Appendices: Illustrative Case Studies

A The OLIO Case Study: A Social Enterprise App Tackling the "Chicken and Egg" Paradox

The Context

In December 2014, OLIO's co-founder Tessa Clarke was packing in her apartment in Switzerland to move back to the UK. Despite her best efforts, she had some leftover food in the cupboard. She desperately tried to give it away, but after hours of looking for someone who might want it, she failed (OLIO, 2020b). Thus was born the idea for OLIO – an app connecting users with each other and local businesses to share surplus food and fight food waste.

The business was officially incorporated in February 2015, with the help of cofounder Saasha Celestial-One, and the IOS and Android app launched in July. From being available in just five London postcodes, OLIO is now present in more than 60 countries, counts over 6 million users (OLIO, 2020a), raised over \$50 million in five rounds of funding, and generates slightly less than £1 million in revenue each year (Table A-A)

Table A-A: OLIO Facts and Figures.

Date of app launch	July 2015
Number of active users to-date	6,000,000
Number of active businesses and ambassadors to-date	Over 50,000
Annual revenue	Over £1,000,000
Countries where the app is present	Over 60
Funding rounds	5
Total funding raised	Over \$50,000,000
Portions of food saved to-date	55 million
Number of employees	85

(Source: OLIO website and email exchange with co-founder Tessa Clarke).

Business Model

By acting as an intermediary between users and businesses trying to sustainably access and dispose of excess food, OLIO fits into the category of multi-sided platforms

Note: Appendix A by Elena Cherubini

(MSP, see Figure A-A). These businesses create value by enabling direct interactions between two or more sides of the market, generally consumers and producers, with both parties benefiting from gaining access to the other side (Hagiu & Wright, 2014). MSPs also tend to have a dual-value proposition, specific to each side of the market, with the two often strictly interlinked (Muzellec, Ronteau, & Lambkin, 2015).

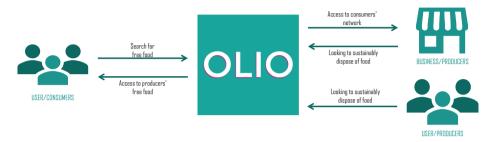


Figure A-A: OLIO's Multi-Sided Platform Model.

In OLIO's case, the platform enables consumers (users) to share leftover food as well as pick it up from their peers and/or producers (businesses). They gain value by sharing their food without wasting it, as well as receiving free goods. Businesses, on the other hand, by accessing the consumer network, get to dispose of their excess food for a flat fee, compared to the charges of a traditional waste disposal company. They also gain access to OLIO's Food Waste Heroes (volunteers), who take care of picking up and sharing the food, simplifying the process for business partners. Both sides also experience the benefit of knowing they are contributing to OLIO's mission of ending food waste (Figure A-B).

Unlike its main competitor, food-sharing app Too Good To Go, the interactions on OLIO are completely free – with the company generating revenue from the business side – and they are not limited to a B2C model but also offer the possibility of a C2C exchange.

The "Chicken and Egg" Challenge

Due to their being so co-dependent, OLIO's value propositions rely on the company's ability to generate a positive cross-side network effect, where the larger the number of consumers, the higher the value to producers and vice versa (Hinz, Otter, & Skiera, 2020). By scaling both sides of the market, the platform increases its attractiveness and value to both consumers and producers, encouraging increased use and sign-ups.

However, since both sides are needed to incentivise each other to join, OLIO faced what is commonly known as the "chicken and egg paradox" (Bakos & Katsamakas, 2008). To attract businesses, a platform needs a large base of registered users but, at

Trying to share/donate food

takes time and effort Pains

Gain creators Gains Meeting new people Messaging function built in the app within the community Forum to educate about waste issues Feeling good about Customers jobs helping to end food Access free food waste from nearby people Products & Share leftover food Services with nearby people Difficulty to find and gair access to free food from Contribute to help Search function to find nearby food Ann nearby people ending food waste Distance feature and map Hard to find ways of donating leftover food within the Easy interface to share food community Trust issues when meeting User profiles and rating system to increase people to exchange food Pain relievers **Customer Segment: Business (Producers)** Gains Flat fee comparable to waste disposal Spending the same, or less, than if they disposed of their leftovers Forum to educate about waste issues Feeling good about helping Food hero feature to highlight to end food waste Customers jobs the business Olio's Ambassadors Reputational benefit Dispose of excess Products & food cheapy Services waste disposal Contribute to help App companies are costly Flat fee ending food waste Food gets shared and not wasted throwing away food could still

Figure A-B: OLIO's Value Proposition Canvas for Users and Businesses.

Pain relievers

Ambassadors take care of picking up

and uploading on the app

the same time, users will be willing to register only if they can access products from the other side (Caillaud & Jullien, 2003). In OLIO's case, businesses will not join the platform unless there are users interested in picking up their food, but users will also not join unless there are businesses, or other users, supplying the free food. Onboarding both sides was therefore a crucial step towards sustainability for the company.

Overcoming the Challenge

Customer Segment: Users (Consumers)

To overcome the "chicken and egg" challenge and generate positive network effects, OLIO engaged in a mix of platform launch strategies and marketing techniques to seed both sides and achieve scale. It started with a very narrow focus, just five London postcodes, to test its value proposition and iterate the product (Ajilore, 2018). This enabled it to reduce the total market size and gain loyal users who were highly committed to OLIO's mission of ending food waste.

Further, to kickstart the initial user onboarding, even with a very limited marketing budget, OLIO took advantage of the word-of-mouth power by launching an ambassador programme, recruiting volunteers to spread the word in their local communities (McMullen, 2018; OLIO, 2020d). Currently, the platform still offers many volunteering opportunities for people to collaborate with them, continuing to leverage the word-of-mouth power to further enhance its user base (OLIO, 2020c). Digitally, it is also focusing strongly on leveraging electronic word-of-mouth by using its website and email marketing techniques to encourage registered users to share the app with their networks on social media (Figure A–C).

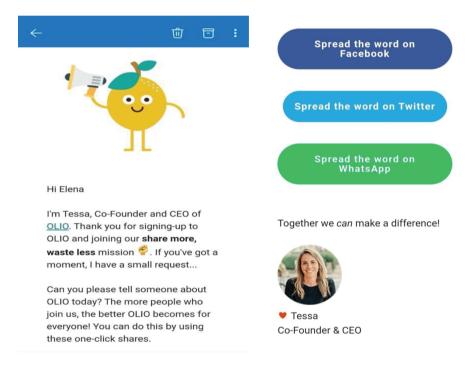


Figure A-C: OLIO's Email Marketing to Encourage e-WOM. (Source: Screenshot of Olio email sent to account after signing up for the app)

However, the most effective strategy was what Stummers et al. (2018, 171) described as the side-switching tactic, where an MSP becomes one-sided by "finding a platform design that allows users to fill both market sides" simultaneously. OLIO's initial proposition followed this method by allowing subscribers to fulfill both the role of the end-consumer, by picking up the free leftover food, and that of the producer, by uploading and sharing their own food. This way, users would find value in the platform even without the presence of the business side, and a positive network externality would be generated, avoiding the issue of the "chicken and egg".

Of course, since OLIO offers its services to users entirely free, at this stage, despite the growing number of users, the company was still not generating revenue and could therefore not be considered a viable long-term business. However, by the end of 2017, it was able to reach enough scale on the user side – 340,000 – to interest paying businesses to join, as there was enough activity on the platform for them to perceive value in their participation. Once businesses were added in 2018, under the label of Food Waste Heroes, OLIO was able to become a revenue-generating company, while also increasing the value provided to its users by ensuring a steady supply of food to the platform.

The company took things further in 2020 with a UK-wide partnership with Tesco (Smithers, 2020), proving that once the network effects start kicking in, the app can convince even the UK's biggest supermarket (Kantar, 2020) to buy into its mission.

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