FOOD WASTE CHALLENGE

A Look Back
The Problem

Globally, 30-40% of food produced for consumption is wasted per year. If food waste were a country, it would rank third in the world for harmful greenhouse gas emissions. Yet 800 million people are undernourished.

When we dramatically reduce food waste, we’re also addressing hunger, harnessing economic potential, and being good to the earth.

At OpenIDEO, we believe that collaboration fosters innovation. When faced with the world’s most pressing challenges, we’ve been awed by the power of working together rather than in silos. And our aspiration to use open innovation and design to create solutions to address food waste proved no different.
The Opportunity

In partnership with The Rockefeller Foundation, ReFED, The Fink Family Foundation, and The San Francisco Department of the Environment, OpenIDEO called on a global community to develop innovative solutions for dramatically reducing food waste.

Opening this topic to a global community with a variety of experiences, cultural backgrounds, and areas of expertise created opportunities for radical conversations and unexpected collaborations.

Our Challenge Sponsors

How might we dramatically reduce waste by transforming our relationship with food?
During the Research phase of the Food Waste Challenge, we called on a global community to action – to share stories, reflections, interviews, and findings related to food waste. Then during the Ideas phase, we received over 450 promising solutions from around the world to dramatically reduce food waste.

With help from our challenge sponsors, we created a shortlist of 40 submitted ideas that moved into our Refinement phase. During the Refinement phase all ideas were encouraged to continue progressing, while the shortlist represents ideas that are most active and aligned with our Evaluation Criteria.

After an iterative Refinement phase we announced 12 Top Ideas from the challenge - a diverse set of solutions that represented innovative and impactful approaches to reducing food waste.
The Challenge Process

- **RESEARCH**: July 19, 2016
- **IDEAS**: August 15, 2016
- **REFINEMENT**: September 17, 2016
- **TOP IDEAS**: October 15, 2016

- 3 Months
- 726 Posts
- 4,560 Comments
- 20,000 People Engaged in Challenge

Participation from 100 Countries
A Global Community of Action

Track Your Waste Diaries
Given that nearly 40% of food waste in the U.S. occurs at the consumer level, we called on participants to track their waste, measuring all the scraps they threw away. It was an enlightening experience — many said they were shocked by how much they wasted, began actively taking steps to toss less, and started to rethink the way they cooked at home.

Watch Your Waste Meals
We then catalyzed participants to host more than 80 waste-conscious events in over 30 countries, from Saudi Arabia to Peru, where participants shared their experiences tracking their food habits and were able to learn from one another and discuss food waste in real time.

Hack Your Waste Events
Following these events, the community hosted Hack Your Waste brainstorms focused on designing food waste solutions.
In addition to our fantastic Challenge Sponsor team, we were joined by a group of leaders in the food industry who made up our Partner Committee. Representatives from corporates, organizations, city governments, foundations, investors, universities and food waste experts all convened to make up a dynamic and accomplished group.

We shared findings and insights during monthly Partner calls, gathered for in-person food waste events, and shared outreach for our work. Partners joined as judges for Ideas in the Challenge – providing valuable guidance and perspective.
Partner Committee List

Thank you to our Partners, who included representatives from organizations including:

Ahold USA  
Alameda County Sustainability Dept.  
Arabella  
Aspen Institute  
AUSA  
Bon Appetit Management Company  
Chef Action Network  
Church Brothers Farms  
City Harvest  
City of Boulder  
City of Phoenix  
Climate Nexus  
Clinton Global Initiative  
Closed Loop Fund  
Connect4Climate - World Bank  
CUESA  
D.C. Department of Public Works  
DC Government  
DEWA  
Earth Day Initiative  
U.S. EPA  
Feeding America  
Food Hackathon  
Food Recovery Network  
Food Shift  
Food System 6  
Foodfuturereolab  
Foodstand  
Forum for the Future  
FWRA  
Full Harvest Technologies, Inc.  
FUSE Corps  
Genentech  
Google  
Greenpeace  
Grocery Manufacturers Association  
Harvard Food Law and Policy Clinic  
Hatzimemos / Libby  
IDEO  
ImaginH2O  
Imperfect produce  
James Beard Foundation  
Kitchens For Good  
L.A. Kitchen  
LeanPath  
Lexicon of Sustainability  
Marriott International  
Metro Vancouver  
New York City Dept. of Sanitation  
NRDC  
Nutter Consulting  
NYC  
Ocupop  
Oregon DEQ  
OSC2 // Impact Hub  
Pisces Foundation  
Real Food Real Stories  
Recology  
Redstone Strategy Group  
ReFED  
Research Chefs Association  
RSF Social Finance  
Salvage Supperclub  
SF Environment  
SOCAP  
Sodexo  
SunShot Initiative  
Sustainable America  
Target  
The 11th Hour Project  
The Perennial Restaurant  
Treasure8  
U.S. Department of Agriculture  
UNEP  
USEPA Region 4  
Utopia  
Waldorf Astoria  
Walmart Foundation  
Waste Management  
Winnow  
World Resources Institute  
WWF & WWF-X
RESEARCH PHASE LEARNINGS
Research Synthesis Workshop

At the completion of the Research phase, the OpenIDEO Team hosted a synthesis workshop with the Challenge Sponsors at the IDEO office in San Francisco. Together, we looked over the overarching themes that emerged from the diverse collection of inspirations submitted.

The workshop proved a valuable time for us to share key learnings we had gained from our global OpenIDEO community who participated in the Challenge. Building on this discussion, we were able to define focus areas for generating new solutions in the following Ideas phase of the Challenge.

Our Challenge Sponsors

[Image of sponsor logos]
We identified 7 overarching themes that emerged from the Research phase. These themes are meant to serve as conversation starters for the Ideas phase and do not reflect all of the amazing learnings from our OpenIDEO community.
Widespread change often starts with passion projects at the local level. Social innovators around the world are building micro-communities to tackle food waste. How might we support innovators in scaling their food waste interventions?
Activate Local Communities around Food Waste

Salvage Supper Club in NYC

Jake Stanley
OpenIDEO Member

The now popular Salvage Supperclubs started out as pop-up dinner parties in Brooklyn where meals made from past-prime food were served to diners inside a scrubbed down dumpster.

Solidarity Fridge

Anne-Laure Fayard
Associate Professor of Management at New York University

A communal fridge experiment in Galdakao, Spain is allowing local residents and restaurants to drop off leftover/unused food for anyone to take home.

#SaveFood

Enactus UoE
University of Eldoret Enactus Students Club in Kenya

The ENACTUS University of Eldoret in Kenya noticed that edible food from restaurants and households were appearing in landfills at alarming rates. In response, they created the #SaveFood campaign that succeeded in reaching 20,000 local residents and led to a 45% drop in edible food wastage.
Create Food-Share Networks for Local Communities

**OLIO - The Food Sharing Revolution**

A free app that connects neighbours, local shops and cafes with each other so that surplus food can be shared, not thrown away.

**Farmsquare - Share Healthy Food**

A digital platform that connects people who are growing their own food to exchange or donate healthy foods to neighbors within the local community.

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**Peak Plate’s Mission to Transform Food Supply**

A platform and community of foodies, restaurateurs and farmers who are dedicated to supporting a sustainable food system by distributing the produce that is typically wasted during peak of harvest to local chefs and specialty grocers.

**OLIO**

Tessa Cook  
Co-Founder and CEO of OLIO in the United Kingdom

**Farmsquare**

Tatiana Teixeira  
OpenIDEO Member

**Peak Plate**

Julie Fineman  
CEO and Founder of Peak Plate in San Francisco

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Food Waste Challenge Research Learnings
Food scraps and throwaways are increasingly being repurposed as business opportunities in local economies. How might we support new business ventures around repurposing food waste?
Re-purpose Scraps to Create New Foods

The Case of Brewers’ Spent Grain

Spent grain is the main leftover of beer brewing. Most of it ends up in landfills, but it is now being used as an ingredient for granola bars, pasta, bread, and dog biscuits.

‘Junk’ Food — Literally!

For each meal served in restaurants, a half-pound of food waste is created. Top chefs are applying innovative techniques to turn vegetable scraps into stunning meals.

Beer Brewed with Surplus Bread

British beer brand “Toast Ale” uses surplus bread from local bakeries and delis for brewing. All profits are given to the food waste charity, Feedback.
Waste to Taste is a food recycling center and waste food restaurant founded in Helsinki that serves high quality food made mainly from ingredients that would otherwise be thrown away.

An agri-business in Cambodia is taking the oversupply of unsold mangoes and converting it into dried fruit snacks — in turn creating new employment in the countryside.

Two business students joined forces with Too Good To Waste and launched a Kickstarter that led to the creation of a brand that only uses “wonky” vegetables to make soup.

Waste to Taste is a food recycling center and waste food restaurant founded in Helsinki that serves high quality food made mainly from ingredients that would otherwise be thrown away.
Our love for over-indulging on lots of food often comes from the cultural and family values we grew up with. How might we re-imagine our personal relationship with food by adopting more frugal mindsets around eating?
Challenge Social Norms Surrounding Food Waste

Mama, I Know You Love Me but...

Swapna Bellare
Consumer Researcher in Austin, Texas

In Indian and other cultures, mothers are known to overfeed their children to show love and affection. How can we say, “Mama, I know you love me, but no more food please!”

The Drivers of our Food Waste Behavior

Niki Ramchandani
International Research Analyst in New Jersey

Through a Facebook survey, Niki discovered how lessons and social disapproval from childhood can affect our eating behaviors and our relationship to food.

Food Waste vs. Country’s Culture

Armand Khoury
Innovation Manager of a CRM Company in Paris, France

How would you reduce food waste in a culture that is known for its generosity and hospitality, especially when it comes to serving lots of food?
Feeling sad? Have a whole tub of ice cream! Feeling rejected? Eat a whole lot of donuts! We all have unhealthy tendencies to over indulge on comfort foods that end up in waste.

Katie discovered how taking selfies with our food can help us become more mindful of choosing the right portion sizes when eating meals.

Food Waste on College Campuses

All-you-can-eat dining is causing huge amounts of food waste on college campuses — so why not go for more waste-conscious dining options?

Will
Sophomore Aerospace Engineering Student at the University of Maryland

Eradicating the Myth of the Binge

Aika
OpenIDEO Member

Feeling sad? Have a whole tub of ice cream! Feeling rejected? Eat a whole lot of donuts! We all have unhealthy tendencies to over indulge on comfort foods that end up in waste.

Food Waste Challenge Research Learnings
Every effort to reduce food waste also creates opportunities to fight hunger in our communities. How might we collect and redistribute surplus foods to tackle food insecurity?
Share Your Meal with Someone in Need

**Satisfeito Project**

Marcos Szrajer  
*Project Manager at Satisfeito Project in Sao Paulo, Brazil*

A food security program in Brazil is enlisting restaurants to offer smaller plate portions so the costs saved can be transferred to help organizations fight child hunger.

**Re-Plate: Turning Abundance Into Fraternity!**

Daniel  
*Re-Plate Team Member in San Francisco, California*

Re-Plate is an non-profit tech company that delivers surplus food to charitable organizations in the Bay Area through an on-demand transportation system.

**Share My Dabba (Lunchbox)**

Sharon D’Costa  
*Marketer and Social Entrepreneur in Mumbai, India*

Mumbai’s lunchbox delivery network now lets people share leftover food with the hungry street children by placing a simple “Share” sticker on lunchboxes.
If you can measure it, you can improve it. Reducing food waste starts with defining what good waste management looks like. How might we develop new benchmarks and measurement tools to help companies improve their waste management practices?
If You Can Measure It
You Can Improve It

Reducing Food Waste in Berkeley Restaurants

A research study in Berkeley revealed that local restaurant owners perceived only minimal amounts of waste and have little knowledge of how to accurately measure food waste.

My Food Waste Diary: Tracking My Waste

Matt tracked his personal food waste by keeping a Food Waste Diary for an entire week, which resulted in some unexpected surprises and creative solutions for reducing waste.

How Winnow is Revolutionizing the Hospitality Sector

Winnow connects commercial kitchens to the cloud, allowing them to record and analyse exactly what is put in the bin. Chefs would then have the information to cut food waste in half.
The South Australian government is working on a trial to get restaurants and pubs onboard to reduce their large portion sizes.

A high-tech initiative in South Korea charges households and businesses fees based on the weight of waste generated. The program has succeeded in reducing restaurant food waste by 40%.

In South Korea, An Innovative Push to Cut Back on Food Waste

Volume-Rate Garbage Disposal in South Korea

Hyung Jin Yoo
Product Designer in Philadelphia, Pennsylvania

A high-tech initiative in South Korea charges households and businesses fees based on the weight of waste generated. The program has succeeded in reducing restaurant food waste by 40%.

Legal Approach to Food Waste

Saumya Walia
Mechanical Engineering Student at Georgia Tech University

France is the first country to fine supermarkets for throwing away edible produce — mandating that all unsold food must be donated to charities and food banks.

Reducing Portion Size

Emma
Business Technology Consultant

The South Australian government is working on a trial to get restaurants and pubs onboard to reduce their large portion sizes.
While modern day consumer packaging and in-home refrigeration have dramatically increased the shelf-life of foods, they’ve also lowered our awareness of buying only what we can eat. How might we design smarter consumer packaging and storage methods to help consumers become more conscious of their shopping behaviors?
Rethink Consumer Packaging of Food

Redefining the First Moment Of Truth

Angel Landeros
Consumer Packaged Goods Professional in Mexico

The First Moment Of Truth (FMOT) and Convenient packaging have desensitized us to the consumption of excessive and overpriced foods.

Dual (Soft & Hard) Expiration Dates

Tojin Eapen
Doctoral Student at University of North Carolina

Introduce soft and hard expiration dates on food products. Some products are perfectly safe for human consumption beyond the expiration date, but are thrown away once the date is crossed.

Trendy Berlin Grocery Store Rethinks Packaging

Jen Riedel
Director of Operations at a Med-Tech Startup in North Carolina

Original Unverpackt is a packaging-free supermarket in Germany where shoppers can bring their own containers to buy food in the exact amounts that they need.
Fresh Paper, invented by Kavita Shukla, prolongs the life of fruits and vegetables using spices. When placed under produce, the sheets are able to keep food fresh two to four times longer than normal.

A designer revived traditional food preservation techniques to re-imagine how fruits and vegetables can be stored without refrigeration at home.

**Escape from the Fridge**

A designer revived traditional food preservation techniques to re-imagine how fruits and vegetables can be stored without refrigeration at home.

**Cooking without Refrigeration**

Sruti Bharat
*Strategy Manager in San Francisco*

Sruti reflects on how her grandmother developed the instinct to cook exactly the right amount of food each day in response to the humid climate in India.

**Fresh Paper**

Silvana Zaldivar
*Industrial Designer in San Francisco*

Fresh Paper, invented by Kavita Shukla, prolongs the life of fruits and vegetables using spices. When placed under produce, the sheets are able to keep food fresh two to four times longer than normal.
The boundaries of conventional waste management are being pushed by emerging technologies and processes. How might we incorporate new trends and technologies to re-imagine new possibilities for reducing food waste?
Build On Emerging Trends to Prevent Waste

A Pokemon Go Model for Urban Fruit Rescue

Brian Tang
Corporate Finance Lawyer in Hong Kong

Using GPS, gamification and the sharing economy to scale a fruit rescue initiative in Hong Kong.

Samsung’s New Smart Fridge

Nathan Smith
OpenIDEO Member

Samsung is rolling out a new smart fridge with internal cameras so you can monitor your produce using your phone when you’re out and about.

Food + Future CoLab

Alan Hurt
CEO of Innospce Lab and Founder of Light Up Africa

A collaboration between Target, IDEO and MIT Media Lab is developing in-field drone technologies to monitor, scan, prune and dehydrate fruits on the spot.

Food Waste Challenge Research Learnings
Gakko-kyushoku, Japan’s school lunch system, teaches students how to prepare, serve, eat and conserve their meals.

Mundane Matters creates food sculptures and sensory experiences using natural ingredients, mostly fruits and vegetables. The project has inspired people to consume food in a much more positive manner, either from saving their leftover, or an imperfect fruit, or simply eating more responsibly.

The rising popularity of experiential dining events are not only attracting new customers, they’re also giving chefs new opportunities to raise awareness around reducing food waste.

School Lunch in Japan

Gakko-kyushoku, Japan’s school lunch system, teaches students how to prepare, serve, eat and conserve their meals.
Ideas Phase

We often get asked if we read through every post that’s submitted on the OpenIDEO platform. The answer? Yes we do!

We believe that by being hands-on with our community – interacting directly with them and reading through each submission that we learn and gain the most insight and can help shape social impact.

In the Challenge Ideas phase, we saw over 450 ideas shared from around the world. Ideas ranged from brand new community-driven food waste solutions to jumpstarts for existing, impactful startups. We are truly inspired by the diversity, innovation and depth of submissions we saw from nearly 40 countries around the world!
Food scraps and throwaways are increasingly being re-purposed as business opportunities in local economies. How might new business models focus on reducing or re-purposing food waste? Let’s create solutions that use business as a huge lever for change on a local and national level.
Waste Means Business

**BuyMeBy**

Carlos de Santiago  
Co-Founder of BuyMeBy in New York

An online marketplace that will use dynamic pricing to discount perishable goods nearing expiration. Use BuyMeBy to find live discounts on foods in stores.

**CaribShare Biogas**

Carol  
Founder of CaribShare Biogas in Jamaica

The first Caribbean social enterprise focused on turning organic waste from hotels and pig farms into clean energy, fertilizer, and social good.

**Toast Ale**

Julie  
Full-Time Toast Ale Team Member, London, United Kingdom

A British brand that’s using surplus bread from delis, bakeries and sandwich factories to brew beer. All profits go to a non-profit dedicated to fighting food waste.

Food Waste Challenge Ideas Phase Missions
We might not be aware of waste associated with our eating habits or how to make better use of what we don’t use. These habits have a huge influence on strategy decisions for businesses and supply chains – so it’s a really powerful place to start. Let’s reimagine the consumer experience from purchasing to disposal.
Food is often wasted in the home when it’s lost in our overloaded shelves. Now there’s an app for keeping track of the food we forgot about.

An infographic food labeling system in supermarkets that will prevent consumers from buying more than they can eat.

A fresh food storage solution that reimagines how produce is stored at home without refrigeration. Produce is stored visibly, encouraging us to eat them as they ripen.

Food is often wasted in the home when it’s lost in our overloaded shelves. Now there’s an app for keeping track of the food we forgot about.
Widespread change often starts with passion projects at the local level. Let’s think about what zero waste might look like on a small scale – from a meal to a kitchen to a community to a city – in order to apply those learnings globally. Activation of innovations that build micro-communities tackling food waste...what could be more powerful?
Think Locally to Scale Globally

**Gator and Crane’s #WasteLess Market**

Emily Gaddis
*Founder of Gator and Crane in New Orleans*

A zero-waste grocery that incentivizes sustainable consumer behaviors. Consumers would pre-order online exactly the amount of food they need for pickup in the stores.

**Urban and Suburban Food Rescuer**

Brian Tang
*Founder of Young Makers & ChangeMakers; Corporate Finance Lawyer in Hong Kong*

ZacSnax is an urban fruit rescue program that’s developing a gamification app to help more people discover and rescue imperfect fruits from markets across Hong Kong.

**Family Meals**

Fiona
*Program Manager at Food For Free in Boston, Massachusetts*

A food rescue program that repackages surplus foods from university dining halls into single-serving meals for people with limited access to kitchens.
MISSION 4

Better Together

The brilliance sparked when ideas and current efforts come together is a huge part of what will create a movement to reduce food waste. We’re eager to see collaborations that increase the impact of what an effort might be able to do alone. How might new technologies, transportation, education, or other unlikely contributors be part of powerful new models?
A crowdsourcing app that would allow food-packaging companies and designers to collect high-quality insights from consumers, revealing new opportunities for innovation.

The production of food makes up the largest part of our water footprint. Let’s offer Water Conservation Certificates to businesses that conserve waste or donates surplus foods.

**Water Conservation Certificates**

Aine Gormley-Gallagher
Lecture in Geopolitics at the University of Groningen, Netherlands

The production of food makes up the largest part of our water footprint. Let’s offer Water Conservation Certificates to businesses that conserve waste or donates surplus foods.

**Employee Wellness Program**

Megan Kennedy
Product Designer at Tradecraft in San Francisco

A crowdsourcing app that would allow food-packaging companies and designers to collect high-quality insights from consumers, revealing new opportunities for innovation.

Go-Between

Ana Milena Marquez
Industrial Designer and Creative Director in Colombia

A crowdsourcing app that would allow food-packaging companies and designers to collect high-quality insights from consumers, revealing new opportunities for innovation.
TOP IDEAS
Meet Our 12 Top Ideas

Feast your eyes on our Top Ideas: from on-demand food waste reduction to the production of pet food, plastics, even muffins. Our community served up creative redesigns to food waste, from the grocery store to the catering tent and beyond.

Each of these met the evaluation criteria:

- **Reduce Food Waste** – illustrate potential for significantly reducing waste
- **Are innovative** – provide a creative solution
- **Are human-centered** – consider human user needs
- **Think big and smart** – show potential for scale & impact
- **Focus on relationships** – partnerships, collaborations

In addition to meeting these evaluation criteria, each of the Top Ideas exemplified partnership and collaboration during the OpenIDEO Challenge process – by connecting with other users around the world, responding to feedback and posting significant progress during the Refinement phase.

*Congratulations to each of our Top Ideas!*
Food Flow

Team

Luis Fernando De Pombo  
Software Engineer at Uber in San Francisco, CA.

Gabriel Ascanio  
Program Assistant at ArtSpan in San Francisco, CA.

Michael Atherton  
Interaction Designer in San Francisco, CA.

Iris Yan  
Community Prototyper; Product Design Engineer at Apple in Cupertino, CA.

Idea Overview

What if you could easily cut down on wasted food and provide meals to local food shelters - all while running errands or walking back to the office from lunch? Food Flow is aiming to make it that simple and seamless. The app incentivizes individual transport of food from a catering company or restaurant to a food shelter. Users will receive Flow points that they can redeem for dining experiences, keeping the cycle going and the food flowing into the community.
RISE

Team

Bertha Jimenez  
Cofounder of RISE; Post-PhD in New York

Ashwin Gopi  
Doctoral Candidate at NYU

Jessica Aguirre  
Insurance Agent in New York

Remington Tonar  
Strategy Consultant in New York

Idea Overview

One man’s byproduct is another man’s treasure! RISE is working to turn beer spent grain into baked goods, and to close some of the loopholes where food escapes from the supply chain. In the hierarchy of food recovery detailed by the EPA, feeding humans beats out things like composting and industrial use – once we’ve produced food for people, the goal is to make sure it gets to the table. With that in mind, the RISE team is building some thrilling partnerships: working with several local makers, linking up with other OpenIDEO community members, and even presenting their idea at the UN!
Smart Food Dehydration

Team

Chad Knutsen
Chief Innovation Officer at Cornucopia Group in Anacortes, WA

Idea Overview

This idea aims to bring food dehydration into a bright new future. Farm waste is a drain on our water supply as well as on farmers’ bottom lines – so the team behind PS Coating wants to increase the GDP of our food supply. Their protein coating produces preserved foods that retain all of their nutrients and yummy qualities. By transforming those lost food resources into high quality dehydrated foods, PS Coating is adding extra efficiency (and deliciousness) back into the supply chain.
Caterers and other large-scale food production operations have a problem: excess meals are wasteful, and cost money to clear away. Re-Plate has a solution: a recovery service that provides those meals to charitable organizations free of charge. Their on-demand transportation service zips over to food pickup points, connecting donors to recipients in real time. That means less food wastage, and more edible support for organizations and individuals that need it most.
Eat The Old One First

Team

Yulianto Hiu
Designer in Indonesia

Idea Description

We’ve all been there: you go to the grocery store and realize when you get home that you already had lemons. The citrus already in your fridge gets shoved to the back, forgotten until it makes its presence known by going bad. Eat the Old One First brings hipness to the “first in, first out” model of freshness by designing storage that keeps us one step ahead of spoilage. In addition to fruit and vegetable keepers, there are specialized containers for bread and cereal; the system is designed for use in industrial and home kitchens alike.
One in five residents of Alameda County is food insecure – and at the same time, food and food-soiled paper makes up more than a third of the county’s waste stream. There is also a significant portion of the population who, for one reason or another, are difficult to employ. ALL IN Alameda County is developing a triple threat solution that treats problems as opportunity. The program being designed creates fairly paid jobs as food runners. It has the potential to make a serious dent in that 35% of waste generated by discarded food and packaging, while also bringing nutritious food to those in need.
CoBuy

Team

CoBuy Team
New Zealand

SL Rao
Community Prototyper; UX Designer at Microsoft in Seattle, WA

Idea Overview

There’s a lot of slack in the traditional grocery shopping experience. Think edible food being tossed by stores to make space for new shipments, or individual Styrofoam packaging for fruits and vegetables with naturally thick skins. One great way to cut down on this waste is by buying in bulk, but that can be unwieldy and occasionally expensive. Cobuy aims to enable group buying in bulk from wholesalers, cutting down retail food waste and packaging, along with price tags for consumers.
How To Keep Fresh Sign

Team

Neil Trivedi
Business Strategist at a Financial Institution in San Francisco, CA

Maria Paula Machado
Community Prototyper; Product Designer in Bogota, Colombia

Amit Kundani

Idea Overview

We’ve gotten accustomed to signs in the produce aisle announcing the price, provenance, and organic-ness of peaches or green peppers. But often once that beautiful fruit or veg gets home, storage practices lead to spoilage before it can be enjoyed. If you’ve ever been foiled by the blink-and-you-miss-it ripeness of an avocado, Keep Fresh is a sight for sore eyes. These signs in grocery stores will share storage tips to save your produce for you to enjoy.
Mighty Muffins

Team
Jen
Co-Founder at CommonWealth Kitchen in Dorchester, Massachusetts

Idea Overview
While the jury is out on breakfast as the most important meal of the day, the data shows clearly that students who eat a good breakfast are better set up for success in the classroom. But food insecurity, or just the morning rush, holds some kids back. Enter Mighty Muffins! Sourced from local surplus produce scraps, each muffin contains a full serving of vegetables to start the day off on a tasty foot. The founders are working with bakers, food companies, Drexel University, and the Boston Public School System to develop and pilot their creation.
Amid worries about BPA and the Great Pacific garbage patch, Full Cycle offers a slam dunk: translating everything from agricultural byproducts to waste paper into safe, compostable bioplastics. Normal bacteria are used to “eat” the food waste and turn it into a plastic-like material called PHA. This reduces levels of organic pollution while also decreasing the amount of plastic likely to be put into a landfill or otherwise jeopardize the environment.
FeedTruck

Idea Overview

FeedTruck puts a new spin on an old trend that’s having a delicious moment. Bringing an entirely new meaning to Meals on Wheels, this food truck collects discarded ingredients from São Paulo’s markets and fairs. Then it uses them to whip up delectable snacks for those in need. Incorporating a systems-level approach to increasing access to the gastronomic world, FeedTruck’s creators also plan to partner with a cooking school to train underprivileged students as assistant chefs.
From picky eaters to food fights, kids have their own take on food waste and consumption. Why not start by engaging the next generation in food waste reduction? With a playful challenge, the game Food Trooper aims to get the littlest members of our households on board. From refrigerator magnets to a special “Eat This Food!” box for storing leftovers, the game encourages children to track what’s going on in their own kitchens, discuss with their peers, and come up with solutions to best avoid food waste in future.
WHAT WE LEARNED
Themes as Insights for Innovation

1. Waste Means Business

How might we support new business ventures around repurposing food waste?

Local economies are transforming, as food scraps become business opportunities. We are witnessing new business models emerging that turn what was previously wasted into valuable opportunity. Next, we need the innovative capital structures to fund these efforts so they can scale up and deliver more impact.

2. Food Habits

How might we transform our behavior in order to reduce food waste and see ourselves as agents of change?

When it comes to food waste, we can’t change what we don’t track—and consumer habits have major impact on food-related supply chains. The more simple the opportunity for people to waste less, the quicker behavior will shift. Creating clear calls to action and educating the public will provide big opportunity for change.

3. Think Locally to Scale Globally

How might we create and leverage efforts that start in our own backyards, enabling them to create far-reaching change?

What might zero waste look like on a small scale—from a meal to a kitchen to a community to a city? The actions of micro-communities can coalesce to power global movements. By piloting small test projects, testing them and getting feedback, we can learn what works and what can change. By learning from our pilots, we can make big bets on the most promising aspects in order to scale up opportunity.

4. Better Together

How might new technologies, transportation, education, or other unlikely contributors be part of powerful new models?

New partners, new possibilities. The combination of fresh, bold ideas and existing efforts can form a whole greater than the sum of its parts. In the end, every ship rises together. By being open source about our learnings and collaborative in our work, we will be able to go further faster. Only by working together can we launch into a future without waste.
Waste Means Business

“Waste as Opportunity”

- Business Models
- Capital Structures

Food Habits

“Design for Behavior Change”

- Make it Simple
- Make it Actionable

Think Local, Scale Global

“Start Small, Go BIG”

- Pilot Projects Locally
- Make Big Bets

Better Together

“Every Ship Rises”

- Open Source
- Collaborative
The response of these entrepreneurs and our partners confirmed that there was a need for engagement beyond the Challenge. We sought to build on this mounting global momentum by creating a sustainable, engaged network of innovators designing food waste solutions together. And we’re doing just that.
FOOD WASTE ALLIANCE
We’re designing a future without waste. Join us.

Enter the Food Waste Alliance, a longer term platform for open innovation around the topic of food waste. Following the Challenge, we invited a cohort of the best and brightest ideas, startups, and efforts to share resources and catalyze ongoing food waste impact. The vision is to connect a global community of Innovators, Government, Corporates, NGO’s, Investors, Community Organizers and more.

Our hope is to spark transformation that launches us toward a zero-waste food system that promotes food security and a sustainable planet. Food waste is a problem that affects us all, and we can all pitch in to create change. Whether you’re an innovator, an organization, or an interested individual, join us! We need your help to create positive and disproportionate impact on our food system.
A Platform For Sustained Impact

The Food Waste Alliance offers opportunities to connect, learn and act in order to bring food waste innovation efforts to the next level. Community discussions, tools and resource share and global and local events work together to equip diverse stakeholders to launch us toward a future without waste.
Visit Us!

Interested to learn more?

• Join us: OpenIDEO.com
• Social Media: @openIDEO
• Visit the Food Waste Challenge: challenges.openideo.com/challenge/food-waste
• Learn more about the Food Waste Alliance: foodwaste.openideo.com/
THANK YOU!

*We look forward to designing a future without waste together.*