



## **DigiEduHack Solution**

### **Torino DigiEduHack 4 Urban Food Circularity**

**Challenge: Urban Food Circular**

**Business Models: Digital Solutions to  
'nudge' Sustainable Behaviors**

## **Mobile app CIAOCIBO**

### **An interactive canteen menu to teach kids about sustainability**

Ciaocibo app would empower children to pick their preferred school canteen menu from their parent's device by exploring interactive animations that explain the provenience of ingredients and production processes.

### **Team: Cibochain**

#### **Contact details**

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### **Solution Details**

#### **Solution description**

Ciaocibo is a mobile app designed to improve logistics and experience at school canteens leading to decreasing food waste. The app contains a system of meal ordering and rich educational resources that promote sustainable consumption habits among primary school students. It closes the communication gap between schools, parents and children in the area of catering.

Ciaocibo app empowers children to pick their preferred school canteen menu from their parent's device by exploring interactive animations that explain the provenience of ingredients and production processes.

The success could be measured qualitatively by comparing the food waste (% of food produced, measured both by mass and monetary value) before and after adoption of the app by any given canteen. The success would also be measured qualitatively by studying the improvement in children's and parents' satisfaction of the canteen's service through feedback loops embedded within the app and independent semi-structured interviews in focus groups. In the long term, the success could be verified by comparing consumer habits of the apps' users to control groups from

similar environments that do not adopt the proposed solution.

## **Solution context**

According to scientific research, nearly one third of food present at school canteens gets wasted due to diverse challenges.

- Operational reasons resulting in food being prepared, but not served, include: the absence of ordering systems for school meals leading to kitchens catering for unknown total numbers of pupils; lack of flexibility to adapt centrally planned menus to meet the preferences of pupils in individual schools; kitchens over-cater to ensure pupils have the meal option of their choice; second helpings disallowed; limited opportunities for re-using unserved food.
- Operational reasons resulting in food being served, but not eaten, include: inflexible portion sizes leading pupils being "over-faced" with food; fixed food combinations, e.g. pupils have to have a pudding whether they want one or not; pupils at the end of the queue do not get the meal option of their choice and may be served with food they do not like; and pupils do not know what meal options are available.
- Behavioural reasons resulting in food being prepared, but not served, include pupils not being hungry by lunch time (sometimes due to having eaten snacks); some meal options are less popular.
- Behavioural reasons resulting in food being served, but not eaten, include: pupils reject food when it is unfamiliar; looks unappealing; Pupils don't want to eat healthy foods nor untypical combinations of foods; children do not finish food due to a desire to finish meals quickly to socialise with friends or go out to play.

**Communications (or the lack of them) between catering providers, school staff and pupils were cut across the categories above.**

## **Solution target group**

### **COSTUMER SEGMENTS & END USERS**

Primary school canteen's management

Families of primary school students (including children aged 6-11 and their parents or caregivers who pay for their school meals)

The pilot program (MVP app with some features only and limited contents) would be launched in 2020 with the collaboration of one school canteen in Turin, Italy. Next, the solution should be scaled to other schools in Turin, Italy and potentially other countries.

## **Solution impact**

We expect significant decrease of food waste due to improving the logistics of ordering meal

In the long term, the children using the app are expected to develop profound awareness of natural and industrial processes involved in getting particular food to their plate, and develop sustainable

consumer habits

## **Solution tweet text**

#ciaocibo, where do you come from? A new app combating food waste empowers children to pick school canteen meals in advance from their parent's device by exploring interactive animations that teach about food & production processes in a fun way

## **Solution innovativeness**

Our app would be the first attempt in Italy to directly embed digital education tools in a meal ordering system.

## **Solution transferability**

Potentially, the solution can be transferred to a number of environments, including canteens, catering services and restaurants at high school and universities, hospitals, corporate offices, public institutions, large events. The concept is like a Disney film: created for children but appealing to adults. In the version targetted at adult end-users, the animated contents designed for children could be replaced with contents created specifically for environmentally- and health-conscious grown ups. The educational aspect of the "adult" app would focus on how the food is processed by the body and how to contribute to sustainable development with the right consumer choices.

## **Solution sustainability**

The economic sustainability of the project would base on a commission on every meal order (the app would embedd the payment system).

## **Solution team work**

We have only met at DigiEduHack but feel lucky to have found one another. Are team is truly international with everyone coming from a different country (Italy, Poland, Morocco and Iran); collectively we are fluent in six languages; We have approached every challenge by brainstorming together and perfected the ideas through an open discussion. In the last phase of work we have specialized with one member focused on perfecting the business model, editing and clarifying the notes, one person working on design and user experience and two members preparing the pitch presentation.