



INFOOD JA 2021-2022

ISIS MAMOLI DI BERGAMO, LOMBARDIA
DOCENTE COORDINATORE MARIA CRISTINA CARUSO
ESPERTO DI AZIENDA MAURO QUAINI



EXECUTIVE SUMMARY

Our idea is an APP a simple and flexible solution suitable for people of all ages to make responsible purchases and guarantee our planet's health.

Using our transversal school career skills, we analyzed the food waste problem and how to reduce hunger in the world to protect the planet.

To realize our app, we built a team of 14 students divided into 3 workgroups. Following their attitudes and competencies, the groups examined these themes: environmental, technical, and informatical development and financial marketing.

We set up a legal entity by creating an “srl semplificata”, an organized structure with different roles and functions, called InFood J.A.

To give it more visibility, we launched “InFood J.A.” media spaces on the main social media such as Facebook and Instagram, as well as we launched a website called “InFood -notimetowaste”.

In addition, our app provides, useful information for users and food producers, through a QR code scanning.

The target we have identified is made up of a typical consumer , supermarket, and production chains. The companies interested to our app are supermarket and the great produtors of the principal brands of the alimantar industry .

The main costs to be incurred are the development and integration of the App “INFOOD”, human resources costs, and marketing costs. The main revenues streams for the company are QR Code revenues.

“InFood JA” desire is to transform a problem into an opportunity for everyone, creating jobs, protecting the customer's health, reducing food waste, and minimizing environmental illness.

“OUR MISSION IS TO INVOLVE EVERYONE IN THE FIGHT AGAINST LOSS OF FOOD”

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LETTER FROM THE CHIEF EXECUTIVE OFFICER

It is with the passion of our resources and our technology solutions that we respond every day to the real needs of our customers and, more generally, of our stakeholders.

Our mission is to inspire and make everyone involved in the fight against food waste. To put our goal into practice, we place the following values at the foundation of our action:

Food and nutritional well-being are primary and essential conditions and for us a value to be respected and protected.

Solidarity is one of the main objectives of our social policy.

We affirm the centrality of the person we respect and support the observance of internationally recognized human rights

Awareness Communicate effectively to our stakeholders the commitment against food waste

The Responsibility Social Enterprise is a dimension of our being that guides us in respect of our main stakeholders: the environment, which provides us with essential resources; the people who offer us their trust; the territory, which welcomes us and supports us with its cultural richness, social and economic.

Sustainability to promote the spread of a mature culture of sustainability to contribute to the improvement of the quality of life of all stakeholders and the Community.

Bergamo, 21/03/2022

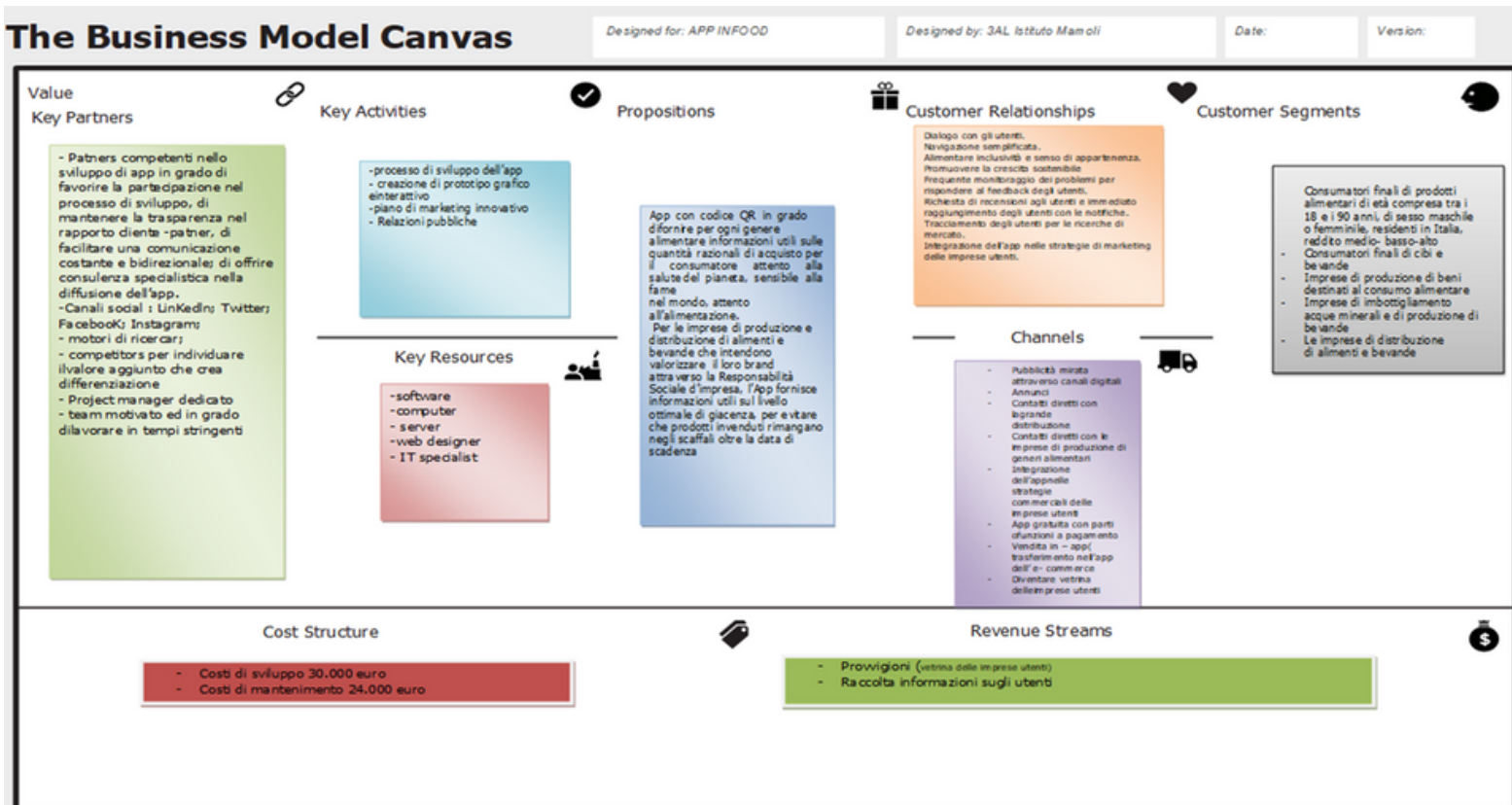
Chief Executive Officer

Letisia Timis

ATTO COSTITUTIVO E STATUTO

INFOOD J.A. società a responsabilità limitata semplificata

Modello standard di atto costitutivo e statuto della società a responsabilità limitata semplificata è stato approvato con il decreto 23 giugno 2012, n. 138 (G.U. n. 189 del 14 agosto 2012) – In vigore dal 15 agosto 2012.



PROBLEM

CASE STUDIES

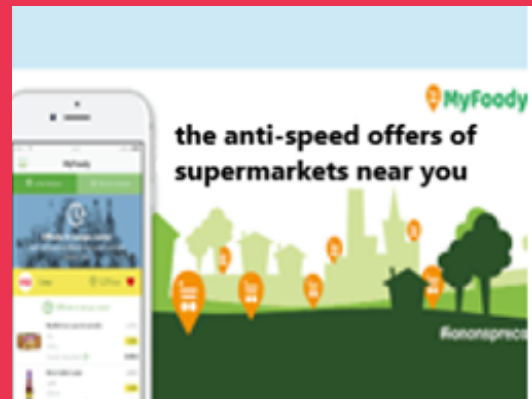
We have compared our startup with the following ones:

Too good to go



Connects customers to restaurants and shops that have unsold food surpluses.

My foody



The first Italian startup where users can see the products at risk of waste, is offered by nearby supermarkets.

Squiseat



Was created in Bologna; everyone can order the products they prefer paying half price. It is a “Too Good To Go” competitor.

Empty my fridge



Which gives recipes teaching how to use the food left in the refrigerator.



A recent United Nations research (dated March 2021) reported that families throw away from 11% to 17% of food (almost 125 kg per person yearly) while shops waste 5% of it.

It has an extraordinarily negative impact on the environment, causing CO2 emissions equal to 3,3 milliard tons yearly.

Cities will face a great challenge in making food consumption sustainable for the health of people, the planet, and the economy.

“InFood JA” mission is to transform a problem into an opportunity for everyone creating jobs, and protecting the health of consumers, and the environment by reducing food waste.

The key innovation of “InFood JA” is that the customers have to answer a short questionnaire about their families’ dietary habits before shopping.

Scanning the products at the supermarket, every kind of useful information regarding your family's ideal purchase will appear on your mobile.

It is a simple and flexible solution, easy to use, and suitable for people of all ages: it makes purchases responsible and protects our health and planet.

To better understand the external environment, we decided to carry out a step analysis.



SOCIAL: By 2020 it has been estimated that 12% of the world's population experienced severe food insecurity, about 928 million people, 148 million more than in 2019. In September 2015, 193 world leaders signed a commitment to achieve seventeen global goals for sustainable development. The second goal, aimed by 2030 is to end hunger, achieve food security, and improve nutrition by promoting sustainable agriculture."



TECHNOLOGICAL: The digital revolution changes the meaning of communication and the information availability. Technological progress has allowed companies to expand their market presence and to increase their competitiveness.



ECONOMIC: The legislation has provided for a wide range of benefits to support the birth and development of these businesses. Facilitated loans thanks to start-up. Interest-free loans between 100,000 and 1,5 million.

The legislation has also provided benefits to the investors of these companies. They're growing exponentially and it is therefore possible to earn a lot. Generally, the legislation provides for the possibility of deduced 30% in the tax return phase for the year following the investment.



ECOLOGICAL: Reducing food loss and waste is considered by the United Nations and many international institutions as one of the main ways to move towards environmental protection and human well-being. This is also reaffirmed by the UN's 2030 Agenda for Sustainable Development. It is now clear that food waste is a key determinant of the loss of biodiversity, the accumulation of greenhouse gasses in the atmosphere, the waste and pollution of water, soil and other resources.



POLITICAL: The main initiatives of the European Union The European Commission and Parliament are leading all Member countries toward a zero waste and circular economy. 2010, conference Transforming waste into a resource 2016, European Union platform on food losses and waste. It was created with the aim of helping the countries of EU a counteract the phenomenon of waste. 2018, Directive of the European Commission. It invites all countries to take action to reduce food waste 2019, Green Deal of Europe



SOLUTION

VALUE PROPOSITION

“The hunger it’s not a problem of shortage, it’s a problem of distribution.

An excessive quantity of world food belongs to rich countries that waste it in the garbage”

- Jason Hickel

With this quote, Jason Hickel, explains how the problem is not the shortage of food is but the poor distribution which sees the rich countries of the world as privileged, and despite this, waste it in large quantities, leaving most countries in poverty. Our future strategy is to use targeted advertisements to promote sustainable growth, food inclusiveness, and a sense of belonging to the “not waste food” campaign.

On our free app, the consumers will find all the elements useful to satisfy their requests.

The aim is to limit waste and the production of waste, promote the restoration of biodiversity and spread healthy eating habits through a digital solution that offers our customers a consultancy service. The app provides, by scanning the QR code, useful information for consumers and food producers.

The target identified includes consumers, food production and packaging companies, and food and beverage distribution companies.

1. A first phase of registration, in which the customer is asked for the family composition, eating habits and the frequency with which he goes to the grocery store.
2. Once logged in you can start using the app that includes:
 - the shopping cart, in which the products previously scanned with their expiry date and the method of storage of the product are located;
 - a series of recipes which include as ingredients the products which should be discarded;





CUSTOMER SEGMENTS

CUSTOMER PROFILE

Marco



AGE 50 years old
PROFESSION Architect
STATUS Single
LOCATION Roma

BIO
Marco works as an architect in a small studio in Roma, the city where he moved to begin his studies. He is a very **sensitive** person and one of his favorite hobby is **volunteering**.

PERSONALITY

- ★ ★ ★ ★ ★ EXTROVERT
- ★ ★ ★ ★ ★ CONSERVATIVE
- ★ ★ ★ ★ ★ DYNAMIC
- ★ ★ ★ ★ ★ CURIOUS

BEHAVIOUR
He is a very **kind** person, always open to help others and **fascinated by nature**. He's very careful in respecting the **environment**.

CORE NEEDS
He mainly uses apps that make him aware of the **world issues**.

PAIN POINTS
Marco is not a big phone user so he doesn't find interesting all those apps that don't have a beneficial purpose, except the messaging ones.

MOST USED APPs



We used a questionnaire to identify the target and learn about the habits of our customers. Furthermore, it allows us to know the habits of our potential customers. Most of the interviewees showed a positive attitude towards the problem, describing a willingness to receive more information to improve their anti-waste behavior. Therefore, they pose excellent conditions for the success of training actions according to the criteria of social marketing.

The target we have identified is made up of a typical consumer (Marco), supermarket, and production chains. Marco is a 46 years old employee who lives with his family of four people. The main person responsible for spending in the family is Marco. He usually does his shopping in a supermarket one or more times a week and carries a list with him. Sometimes he buys food products regardless of their environmental impact and is not affected by advertising. Sometimes, Marco has the habit of reading the labels and the difference between “to be consumed preferably by...” and “to be consumed by...”; what interests him most is the expiry date and the calorie content of the products. Also, sometimes, he happens to eat outside his home. Marco is a person attentive to social problems and is worried about avoiding the waste of food in his family. Note that often some of the food bought remains uneaten in the fridge. He would certainly waste less food if he were better informed of the negative impacts of food waste on the environment, and to reduce waste he would need more advice on how to store food more adequately and on the right quantities to keep in the pantry. The companies interested to our app are supermarket like: Coop, Conad, Iper, Auchan, Carrefour, Esselunga, Famila, Aldi, MD, Lidl, Decò, Eurospin, Pick Up, Iperal, U!, il gigante, Pam, Migross, Crai, Penny, U2, Costameno. And the great producers of the principal brands of the alimentar industry like Barilla, Mulino Bianco, Ferrero, Granarolo

SWOT ANALYSIS

<p style="text-align: center;">STRENGTH</p> <ul style="list-style-type: none"> • Wide community of final consumers • Loyalty of consumers and businesses • Efficient business organisation 	<p style="text-align: center;">WEAKNESS</p> <ul style="list-style-type: none"> • Sometimes the demand from the final consumers is higher than the offers coming from businesses • Low brand recognition
<p style="text-align: center;">OPPORTUNITY</p> <ul style="list-style-type: none"> • Increasing attention to sustainability and environmental impact • Italian market is not so developed in the sector 	<p style="text-align: center;">THREAT</p> <ul style="list-style-type: none"> • Success of other anti food waste apps • Low level of awareness about food waste impact



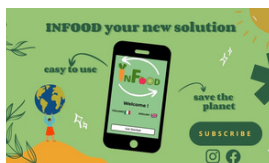
CHANNELS

In addition, our app offers a free service with the addition of paid functions.

Instagram, Facebook and Google are official channels to reach our customers who are informed about updates of our services and changes related to the theme of food waste.

Our customer service is active for any clarifications, requests or suggestions to the e-mail infood.notimetowaste@gmail.com.

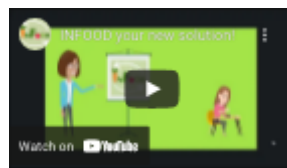
We also have created:



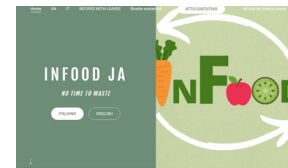
https://instagram.com/infood.notimetowaste?utm_medium=copy_link



<https://www.facebook.com/profile.php?id=100077665557070>



<https://youtu.be/zvzEkgSke-U>



<https://infood-no-time-to-waste.jimdosite.com/>

REVENUES STREAM

With a view to understanding the value created by the solution, we decided to distinguish the revenues sources between direct and indirect ones. In particular, the main revenues streams for the company are:

QR Code revenues

The app seeks to provide a service that will attract more and more customers and that rely on a strong merchant base, which will be created thanks to the numerous benefits offered to them. In this scenario, the company's direct source of income is given by the price of QR code.

Increases of data about users.

The platform can collect data about users and to reprocess them to obtain information. In this way. The company can conduct market analysis and offer new services following customers' preferences and behaviours. The company can reduce costs and increase its efficiency, and it is always updated with the major trends characterizing the community.

COST STRUCTURE

Fixed Launch Costs	
App development	€ 67.312,00
Technical requirement definition	20.496,00
Design definition	28.000,00
Coding (Web, iOS, Android)	9.520,00
Testing (beta version release)	3.528,00
Bug fixing and final release	5.768,00
Operations costs	€ 13.462,00
Maintenance	13.462,00
Human resources	€ 54.600,00
Customers' assistance	54.600,00
Marketing costs	€ 37.000,00
Logo stickers	15.000,00
Social Media Advertising	€ 22.000,00
Total Fixed Costs	€ 172.374,00

To estimate cost figures, some assumptions have been made. The main costs to be incurred are the development and integration of the App "INFOOD", human resources costs, and marketing costs.

Variable costs					
QR cost per product	€ 0,01	x	10.000.000	Nº products	= € 100.000,00

APP DEVELOPMENT

The development cost considers the whole infrastructure. This is supported by professionals who work in designing the graphic's interface and develop the integration with Android and IOS devices. The needed figures are the Project Manager, the App Designer, the Developer, and the QA Specialist.

OPERATIONAL COSTS

Operational costs cover application and traffic maintenance, bug and crash reporting resolution and performance monitoring



HUMAN RESOURCES

Our solution requires the presence of professional employees who take care of the platform's users and enable the creation of a community both online and offline. In particular, the necessary figures are:

- Customers assistant
Customer satisfaction is the key to reach a strong brand loyalty. The customer assistant will oversee providing a support service for the use of the application to both customers and merchants.
- Project Manager
To realize the projects, it is important to have professional figure in charge of the coordination between INFOOD and the companies consumers.

MARKETING COSTS

This category includes costs related to social media advertising on platforms such as Instagram and Facebook, costs of roll up stands and flyers distributed at post offices, and costs related to the production of QR codes and sticker with the logo of INFOOD JA. In addition, there are also the costs for the organization of the social event, during which the application is presented.

FUNDING SOURCES

To cover financial needs, the team will use a variety of sources. The start-up costs can be covered with shareholder contributions. App development and maintenance costs can be covered by applying our business to a crowdfunding campaign to raise capital online. Equity Crowdfunding is an online investment method that allows small businesses and start-ups to finance development projects by raising risk capital starting from small amounts. Financial needs not covered with online capital raising can be found by applying for a soft loan from a credit institution for young entrepreneurs.

COST STRUCTURE

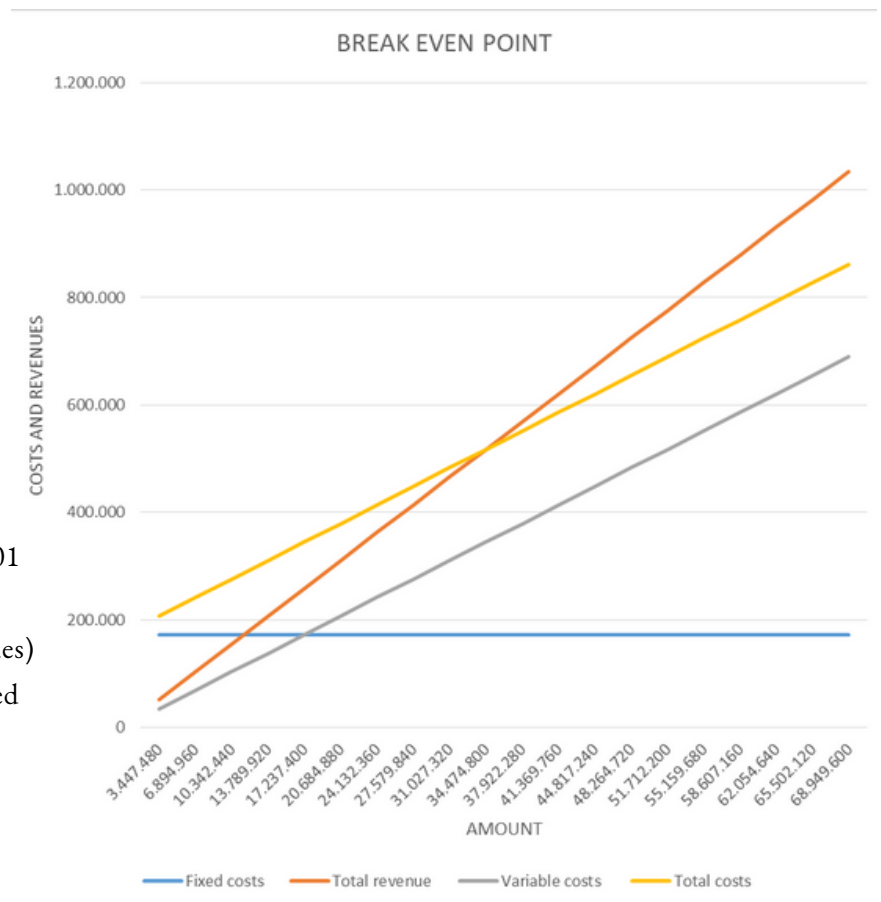
- START UP COSTS 500 €
 - EQUITY 5.000€
 - FIXED ASSETS 4.300€
- 1) DATA ENTRY
- Unit price 0,015
 - Numbers of products assumed 10.000.000
 - Mark up for hypothetical pricing 50%

BREAK EVEN POINT

- CF= total fixed costs 172.374,000
- P= unit selling price of the product 0,015
- CV= variable unit costs of the products 0,01
- B.E.P= $CF / p - cv = 34.474.800$

The equilibrium point (total costs=total revenues) is reached with the sale of this quantity produced to which correspond:

- Total revenue 150.000,00€
- Total costs 272.374,00€
- Economic result (RT- CT) -122.374,00





TEAM EXPERIENCE

Good vibes and interaction are one of the secrets to be successful.

To reach the top, some basic concepts are required:

- A clear goal to define the accomplishment that has to be achieved
- An accurate role division based on everyone's abilities in which everyone will have to use proper skills.
- A high motivation that encourages people to get the job done and reach the goal.
- A peaceful atmosphere in which there is respect, acceptance and trust in every member.
- An open and clear communication based on dialogue and relationship that allow you to exchange ideas and face each other directly.

Our team is made up of 13 students each with different qualities that we have enhanced by assigning the role that best suits their skills.

TUCKMAN MODEL

FORMING

Immediately, the strongest personalities among us stood out: Sara showed herself as the one who takes the initiative, while Letizia was the one who took care of the work organization. The first meeting had exceeded expectations, a feeling had already been created between us and our mentor. We also addressed the brief selection, but we preferred to postpone it so that we could have more time to think about it and take a final decision.

STORMING

In general, there were no big issues or conflicts inside the group because we always tried to find a compromise. Despite this, we had to overcome some difficulties. The first moment in which different opinions and traits emerged was when we started working on the project. Not everyone was satisfied, and this created tensions within the group. This frustration resulted in a general confusion about what should have been done, leading us to underperform.

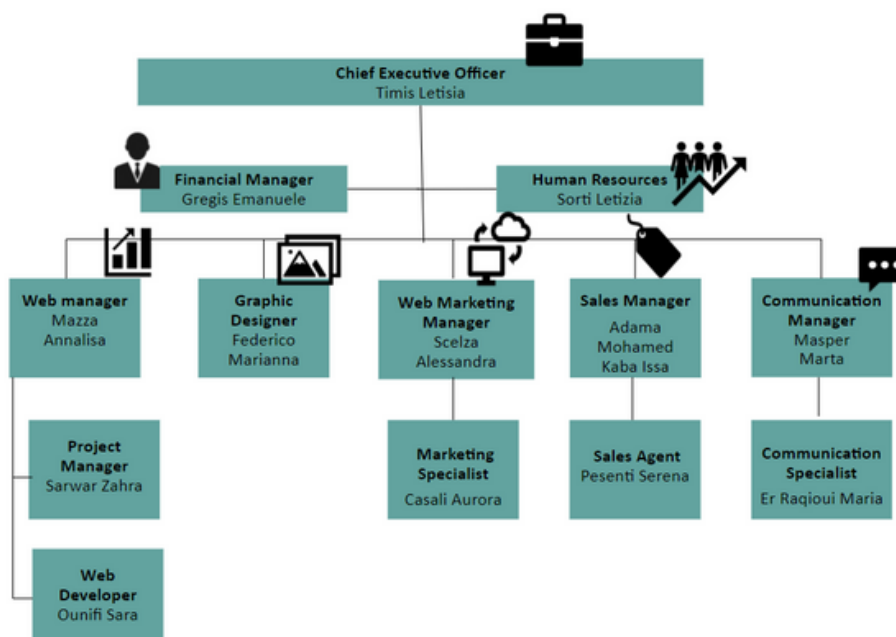
NORMING

After the first project review, following the tutor's suggestions, we decided to dedicate a meeting to integrate and slightly modify our work. In that moment we understood that some norms had to be implemented. We introduced some common rules: we defined clear and precise deadlines to respect; we assigned ourselves specific tasks that had to be completed on time. In this period, we began to balance our differences: we understood that not everyone was inclined to perform certain tasks and we started to appreciate each other's strengths.

PERFORMING

At the performing stage, the role of each of us inside the team was clear and the work proceeded without the need for further coordination. We fully accept each other's strengths and weaknesses. Thus, considering our own capabilities and interests, we were able to decide independently which tasks to carry out and we did it by giving our best.

ORGANIZATION CHART





CHIEF EXECUTIVE OFFICER

Letisia, the CEO, has a great evaluation criterion, organizational and coordination skills, ability to solve problems and efficiency in motivating the group.

HUMAN RESOURCES

Letizia, the human resources, has the ability to understand people and groups, a proactive and creative approach in the enhancement of personnel and negotiation skills.

WEB MANAGER

Annalisa, the web manager, has IT and advertising knowledge, analytical and data interpretation skills and planning skills.

FINANCIAL MANAGER

Emanuele, the financial manager, has an innovative approach to financial and resource management, analytical and communications skills, reliability in money, management and knowledge of market trends.

WEB MARKETING MANAGER

Alessandra e Aurora, the web marketing manager and the marketing specialist, have great computer skills, creative intuitions and planning and coordination skills.

GRAPHIC DESIGNER

Marianna, designer, has creative skills and computer and artistic knowledge.

PROJECT MANAGER

Zahra, project manager, has problem solving skills, leadership qualities, language skills and ability to define priorities and act on several fronts.

SALES AGENTS

Adam and Serena, sales agents, have the ability to interact with sales and customers and understand the importance of price and cash flow.

COMMUNICATION MANAGER AND SPECIALIST

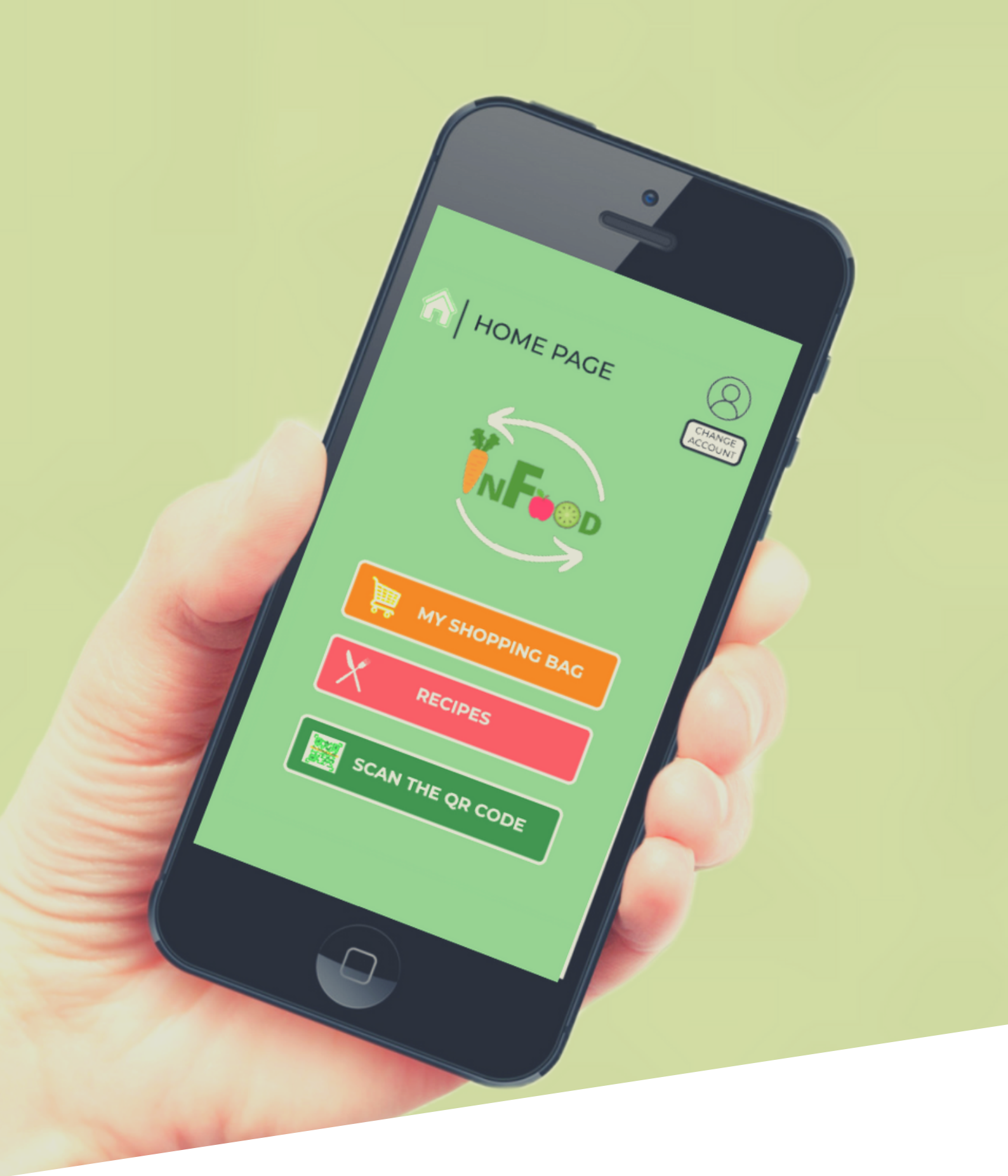
Marta and Maria, communication manager and specialist, have great communications skills and interaction with the team and customers and linguistic and psychological knowledge

WEB DEVELOPER

Sara, web developer, has skills in website development and knowledge of various programming languages, organizational and management skills

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Bergamo, 2022