



# CIRCULAR DESIGN FOR THE PLANET

To provide you with some background about us, STREAT is a food system social enterprise that provides supported vocational training in hospitality and horticulture along with holistic personal support to young people aged 16-24 who really need a hand.

STREAT exists to make a difference to young people who face a range of barriers and disadvantage. We aim to provide a sense of connection, safety and belonging to our young people.

We want our young people to thrive in all parts of their lives. We want them to feel a sense of belonging at STREAT, and know that we're here to help them achieve a healthy self, healthy work and a healthy home.

**But it doesn't end there. STREAT strives to create goodness in the following three areas:**

- PEOPLE** - Maximising our social footprint.
- PLACES & PLANET** - Minimising our enviro footprint.
- PERFORMANCE** - Standing on our own two feet financially.

Today, you are integral in helping us achieve our goal of minimising our environmental footprint.

Dear You

STREAT has always had a goal to maximise its social footprint whilst minimising its environmental footprint, and in recent years we've amplified our environmental work, working with other food system social enterprises in initiatives like Open Sauce to work on system-wide changes that make a difference.

The task of taking climate action may seem daunting, but as the food system is one of the biggest contributors to greenhouse gases, we have an opportunity to collectively make a big contribution through reframing our waste streams as resource streams, identifying how we can reduce waste and create circular products.

This Melbourne Knowledge Week we're partnering with MAKE Studios on ways to create circular products from food and packaging waste across our cafes. We're keen to work as hard as we can to help as many people and organisations go as deeply green on food waste as humanely possible.

Thanks for being a part of STREAT for a couple of hours, whether you're ideating and storyboarding new ideas or helping us test prototypes. We look forward to hearing how you use these skills and ideas in your own organisations and lives.

STREAT & MAKE

## ABOUT MOVING FEAST

### Our collective work in the food system

Moving Feast is a collective of food system social enterprises and affiliated for-purpose partners that formed during the pandemic, working together over the last two years from paddock to plate, to provide food relief to those who are food insecure. Moving Feast has also always kept an eye on the longer term need to rejuvenate and work towards systemic change in our food system, to support people and our planet creating a fair, regenerative and connected food system for Victoria.

One of Moving Feast's key projects is Open Sauce supported by Sustainability Victoria. Working with several Moving Feast partners (movingfeast.net), the Open Sauce project is on a mission to reduce and divert our collective waste items from landfill to turn these precious resources into both edible and non-perishable products.

The Open Sauce project is designed to be open source in nature; it seeks to establish an open innovation process across the food social enterprises and the public, sharing processes and best practices for developing new circular retail products.

To be able to achieve this, we need to understand the food system ecosystem (pictured at right) in order to pinpoint how we can go deeper shades of green at every point.

This includes:

- Auditing and mapping – supply & value chains, waste, assets, skills.
- Creating new circular product ideas and products – at least 100 new circular retail product ideas (see movingfeast.net/projects/opensauce).
- Integrated production – identifying a small-batch process across the group.
- Open innovation – running open innovation workshops, ideation and pitch sessions, providing student internships, education materials and an open-source portal.
- Zero waste plan – developing a strategy to circularize our network by mapping our network's food system waste streams and value chains, developing products and small batch production processes, investing in equipment, and many more Moving Feast and public events and initiatives.

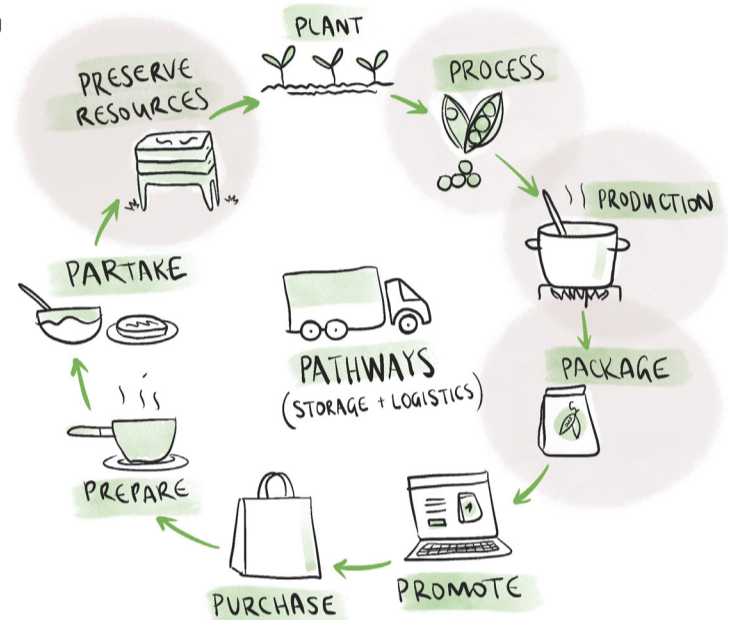
## THE FOOD SYSTEM VALUE CHAIN

Today, we're focusing on creating and testing circular products.

In the context of the food system value chain, we're exploring ways to preserve resources, and process, produce and package more resources at each stage, preserving and creating value throughout the system.

**"Social entrepreneurs are not content to just give a fish, or teach how to fish. They will not rest until they have revolutionized the fishing industry."**

– Bill Drayton



## SOME UNSAVOURY FOOD WASTE FACTS

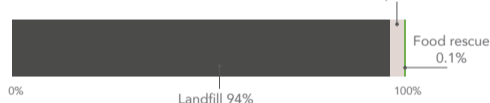
### Some unsavoury food waste facts

- We'd say here are some interesting facts to chew on but we find them quite unpalatable. From the macro to the micro we've got huge problems with food waste.

### Worldwide

- One third of the world's food is wasted.
- 25% of water used in agriculture is used to grow food that is wasted – throwing away one beef burger wastes the same amount of water as a 90-minute shower! While its vegetarian cousin is certainly better water-wise, chuck out an impossible burger and it still equates to a 23-minute shower!
- Food waste produces 8% of global greenhouse gas emissions. If food waste was a country, it would be the third largest greenhouse gas emitter, behind the USA and China.
- Food in landfill converts to methane, one of the worst greenhouse gases.

### Australia - Food waste destinations



### Victoria

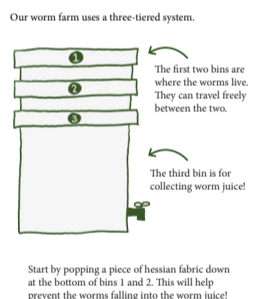
- Cafes and restaurants are responsible for 15,500 tonnes of food waste.
- Take-away food shops are responsible for another 33,000 tonnes.

### Melbourne

- The average City of Melbourne food business's landfill bin contains 34% food waste.
- Thrown out food from Melbourne's food businesses could be feeding over 70,000 people a year.

Sources: Sustainability Victoria, Fight food Waste Cooperative Research Centre, City of Melbourne, Department of Agriculture, Water and the Environment and the World Economic Forum.

## BY CREATING CIRCULAR PRODUCTS, WE CAN TURN THIS ON ITS HEAD



The circular products we've been exploring include (from top left):

- Food products made from parts of the fruit or vegetable that would often be thrown away, like this watermelon rind pickle.
- Products made from sturdy bulk food packaging that restaurants and cafes go through in high volumes, like this worm farm made from bulk food buckets and hessian coffee sacks.
- Kits for products up-cycled from food packaging that both hospitality businesses and consumers use, such as these lunchboxes made from plastic milk containers.

## DESIGNING FOR THE PLANET – APPLYING HUMAN-CENTRED DESIGN TO FIND INNOVATIVE WAYS TO CREATE CIRCULAR PRODUCTS

In today's workshop, we'll be focusing on the Develop stage of the Human-Centred Design double-diamond process, using tools and approaches to create new concepts, test, learn and iterate.

We'll be building on the work that the Moving Feast network have already done in Open Sauce's Discover and Define phases, including comprehensive waste audits and interviews about what resources end up in the waste stream, and why. Today's outcomes will help to develop Open Sauce concepts and products.

The first part of the workshop will be an Ideation session, to generate ideas individually and collaboratively. It's a great warm up for generative thinking and circular design ideas!

Then, for the second half of the workshop you can choose whether to prototype your own ideas for products, or test and iterate Open Sauce products that we have been prototyping.

### IDEATION



Generate as many ideas as you can! This activity is great for people who love to ask 'what if?' and sharing their ideas to help spark new ones.

#### HCD tools we'll use:

- How Might We...? statements
- Brainstorming
- Idea Ts and sketching

#### Objective:

Diverging to explore new ideas

### PROTOTYPING



Develop a concept by considering it from every angle. Get hands-on by creating a physical prototype, or sketch a concept.

#### HCD tools we'll use:

- Physical prototyping
- Concept storyboards
- Rapid feedback framework

#### Objective:

Learn by doing and iterating

### RESEARCH



Take a prototype into testing and learn from real customer feedback. Design and conduct interviews, identify themes and make recommendations.

#### HCD tools we'll use:

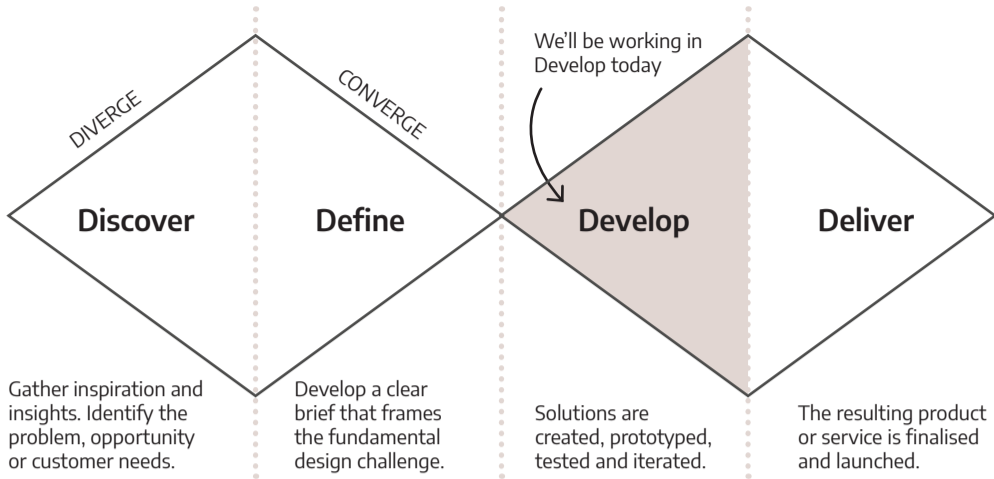
- Prototyping
- Customer interviews
- Synthesis of findings

#### Objective:

Generate recommendations

Human-Centred Design (HCD) is a creative approach to problem solving that starts with the people you're designing for. By gaining a deep understanding of people's needs, hopes and aspirations we can create better and more innovative solutions for them.

The HCD process involves different phases of **diverging** – exploring and widening our thinking to create choices, and **converging** – learning and focusing our thinking to make decisions. This process is known as the 'double diamond'.



**DO...**

- Participate! You are part of the team and your thoughts and input are valuable.
- Listen to other's points of view. Jamming is fun, it works best when there's diversity of thought.
- Use this zine to take notes and add ideas – it's your record of the process we'll go through today.
- Tweet, Instagram, Facebook or LinkedIn the day – share what we are doing and the fun you're having. We'll share some hashtags during the day.
- Have fun!

**AVOID...**

- Using any device except if we are doing desktop research or taking photos and posting to social media.
- Approaching cafe customers for feedback without first checking with your facilitator and the site manager.



**ABOUT IDEATION**

**HOW MIGHT WE (HMW)**

Using How Might We (HMW) questions we're able to take challenges and insights and reframe them into actionable provocations.

This is where Post It notes™ and Sharpies™ get a real workout!

Today's challenge is to come up with ideas in response to the question:

**How might we ...**

**Reframe resources that are going into the waste stream by creating products that use them at their highest value so that they are not only kept out of landfill, but have multiple ways of creating value?**

**MINDSETS AND PRINCIPLES FOR IDEATION:**



**Be optimistic**

Approach things from a place of possibility and ask questions like 'What if?' and 'How might we?'



**Co-create solutions**

Benefit from the multiple perspectives of others and their different backgrounds, experience and skill sets.



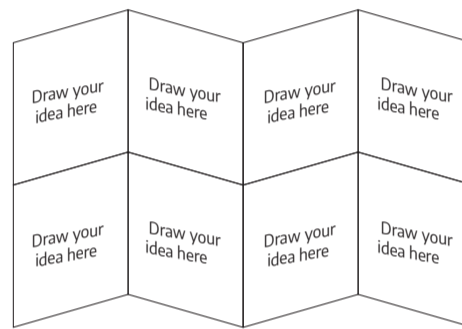
**Think visually**

Sketching helps to draw out the essentials of your idea and engages a your brain in a different way, to get those creative juices flowing!

**IDEATION TOOLS**

**For quantity: Crazy 8s**

The aim is to generate as many ideas as possible within a short timeframe, focusing on quantity of ideas not quality. Grab an A3 piece of paper and fold it 3 times to copy this framework:



**For more depth: Idea Ts**

The Idea T is a simple template to get your idea onto paper. It can help you think through the details of your idea, and make your idea clear to your team. Grab an A4 piece of paper and copy this framework:

Name your idea _____	
Draw your idea	Describe your idea (bullet points)



**Do I really have to draw?** Give it a try! You don't need to be an artist, in fact, stick figures, simple shapes, labels and arrows are often all you need.

**ABOUT PROTOTYPING**

**WHY WE USE PROTOTYPES**

A prototype is a tool to learn from; an experiment to test assumptions.

Prototyping forces us to let go of our ideas and assumptions – the idea the we love might not be the one our customers love. So, rather than making a guess, we test and validate.

Use prototypes to learn through doing - building the solution and putting it in front of users gives you immediate feedback.

We're not always going to get it right first go. Testing aims to take some of the risk out before we invest too heavily.

**MINDSETS AND PRINCIPLES FOR TESTING AND INTERVIEWING:**



**Experiment**

Use prototyping to learn from experiments before jumping to solutions.



**Practice empathy**

Put yourself in the shoes of the people you are designing for and see it from their perspective.



**Keep iterating**

Revisit, improve and build on ideas based on input from customers, peers and experts.

**CONCEPT STORYBOARD**

The concept storyboard is a way to build out an idea and get it clear in your mind.

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Who: \_\_\_\_\_ Solution: \_\_\_\_\_ How does the user start interacting? \_\_\_\_\_  
 Problem: \_\_\_\_\_ Main touchpoint: \_\_\_\_\_

How does it solve their problem? \_\_\_\_\_

What is the happy result? \_\_\_\_\_

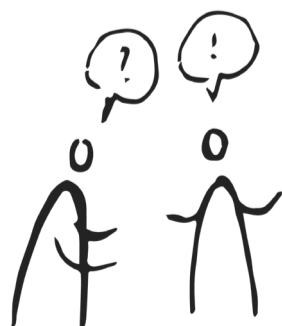
**RAPID FEEDBACK CANVAS**

This simple canvas is a useful framework to guide and capture rapid feedback.

When giving feedback, be specific – if you don't like something, what is it you don't like?

When receiving feedback, try to understand and learn, rather than defending your original idea - the goal is to iterate and improve based on feedback.

👍 What was great?  _____  🗋️ Questions	🗣️ Areas to improve  _____  💡 Ideas
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**PREPARING FOR PROTOTYPE TESTING**

Once we have designed our prototypes we have to design our research – setting up an interview guide and planning our interviews.

When designing research, there are some key questions to ask, to ensure you capture the most useful information from customers.

**1. WHAT ARE WE AIMING TO LEARN?**

Having clear objectives helps you design the interview and keep the conversation on track. Today, we want to learn:

- Initial impressions and perspective on the concept.
- What further information, if any, they would need to feel confident using it.
- How likely they would be to purchase it.
- What changes would make the product more suitable for them.

**2. WHAT ARE WE NOT TESTING?**

This is also helpful to define before you design and conduct interviews. When you talk to customers they can offer their opinions on all sorts of things, and it's up to you as the interviewer to steer the conversation. Today, we're not testing:

- The detail of the construction (it's a prototype, not a finished product).
- Pricing, as interviews aren't great for this.

**3. WHO ARE WE TESTING WITH?**

Working out who to interview can depend on how specific your customer is. For some ideas, guerrilla testing can be a fast way of testing by talking to people on the street.

Today, we'll work together to develop a customer empathy map and then develop interviews and test with each other.