

TAREK YEHIA

The Problem:

Every 100 pounds of food waste in landfills sends 8.3 pounds of methane into the atmosphere. Over 20 years, methane has 86 times the global warming effect of carbon dioxide. EPA data show that food waste is the single most common material landfilled and incinerated in the U.S.

A major aspect of the global food waste problem, especially in developed countries, is that cosmetically-defected fresh produce, which only differs in shape and form and is perfectly edible, is vastly rejected by retailers & consumers for not being “cosmetically-perfect” enough. This has been causing colossal amounts of food waste being thrown into landfills and producing immense levels of methane greenhouse gases. It also means that the energy and resources put in the production and transportation of the produce also emitted greenhouse gases to waste.

A UK study estimates avoidable food waste from on-farm **cosmetic grade-outs** to be up to 51,500 kt/year in the European Economic Area (EEA) alone.

The Solution/Our Idea:

The solution we proposed was turning cosmetically defected vegetables into affordable and variety-rich “ready-made meal” boxes, to be sold at retail stores and university campuses. Our customer segments were people who wanted the convenience of meals on the go, such as employees and university students. Since studies have shown that this issue is more than twice as severe in developed countries than developing countries, and since the ready-meal market was exponentially on the rise in developed countries, our market target was primarily developed countries, where revenue in the ready-to-eat meals segment amounted to \$77.85bn in Europe alone.

Value Proposition/Uniqueness of Idea versus Market:

Currently, when cosmetically imperfect fresh produce is not dumped into landfills, it is sometimes salvaged by organizations who either donate them to food banks or deliver them to environmentally-conscious individuals who do not mind buying the vegetables in peculiar shapes.

However, we are proposing to transform those vegetables into a fully new product, while also providing an edge in the selling process: exponentially greater affordability due to the low cost of the produce, and rich variety in meal offerings – something that is usually lacking in the ready-meal market. Hence, we want to turn waste into a financial opportunity.

My Experience & Role:

The competition was an exciting learning experience, where I enjoyed combining my passion for innovation with the academic and analysis skills I gained from my education at AUB, to create real impact within an international setting.

Throughout the hackathon, I co-developed our idea’s business model and was responsible for conducting financial analysis studies, such as break-even analysis, as well as conducting market research, and working on the pitch deck.

AUB:

Finally, I would like to take this opportunity to thank the American University of Beirut and the Talal and Madiha Zein AUB Innovation Park for giving me the opportunity to participate in this global competition alongside 1000 participants from global top-tier universities, where I was fortunate to be the only student from the MENA region amongst the top 3 winning teams.