Click n'Pick

YOU THINK IT, WE HAVE ALREADY DONE IT

CLICK N' PICK

REPORT OF THE HIGH TECH ENTREPRENEURSHIP COURSE

A.A. 2022/2023

MASSIMO BALDRIGHI - 232421
GIUSEPPE FESTA -222778
FRANCESCO FORESTIERI- 225644
MARIA LAURA D'AMATO- 233415
MARCO LODETTI - 224760
ALEXANDRA SPERTINI - 220793
ALEX ZAGATI- 221540

INDEX

For our Elevator Pitch **click here**

1. SUMMARY

With our groundbreaking startup, Click n'Pick, we are dedicated to improving the retail distribution industry and the final customer shopping experience.

HOW DO WE DO THAT?

We install Smart Lockers, nearby supermarkets, that house and dispense boxes containing carefully selected ingredients from the shopping point that allow you to bake the perfect recipe. Inside our boxes, easily purchasable from our vending machines, customers will find more than just the ingredients. Indeed, we include a printed recipe that guides them step-by-step through the entire preparation process. While the hardware aspect of our idea may appear to be a typical vending machine with a captivating screen, the true revolution lies in our software. Our Smart Lockers are equipped with a tailor-made algorithm designed for the hosting supermarket. Powered by artificial intelligence, it can generate recipes that combine products which are advantageous for both the client and the supermarket, resulting in a mutually beneficial WIN-WIN scenario.

WHY DO YOU NEED US?

To enhance convenience for supermarket customers, we offer affordable boxes that can be collected immediately from our lockers, resulting in significant time savings. On the supermarket side, the expected gains are way deeper, not only facing the financial point-of-view. Starting with the most obvious, by installing Click n'Pick lockers, supermarkets tap into a new revenue stream while attracting new customers thrilled about trying our cutting-edge shopping experience. Furthermore, we introduce an innovative approach to food advertising, by including desired ingredients directly inside our boxes. We believe this is a way stronger path to advertise a product rather than putting an ADV in an Instagram story or a Tik Tok reel, since the interested client is already in the right place to buy it and not lying on the sofa using his smartphone. Overall, we contribute to the growth and success of supermarkets, helping them to stay competitive in the evolving market, while creating a service which combines quality, convenience, and time efficiency, all of which are highly valuable to the end customers.

2 BUSINESS MODEL

2.1 THE PROBLEM

Grocery shopping is an essential aspect of our lives. However, maneuvering through a bustling supermarket can be cumbersome for many, resulting in significant time loss. In today's fast-paced world, it is crucial to embrace the need for a quicker shopping experience without compromising on the importance of saving money. Concerning supermarkets, nowadays they are making less and less money directly from product sales, while a substantial portion of the profits is derived from advertising space, as it will be further discussed. To strengthen their negotiating power with food suppliers, the introduction of a new service is necessary.

2.2 VALUE PROPOSITION CANVAS

Our solution involves installing intuitive, eye-catching, refrigerated **lockers** inside supermarkets, filled with boxes containing ingredients to cook recipes. All the recipes offered are carefully curated to incorporate promotional and strategic products, aiming to attract customers and maximize the supermarkets' benefits. Every day, these boxes are created using an innovative AI algorithm which leverages mass-market trends and aligns with supermarkets' selling policies.

Given the nature of our business idea, it's clear that we are targeting two different kinds of customers. First, we want to sell our products to SUPERMARKETS, since our main purpose is to work in cooperation with them to choose accurately which kind of dish to sell inside the boxes. Secondly, we want to offer the best possible experience to the SUPERMARKET'S CLIENT, making our locker an outstanding service for the customers, in terms of both time and money saving. For all these reasons, two different value proposition canvases are needed.

2.2.1 SUPERMARKET

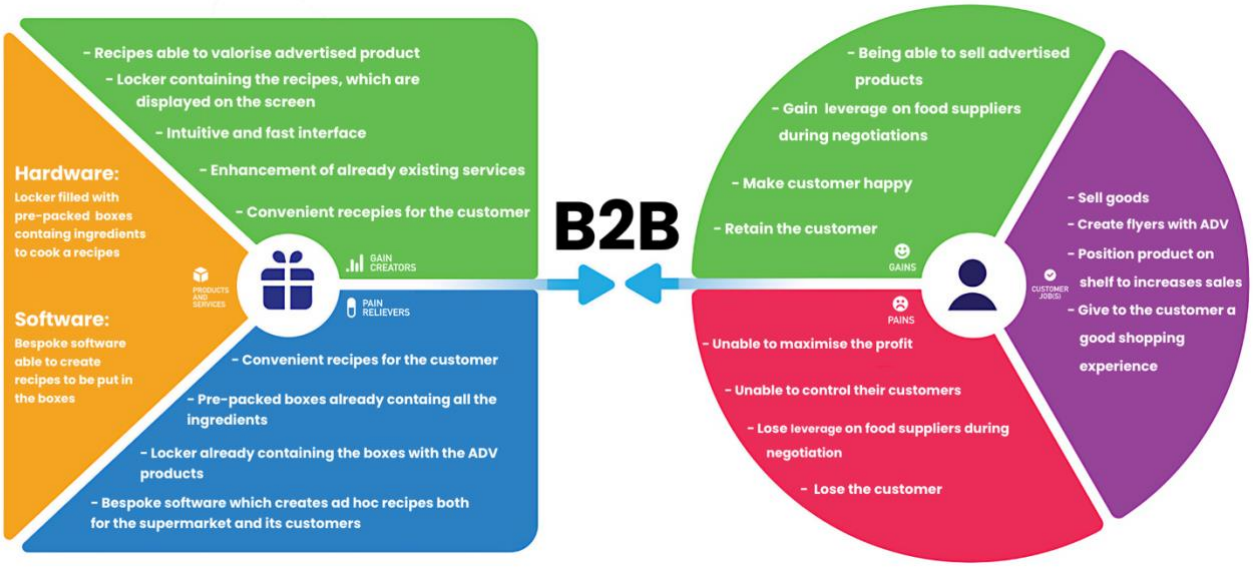


Figure 1 - Value Proposition Canvas (Supermarkets)

CUSTOMER JOB: the activities that the supermarkets need to do to sell food are peculiar: from creating captivating fliers, to positioning goods onto the shelves in a certain way, according to their selling policy, which is heavily dependent on the commercial partnerships they have with the different food companies. On the background of all these promotional activities, there is also the most crucial task for supermarkets: giving the customer the best shopping journey. Clients evaluate their in-store experience from several parameters: ease in finding the products, fast method of payment, freshness and quality but, most importantly, time spent (or better wasted) in the supermarket.

GAINS: Succeeding in doing the above activities will lead the supermarket to sell the wanted goods to their customers while giving them the best possible experience. It is useless to say that, in this way, they can retain the client, guaranteeing that they will come back. On the other side, giving great visibility to products in the shops, allows the supermarket to gain a certain edge over food suppliers during negotiations. This is a key factor for supermarkets since their main revenues come from sponsorship and not from sales to retail customers.

PAINS: On the contrary, if the supermarket is not able to fulfill its job, there is a high risk of not maximizing the revenues from food selling (that are already low), being also unable to sell the advertised goods and so losing the power position during negotiations with food suppliers. On the customer side, it is useless to say that if they are unhappy about their experience inside the shop, they won't come back again, since they are not willing to queue for hours on their Sunday afternoons.

PRODUCTS AND SERVICES: We offer a locker, to be installed nearby supermarkets, containing boxes with all the ingredients you need to cook a tasty recipe. Our solution has basically two souls: a hardware part, which can be seen as a display window for the products that the supermarket is willing to sell and a software part which helps to create the recipes by evaluating different parameters that can be chosen by the supermarket (availability of an ingredient, gain margins on the food to be put in the boxes, brandings…). That's not all, since the software is also capable of tracking which recipes are the most desired, creating AI-based predictive models to suggest the trending recipes. Both these two parts come together to create a new way of selling advertised goods, giving the customer a modern shopping experience. The interaction is, in fact, enhanced by the lockers' intuitive touch screen, which will display all the recipes available.

GAIN CREATORS: By creating recipes, every single ingredient is much more appetible to the customer, enabling the supermarket to easily sell it. The locker, in fact, can be seen as an interactive display window where the store can advertise products by combining them into tasty and convenient recipes. This new way of promoting food will be a strong leverage on which the supermarket can rely during

sponsorship negotiations. Furthermore, this technology will be integrated into supermarkets' services, such as online shopping, giving them a boost.

PAIN RELIEVERS: The software, which is bespoke on the supermarket database, guarantees to make the best recipes in terms of revenues, trends and other custom settings dictated by the internal policy of the supermarket. In this way, you will have a huge valorization of all the products inside the box, which will be very easy to sell. From the customer's point of view, by using the locker, the client can go from looking for a recipe to directly collect all the needed ingredients in a bunch of minutes, giving him an unprecedented shopping experience.

2.2.2 SUPERMARKET'S CLIENT

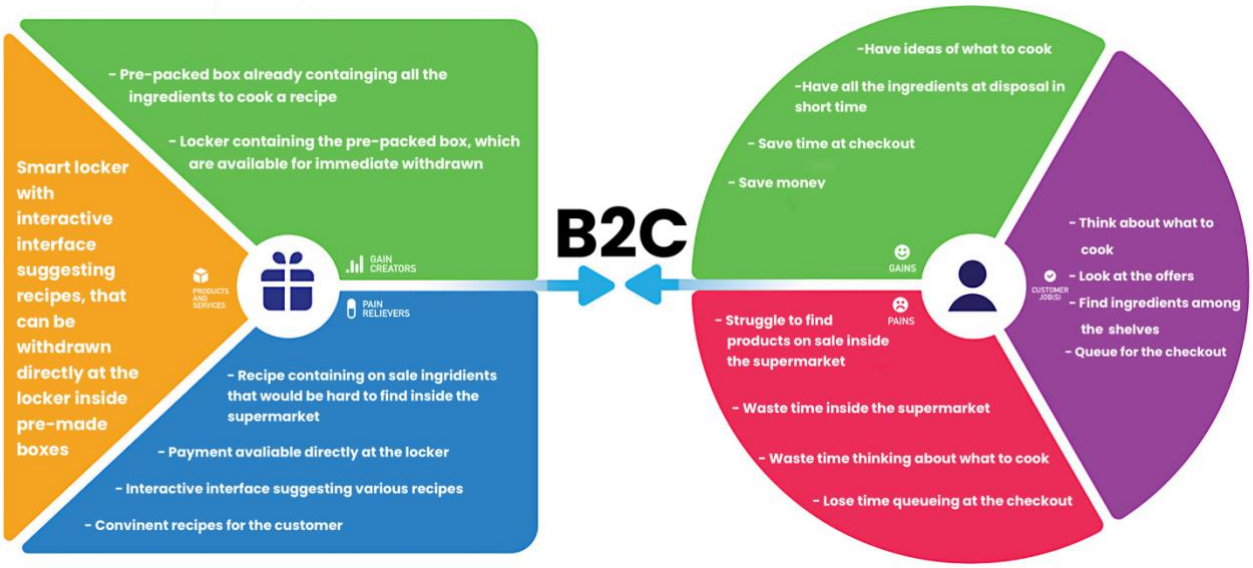


Figure 2 - Value Proposition Canvas (Customers of the Supermarkets)

CUSTOMER JOB: Doing the grocery shopping can induce stress to our customer segments, encompassing various tasks such as deciding what to cook, searching for attractive discounts in messy promotional fliers, while attempting to save money. The situation doesn't improve upon entering the supermarket, as one must invest hours walking through shelves to find the discounted items, only to then endure a queue at the checkout. It's certainly not an ideal way to spend a Saturday afternoon, is it?

GAINS: all the activities mentioned above are basically going in the same direction: saving time and money. This can be achieved only if the customer is able to find rapidly the discounted products he wants to buy, being able to pay for them in a short time, without having to queue behind heavy-loaded shopping karts.

PAINS: failing to do all the activities mentioned, would result in a waste of both time and money. The client, in fact, not only loose hours thinking about what to buy, but he also had to put a lot of effort to find the right products.

PRODUCT AND SERVICES: what we offer to the supermarket's customer segment is a Smart Locker, filled with pre-packed boxes containing all the needed ingredients to cook a tasty recipe, made out by the on-sale items of the supermarket. Additionally, our product is equipped with an interactive display which provides the customer with the best and fastest experience possible, since clients will be able to pay and pick the boxes directly at the locker.

GAIN CREATORS: the idea of pre-packed boxes, already containing all the elements to cook the recipe, enables the customer to avoid looking for the ingredients around all the shelves. Indeed, recipes can be directly picked at the locker, which is the other huge advantage of our idea.

PAIN RELIEVERS: the customer will not struggle anymore thinking about what to cook, not only because our service suggests and offers plenty of recipes, but also because you can pick instantly the box directly at our locker, thanks to our on-site payment system.

2.3 BUSINESS MODEL CANVAS

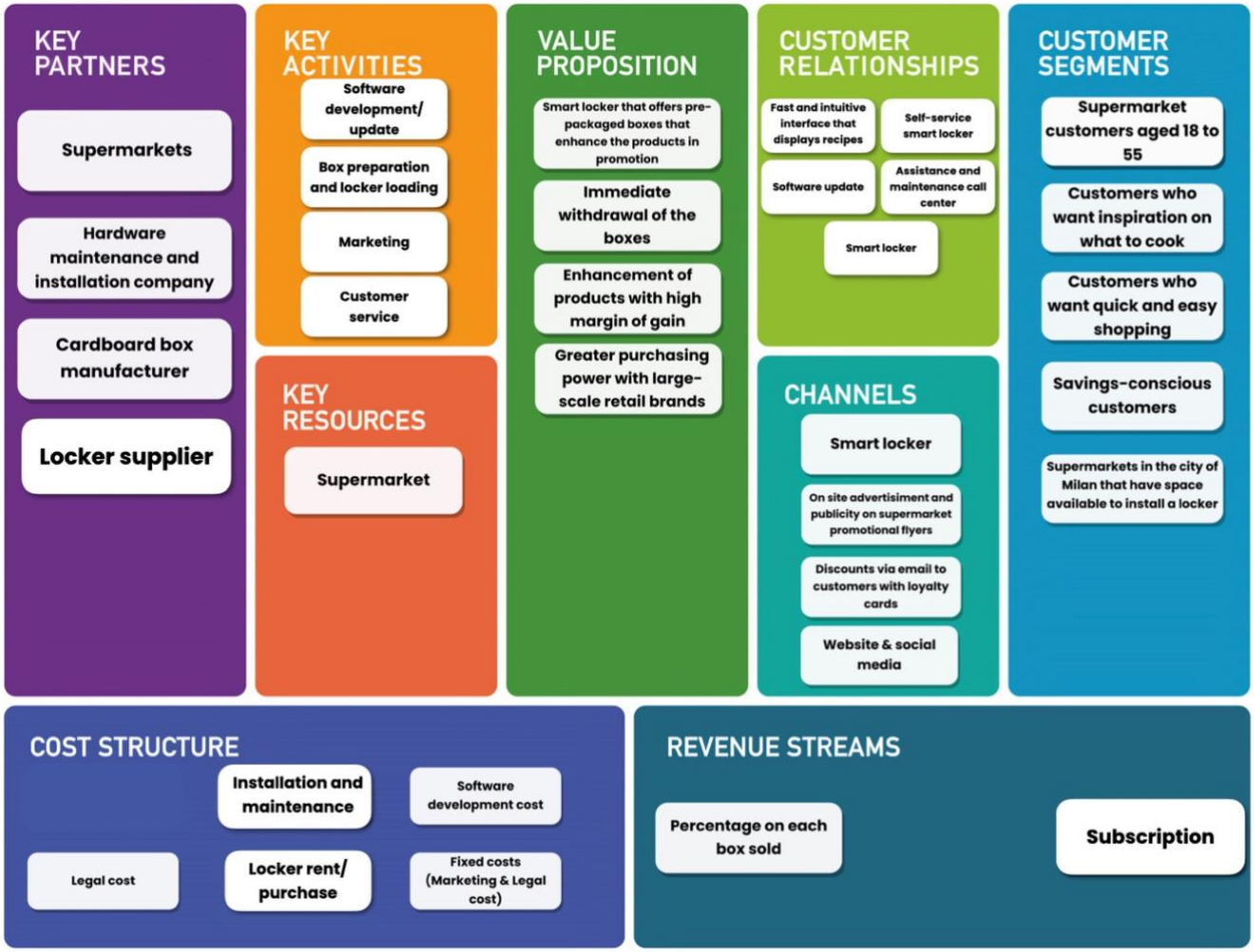


Figure 3 - Business Model Canvas

Considering the organizational framework of the BMC (Business Model Canvas), which is logically segmented into three sections (desirability, feasibility, and viability), our analysis will adhere to this structure as well.

2.3.1 DESIRABILITY

VALUE PROPOSITION

Click n'Pick offers a Smart Locker filled with boxes, ready to be picked up, containing the ingredients for cooking a personalized recipe that enhance promotional and advertised food. As regards supermarkets, Click n'Pick allows to increase the purchasing power with the suppliers and the sales of goods to customers.

CLIENT SEGMENT

Our product refers to a target audience aged up to 55 years old, specifically in large supermarkets situated in major cities like Milan. We focus on customers seeking culinary inspiration, those desiring a quick and efficient shopping experience, and individuals who prioritize cost savings. Regarding supermarkets, our initial goal is to offer our Locker to establishments in Milan that possess ample space to accommodate it, either inside or directly outside. Subsequently, we plan to expand our business to encompass other supermarkets across Italy.

CUSTOMER RELATIONSHIP

We value the relationship with our clients as an essential aspect of our business. For supermarket customers, we provide a user-friendly Smart Lockers with a fast and simple interface. Customers can independently use the locker, and we ensure that clear instructions and an intuitive interface are in place to make its use enjoyable.

As concerns supermarkets, we ensure a periodic software update and a 24/7 customer service that provides support and maintenance of both software and hardware. Additionally, if we're not able to directly solve the problem, we can provide the service of a partner external company.

It is available also a **website** with a demo of the project to explain how it works and the main characteristics that make our idea an attractive item for the market.

CHANNELS

In order to provide a convenient solution for delivering our boxes to customers, we employ an accessible and visually appealing locker, located nearby the supermarket. To ensure visibility to our product, we place significant emphasis on advertising and marketing efforts inside the retail store. This involves utilizing billboards, promotional flyers, and leveraging supermarkets' social media channels, to inform and attract potential customers. Additionally, during the early stages of the locker's launch, we offer exclusive promotions to loyal supermarket customers, further incentivizing them to use it for their shopping needs.

2.3.2 FEASIBILITY

KEY ACTIVITIES

Our business idea requires the efficient execution of multiple activities. From a programming perspective, we need to develop customized software for each supermarket where our Lockers are installed. This software will facilitate the integration of their database with our recipe-making algorithm. Additionally, we commit to providing supermarkets with regular software updates to enhance and adapt the algorithm to the latest culinary trends, customer feedback, and specific supermarket requirements.

From a practical standpoint, the daily operations of our business involve assembling the meal boxes and refurnishing the Lockers. Furthermore, on-site marketing plays a vital role in promoting our product. We collaborate closely with the supermarkets to integrate our idea into their services. For instance, we can leverage supermarket promotional fliers or display banners within the store to effectively advertise our offering.

KEY RESOURCES

To ensure smooth product delivery to our customers, several essential resources are necessary, most of which are provided by the partnering supermarket. One crucial resource is the allocation of an employee responsible for assembling the meal boxes and refurnishing the Smart Locker. These tasks can be seamlessly integrated into their existing working routine. Additionally, the supermarket plays a vital role in supplying the ingredients required for the boxes, as well as providing the physical space necessary to install the Smart Locker.

KEY PARTNERS

Our main partner is the supermarket, as our idea heavily relies on their cooperation. Additionally, we have key partnerships with external companies for maintenance, carton boxes and locker supply.

2.3.3 VIABILITY

COST STRUCTURE AND REVENUE STREAM

We provide supermarkets with our valuable services at a fixed monthly subscription fee of 700 € per locker. The following services are encompassed:

- The Smart Locker, including its maintenance.
- The packaging materials.
- The AI-based software with the respective updates.
- customer service

In a likely scenario, we request approximately two hours of labor per day from the supermarket staff to assemble our boxes and refill the lockers, for a total labour cost of around 600 €/month.

Furthermore, as a second revenue stream, we focused on the final customer, overcharging him for a reasonable percentage of profit on the box price. We expect to sell biportion boxes for 15 €/box on average, applying a 5% fee on it. Overall, the customer is still saving money due to promotional products, despite the overcharge.

The subscription fee has been carefully determined to ensure that all internal costs of the startup are covered. Our primary objective is to generate profits exclusively from box fees. For further information and a comprehensive sensitivity analysis, please refer to the detailed explanation provided in the **appendix**.

3 LEAN STARTUP APPROACH

3.1 IDEA 1

Our journey in the business world did not initially involve selling boxes through lockers. In fact, for more than a month, we dedicated our efforts to developing a concept called "Idea 1". Although only briefly outlined in this subchapter, this alternative concept played a significant role in shaping our business trajectory.

MISSION AND VALUE PROPOSITION (IDEA 1)

In recent years, we have witnessed a remarkable shift in our society's mindset towards sustainability. We have dedicated ourselves to creating a product that addresses the pressing issue of food waste in the most ignored step of the chain: supermarkets. We understand that each year, a staggering amount of food is discarded, contributing not only to economic losses but also to environmental degradation. We firmly believe that the best way to avoid wasting expiring ingredients is to enhance them through their combination with other more appealing ones, designing cost-effective recipes.

Our solution involves installing simple, AI-powered totems in supermarkets that suggest personalized recipes, containing expiring food, to the customer. Moreover, this concept can be extended to promotional and advertised products, further enhancing their visibility and appeal. This is addressed by presenting customers with a dynamic and interactive device which cleverly combines promotional goods with expiring and advertised ones, according to the customer habits, enabling both clients and the supermarkets to rip benefits out of it.

Notice that the two ideas share numerous advantages for both the end customer and supermarkets, along with several underlying assumptions.

HOW IT WORKS (IDEA 1)

The final customer scans their loyalty card to the totem, gaining access to personalized recipes. Once the recipe is chosen, the software provides a smart selection of sponsored products that perfectly complement the recipe and fit the customer's taste preferences. Then a supermarket operator gathers all the required ingredients and delivers them to the customer. As an alternative solution, the totem can provide the end user access to an interactive map, showing the location of each ingredient within the store. In this scenario, the customer can personally collect them while completing their regular shopping routine.

3.2 VALIDATION

According to the lean start-up philosophy, an iterative validation process is needed to figure out whether the idea fits the market and whether the hypothesis made sense.

As a predominantly business-to-business startup, our primary objective is to develop a minimum viable product that can be shown to industry experts in the large-scale distribution sector. Our aim is to gather valuable opinions and validate key hypotheses that underpin our business model.

Before proceeding, it is crucial for us to collect and analyse data that demonstrates the interest of the final consumer of our service. This will require us to conduct a validation process to confirm the assumptions on the business-to-client side of our operations. By thoroughly examining the data and validating our assumptions, we can gain valuable insights into the potential demand and interest from the end consumers, helping us make informed decisions for our business.

3.2.1 B2C VALIDATION

As mentioned before, the goal here is to indirectly figure out whether the people would use our service.

This was accomplished through an anonymous online survey on a sample of hundreds of people with different characteristics, such as age and shopping habits. A second “on-site” test was performed with the aim of understanding how people react to our totem’s interface. Both tests are well summarised in the appendix through **test cards**.

It is worth mentioning that, even though this validation was initially conducted for the first idea, it proved to be valuable for the second one as well.

ASSUMPTIONS VERIFIED BY THE POLL

People care about savings and struggle to find items on sale, indeed, 60% of people express a desire for a tool that can easily help them to find discounted food. Additionally, on average, 90% of the interviewed individuals are influenced by on-sale products while shopping.

We measured that close to 80% of shoppers are uncertain about what they will eat later, while food shopping. Moreover, nearly 60% of individuals appreciate the idea of customized recipes that incorporate on-sale ingredients. Interestingly, this percentage rises to 75% when considering people below the age of 36.

Furthermore, customers have expressed a strong desire to reduce their time spent in stores. Approximately 70% of those interviewed find it challenging to tolerate wasting time inside supermarkets. This seems the hardest problem to overcome.

ASSUMPTION VERIFIED BY THE ON-SITE TEST

Selling a product through a totem **interface** offers numerous advantages, including an interactive experience, increased items exposure, and effective promotion. These benefits, combined with the factors treated in **picnic in the graveyard section**, had us strongly believe in the value of incorporating a totem presence. Yet, it remains crucial to assess whether users would seamlessly utilize it without encountering any issues, at least for what concerns understanding how to get going autonomously with it. Gathering information about it through the survey would have not been effective, so we designed a precise totem static interface and conducted on-site testing at a local supermarket, near Milan, to gauge people's reactions. Specifically, we approached 13 customers at the entrance of the supermarket and showed them our static interface, starting from the first page. We then observed their interactions without providing any assistance unless demanded for. Once the initial selection was made, we proceeded to display the subsequent pages of the interface, repeating the test until reaching the final page. Our objective was to transform our static interface into a dynamic and costless one, allowing us to evaluate how easily people adapted to it. To assess the usability, we focused on measuring the time taken by participants to complete the recipe selection process and recorded any difficulties they encountered. The results were great, revealing that on average, a customer, aged around 45, completed the recipe selection within 4 minutes in 80% of cases.

Additionally, we found that 65% of participants experienced no problems throughout the process. The remaining 35% faced mostly minor issues that could be resolved with some initial assistance. It's worth mentioning that most of the interviewed considered the **interface** clear and eye-catching and that overall liked our alternative concept of food shopping. Further experiments with a dynamic interface will have to be performed in the future.

3.2.2 B2B VALIDATION

All the critical assumptions, on the final customer side, have been successfully verified. Now that we know that our product has great potential in the distribution chain, it's time to move on developing the MVP, which is going to test our business hypothesis on the supermarket side.

In our specific case, the most obvious choice is getting in touch with industry experts with the aim of showing them our value proposition and the related advantages through a power point presentation, equipped with the Mock-up interface of the totem explained before.

Yet, to enhance our credibility and to gather as much answers as possible, a clear and self-explanatory **landing page** of our startup is mandatory. In this powerful MVP, we clearly state why the final customer is going to use our system and mostly why the supermarket needs it.

Notice that the first call has the purpose of validating B2B assumptions of idea 1 (See **Risk Matrix 1**). The corresponding **learning cards** are available in the appendix section.

CALL WITH ESSELUNGA (IDEA 1)

Luca Colnaghi, deputy manager of Esselunga Gallarate, has kindly volunteered to have a videocall with us. After preening our idea to him, we discussed about its general feasibility and the main critical points.

The host seemed to be excited about our concept. In particular, he called it consistent with today's expectations. The environmental theme is getting more and more urgent and engaging, therefore our service, with its charming and custom features, could really make the difference. Nevertheless, many problematics came out during the talk.

Above all, the additional employee's requirement is hardly satisfied. Indeed, nowadays in Italy labour cost is a big voice in supermarkets expenses, so increasing them could be motivated only if data shows great benefits from the service. Hence, our initial alternative is promptly dismissed since, in the absence of employees gathering the ingredients for customers, they would be required to retrieve them independently. This situation would be unfavourable for us, as it would pose challenges in tracking whether the customer has purchased the promoted food, thereby making the sale of our product difficult.

Furthermore, Mr.Colnaghi kindly explained to us that there could be some issues related to how Esselunga manages expiring products: the Milan-based firm has adopted a minimization policy on them, and their tracking turned out to be tricky, since they are discounted last minute without being logged on the data base.

Overall, the assumptions on which our previous idea was built were too fragile and this could have compromised its success.

The call has revealed extremely useful to better understand and address both clients and supermarkets problematics. Particularly, it came out that nowadays retailers are making less and less money directly from sales, while most of the revenues come from advertising space: "We are no longer product sellers, but we are service sellers to food businesses", says Mr.Colnaghi.

Additionally, as well as we noticed in our survey, the waiting time is a critical subject for the client: "waiting time inside the store represents 60% of the weight the customer gives to the shopping experience". In other words, most of the people prefer saving time over money.

Finally, it emerged that the space of promotional flyers is very limited and most of the discounted items do not fit into them, “your service could fix this problem, giving to promotional products an appealing visibility”.

These suggestions, combined with the fragility of the previous assumptions, led us to pivot.

PIVOTING (IDEA 1 → IDEA 2)

Since we understood that the main pillars of the first idea were clearly appreciated and had great potential, we decided not to completely twist the initial vision, but to design a new service still based on promotional food valorisation, trend-based recipes and moreover advertised products exploitation. In addition to that, we want to focus on the time problematic, which seemed the major among all.

Coming back to the final idea, our Smart Lockers target all the clients that do not want to waste time inside supermarkets but yet want to take advantage of promotional products and all of those who are looking for money-saving but intriguing recipes. With respect to the previous solution, the cost of labour is minimized as it will be further explained in the **revenue stream section**, moreover we can now perfectly track the ingredients sold by the lockers, making it a powerful mean for targeted sales. In other words, if clients want to save money and/or time, they are obliged to buy advertised goods as well.

Now envision yourself as the manager of a thriving midsize food company, seeking for a significant boost of brand exposure. Suddenly, an opportunity presents itself when the grocery shop you supply, assures you that thousands of boxes containing your product will be sold to the final customer each month. Considering this prospect, wouldn't it be prudent to consider investing additional funds to reap the benefits that lie ahead?

CALL WITH ITALMARK (IDEA 2)

Of course, basing our considerations on Esselunga’s policies only would have been not enough. We needed a second expert to get further opinions and to validate the new assumptions developed on the current vision (See **Risk Matrix 2**).

We were extremely grateful for the long conversation with **Riccardo Odolini**, general director of “Immobiliare il Ponte” and manager of “Italmark”.

As pointed out by Mr. Colnaghi, the cost of labour seemed to be the greatest problem to be overcome. “The optimization of all the internal processes, with particular attention to employees' allocation, determine most of the revenues that supermarkets get from sales”, says Mr.Odolini. Concerning the previous idea, which required at least an employee occupied full time to provide our service, now things have drastically changed. Indeed, we estimated that, in the most likely scenario, we would need 2 hours of work per day to create our boxes and carry them into the locker. The huge advantage is that the job can be achieved all at once, letting all the employees of the supermarket to be free to complete their duties later. For instance, the supermarket could have 2 employees to carry out the daily box preparation in just 1 hour, for a relatively modest cost, as discussed in the **revenue streams** paragraph.

Mr.Odolini emphasised how services to the clients are nowadays the real focus of supermarkets. To make an example, for most of the chains, online shopping is still a loss in their financial statement. Nevertheless, they still invest money and resources on it because it’s a service in ever-increasing demand and not having it could compromise the supermarket image and mostly its future development. “If you do not start now, you will never be ready tomorrow”. In this perspective our service, as proved by data, has high potential, regardless of its profitability.

The manager suggested not to limit our concept to the locker, but to extend it to the other services offered by the supermarket, such as “online shopping” and “click and collect”. In this way we can boost them and reach most of the clients.

Finally, we were afraid that supermarkets could be reluctant to get their customers used to do the shopping with promotional goods only, even though they could earn more from product placement. Indeed, it came out that marginality on some discounted food is null because they are on sale just to attract a specific client inside the store. However, Mr.Odolini pointed out that there are many on which the net profit is relatively high, and the entrancing news is that this information can be extrapolated directly from the supermarket's database.

Overall, this call let us understand that our concept needs to be extended and integrated across all supermarket services and that it must merge high margin promotional products with advertised ones, keeping an eye on labour cost minimization.

4. SWOT ANALYSIS

Figure 4 - SWOT Analysis

5. INDUSTRY ENVIRONMENT

5 FORCES OF PORTER

1. Competitive rivalry: there are currently no direct competitors in our sector. We can identify two types of threats: apps that, through a subscription, send home the box with the ingredients needed to prepare a surprise recipe, or boxes and meal kit that can be purchased online, containing the right amount of ingredients to prepare recipes.
2. Supplier power: our potential suppliers are supermarkets and companies that sell/rent the refrigerated locker. Since our idea relies on supermarkets collaboration, they certainly have a huge power over us. On the contrary, by renting/buying the Smart Lockers, we don't have to care about any related issue. The same goes for cartoon boxes suppliers.
3. Buyer power: our main target audience are those who go to the supermarket to prepare a meal and do not have the time or inclination to do the shopping, so they just buy a pre-made bag with all the ingredients needed to prepare a recipe. Furthermore, by using mainly convenient products, we assume that customers are generally inclined to use our service.

4. Threat of new entry: being a totally new service, it should not be easy for new entrants to replace us, since we would have already built strong relationships with the supermarket chains.
5. Threat of substitution: services concerning pre-packed boxes are usually very expensive so, we expect having an edge on them thanks to our relationship with the supermarket. One of the main threats remain apps with home delivery.

The table pitching all the competitors can be found in the **appendix** section.

6. STRATEGY ROADMAP

The idea was based on our personal experience: we are seven young students living by ourselves in Milan, trying to keep up with the pace of this frenetic city, which doesn't let you any time to waste. Forget about spending the whole Saturday afternoon food shopping. For this reason, our plan is to start installing our Smart Lockers in the city that started it all. In the first year, in fact, we plan on installing 30 of them in supermarkets around the city, guaranteeing us good coverage, collaborating with all the principal players of Milan's market.

After the first year, during which we plan to become a solid reality in town, we expect to expand our market all over Italy, making leverage on the fact that we're already working with the biggest players in the country.

Given the flexibility of the Smart Locker concept, we also see many alternative future developments of our idea. For example, in our vision, installing our lockers in strategic parts of the city would be a boost in supermarkets' advertising exposure. But why just keep it to the supermarket area? We see also huge possibilities in collaborating with companies like *Too Good to Go* or *Deliveroo*, in order to make their products available in physical places such as offices or underground stations.

"You think it, we have already done it".

7. APPENDIX

7.1 TEAM

7.1.1 TEAM ORGANIZATION AND ROLES

Marco Lodetti
CEO
marco2.lodetti@mail.polimi.it

Massimo Baldrighi
CTO
massimo1.baldrighi@mail.polimi.it

Alexandra Spertini
CMO
alexandra.spertini@mail.polimi.it

Alex Zagati
CSO
alex.zagati@mail.polimi.it

Maria Laura D'Amato
CFO
marialaura.damato@mail.polimi.it

Giuseppe Festa
CPO
giuseppe2.festa@mail.polimi.it

Francesco Forestieri
CDO
francesco1.forestieri@mail.polimi.it

The roles are the following:

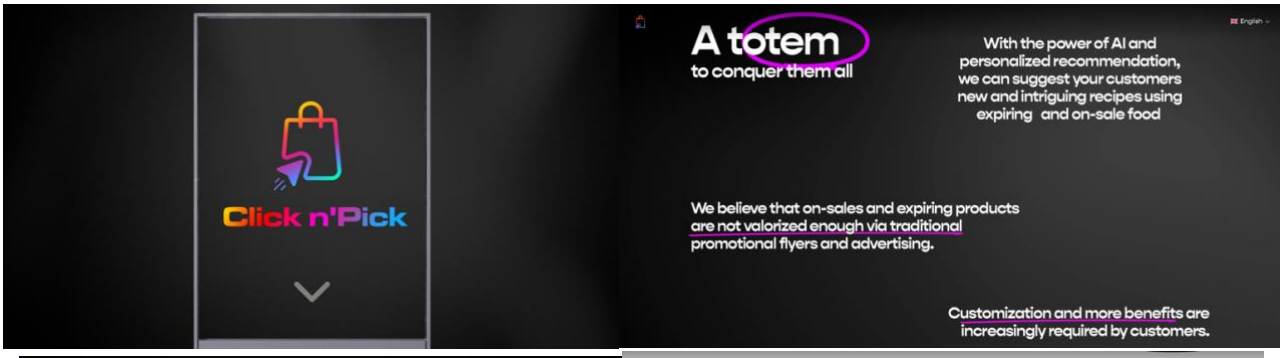
- CEO: President and supervisor, he has a clear idea of the business model in general and what kind of objectives our team is aiming.
- CSO: Sales Manages: he oversees the sales situations and analyzes the market and competitors; he cooperates with the rest of the team in defining a suitable growth strategy.
- CDO: Data & Privacy Manager, he is in charge of the management of all data users and their consequent monetization.
- CFO: Financial Director, oversees all the financial operations like accounting and reporting.
- CPO: Product Officer, he follows the development of the software on the entertainment side and on how to increase the engagement of the application.
- CTO: Technical Director, he follows the technical side of the development of our application especially on programming and UI/UX design.
- CMO: Marketing director, he follows the advertisement parts and alliances strategies.

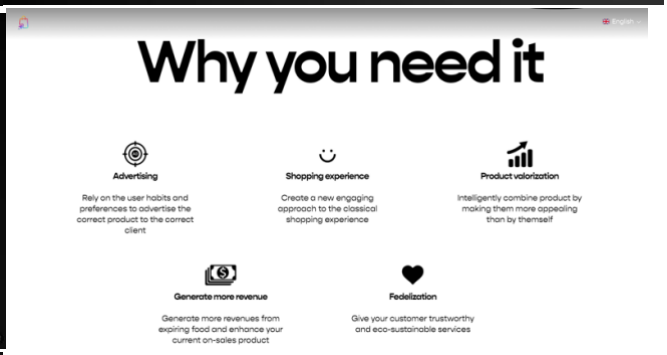
7.1.2 WHY WE ARE A WINNING TEAM

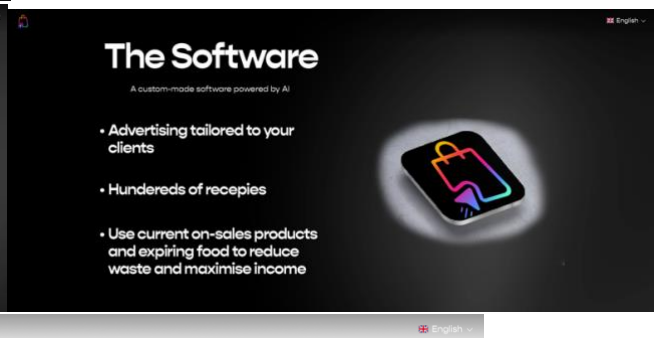
Our team has a high variety of background and skills that are necessary for the proper development of the project. We are all engineering students, with strong roots in programming, statistics and computer science: Marco, Alex, Massimo and Giuseppe are also skilled in software, app development and data analysis.

Although we are still enrolled in university courses, each one of us has already some working experience such as a simple stage or a steady job, in particular Giuseppe and Massimo have already been founders of a tech start-up. For these reasons some of us have already acquired competences in management, finance and other topics not strictly related to engineering. We have backgrounds in events organization and volunteering, all of us are active members of university associations, experiences that give us important prerequisites for making our software application enjoyable.

7.2 LANDING PAGE (IDEA 1)







7.3 REVENUE STREAMS - DETAILED DESCRIPTION

In this paragraph, we will discuss our strategy for generating profits. To achieve this, we must develop a cost model that takes into consideration market demand and the variability of assumptions. This model will enable us to estimate the approximate capital required to launch our project. However, it's important to note that all analyses based on this model have a qualitative value rather than providing precise figures.

The best way to earn money out of our idea is by offering supermarkets our valuable services for a monthly subscription fee. Indeed, supermarkets may be hesitant to invest in a new system that requires significant upfront costs, such as purchasing and installing lockers, training staff, and integrating the system into their existing infrastructure. This, combined with their possible concern about not generating a sufficiently high ROI, led us to create a flexible and affordable monthly pricing tier that encompasses all the services and more. This pricing tier offers the added advantage of allowing supermarkets to cancel the subscription at their discretion.

Furthermore, as a second revenue stream, we focused on the final user overcharging him with a percentage of profit on the box price. Overall, the customer is still saving money due to promotional products, despite the overcharge.

Our purpose is to find a subscription fee such that all the startup internal costs are covered, and then we aim to generate profits solely from box fees. More details later.

MODEL DESCRIPTION

Establishing a flat rate subscription requires understanding your market and the value subscribers place on your service.

But before entering that, an approximated analysis of internal costs must be carried out.

With that purpose, we built a rough cost model which takes as input our “internal cost structure”, a hypothesis of how many new lockers we expect to buy/rent each month and a period over which the lockers’ demand is forecasted.

As mentioned before, the goal is to compute the flat rate subscription price such that, at the end of the period, all the costs get paid back.

We introduce two different models, let’s say model A and model B, where the only difference is that in the former, we hypothesize to buy the lockers while in the latter we sublet them applying an overcharge to pay up our expenses.

To avoid redundancy, only model A is detailly described; some comparisons between the two and some sensitivity analysis with respect to the model assumptions will be delivered at the end of the chapter.

INTERNAL COST STRUCTURE (all costs are monthly expressed)

1. Locker cost: some researches online advised a likely cost for each locker to buy.
2. General expenses: we overestimated an average fixed monthly cost due to legal expenses, marketing and extras.
3. Locker maintenance: this cost is proportional to the number of lockers that we manage. We imagine commissioning the job to an external maintenance crew.
4. Materials costs: Our subscription include in the price the supply of packaging materials. This cost is proportional to the number of boxes monthly sold.

ASSUMPTIONS

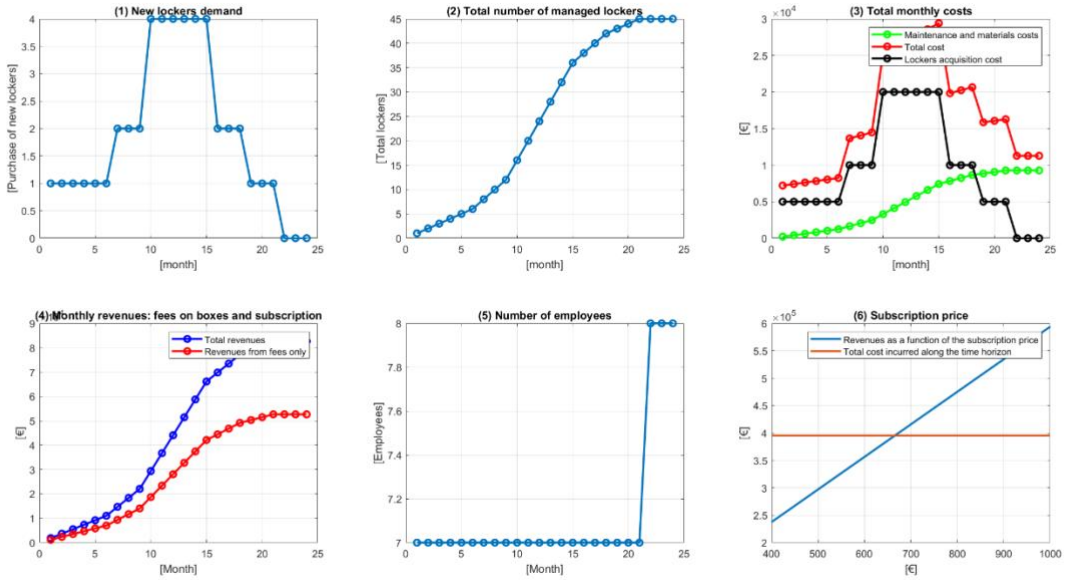
1. Our startup is composed of heterogeneous personnel; hence we can take care of all the tasks necessary for the proper management of the business: marketing, software development, software upgrades and maintenance, … In general, we’re able to properly conduct all the activities described in the team paragraph.

2. We don't consider personnel cost inside the subscription model: it affects only the revenues that we make directly on the boxes.
3. We do not have rent and utilities expenses because of smart working, at least in a first phase.
4. We hypothesize that our initial team can smoothly manage up to 30 lockers, then we assume to hire a new member every 15 new lockers. This is modelling the general growth of required work hours as the number of managed lockers increases, and it affects the net profit that our startup will be making.
5. New lockers demand: We imagine having a trapezoid-like shaped demand of new lockers to simulate a variable behaviour of installation requests over time. This shape was chosen to represent an initial growth of requests, followed by a static demand phase and then a stall one. Working on the parameters of this function we can analyse different scenarios.
6. Hypothesis on the average number of boxes monthly sold: for this calculation, we have considered a worst-case scenario where we assume that the locker remains unused for 80% of the opening time. Based on this assumption, the average number of boxes sold per locker per day is estimated to be 50.

SENSITIVITY ANALYSIS AND COMMENTS

Here we want to discuss different scenarios pointing out different aspects and to explain better the model developed.

1) <u>Model A: most likely scenario</u>



In this scenario we imagine that after two years we will be managing 45 lockers, which is realistic considering that there are nearly 2000 supermarkets only in Lombardy. The matrix of figures above represents the input and the outputs of the model. In the first figure, the predicted demand of new lockers' purchases per each month is displayed. In the third one all the incurred cost evolution is represented; here we can notice that the biggest role is played by the cost of lockers acquisition.

The sixth figure represents the graphical solution of the equation to find the price of the subscription, which is about 650 €/month per locker.

The fourth graph shows the behaviour of the total revenues of the company: in blue you can see how much we expect to bill each month from both the subscriptions and the fees on the boxes while in red only the revenues related to the boxes are shown. To compute the red line, we considered the worst-case estimation of boxes sold per month, and we multiplied it by the average fee that we want to impose on each box, namely the 5% of its average price. Notice that we would rather be applying

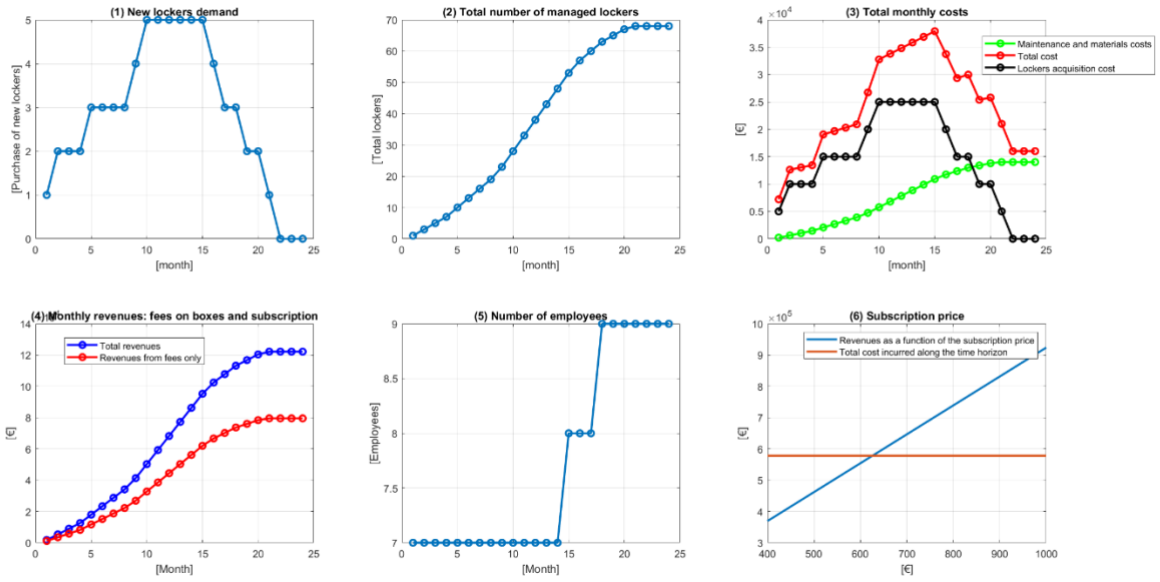
a percentage of earnings on the amount of money spared with each box, which leads to similar fees anyway.

Therefore, we expect that at the end of the prediction horizon our startup will be making tens of thousands of euros per month (red curve, figure 4) with which all the employees, including ourselves, will have to be paid.

Yet, it is easy to understand that for the first months, the expenses of the startup will be greater than the revenues, so we computed that, in this configuration, an initial loan of 15.000 € is required to fulfil internal costs. It will be only after 5 months that the company will become profitable.

One additional note should be made on the supermarkets side: the model computes the monthly cost of labour required per each locker; assuming that our locker can sell around 50 boxes per day, the supermarket would need to pay roughly less than 2 hours of work to have one of its employees making the boxes, for a total of around 600 € per month. Furthermore, with the same hypothesis, it's easy to find that on average the supermarket will make 20.000 €/month from the box sales per each locker, not to mention the revenues coming from product placement and the benefits derived from improved service offerings.

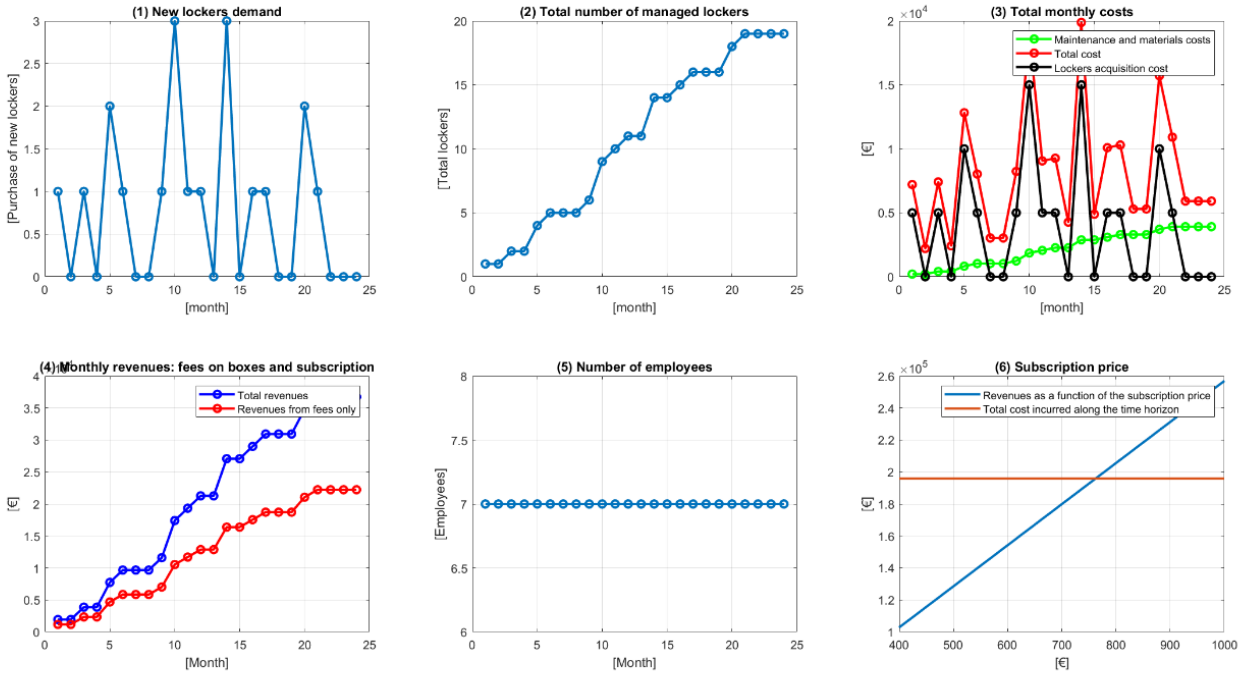
2) <u>Model A: positive scenario</u>



In an optimistic outlook, we envision managing approximately 70 lockers by the end of our projected timeline. With respect to the previous scenario, only the predicted lockers demand has changed. The thing to be noticed is that the final price for the subscription has now slightly decreased to 600 €/month per locker. What changes are the revenues that the startup is making, indeed they are both proportional to the number of lockers installed.

As a result, the requested loan amount settles at 26.000 € and the company reaches profitability within six months.

3) Model A: worst case scenario

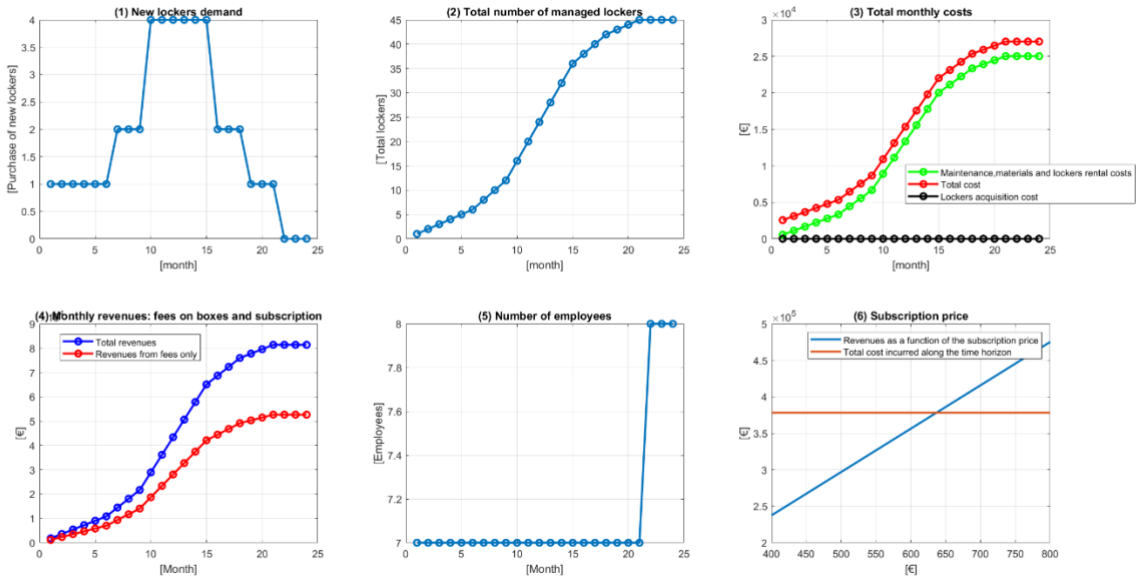


In this scenario we test out how sensitive is our pricing policy to a worst-case situation characterised with a small and random installation demand, which leads to manage less than 20 lockers after 2 years of activity.

Revenues coming from subscriptions are small compared to the costs incurred mainly to buy the lockers, so the subscription price rises to 750 €/month per locker. Yet, what really varies is the company monthly income which drastically drops down to 20.000 €/month at the end of the horizon. This is clearly telling us that if the demand is weak, a possible solution would be increasing the fees on the boxes or introducing a subletting policy as later explained.

Since costs are less, now we would need only 9.000 € to launch our startup, which will become profitable after 4 months.

4) Model B: most likely scenario



In this analysis, we explore the impact of subletting lockers instead of purchasing them directly on the final price.

We maintain the same assumptions taken for the most likely scenario with model A, except for the cost of lockers. Rather than buying them, we found online the rental cost to be around 350 €/month per locker.

The revenue generated from fees remains unchanged. The key difference is that the total cost function (represented by the red line in Figure 3) now resembles the shape of Figure 2, whereas in model A, it mostly resembled Figure 1. This implies that costs are relatively low in the initial phases but significantly increase as the horizon approaches its end, as the rental costs are proportional to the number of lockers.

This approach also allows the startup to be launched without any loans, making it profitable from the first months and significantly reducing risks.

To cover all our expenses, the subscription price is set at around 600 €/month per locker, which includes a 300 € markup over the rental cost, compensating for our valuable services.

FINAL CONSIDERATIONS

In summary, irrespective of demand fluctuations and the specific model employed, a reasonable hypothesis for the subscription price per locker would be approximately 700 €/month. These revenues should be sufficient to cover all expenses, even when considering worst-case parameters.

Furthermore, our fee structure, despite being modest, would enable us to achieve substantial long-term profits. These earnings would be high enough to ensure profitability within a few months of operation, requiring only a limited initial loan of approximately 20.000 € to launch the startup. To better assess the market, one possibility is to start with a subletting-based model, which minimizes initial expenses and associated risks. If the market responds as anticipated, we can then transition to a model with owned lockers.

For supermarkets, our service would represent a fixed and negligible monthly cost compared to their overall expenses. To recap, supermarkets would only need to cover the subscription fee and the small additional labor cost required for box handling. However, our service would create and enhance multiple revenue streams for them. Firstly, in a conservative scenario, supermarkets would generate approximately 20.000 € per month per locker from product sales alone. While the resulting profit margin might be considered low, it's important to not overlook the earnings arising from improved bargaining power, which varies depending on the specific supplier, but as emphasized by Mr. Odolini and Mr. Colnaghi, presents significant potential. Additionally, the indirect revenues resulting from the introduction of this new service cannot be easily quantified, but should also be taken into consideration.

7.4 TEST CARDS

TEST CARD 1

Clients behaviour at supermarkets

Whole team

STEP 1: HYPOTHESIS

We believe that...

1. People are influenced by promotional products while shopping
2. People don't bear wasting time at supermarkets
3. People don't usually have an idea on what to eat/cook when they go to supermarkets
4. People like the concept of recipes that combines on-sale food

STEP 2: TEST

To verify that, we will...

Design an anonymous survey which indirectly shows whether the people would use our service or not. That is accomplished by providing them many options of services/ shopping experience features and analysing how many responses are coherent with our beliefs .

STEP 3: METRIC

And measure...

Survey responses.

STEP 4: CRITERIA

We are right if....

1. at least 70% of people is influenced by discounts on products.
2. al least 70% of people can't stand with wasting time inside the store.
3. at least 60% of people don't usually know what to cook while doing their shopping.
4. at least 80% of the people like the concept of convenient recipes.

TEST CARD 2

Totem/Locker usage

Francesco, Alexandra, Alex

STEP 1: HYPOTHESIS

We believe that...

1. People like our intuitive interface
2. People do not struggle using our interface
3. Clients will use our services alongside the classical shop

STEP 2: TEST

To verify that, we will...

Create an MVP by making a mockup of our software interface and test it in front of a supermarket to see how people will interact, use it and if they like the service.

STEP 3: METRIC

And measure...

1. Time required to complete the recipe selection
2. Difficulties encountered during the selection process and feedbacks on the interface's usability
3. Percentage of people who like our concept of alternative shopping experience

STEP 4: CRITERIA

We are right if....

1. At least 60% of the people find our interface easy and complete the selection in less than 5 minutes
2. At least 60% of the people have no or minor issues while using our interface
3. Most of the people declare to like our concept

7.5 LEARNING CARDS

LEARNING CARD 1

Esselunga validation | April 2023

Francesco, Marco, Alexandra, Alex

STEP 1: HYPOTHESIS

We believed that...

1. Asking to supermarkets employees to collect ingredients is not a big trouble
2. Expiring products have high revenue potential and their management is possible
3. The main goal of supermarkets is to sell products

STEP 2: OBSERVATION

We observed that...

1. Cost of labour is enormous and we would need more data to justify such an investment.
2. Expiring products are minimized and difficult to be tracked through data base.
3. Earnings from products are ever fewer. Supermarkets have to be seen as service sellers to clients and food suppliers.
4. Promotional product visibility is low and time waste is a big problem for customers.

STEP 3: LEARNINGS AND INSIGHTS

From that we learned that...

Our service has to be reviewed, in particular we need:

1. Minimization of personnel involvement.
2. Focus on advertised and promotional products only.
3. Our product has to increase supermarkets' services for both clients and suppliers. Focus on promotional product visibility, time waste reduction and enhancement of supermarkets' bargaining power towards suppliers.

STEP 4: DECISIONS AND ACTIONS

Therefore, we will...

Pivot as described in the next paragraph.

LEARNING CARD 2

Italmark validation | May 2023

Giuseppe, Maria Laura, Massimo

STEP 1: HYPOTHESIS

We believed that...

1. Asking to supermarkets some employees to prepare the boxes for a limited time is feasible.
2. Supermarkets want to sell promotional products
3. Our service is a powerful mean to enhance supermarkets' services and bargaining power towards suppliers.

STEP 2: OBSERVATION

We observed that...

1. Having employees to carry out the required tasks all at once, like in our case, it's a lot less critical, hence a lot more feasible.
2. The focus goes to high margin promotional products sales, which can be easily spotted through the supermarket's database.
3. Supermarkets are investing more and more on innovative customer services to keep pace with the times. Furthermore product placement has high potential.

STEP 3: LEARNINGS AND INSIGHTS

From that we learned that...

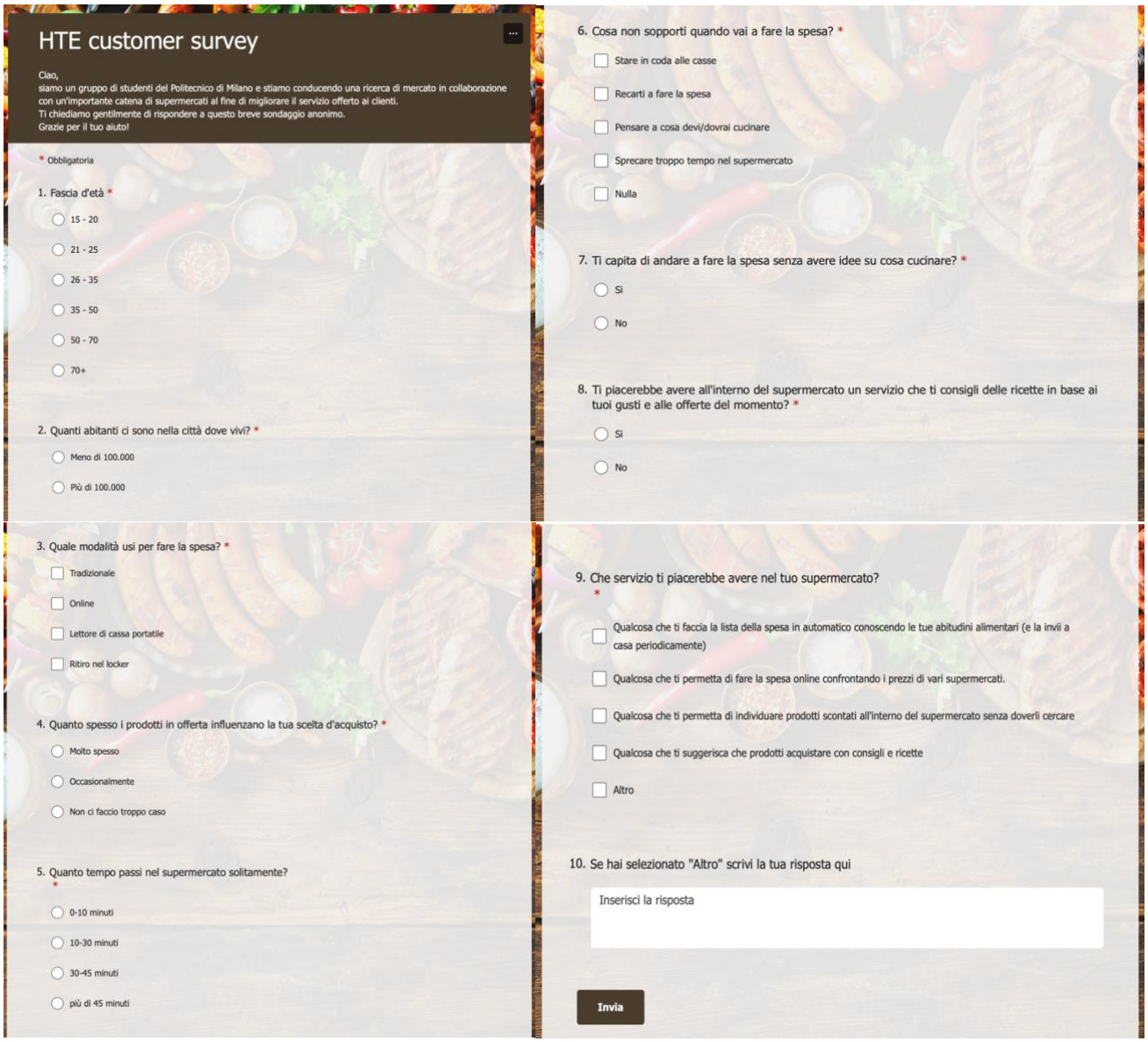
Our concept needs to be extended and integrated to all of the supermarket services and that it has to merge high margin promotional products with sponsored ones, keeping an eye on labour cost minimization

STEP 4: DECISIONS AND ACTIONS

Therefore, we will...

Confidently state that our value proposition and our main assumptions are verified. The next step would be testing out our pricing policy offering the subscription to supermarkets. Besides that we could test our idea's desirability placing some boxes inside a supermarket and observing how clients react to them.

7.6 ONLINE SURVEY



HTE customer survey

Ciao,
siamo un gruppo di studenti del Politecnico di Milano e stiamo conducendo una ricerca di mercato in collaborazione con un'importante catena di supermercati al fine di migliorare il servizio offerto ai clienti.
Ti chiediamo gentilmente di rispondere a questo breve sondaggio anonimo.
Grazie per il tuo aiuto!

* Obbligatoria

1. Fascia d'età *
- 15 - 20
- 21 - 25
- 26 - 35
- 35 - 50
- 50 - 70
- 70+

2. Quanti abitanti ci sono nella città dove vivi? *
- Meno di 100.000
- Più di 100.000

3. Quale modalità usi per fare la spesa? *
- Tradizionale
- Online
- Lettore di cassa portatile
- Ritiro nel locker

4. Quanto spesso i prodotti in offerta influenzano la tua scelta d'acquisto? *
- Molto spesso
- Occasionalmente
- Non ci faccio troppo caso

5. Quanto tempo passi nel supermercato solitamente? *
- 0-10 minuti
- 10-30 minuti
- 30-45 minuti
- più di 45 minuti

6. Cosa non sopporti quando vai a fare la spesa? *
- Stare in coda alle casse
- Recarti a fare la spesa
- Pensare a cosa devi/dovrai cucinare
- Sprecare troppo tempo nel supermercato
- Nulla

7. Ti capita di andare a fare la spesa senza avere idee su cosa cucinare? *
- Si
- No

8. Ti piacerebbe avere all'interno del supermercato un servizio che ti consigli delle ricette in base ai tuoi gusti e alle offerte del momento? *
- Si
- No

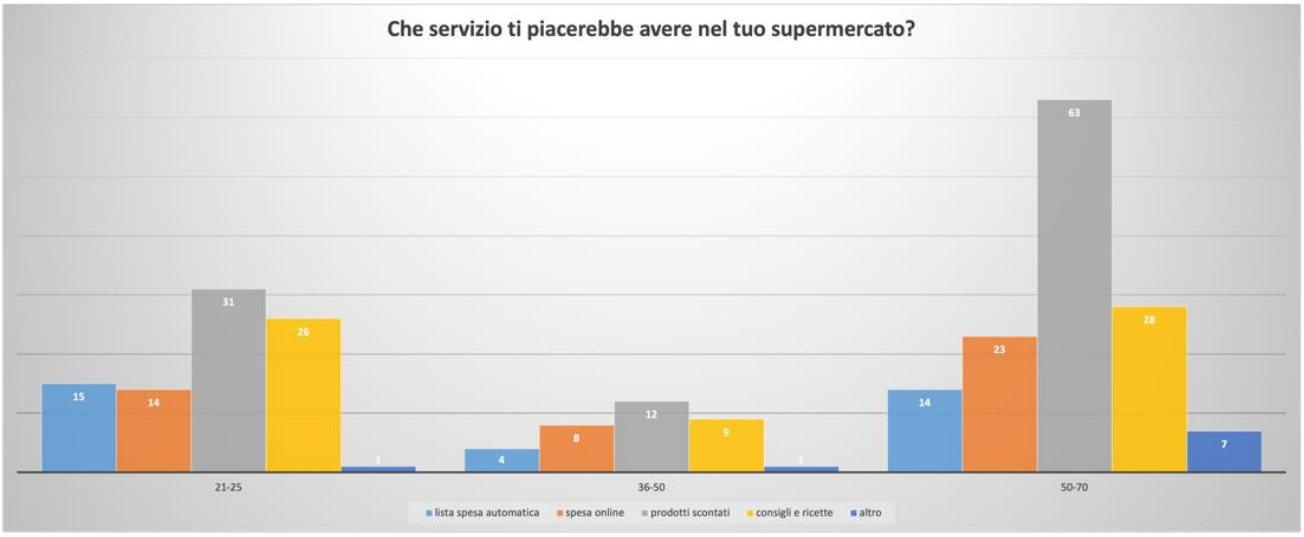
9. Che servizio ti piacerebbe avere nel tuo supermercato? *
- Qualcosa che ti faccia la lista della spesa in automatico conoscendo le tue abitudini alimentari (e la invii a casa periodicamente)
- Qualcosa che ti permetta di fare la spesa online confrontando i prezzi di vari supermercati.
- Qualcosa che ti permetta di individuare prodotti scontati all'interno del supermercato senza doverli cercare
- Qualcosa che ti suggerisca che prodotti acquistare con consigli e ricette
- Altro

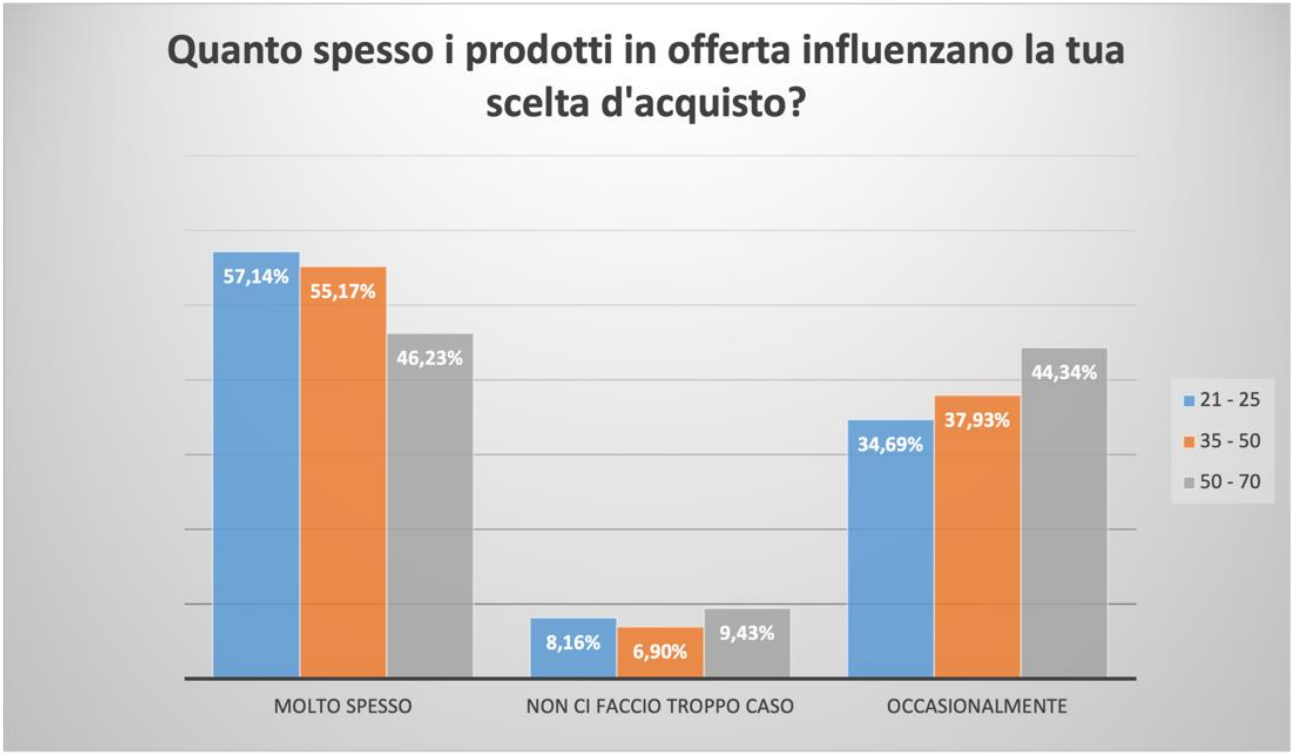
10. Se hai selezionato "Altro" scrivi la tua risposta qui

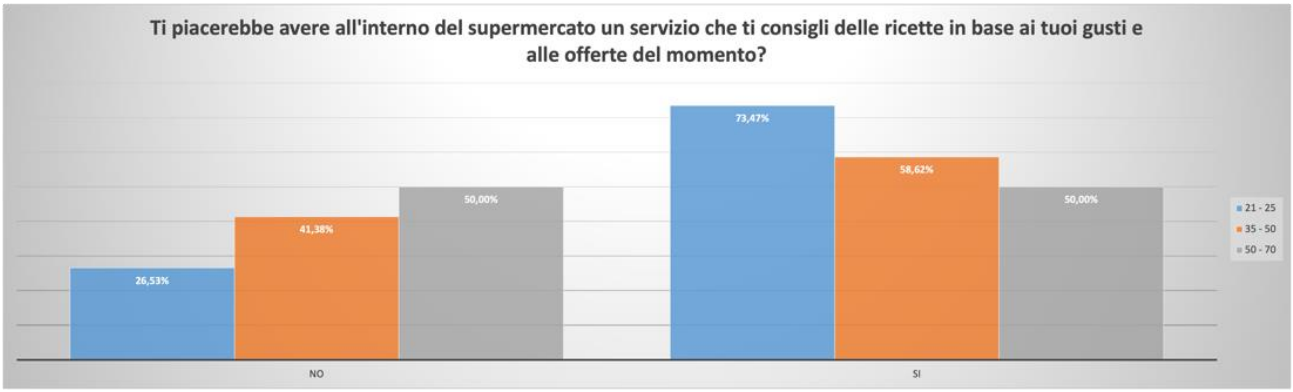
Inserisci la risposta

Invia

7.7 ONLINE SURVEY– RESULTS





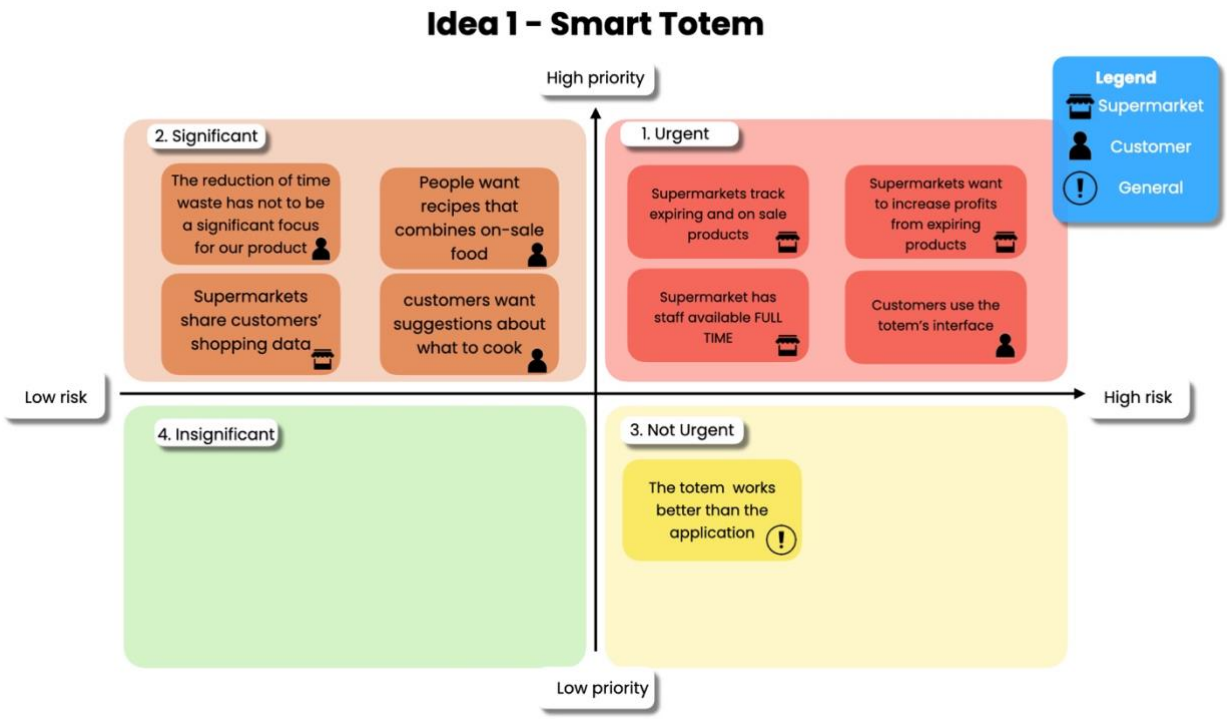


6. Cosa non sopporti quando vai a fare la spesa? (0 punto)

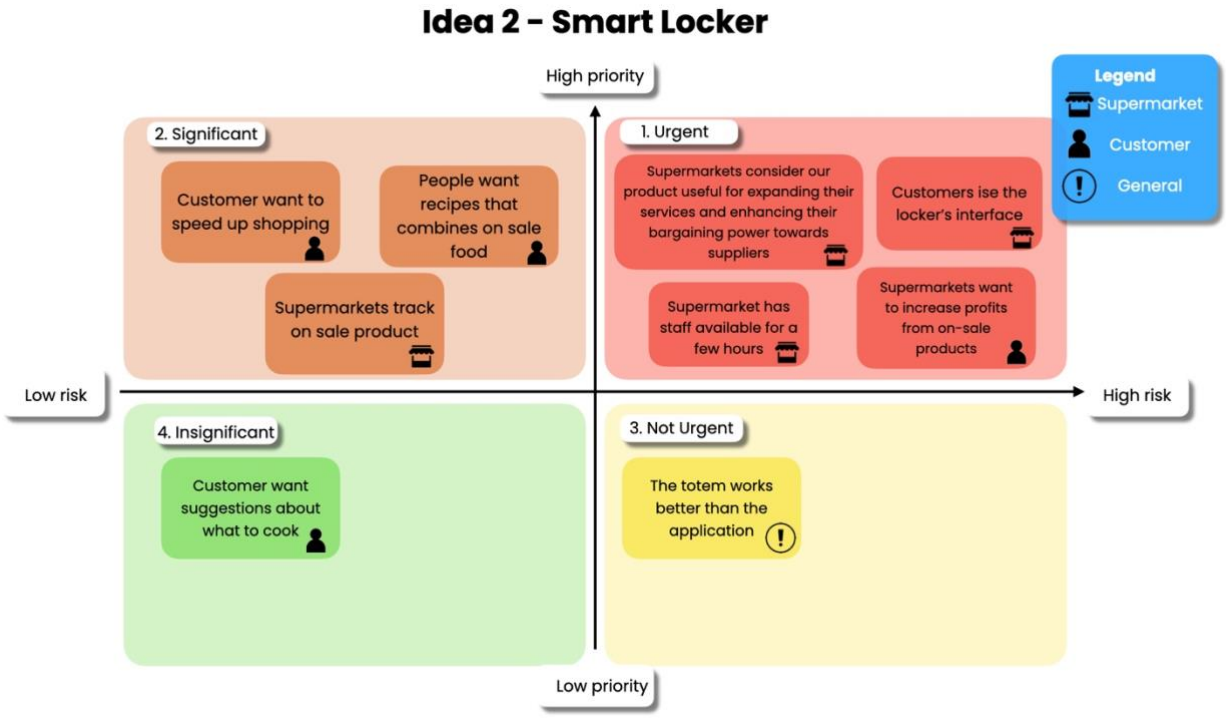
Altri dettagli

Stare in coda alle casse	121
Recarti a fare la spesa	19
Pensare a cosa devi/dovrai cuci...	32
Sprecare troppo tempo nel sup...	65
Nulla	24

7.8 RISK MATRIX (IDEA 1)



7.9 RISK MATRIX (IDEA 2)



7.10 PICNIC IN THE GRAVEYARD

GOOD APPETITO

Good Appetito is a start-up founded in 2014 with the aim of optimising supermarket promotions by suggesting recipes to the customer. *How does it work?* You can select a supermarket in your area and be inspired by the available recipes at the best price. In the end, *Good Appetito* generates the shopping list that you can print or email to whoever you want.

What didn't work?

- Doing everything from the online site, so not in the supermarket
- They provide to the customer just the shopping list, without giving any information on where to find the suggested products. Additionally, they couldn't keep track of their sales. (We had the same problem with idea 1)
- Problems with stock management

In our opinion, the main problematic of the startup was the process of getting the recipe to the customer. In fact, after having to choose the recipe, the client needs also to get to the supermarket, hence the steps involved in the process were too cumbersome. On the other hand, our Smart Locker provides immediately the recipe. Additionally, our target segment is already in the right place, making it a winning scenario for us.

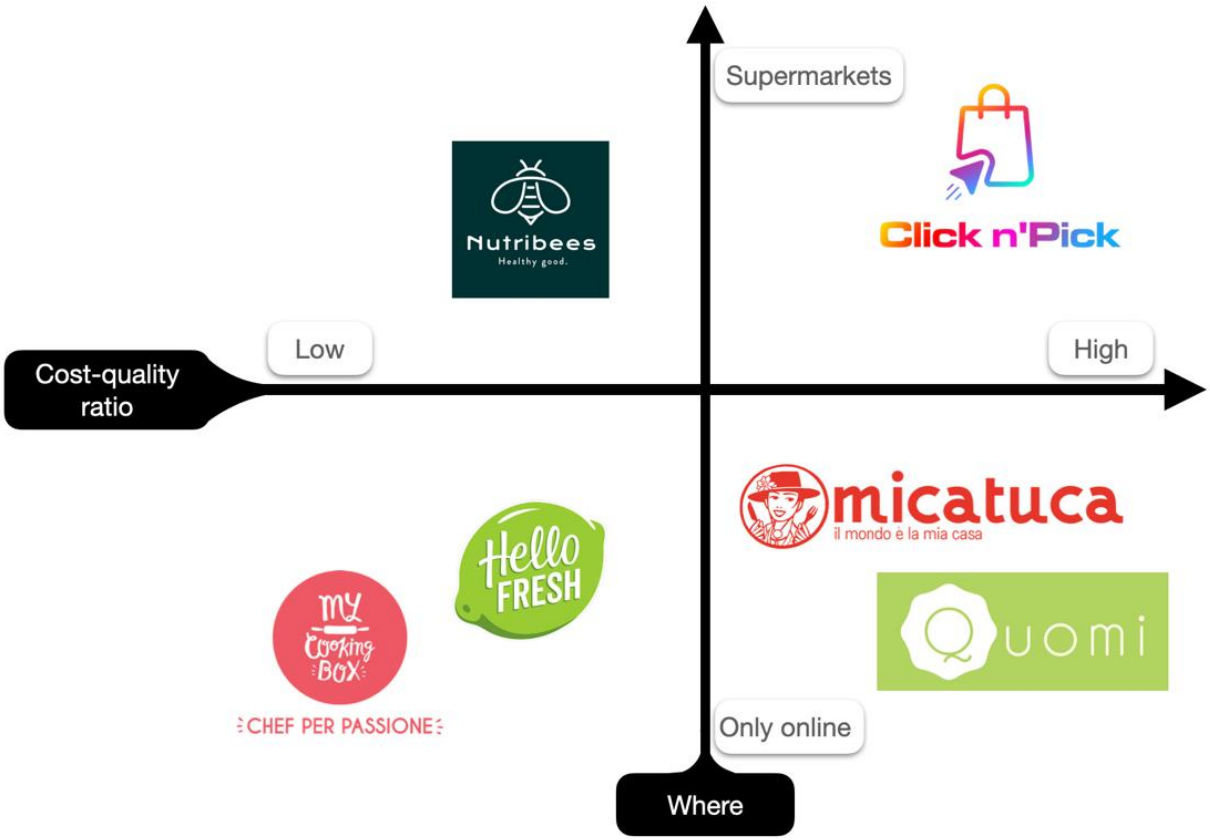
7.11 DESK RESEARCH

RECIPES IN THE BOXES

According to ISTAT's 2020 data, the average household size in Italy is 2.3 members, with a significant rise in single-person households comprising one third of the total. Taking this into account, our strategy focuses on primarily offering meal boxes for two people, aiming to cater to a wider customer base. This approach allows families to purchase two identical boxes, providing them with additional ingredients, while individuals living alone can prepare the recipe a second time, resulting in cost savings compared to buying single-portion boxes. Consequently, our decision to forgo single-portion boxes is aimed at maximizing customers' savings.

7.12 SMART LOCKER PROTOTYPE

7.13 COMPETITOR ANALYSIS



	Click n'Pick	Quomi	My Cooking Box CHEF PER PASSIONE	NutriBees
SPECIAL FEATURE	AI based recipes	the menu changes weekly	Italian cuisine	ready-made weekly menus
PRICE	Low	Medium	High	High
QUALITY	High	High	Low	High
LOCATION	Supermarket	Online	Online	Online
CUSTOMER SERVICE	High	Low	Low	Medium
CUSTOMISATION	Medium	High	Medium	High
DELIVERY	No	Medium cost	High cost	1 per week
RECIPES	Yes	Yes	Yes	No