businesses to participate.

WRAP UP

Your AI Food Donation and Inventory Management Platform has the potential to make a significant impact on reducing food waste and supporting communities in need.

By addressing the weaknesses and leveraging the strengths and opportunities, we can create a sustainable and socially responsible business. Building strong partnerships and raising awareness will be crucial to the success of your platform.

Lets be real this is more of a B corp than a traditional for profit, which may make it a bad idea for this course, but thanks for reading!