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 of 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
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.

Founder & Designer at Little Mammoth
WHAT ARE WE HERE TO DO in today's session

- LEARN ABOUT NPD
- DEVELOP YOUR IDEAS
- COMPLETE YOUR WORKBOOK
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 for the new product development process?
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 OPPORTUNITIES
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

Slide 15
WHERE ARE WE IN THE PROCESS
the discover phase

Double Diamond

DISCOVER
insight into the problem

DEFINE
the area to focus upon

DEVELOP
potential solutions

DELIVER
solutions that work

PROBLEM

PROBLEM DEFINITION

DESIGN BRIEF

SOLUTION

Slide 16
FRAMING THE DESIGN OBJECTIVE
the discover phase

IDENTIFY PROBLEM
COLLATE INSIGHTS
IDENTIFY USERS
SOLID START POINT
ALIGN THE TEAM
WORKSHOP 1 - CONCEPT DEVELOPMENT
Pre Workshop Prep - Monday 4th May 2020
Print one worksheet per person.

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 your project. Complete as part of your team.

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 METS 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

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.

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.)
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.

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

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

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.

<table>
<thead>
<tr>
<th>1. THE DESIGN OBJECTIVE</th>
<th>4. CONSIDERATIONS &amp; CONSTRAINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Copy and condense from Worksheet 1)</td>
<td>(What do you need to consider during development?)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. USERS &amp; STAKEHOLDERS</th>
<th>5. ASSUMPTIONS MADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(List out everyone that uses, installs and maintains your product / service)</td>
<td>(Create your own constraints where you don’t have the evidence as yet)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. FEATURES &amp; FUNCTIONAL REQUIREMENTS</th>
<th>6. SAFETY REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(What does your product / service need to do? Be specific)</td>
<td>(Consider the safety and privacy of your users)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. COST ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Approximate cost estimate when purchasing your product / service)</td>
</tr>
</tbody>
</table>
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

PLACE YOUR FAVOURITE IDEA HERE

WINNER

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

the develop phase

IDEAS ARE THE SPARK
CONCEPTS ARE RESOLVED
HOW IT WORKS
HOW IT LOOKS
HOWS ITS PRODUCED
HOW PEOPLE USE IT
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.

**Concept Title** (give it a fun name)

**Concept Illustration** (draw a image of your idea)

**Concept Description** (give a little bit more detail)

**Group Scoring** (circle where your team agrees)

1 2 3 4 5 6 7 8 9
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.

CONCEPT TITLE (give it a fun name)

"Ocean Looper"

CONCEPT ILLUSTRATION (draw a image of your idea)

CONCEPT DESCRIPTION (give a little bit more detail)

A remote floating rig that is self powered. (using wind + solar energy) extracts + sorts marine waste bailing 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

EXAMPLE WORKSHEET 5
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 RENDERS
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

Slide 35
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
Longitude Explorer Prize