



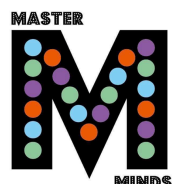
F.O.O.D.L.Y

SAVE FOOD, BE FRIENDLY

THE GREAT TRANSITION
SCHOOL OF MANAGEMENT AND INNOVATION
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a MASTERMINDS
Project



THE CURRENT ISSUE

Our project aims to address the problem of food waste among the student population in France. Food waste is one of today's most pressing issues due to its double polluting effect. First, food requires a large amount of resources to be produced. Not only are these resources scarce and should therefore be used efficiently and in moderation, but they also contribute to pollution as they are being utilized in the production process. It logically follows that as food is wasted, all the resources needed to grow the final produce are automatically wasted as well. Second, disposal of food also adds to pollution for two reasons. On the one hand, disposal procedures require the use of a great amount of resources which creates further pollution. On the other, while sitting in landfills, organic waste releases methane which is 21 times more polluting than carbon dioxide (Simon 2018). It is therefore clear that food waste is one of the primary issues to be addressed in the fight for a more sustainable future.

Our project lies within the framework of the Sustainable Development Goals, and specifically at the intersection between SDG 12 and 13 (respectively, *Climate Action* and *Responsible Consumption and Production*), aiming at reducing the food waste problem among the student population in France. According to the Minister of Ecology, France wastes 7.1 million tonnes of food every year, of which 70% is wasted by consumers (Chrisaphis 2016). A big chunk of the problem, therefore, is produced and perpetrated by the demand side of the industry, meaning that buyers must be educated to a more sustainable approach to food consumption.

The role of students is often forgotten when discussing the issue of food waste reduction. Having limited financial resources, students are supposed to consume (and therefore waste) less. In fact, students usually have a budget to respect. On average, they have between 600€ and 1,000€ (included rent, food, electricity, transport, phone, internet, etc.), of which food expenses represent 25-30%. Nevertheless, our project stems from the observation that the student life provides many incentives to waste food. For example, many students in France live alone, either in student accommodations with single rooms or small studios in the cities. This means that when they cook at home, students usually have to make food for one person only. As most food in supermarkets is sold in packages for more than one person, it is easy to see how students can easily end up wasting a lot of food as they cannot finish in time all the groceries they bought. Furthermore, the student life can be rather hectic as students meet new people, attend events and spend less time at home, resulting in more food being unused and ultimately getting thrown away (Gil, 2015).

With this said, our team has worked together in an attempt to answer the following question: *How can we incentivize students to waste less food knowing that they have not yet developed proper food-management behaviors?* By promoting a sense of community and sustainable lifestyle, we believe that F.OO.D.L.Y. can provide the answer.

PROPOSED CONCEPT

- **Name, scope, and detailed description of the concept**

"F.OO.D.L.Y. save food, be friendly" (Foodly hereafter) will be a free app that targets students. Since a high number of students uses social networks and in particular Instagram (Appendix 1) in their daily routines, we would like to launch an app based on the design of Instagram to propose recipes and avoid food waste as much as we can.

The app will function as follows. After opening the app, users will see a bar at the bottom with an array of options. On the left, there will be a function which allows users to specify (1) the

remains in their fridge, (2) their budget (could be *nil*), and (3) number of meals they want to cover in one cooking session. Once the relevant information is added, an algorithm will give back different recipe ideas. Each recipe will be easy and quickly to prepare, and the dosage adjusted for one person. 'Attractive' and appealing pictures will encourage users to cook. After selecting their preferred recipe, users will see the list of necessary ingredients with the respective proportions. In case extra ingredients are needed, users will be given the exact quantities and additional recipes to maximize usage of the food in excess (e.g. if they need to buy 1 egg, they will also receive suggestions on how to use the remaining 5 eggs in the box). If the student has given the app the geolocalization access, suggestions will be made to find the missing ingredients in sustainable local shops close to the place where they live. Clearly, the aim of the app is not to push students to buy food items, but instead to push them to cook what they already have in their fridge.

Once the user has prepared dish, he/she will be allowed to rate the recipe and share pictures of the meal. Connections with friends (such as pictures on Instagram) and the link of the recipe allow an indirect marketing of the application. We will thus put a particular attention on the design of the application to make as user-friendly and appealing as possible. Should the student's location and notification be allowed, F.OO.D.L.Y. can give suggestions and information regarding activities and discounts from sustainable local shops/restaurants (that have to pay us in order to be promoted in the application). This clearly strengthens local partnerships, which are indispensable for the fight against food-waste on all levels of society and economics. Moreover, students could find educational content about food such as information on seasonal vegetables, advice on consuming all parts of an item. A chat will allow them to share tips with each other.

- **Which other solutions do exist?**

There are currently other apps that encourage a more efficient and responsible way of consuming food (e.g. Epicurious, SuperCook, CookPad, etc.), but improvements can and have to be made. Some applications provide a poor user experience (e.g. Cookpad), while others lack the community aspect (i.e. they simply function as recipe founder with no emphasis on sharing and social connection). Some applications for reducing food waste are already established in the consumer market. As such, *Too Good to Go* or *Phenix*, which consist of launching partnerships with bakeries, supermarkets and even sometimes hostels, allow people to buy a "panier" at the end of the day. Users receive food items that would otherwise perish in a few days with a 63% discount on the original price. *Partage ton frigo* is another app that allows to share excess food between neighbors or deposit it in a collective fridge accessible to many. There is no similar project to F.OO.D.L.Y., as it targets students specifically. Additionally, no other app integrates educational content or inspires a sense of virtual / sustainable community the way F.OO.D.L.Y. will.

- **Why is your solution effective, original and feasible?**

F.OO.D.L.Y. aims at strengthening strong incentives that influence students to change their behavior and stop wasting food. We observed that social networks have a direct influence on the behavior of students. Being part of a community encourages them to take action. As F.OO.D.L.Y. can be perceived as very appealing to students ("instagrammable" pictures, sharing pictures and reactions), it can have an overall positive impact by changing students' behavior

and encourage them to fight against climate change. They learn food-management related tools and how to implement them. Hence, saving food needs to become appealing, sexy and cool. This application is more original compared to other existing solutions: the basic idea is to create a community, a new appealing image of saving food and will be associate to concrete initiatives with a viral platform. It is therefore an educational and incentive project. Our application project is feasible and quite easy to launch even if the application development requires a professional application designer looking for partners and allies, but also influencers that will promote the app from its beginning.

- **POC and tests**

In order to know if our idea is applicable/appealing to students, we designed a survey that asks some students to answer to specific questions (appendix 2). This survey was answered by 37 students. 26 of them use Instagram and 21 of them post regularly pictures of food of restaurants. Even though this is a small basis, the results suggest that creating an app where students can simultaneously search for food recipes and post pictures appears here to be relevant (appendix 3). Before launching the application, we also would like to do a pre-test by asking some students to test it and give us their feedbacks - so that we can improve it.

EXPECTED POSITIVE IMPACTS

This app is intended to, first and foremost, provide educational insights and recommendations on food conservation and food-waste reduction, targeting mainly the French student population who have not yet developed proper food-management behaviors. F.OO.D.L.Y is conceived to create incentives for a segment of the population that is strongly influenced by social media, which is reflected on the idea of providing compelling pictures of food and meals that are thereafter shared with the F.OO.D.L.Y community. Through the proposal of recipes that abide by the ingredients remaining in a student's fridge, F.OO.D.L.Y aims to spark the creativity and imagination of students to be productive with their leftovers, while simultaneously incentivizing them to save money on their food budget.

Along the same lines, the app allows for an exact calculation of the quantity of ingredients required for each recipe, which in turn reduces the amount of leftover food in the first place. As such, the app will positively impact the consumptional behaviors of students and lift a weight off their budget, firstly by reducing the amount of ingredients purchased before the meal, and secondly by proposing alternative meals to be prepared with the leftover quantities of ingredients. Additionally, the app will serve as a community platform whereby the users will be able to share the product of their cooking skills with their peers by means of pictures. This will also allow for a fair share of cooking inspiration between the users. The rationale of food pictures and a sharing platform rests upon the fact that social media has nowadays a huge impact on the behavior of the youth population, thus we hope that F.OO.D.L.Y will positively affect this behavior towards the reduction of food waste and better food management.

We strongly believe that, as students ourselves, such consumption behavior changes are both necessary and beneficial for the individual student, the community at large, and most importantly the environment. We hope to develop the idea of food saving into a trendy and contemporary era by making it a popular and desirable practice among students.

MAJOR RISKS

The development of the F.OO.D.L.Y app comes along with some risks and challenges that we need to take into consideration. Firstly, many food apps are already quite popular among students, thus we are aware that this app is entering a competitive arena of many potential alternatives. The possibility of existing similar apps might to a certain extent threaten the legitimacy and functionality of F.OO.D.L.Y and potentially confuse the consumer about the purpose of this brand. Therefore, we will make sure to have a strong unique selling point and positioning statement that differentiates our app from existing versions, by underlining its utility, practicality, and trendiness. Moreover, the app can experience potential glitches and errors that jeopardize its smooth functioning, as this is normally a common challenge for the majority of new apps. To respond to this challenge, our team will make sure to run trial tests regularly before the official launch of the app. Lastly, the app faces the risk of a low amount of subscribers, which will be reflected in an unsatisfying outcome for the goal of food waste reduction. Therefore, F.OO.D.L.Y will invest in efficient marketing and communication campaigns in the long run, by reassuring the popularity of the app meets and exceeds our expectations.

DEPLOYMENT STRATEGY

First and foremost, it is essential for us to hire a professional cook that will be in charge of cooking the 150 different recipes (25 starters, 75 main dishes, 50 desserts) in order to ensure a smooth start of the project. After having collected these recipes, we will have to test F.OO.D.L.Y among several focus groups, that should in particular be students, by gathering their feedback. Their feedback will not only help us in terms of assessing the user-friendliness, but also it would allow us to get their feedback on specific features and design elements. The way students perceive the application is highly important to the development and improvement of our value proposition, as we plan to address primarily students that share the love for food and want to limit food waste. Once we have completed this step and gathered valuable feedback from our focus groups, we will concentrate our business development. One of the first steps regarding business development is the creation of an application by IT experts and designers that have experience in launching interactive and innovative applications. Equally important is to find resources for the funding of the project. As we are aiming at creating an anti-food waste application, we could apply for venture capital investment funds, launch a crowdfunding campaign and get in touch with business angels who could be interested in investing in our project. We could also apply to “L’incubateur Sciences Po” program. Additionally, we will start to develop strategic partnerships either with sustainable supermarkets or firms that aim to reduce food waste.

Secondly, we strongly believe that communication is highly important for a successful application launch. In order to find early adopters of F.OO.D.L.Y we need to develop partnerships with young influencers who are particularly interested in food, sustainability and reducing food waste. Social Media play an important and shaping role in our communication strategy, as they are an useful tool to make F.OO.D.L.Y known among students. Another interesting opportunity is to attend events and to discuss with experts the possibilities surrounding the fight against food waste

RETURN ON INVESTMENT ANALYSIS

Our application is based on the offer of recipes which is why we would need to hire a cook for three months. He would be in charge of creating all recipes. The food expenditure

budget will be calculated from the average student budget. What is more, the most important cost for F.OO.D.L.Y will be the one linked to the application development. The first step will be to buy a brand name, and then a domain name for the app. It is also strongly recommended to rent a server to increase our application's productivity and to perform regular maintenance tasks. We take into account the following wages : a developer with strong design skills, a partnership manager (that has to find sustainable supermarkets and firms), a data analyst (that will create the algorithm that propose a recipe regarding the student needs), a lawyer specialized in data. We hope that "L'incubateur Sciences Po" will offer us an office, an accountant and a lawyer for one year - so that we could focus on the launch of the application. After one year, we aim at renting an office space in a coworking office. Communication and accounting could then also be done by ourselves. Possibly created costs in marketing, such as for influencer's 'posts' (an average of 500€ for one post), have to be considered as well. Other costs will be linked to more "traditional" communication campaigns, namely with publications on social networks and online advertisements. We want to share it on Play store and Apple store, that cost respectively 25€ and 99€.

As Foodly is a free app which can be easily used by students, we need some funds from venture capital, crowdfunding campaign and business angels in order to be profitable. We hope to receive financial support from "L'incubateur de Sciences Po" that helps Sciences Po students finance smart entrepreneurial projects. We could also receive sponsorship from sustainable supermarkets and companies that we will promote in return. With this money the prelaunch and the launch phase could be covered. Collected data could be sold to research institutes and firms - which would thus substitute as an income.

We established financial forecast composed by making a cost breakdown and revenue breakdown for the three first years and half. After 2 years and 8 months, we could reach the financial equilibrium. (appendix 4)

ORGANIZATION

As all of us are in different Master Degrees, we have the privilege of having very differentiated skills and knowledge. Certainly, this would be helpful when pushing forward the project as well as analysing its weaknesses and strengths. More specifically, we are enrolled in degrees of Communication, Marketing, Management and Finance. Hence, we could divide our project tasks according to knowledge we already gained. During the process, finding specific tasks according to everyone's preferences and previous experiences would render work much more efficient.

Regarding the partners, we plan to apply for venture capital investments from public funds. We can also launch a crowdfunding campaign and Sciences Po's opportunities by applying to "L'incubateur Sciences Po". Sustainable supermarkets and companies will be our partners that we will be promoted in return on the application.

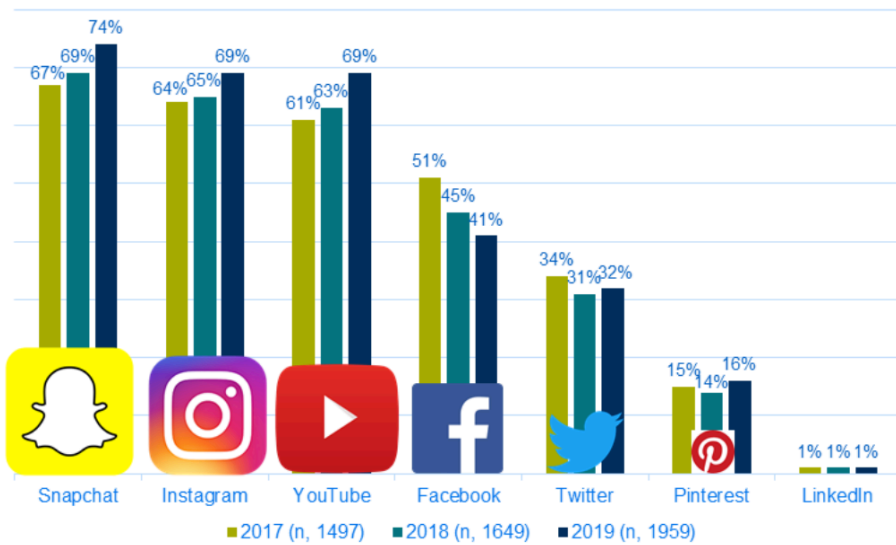
Related to the question of sponsors, we shall manage to build meaningful cooperations with *Too Good To Go* or *Yuka*. These startups, by fighting against food waste and bad nutrition, could make us benefit from their users communities. We could also look for the state's support for our project, scheduling a meeting with the Ministry of Education (as our app benefits students) and, not to be forgotten, Ministry of Health.

APPENDIX

APPENDIX 1 :



Social used **daily** by prospective students:
Snapchat, Instagram, YouTube & Facebook



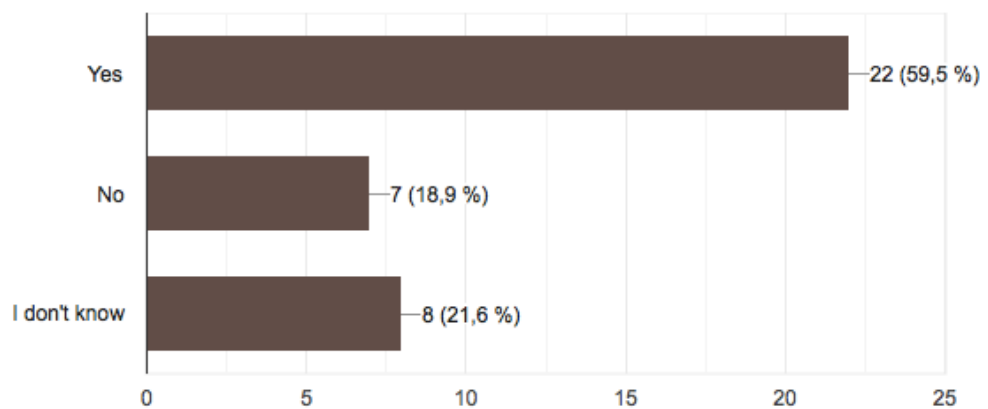
2017 RNL E-Expectations Survey reproduced & edited with permission by Karine Joly (Higher Ed Experts)

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APPENDIX 2 :

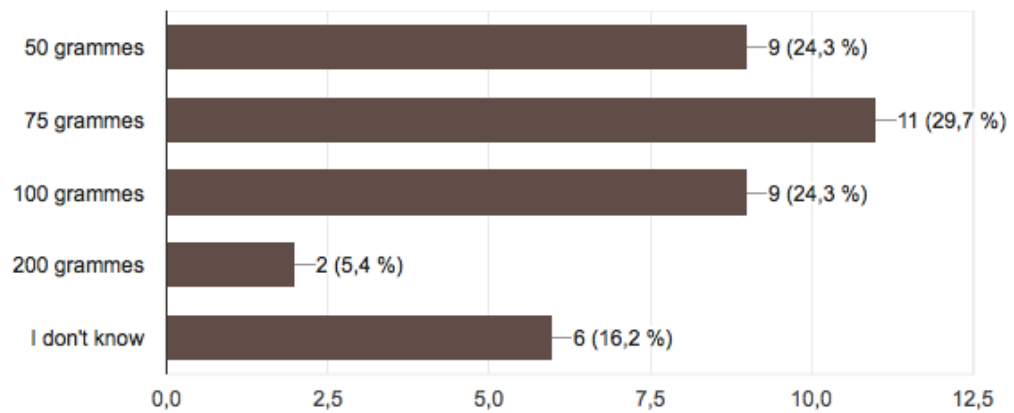
Do you think learning of economic and portion meals could help you waste less food?

37 réponses



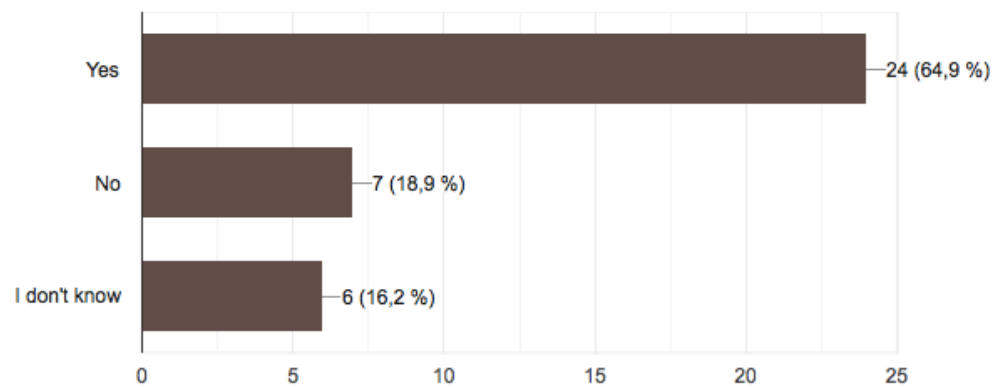
According to you, one portion of rice for one person corresponds to:

37 réponses



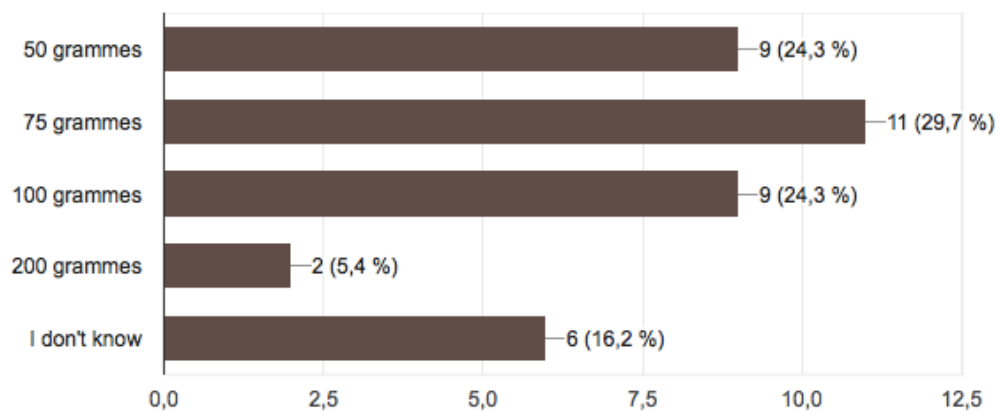
Do you think learning of economic and portion meals could help you eat cheaper?

37 réponses



According to you, one portion of rice for one person corresponds to:

37 réponses

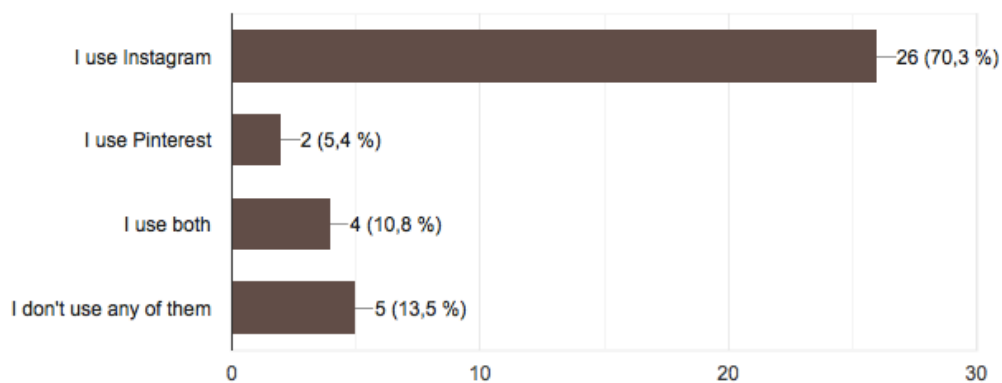


Only 24,3% of the students could correctly evaluate one portion of rice for one person in grams.

APPENDIX 3

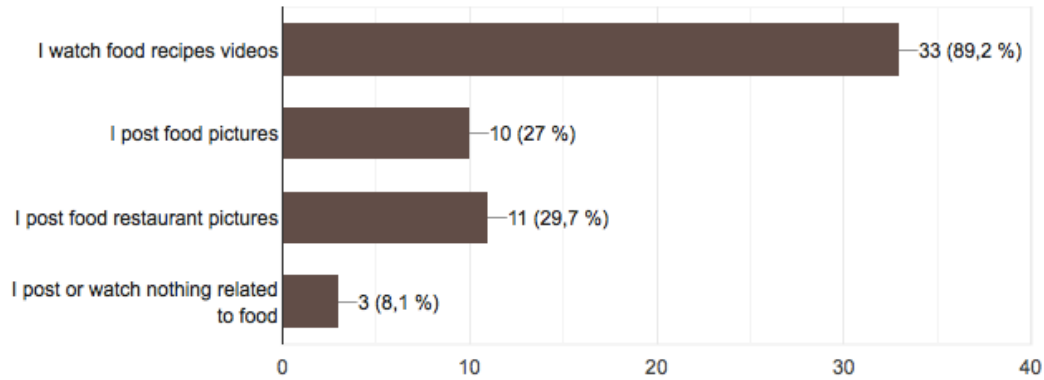
Do you use Instagram or Pinterest?

37 réponses

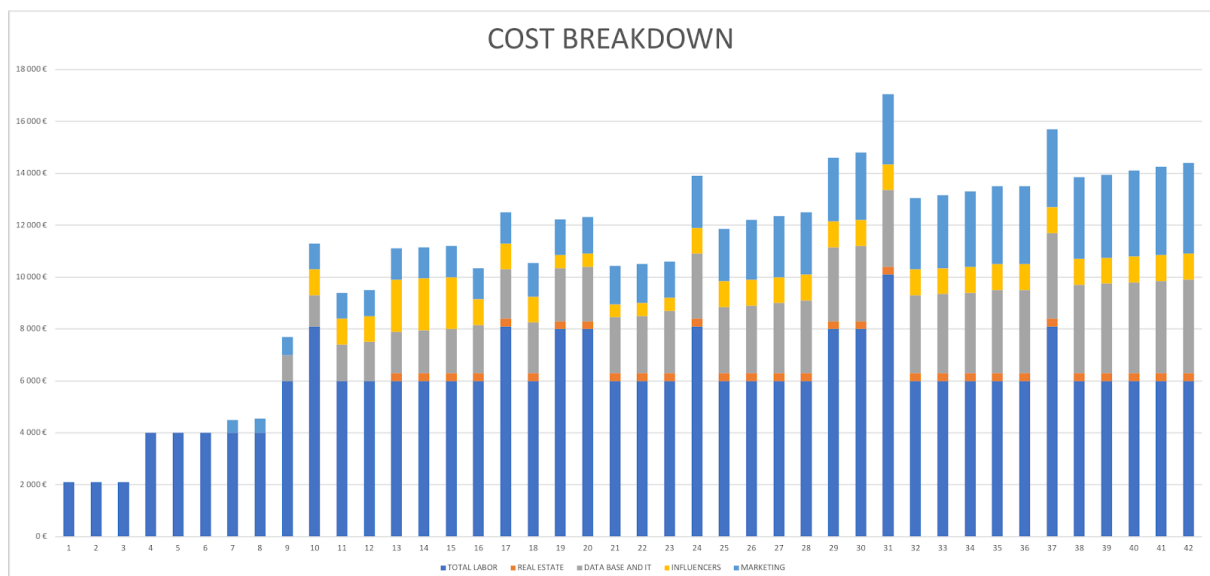


Have you ever watched food recipes videos/ post food pictures/ post food restaurant pictures/ on social networks ?

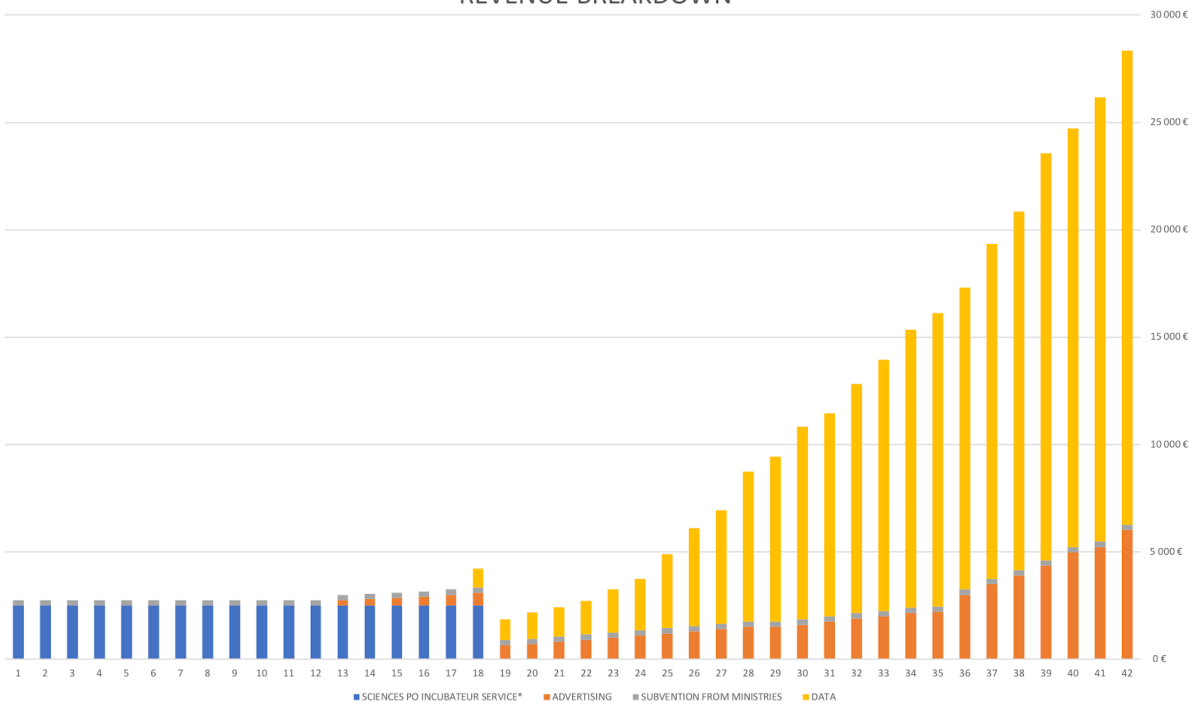
37 réponses



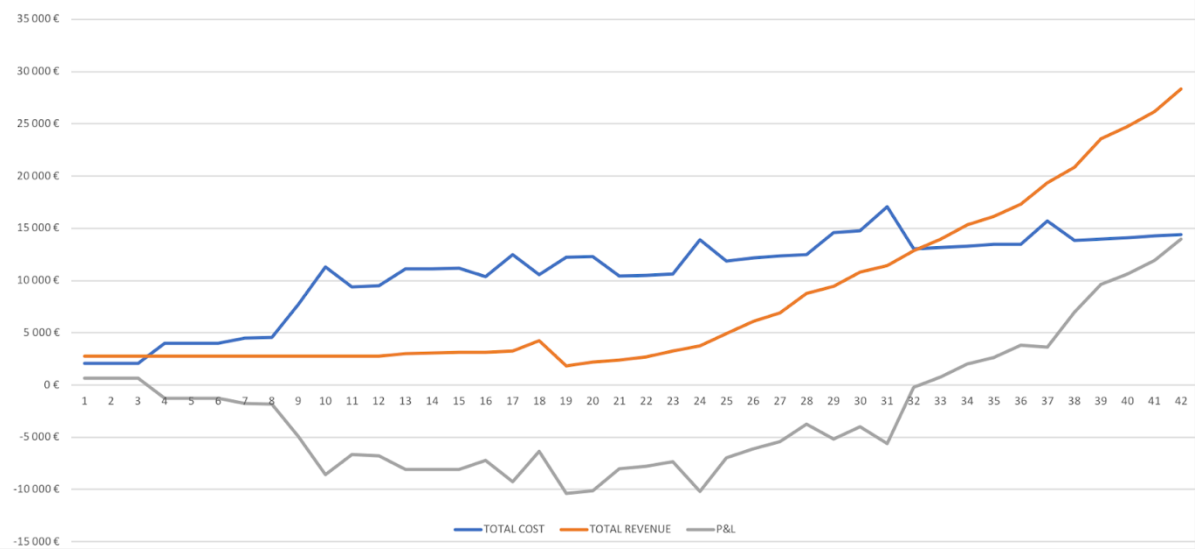
APPENDIX 4 :



REVENUE BREAKDOWN



P&L



🍇 MAIN REFERENCES 🍇

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