

Team Name	pixels
Team Number	042
Product Name	TAPSA
Product Category	Responsible consumption
	and production





# PROBLEM DEFINITION AND PROPOSED SOLUTION OVERVIEW

#### **Problem Definition and Solution Overview**

In today's global landscape, Food wastage and Food insecurity have converged into a complex and interrelated challenge that demands our immediate attention. Food insecurity, which mostly affects the underprivileged, presents a vivid image of human misery and squalor, as millions of people struggle to ensure they will always have enough to eat. Statistics states that where a staggering one-third of all food produced is lost or wasted (Gustavsson et al., 2011), while millions go to bed hungry every night (FAO, 2022).

By understanding the gravity of this complex problem and by highlighting their widespread and intertwined implications the solutionary app "TAPSA". This app will act as a bridge between the people with surplus food and charities and orphanages who need food.

## **Problem Scope**

The problem scope of a food donation app encompasses several critical aspects. Firstly, it aims to minimize food waste by effectively redistributing surplus food from various sources such as restaurants, grocery stores, events, and individuals to those in need. Additionally, the app addresses food insecurity and hunger by efficiently connecting surplus food with individuals, organizations, and shelters requiring

assistance. It facilitates logistics by streamlining processes like scheduling pickups, coordinating deliveries, and ensuring proper handling and distribution of donated food items. The app also focuses on optimizing resources such as time, transportation, and manpower to maximize the impact of food donation efforts. Furthermore, it encourages community engagement by providing a platform for volunteers, donors, and recipients to connect and collaborate in addressing food insecurity issues within their local communities. Leveraging technology features like geolocation and notifications, the app enhances efficiency and effectiveness in food donation operations. It ensures compliance with food safety regulations and

legal requirements to safeguard the health and well-being of both donors and recipients. Lastly, the app promotes scalability and sustainability through ongoing partnerships, community support, and innovative solutions, aiming to create a lasting impact in reducing food waste and alleviating hunger.

#### PRODUCT OVERVIEW AND UNIQUENESS OF THE PRODUCT

#### Product:

An online application "TAPSA".

## Product Description:

The Solution "TAPSA" donation app is a mobile application that allows users to surplus food and non-food items such as clothes, toiletries, stationeries to various orphanages and charities. This donation app can help users find and support the causes they care about, as well as track their donations and receive tax receipts. A donation app can also help charities reach more donors and increase their impact.

TAPSA app consists of features that are in common with the other food donation websites and applications in the market such as Donor registration, Recipient Registration, Search option, social media integration, Multi language support, Reports and analytics, Filter requirements, Rating and review, guideline notification, Mobile application features.

But to enhance the solution there are some innovative features added to "TAPSA" application such as;

One to one chat features: This feature allows the users to communicate with each other through text messages, voice calls, or video calls. This feature can help to coordinate the logistics of feed and provide feedback or support.

**Real time tracking:** This feature allows the users to track the location and status of the donations and deliveries and get update of their donation status through photos and videos.

**Food/Non-food inventory management:** This feature allows the users to manage their inventory of surplus food or non-food items that can be donated.

**Food rescue alerts:** This feature allows the users to receive notifications or reminders about feed opportunities or activities.

**Food, grocery, essential items donation feature:** This feature allows the users to donate or request food, grocery, or essential items through the app.

Non-profit organization validity verifying feature: This feature allows the users to verify the validity and credibility of the non-profit organizations that are involved in food rescue. This feature can help to ensure the quality and trustworthiness of feed.

App's mission and vision to reduce food waste, combat food insecurity, and build stronger, more sustainable communities by developing a comprehensive food donation app that can ensure safety, ease to use, and community engagement.

## **Existing Products:**

Features	Similar Apps & Websites								
reatures	Karuna.lk	zamzam.lk	worldvision.lk	ShareTheMeal(Germany)	Olio (UK)	Aahar Daan (India)	nealconnect.org (USA)	TAPSA	
F1-Donor Registration	✓	1	1	✓	✓	✓	✓	✓	
F2-Recipient Registration	✓			✓	1	✓		✓	
F3-Search option	✓		4	*	1		1	✓	
F4-Automatic suggestion of recipients	1	✓	✓	✓	1	✓	✓	✓	
F5-social media integration	✓	1	✓	a a	JE .			✓	
F6-Multi language support (3 Languages)	✓	30	30	✓	32	✓		✓	
F7-Food safety guideline notifications	30	50	✓	*	38	30	✓	✓	
F8-Review and rating feature	30	*	30	✓	✓			✓	
F9-Advertisement free	✓	✓	✓	✓	✓	<b>✓</b>	✓	✓	
F10-Donation History	.50		✓	✓	1	✓	✓	✓	
F11-Reports and Analytics	✓		✓	✓			✓	✓	
F12-Emergency response	✓	30	30		JE.	,tc	30	✓	
F13-Filter Requirments	✓			. R	1			✓	
F14-View Donor description/ rating	30	30	30	✓	✓	✓		✓	
F15-Mobile Application	JE JE	30	30	✓	1	✓	1	✓	
F16-One to one chat features	×	*	*	*	*	*	*	✓	
F17-Real time tracking	*		*	*	*	*	*	✓	
F18-Food/Non food inventory management	*	*	*	*	*	*	*	✓	
F19-Food rescue alerts	*	*	*	*	*	*	*	✓	
F20-Food, grocery, essential items donation feature	*		*	*	*	*	*	✓	
F21-Non profit organization validity verifying feature	*	*	*	*	*	*	*	✓	
Highlights									
Special feature									
Available	1								
Not Available	*								
Special Feature				Addition	nal Descripti	on	-		
F16	Enables donor and recipient to chat with ecah other through messages through app to get the details of the donation items quantity quality assurance								
F17	Enables Donors to get update of their donation time to time until it reach the recipient through photos, videos, location								
F18	Enables the donor to view their own inventory to check whether there is surplus essentials available for donation through stock database								
F19	Enables the registered recipients to get alert notifications about the locations with surplus food								
F20	Enables donor to donate items instead of money (food items, clothes, essential items)								
F21	Gives the donors trust and assurance that they are donating for a real non profit organization								

# Target market:

The target market for the food donation app TAPSA encompasses a broad spectrum of individuals, organizations, and businesses with varied needs and interests. This includes individuals experiencing food insecurity, nonprofit

organizations and shelters engaged in food distribution, restaurants and food establishments with surplus inventory, as well as volunteers and community advocates dedicated to addressing food waste and hunger. TAPSA operates primarily as a Business-to-Business (B2B) and Business-to-Consumer (B2C) platform, incorporating elements of a multi-sided marketplace model. For businesses, TAPSA facilitates seamless partnerships with nonprofits, enabling the donation of excess food inventory to those in need. Individuals can use TAPSA to either donate directly or access food assistance through local nonprofits. By serving as a platform for collaboration and engagement, TAPSA empowers stakeholders to effectively combat food waste and hunger, fostering a more sustainable and supportive community ecosystem.

# BUSINESS MODEL AND MARKETING PLAN

#### **Business Model Overview**

Business Model Type: TAPSA operates on a platform-based model, utilizing a combination of fee-for-service and donation-driven approaches.

#### Revenue Generation:

Donation Fees: TAPSA charges a small fee for each transaction facilitated through its platform. This fee helps cover operational costs and platform maintenance. Subscription Services: While basic access to the app is free, TAPSA offers premium subscription services for businesses and organizations that require additional features such as analytics, advanced scheduling, or customization options.

Partnerships and Sponsorships: TAPSA partners with food suppliers, restaurants, and grocery stores, offering them opportunities for sponsorship and promotion on the app. In return, these partners gain visibility and contribute to the cause of reducing food waste. Data Monetization: TAPSA aggregates and analyzes data on food donations, waste reduction, and consumption patterns. It may offer anonymized insights and reports to interested parties, such as government agencies, research institutions, or businesses, for a fee.

Value Proposition to Customers:

#### Cost Savings:

Businesses can potentially save on disposal costs associated with food waste by diverting surplus food to those in need through TAPSA.

Visibility and Marketing: Partners of TAPSA gain visibility among users who support the cause of reducing food waste. This can enhance brand reputation and customer loyalty. Overall, TAPSA's business model aims to create a win-win situation by addressing food waste, providing value to businesses, and delivering essential resources to those in need.

# **Industry Specification**

TAPSA operates within the food donation technology sector, which intersects with both the food industry and the technology sector. Its primary aim is to connect surplus food from restaurants, grocery stores, and events with charities and individuals in need. TAPSA

streamlines the process of food donation through a user-friendly app, reducing food waste and addressing food insecurity simultaneously.

#### **Emerging Trends:**

Increasing Concern for Food Waste Reduction: With growing awareness about environmental sustainability and social responsibility, there's a significant trend towards reducing food waste. Governments, businesses, and consumers are actively seeking ways to minimize wastage, making platforms like TAPSA increasingly relevant.

Tech-Driven Solutions: The integration of technology in addressing societal issues is a prominent trend. TAPSA leverages mobile applications, data analytics, and geolocation services to efficiently match surplus food with nearby charities or individuals, reflecting this trend towards tech-driven solutions.

Collaborative Economy: The rise of the sharing or collaborative economy has influenced various industries, including food donation. TAPSA operates on the principle of sharing excess resources, aligning with the collaborative economy ethos.

# **BUSINESS MODEL AND MARKETING PLAN**

#### **Business Model Canvas**

Restaurants Orphanages Charities Grocery stores	Key Activities User registration Searching and Listing  Key Resources Content and Data Technology infrastructure	Value Proposit Convinc Transpa Connect and engage	eant arency tion	Customer Relationships Personalization Feedback mechanism  Channels Mobile application Social media	Customer Segments Households Restaurants Orphanages	
Cost Structure \$3500-\$4000				Revenue Streams  Transaction Fee, Subscriptions, Ad revenue		

# Marketing plan and analysis

1. Market Research and Analysis:

Identify target demographics: Individuals, businesses, non-profit organizations, and volunteers interested in food donation.

Analyze competitors: Study other food donation platforms to understand their strengths, weaknesses, and market positioning.

Conduct user surveys and interviews to gather insights into user preferences, pain points, and expectations.

2. Branding and Messaging:

Develop a compelling brand identity that resonates with the app's mission and values. Craft clear and concise messaging that highlights the app's benefits, such as convenience, community impact, and transparency.

3. Online Presence:

Build a user-friendly website that provides information about the app, its features, and how to get involved.

Create engaging content for social media platforms (Facebook, Twitter, Instagram, LinkedIn) to raise awareness and drive user engagement.

Implement search engine optimization (SEO) strategies to improve the app's visibility in search engine results.

4. Content Marketing:

Create blog posts, articles, infographics, and videos related to food donation, hunger relief, and sustainable food practices.

Share user stories, success stories, and testimonials to humanize the app and inspire others to participate.

5. Influencer Partnerships:

Collaborate with influencers, bloggers, and community leaders passionate about social causes and food sustainability to promote the app.

Host influencer-led events, challenges, or campaigns to encourage user participation and engagement.

6. Email Marketing:

Build an email list of subscribers interested in food donation and hunger relief efforts. Send regular newsletters, updates, and donation requests to keep users informed and engaged.

7. Public Relations and Media Outreach:

Issue press releases and media pitches to local and industry-specific media outlets to generate publicity for the app.

Arrange interviews, guest articles, and speaking opportunities for app representatives to share insights and promote awareness.

8. Partnerships and Collaborations:

Form partnerships with food banks, non-profit organizations, businesses, and government agencies to expand outreach and access to donations.

Collaborate with corporate sponsors, foundations, and philanthropic organizations to secure funding and resources for marketing initiatives.

9. User Acquisition Campaigns:

# TECHNICAL OVERVIEW AND IMPLEMENTATION

# Current Development Stage:

Stage 2

#### 1. Idea

The stage where the project is only a concept or an idea, and the initial research and discussions are ongoing.

## 2. Business plan

The stage where the team develops a comprehensive document outlining the product details, business/marketing strategy, market analysis and financial plans and projections.

### 3. Minimum Viable Product (MVP)

The stage where the team launches a Minimum Viable Project (MVP).

## Implementation

This section highlights the technologies, APIs, and implementation methodology that will be used, alongside a deployment strategy ensuring smooth integration and launch of the product within the specified timeline.

## Team Details and Member Talents



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