

WELCOME

Concept Development Workshop



Longitude
Explorer
Prize

HOUSE KEEPING

in today's session

- When signing into the webinars, please use your team name and your first name only e.g. ←Team Name_First Name→ or ←TC_Team Name_First Name→
- Please respect the [Code of Conduct](#) throughout all the webinars
- Only click on links which are shared by Panellists in the chat
- Get involved! We want to hear from you, so please make use the interactive features of Zoom:
 - Q&A - please put any questions here
 - Chat - this can be used for more general discussion
 - Raise hand - opportunity for attendees to be unmuted and speak
 - Polls - these will pop up at different stages during the webinars and are anonymous
- Webinars and the slides will be available to watch after this week:
<https://longitudeexplorer.challenges.org/im-a-longitude-explorer-finalist/>
- There will be three multiple choice evaluation questions at the end of the webinar which we ask all attendees to please answer

WELCOME

Concept Development Workshop



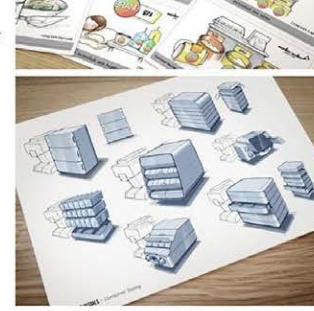
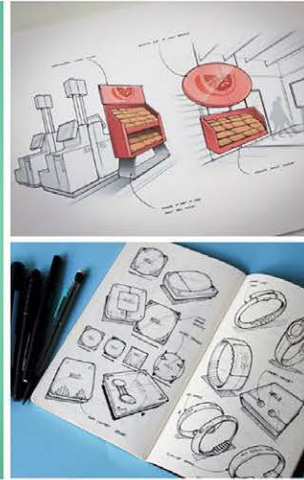
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ABOUT ME & WHAT I DO

Founder & Designer at Little Mammoth

Ideas designed for real life. Making a real difference.

As a design studio, we think we have the best job in the world: we bring ideas to life for our clients. Ideas designed to improve experiences, products and environments. Ideas designed to have a positive impact on the world around us.



WHAT ARE WE HERE TO DO

in today's session

- LEARN ABOUT NPD
- DEVELOP YOUR IDEAS
- COMPLETE YOUR WORKBOOK



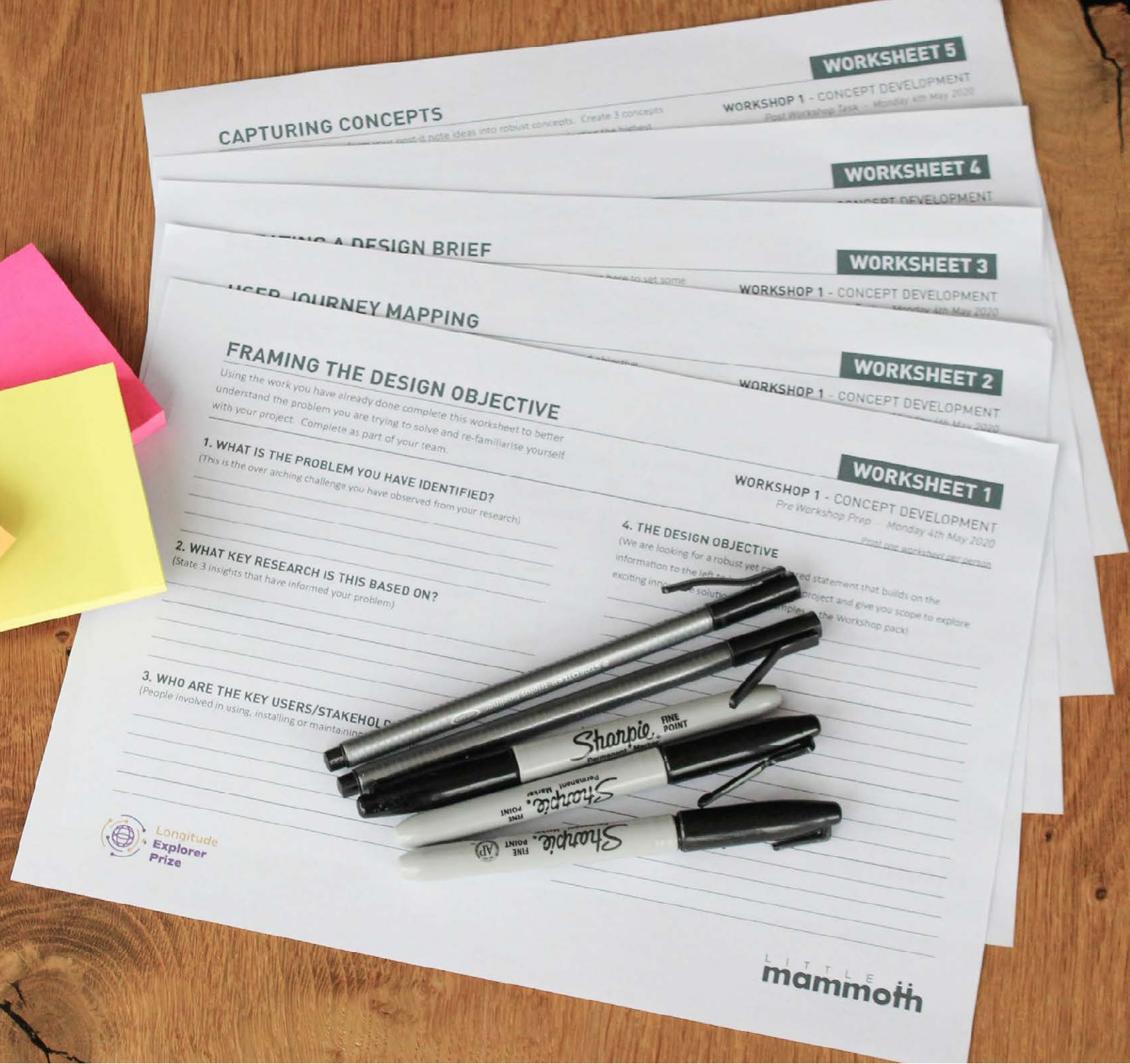
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**SNAP UP
THE PRIZE**



WHAT ARE YOU GOING TO NEED

during the session



WHAT ARE WE GOING TO COVER

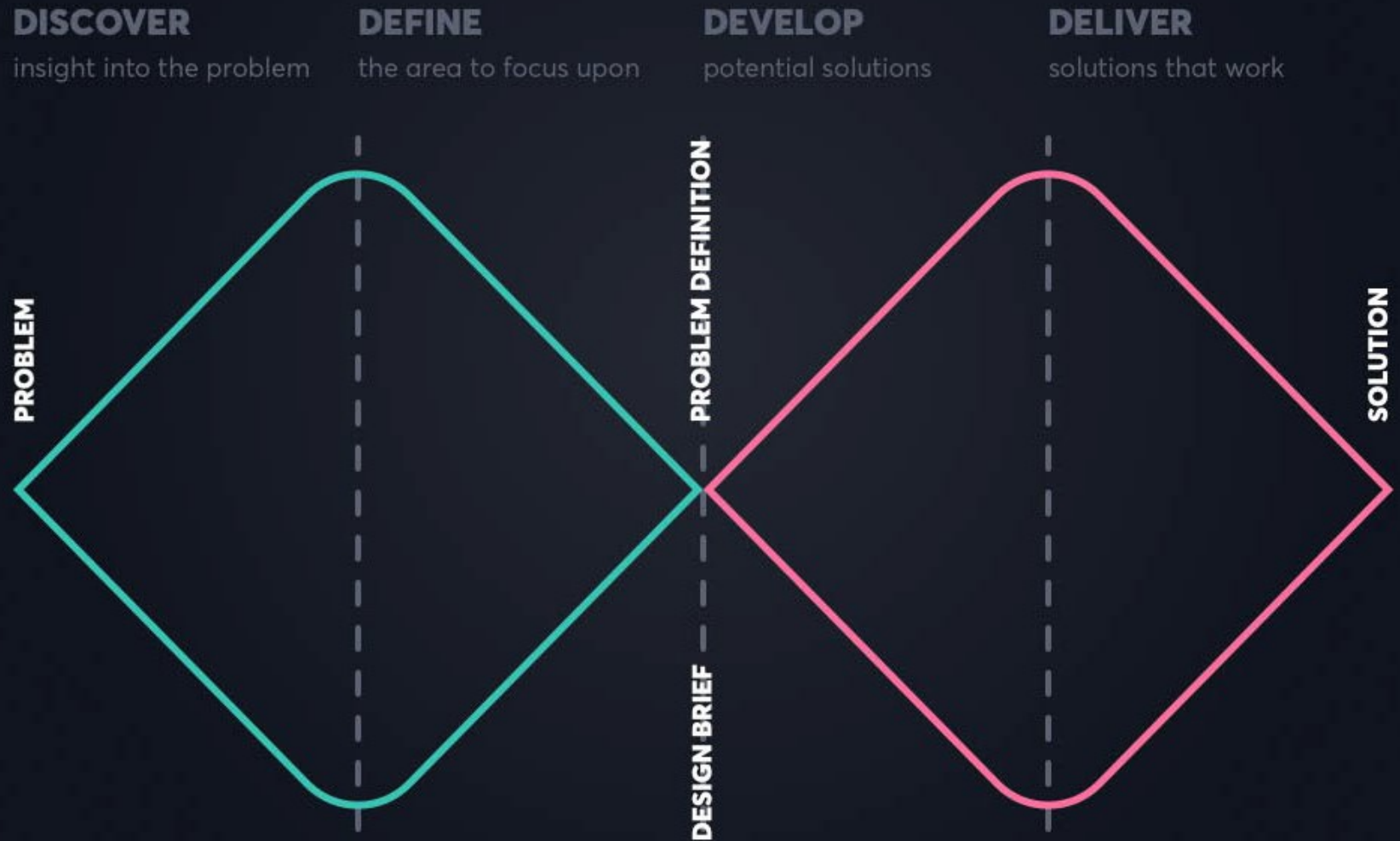
in today's session

- CONCEPT DEVELOPMENT PROCESS
- EXTERNAL TEAM RESOURCE
- USER JOURNEY MAPPING
- CREATING A DESIGN BRIEF
- IDEATION - CREATING IDEAS
- CONCEPT VISUALISATION
- QUESTIONS & ANSWERS

HOW DO WE DEVELOP IDEAS

the new product development process

Double Diamond



DISCOVER

what do we do here

LEARN

TALK TO PEOPLE

ASK QUESTIONS

READ ARTICLES

SEARCH THE INTERNET

OBSERVE PEOPLE





DISCOVER

who can help

RESEARCHER

FIND THE RIGHT PEOPLE
CONDUCT USER STUDIES
CONNECT WITH USERS
UNBIASED QUESTIONS
COLLATE DATA

DEFINE

what do we do here

MAKE SENSE

ANALYSE RESEARCH

IDENTIFY THEMES

EXPLORE OPPURTNUITIES

WRITE A DESIGN BRIEF





DEFINE

who can help

STRATEGIST

MAKE SENSE OF RESEARCH

CONDUCT WORKSHOPS

MANAGE THE PROCESS

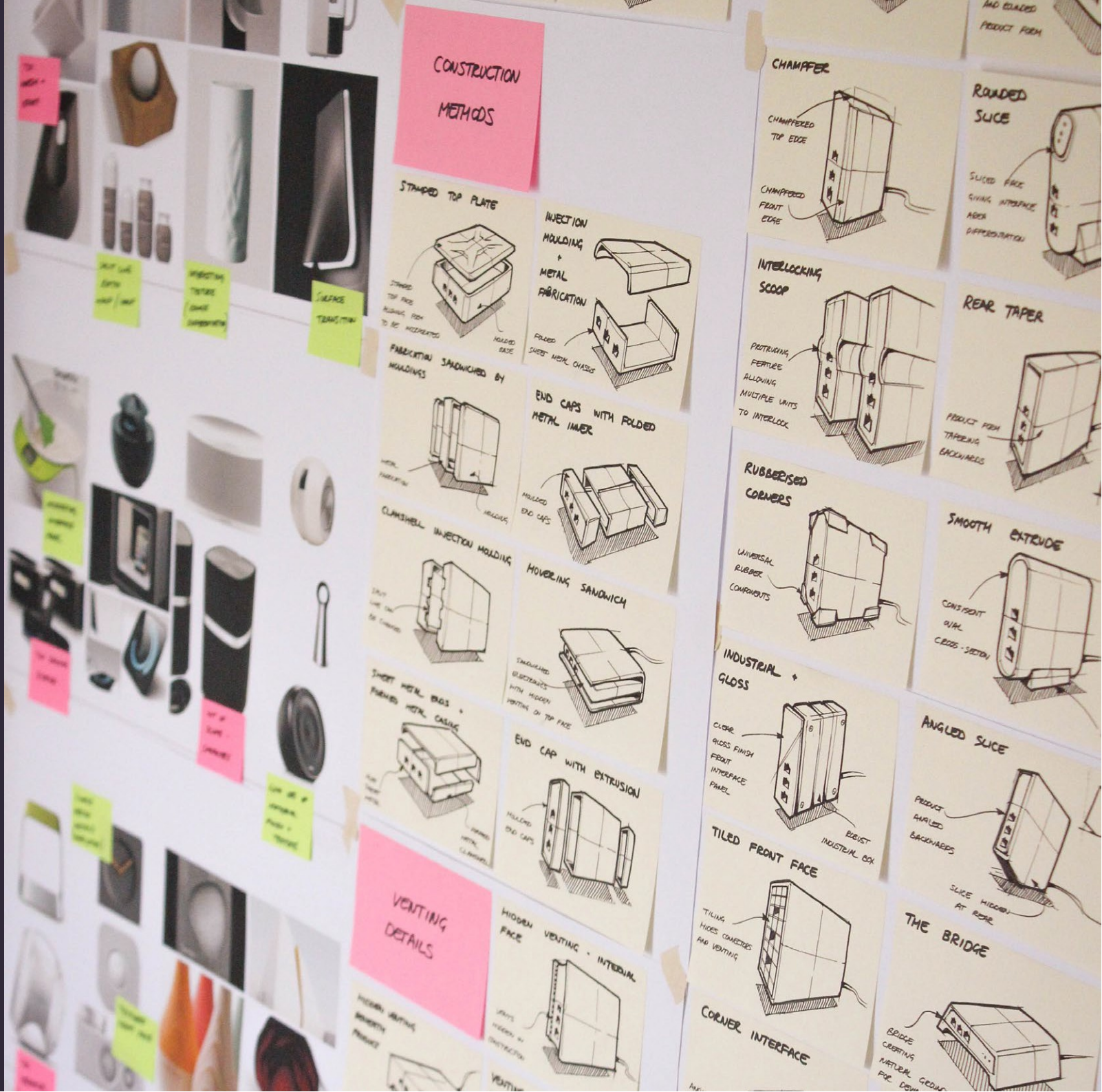
LOOK AT BIGGER PICTURE

DEVELOP

what do we do here

CREATE

CREATE LOTS OF IDEAS
SKETCH, DRAW & PLAN
EVALUATE IDEAS





DEVELOP

who can help

DESIGNER

SOLVE DESIGN PROBLEM

COMMUNICATE IDEAS

INDUSTRIAL DESIGNER

SERVICE DESIGNER

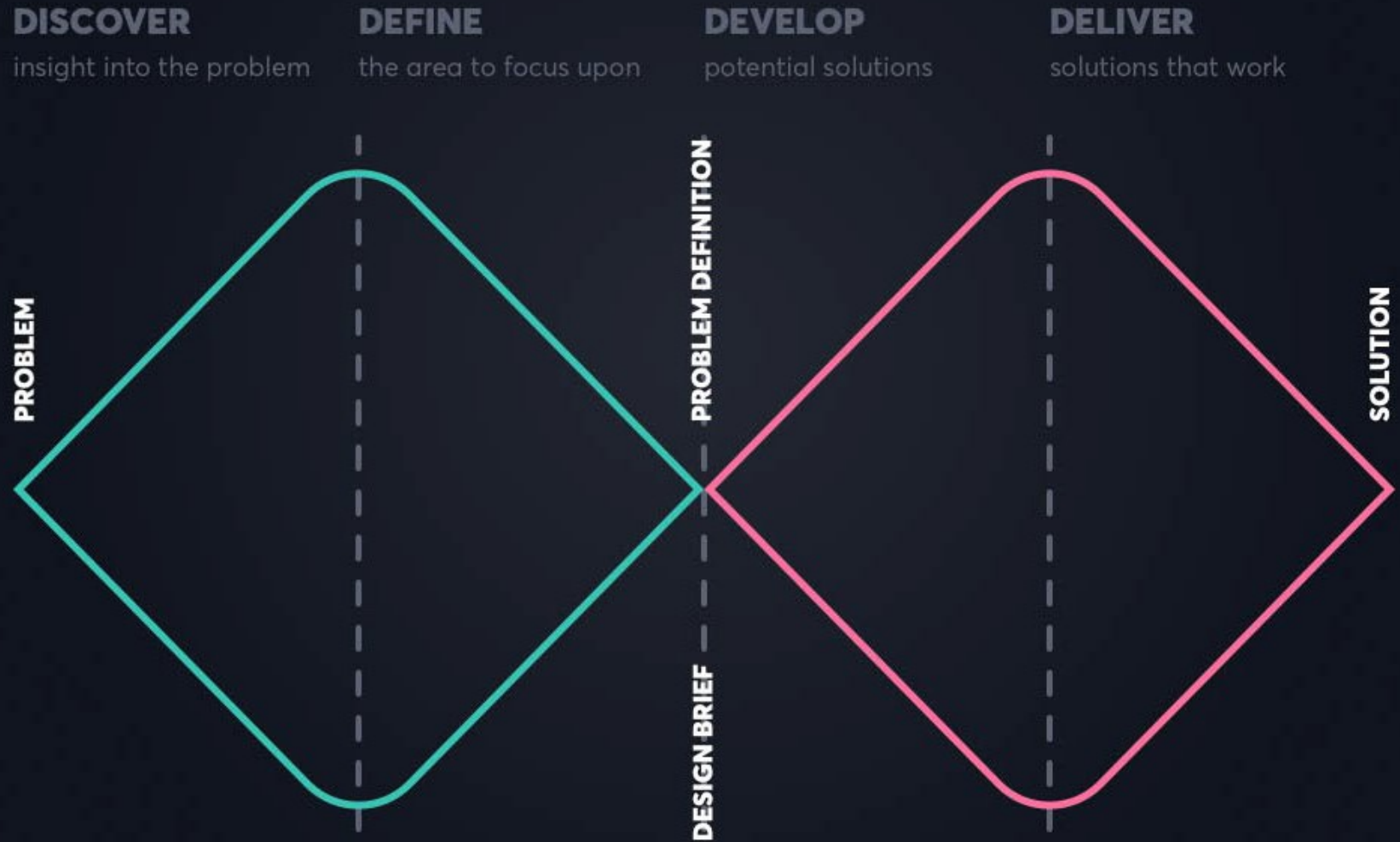
UX DESIGNER

DESIGN ENGINEER

WHERE ARE WE IN THE PROCESS

the discover phase

Double Diamond



FRAMING THE DESIGN OBJECTIVE

Using the work you have already done complete this worksheet to better understand the problem you are trying to solve and re-familiarise yourself with your project. Complete as part of your team.

EXAMPLE WORKSHEET 1

WORKSHOP 1 - CONCEPT DEVELOPMENT

Pre Workshop Prep - Monday 4th May 2020

Print one worksheet per person.

1. WHAT IS THE PROBLEM YOU HAVE IDENTIFIED?

(This is the over arching challenge you have observed from your research)

THE OCEAN IS FILLED WITH AN EXCESS OF PLASTIC POLLUTION HARMING THE ENVIRONMENT

2. WHAT KEY RESEARCH IS THIS BASED ON?

(State 3 insights that have informed your problem)

- GARBAGE PATCHES IN MULTIPLE SITES IN OUR OCEANS
- 640,000 TONNES OF NETS DISCARDED IN OCEAN EVERY YEAR
- 95% OF PLASTIC SUBMERGED

3. WHO ARE THE KEY USERS/STAKEHOLDERS?

(People involved in using, installing or maintaining your product/service)

- ENVIRONMENTAL ORGANISATIONS
- GOVERNMENT ORGANISATIONS
- COMMUNITY GROUP
- FISHERMEN
- MARINE WILDLIFE

4. THE DESIGN OBJECTIVE

(We are looking for a robust yet considered statement that builds on the information to the left to help frame your project and give you scope to explore exciting innovative solutions. See examples in the Workshop pack)

TO DESIGN A SYSTEM THAT COLLECTS PLASTIC WASTE THAT NATURALLY GATHERS ON THE SURFACE OF THE OCEAN. TO ALLOW WORLDWIDE CONSERVATION ORGANISATIONS TO OPERATE IT REMOTELY IN DIFFERENT OCEAN ENVIRONMENTS.

MAPPING THE USER JOURNEY

the discover phase

RESEARCH TOOL

UNDERSTAND THE TASK

GET INTO USERS SHOES

LOOK AT ENTIRE JOURNEY

GREAT FOR SERVICES



USER JOURNEY MAPPING

WORKSHEET 2

First choose a User and a Task that directly relates to your design problem and objective.
Break down every small step of the journey that user goes on when completing the task.
Role play as a group to understand the problem on a micro level.

WORKSHOP 1 - CONCEPT DEVELOPMENT
Workshop Task - Monday 4th May 2020
Print one worksheet per person.

1. CHOOSE A USER / STAKEHOLDER

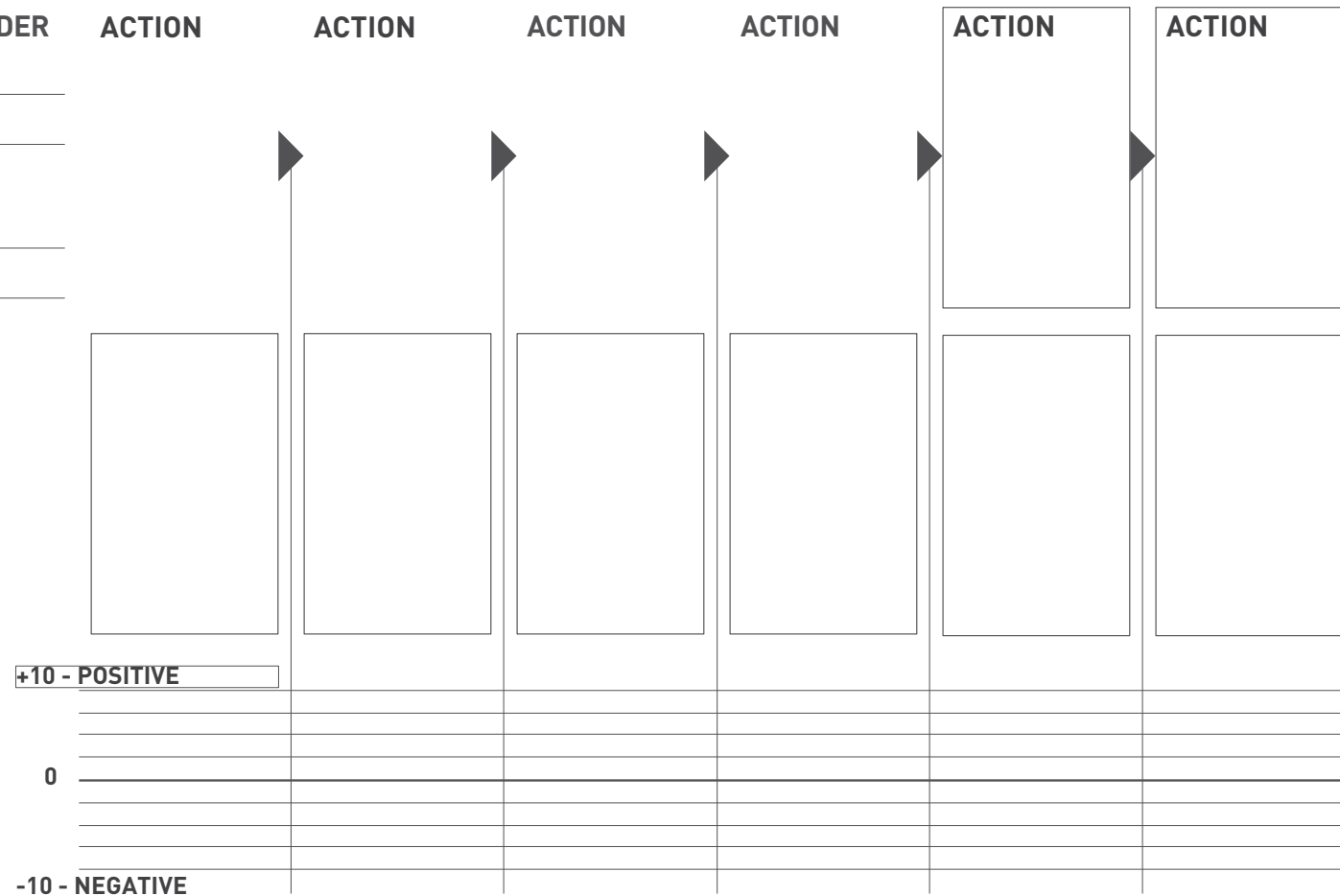
2. CHOOSE A TASK TO MAP

3. THINGS TO CONSIDER

- THE ENVIRONMENT OF USE
- THE USERS FEELINGS
- ANY CHALLENGES
- ANY QUESTIONS

4. EXPERIENCE MAPPING

(Plot on the chart to the right the experience of the user at each specific action. Mark on the scale and then draw a line between each mark. This will show areas of the experience that need improving.)



USER JOURNEY MAPPING

First choose a User and a Task that directly relates to your design problem and objective.
Break down every small step of the journey that user goes on when completing the task.
Role play as a group to understand the problem on a micro level.

EXAMPLE WORKSHEET 2

WORKSHOP 1 - CONCEPT DEVELOPMENT

Workshop Task - Monday 4th May 2020

Print one worksheet per person

1. CHOOSE A USER / STAKEHOLDER

OCEAN CLEAN UP
GROUP

2. CHOOSE A TASK TO MAP

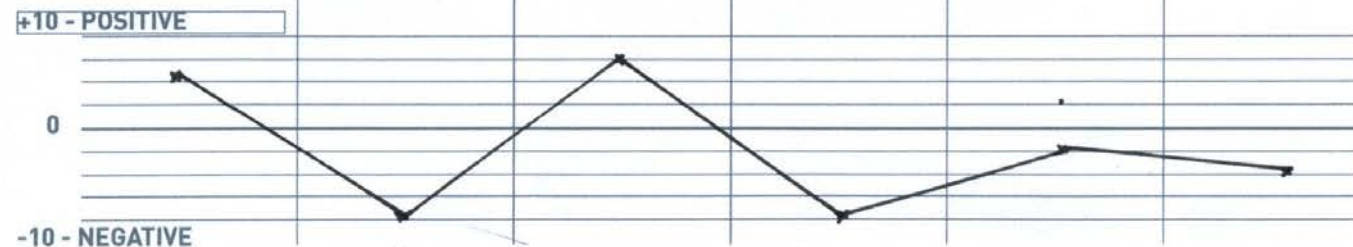
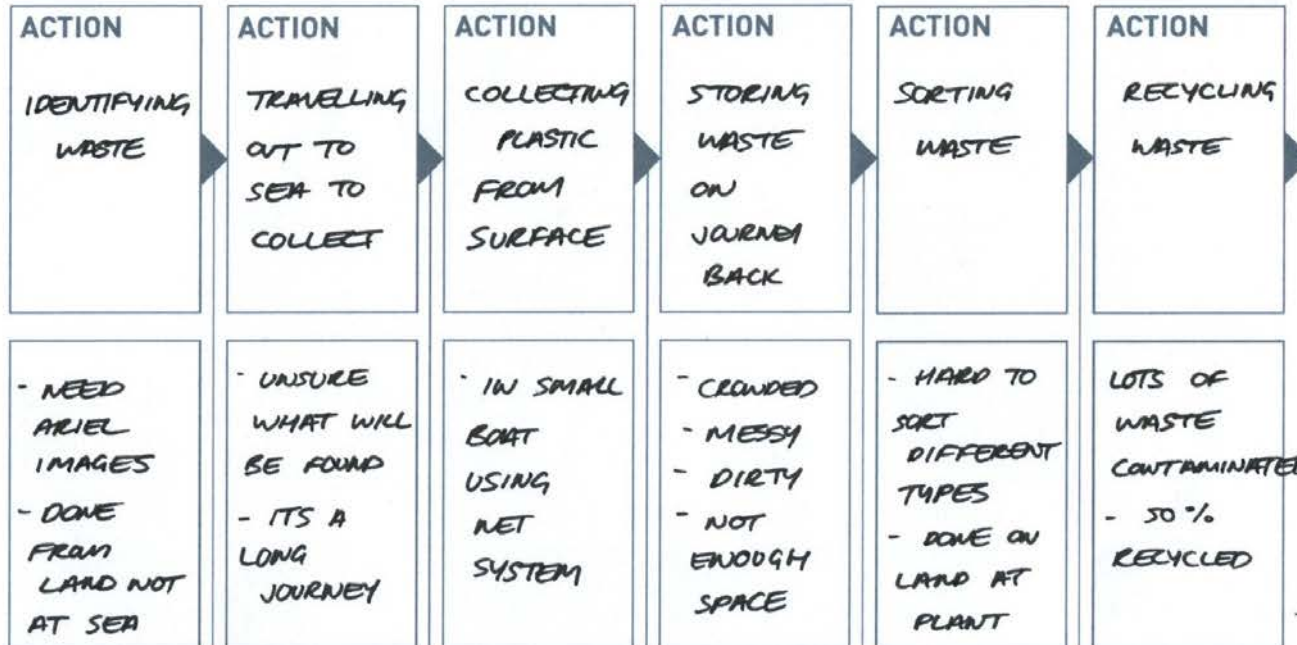
REMOVING WASTE
FROM OCEAN

3. THINGS TO CONSIDER

- THE ENVIRONMENT OF USE
- THE USERS FEELINGS
- ANY CHALLENGES
- ANY QUESTIONS

4. EXPERIENCE MAPPING

(Plot on the chart to the right the experience of the user at each specific action. Mark on the scale and then draw a line between each mark. This will show areas of the experience that need improving.)



CREATING A DESIGN BRIEF

the define phase

- DISCOVER PHASE COMPLETED
- CREATE DESIGN CONSTRAINTS
- DETAILED PLAN OF ACTION
- CLEAR AND CONCISE
- ROOM FOR EXPLORATION
- REFERENCE THROUGHOUT PROJECT

CREATING A DESIGN BRIEF

WORKSHEET 3

Complete the worksheet to create a robust design brief. We want to be rigorous here to set some constraints to design within. You will use this document to evaluate the suitability of your design concepts, so be clear and detailed. Complete as a group.

WORKSHOP 1 - CONCEPT DEVELOPMENT

Post Workshop Task - Monday 4th May 2020

Print one worksheet per person.

1. THE DESIGN OBJECTIVE

(Copy and condense from Worksheet 1)

2. USERS & STAKEHOLDERS

(List out everyone that uses, installs and maintains your product / service)

3. FEATURES & FUNCTIONAL REQUIREMENTS

(What does your product / service need to do? Be specific)

4. CONSIDERATIONS & CONSTRAINTS

(What do you need to consider during development?)

5. ASSUMPTIONS MADE

(Create your own constraints where you don't have the evidence as yet)

6. SAFETY REQUIREMENTS

(Consider the safety and privacy of your users)

7. COST ESTIMATE

(Approximate cost estimate when purchasing your product / service)



IDEATION - CREATING IDEAS

the develop phase

THE EXCITING STAGE

HIGH ENERGY & FAST PACE

EXPLORE LOTS OF IDEAS

LET IMAGINATION FLOW

NO RIGHT OR WRONG

COLLABORATIVE PROCESS



EXPLORING IDEAS

Place 4 post it notes on the boxes on the left hand side. Use the time given to sketch a different idea/solution to your problem on each. These ideas can be big or small. Select your favourite idea and share with your group.

PLACE
POST IT
NOTE
HERE

PLACE
POST IT
NOTE
HERE

PLACE
POST IT
NOTE
HERE

PLACE
POST IT
NOTE
HERE

WORKSHEET 4

WORKSHOP 1 - CONCEPT DEVELOPMENT

Workshop Task - Monday 4th May 2020

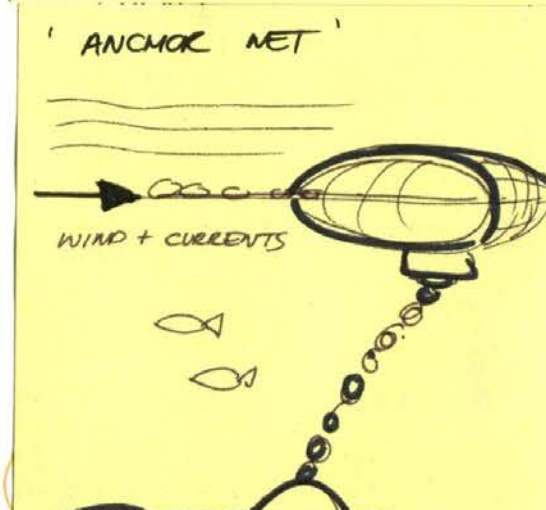
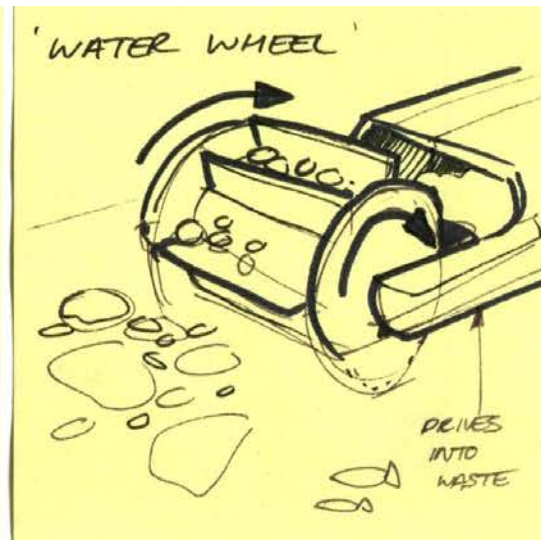
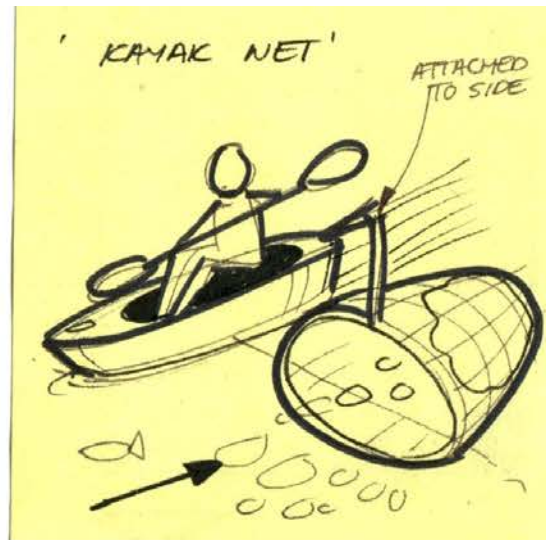
Print one worksheet per person.

PLACE YOUR
FAVOURITE
IDEA HERE

WINNER

EXPLORING IDEAS

Place 4 post it notes on the boxes on the left hand side. Use the time given to sketch a different idea/solution to your problem on each. These ideas can be big or small. Select your favourite idea and share with your group.



PLACE
POST IT
NOTE
HERE

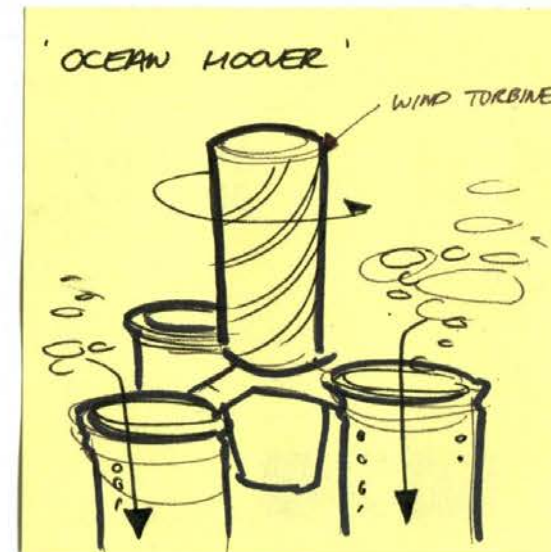
4

EXAMPLE WORKSHEET 4

WORKSHOP 1 - CONCEPT DEVELOPMENT

Workshop Task - Monday 4th May 2020

Print one worksheet per person



CAPTURING CONCEPTS

WORKSHEET 5

Use this worksheet to transform your post-it note ideas into robust concepts. Create 3 concepts individually and share with your team and score the concept as a group, selecting the highest ranking. Please have your favourite concept selected before Workshop 4 on Thursday.

WORKSHOP 1 - CONCEPT DEVELOPMENT

Post Workshop Task - Monday 4th May 2020

Print three worksheets per person.

CONCEPT TITLE (give it a fun name)

CONCEPT DESCRIPTION (give a little bit more detail)

GROUP SCORING (circle where your team agrees)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

CONCEPT ILLUSTRATION (draw a image of your idea)



CAPTURING CONCEPTS

Use this worksheet to transform your post-it note ideas into robust concepts. Create 3 concepts individually and share with your team and score the concept as a group, selecting the highest ranking. Please have your favourite concept selected before Workshop 4 on Thursday.

EXAMPLE WORKSHEET 5

WORKSHOP 1 - CONCEPT DEVELOPMENT

Post Workshop Task - Monday 4th May 2020

Print three worksheets per person.

CONCEPT TITLE (give it a fun name)

' OCEAN HOOVER '

GARBAGE PATCH EXTRACTION RIG

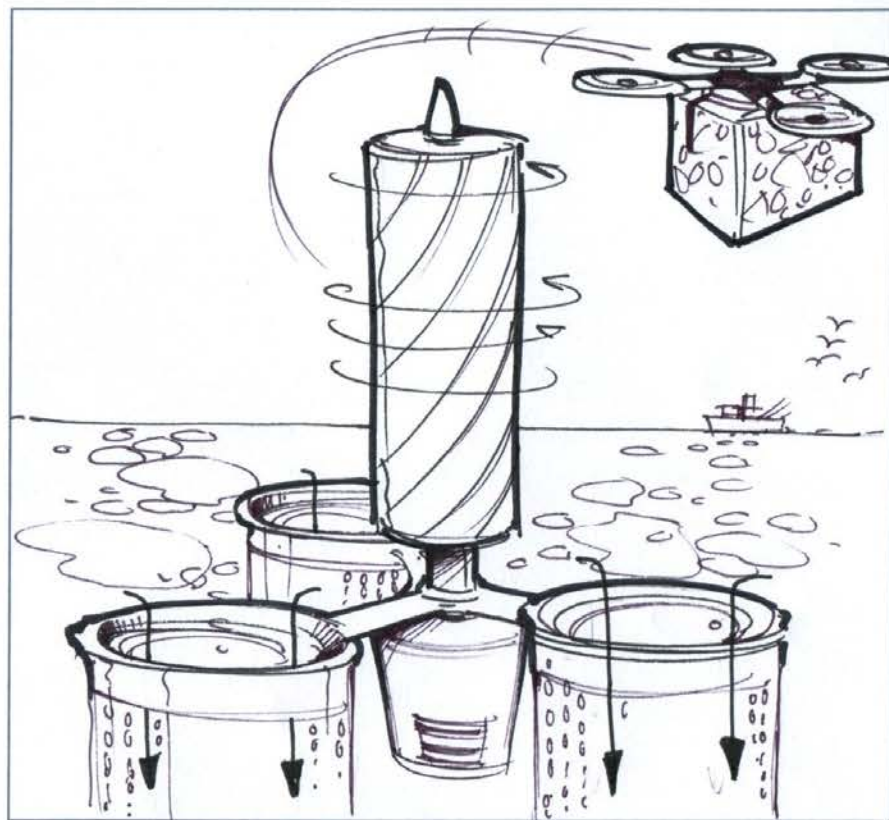
CONCEPT DESCRIPTION (give a little bit more detail)

A REMOTE FLOATING RIG, THAT IS SELF POWERED. (USING WIND + SOLAR ENERGY)
EXTRACTS + SORTS MARINE WASTE
BALING INTO PARCELS TO BE AIRLIFTED USING DRONE TECHNOLOGY

GROUP SCORING (circle where your team agrees)

1 2 3 4 5 6 7 8 9 10

CONCEPT ILLUSTRATION (draw a image of your idea)



HOW TO VISUALISE YOUR CONCEPTS

the develop phase

CLEAR COMMUNICATION OF AN IDEA
MANY TOOLS AVAILABLE

- SKETCH RENDERS
- STORYBOARDS
- CAD MODELS & CGI RENDERING
- UX WORKFLOWS

CHOOSE WHAT IS APPROPRIATE

SKETCH RENDER

the develop phase

QUICK & LOOSE OUTPUT

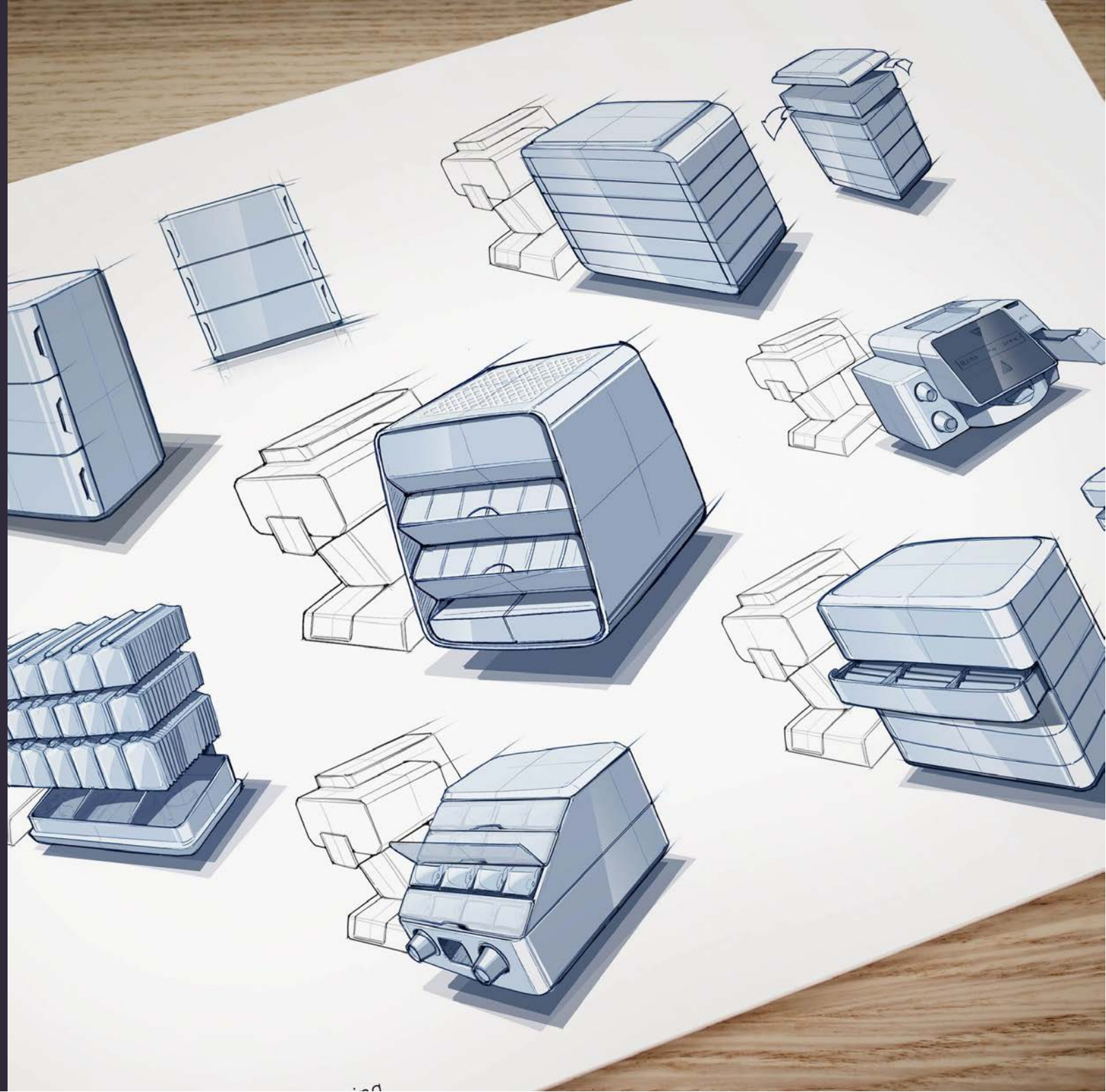
ESSENCE OF IDEA

TRADITIONAL & DIGITAL

FORM, SCALE & AESTHETIC

BW OR FULL COLOUR

GREAT FOR PRODUCT



STORYBOARD

the develop phase

VISUAL STORYTELLING
MAP OUT USER EXPERIENCE
HOW A CONCEPT WORKS
PHOTOS OR ILLUSTRATIONS
GREAT FOR SERVICES



CAD & CGI RENDERING

the develop phase

DETAILED DEVELOPMENT

UNDERSTAND 3D FORM

ARRANAGING COMPONENTS

ACCURATE PROPORTIONS

PHOTOREALSTIC IMAGES



DIGITAL UX WORKFLOW

the develop phase

INTERFACE DESIGN

COMPLEX WEB & MOBILE UX

STEPS OF INTERACTION

SCHEMATIC / FULL COLOUR



WHAT ARE WE GOING TO DO NEXT

the deliver phase

Double Diamond

DISCOVER

insight into the problem

DEFINE

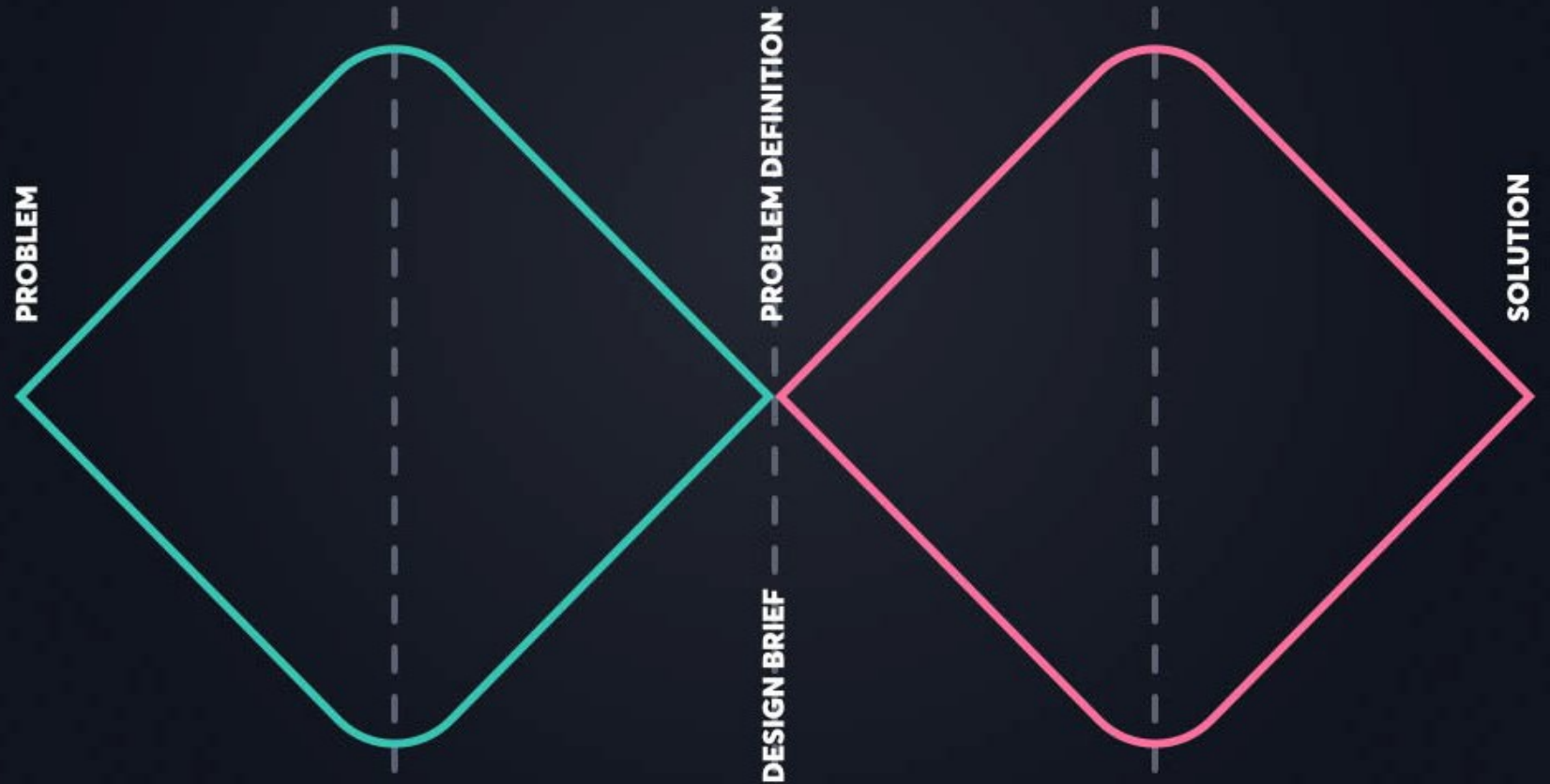
the area to focus upon

DEVELOP

potential solutions

DELIVER

solutions that work



WHAT TO DO AFTER THE SESSION

Homework tasks

COMPLETE WORKSHEET 3

-Creating a design brief

COMPLETE WORKSHEET 5

-Capturing a concept

QUESTION & ANSWERS

do you have anything you want to ask me

BEFORE YOU GO

To help us continue to improve these sessions, please answer these three short multiple choice polls which will pop up on your screen now.

THANK YOU

Concept Development Workshop



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