

SDG 9 Future of Space

Micro Module 7: Problem to Pitch Space Design



MM7: Problem to Pitch Space Design

Phase 3: Implementation

Lesson 7: Design Thinking Stage 5 Test

Subject Areas: Art and Design, CPSE, Climate Action and Sustainable Development, Engineering, Technology, SPHE

Lesson Title and Summary: Design Thinking Stage 5 Test

Evaluating an idea is a key aspect of Design Thinking. In this lesson learners will begin the process of testing their ideas with potential users. Learners will learn that this is not the end of the process and that they may learn something that means they might need to return to an earlier stage e.g. Define or Ideate.

This lesson can be used with the prototypes produced in lesson 6 and has supporting materials that can be applied to learners' projects if they have developed their ideas further.

Vocabulary: Beta-test, Focus Group, Lean Canvas, Refine

In this lesson, the learner will:

- explore how to test ideas
- use their vision board
- complete a lean canvas
- prepare to present their ideas

Materials:

- Completed prototypes and concept statements - lesson 6
- Worksheet: Stakeholder mapping - lesson 1
- Worksheet: 5 W's of Business
- Worksheet: LEAN Canvas
- Worksheet: 8 W's of Business Planning
- Worksheet: Vision Boards
- Worksheet: Zone Mapping
- Pens, Pencils, Paper

8 DECENT WORK AND ECONOMIC GROWTH



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



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Activity Instructions

Activity 1 Testing – Rapid Response (20 mins)

1. Watch the video Design Thinking - Test
2. Highlight the importance of user feedback in refining prototypes to help students understand that the testing phase is not the final step but a critical opportunity for improvement.
3. In groups, learners will work with their prototypes and their concept statements from the last session to consider who they will need to speak to in terms of their audience / user.
4. Learners can also use the stakeholder worksheet from Lesson 1 to map their 'stakeholders' now that they have a prototype and a distinct space-issue project

Activity 2 Testing your Prototype – Rapid Response (30 mins)

1. Pair learner groups together for a rapid feedback session on each other's prototype, noting what works, what doesn't, and suggestions for improvement.
2. Once learners receive feedback from their user tests, allow them to make small adjustments or refinements to their prototype, even if it's just modifying the concept on paper or making minor structural changes.
3. At the same time, other members of the team can document any changes and complete Worksheet: 5 Ws of business, with particular focus on section 2 and 3, 'problem' and 'users'.
4. Through the iteration and feedback process learners can consider the following questions
 - What did your user say they liked most?
 - Can you enhance that feature?
 - What problems did your user have with the prototype?
 - How might you redesign it to solve those issues?
 - Did we miss any key user needs - this is an interactive question encouraging further review
5. If circulating to support learners, these questions can also be used to prompt learners to think more deeply about the iteration and feedback process.

REFLECTIVE EXERCISE: 3-2-1

- Three things they feel they have learnt from the tasks
- Two things they found most interesting and would like to explore more
- One – their opinion they have about the tasks

Use Post-its or a mentimeter survey - www.mentimeter.com - to gather reflections

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EXTENSION / REDUCTION ACTIVITIES

Reduction: For a shorter class, have the learners watch the video and complete their stakeholder map either at home or in the next lesson. If undertaken in the next lesson this can be paired with additional activities. Learners could:

- Role-play a conversation with their target client / user to anticipate the types of feedback they might receive.
- Create a simple survey or a set of questions that they could ask their users during testing.

Extension: For a longer class, learners can use the worksheets: 8Ws of business, the lean canvas, stakeholder maps, vision boards and their prototypes to produce a 'final pitch' presentation – showcasing their project. Media Communication 3 micro-module, the Pecha Kucha, can be used to support students to present and pitch their idea – this can be used as an end of module assessment.

Encourage learners to gain feedback on their as least once 'pitch' before the final presentation

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

- Design Thinking TEST <https://youtu.be/UVEQCNM6X-A>
- Using a lean canvas <https://www.youtube.com/watch?v=WqjM2DdgUnA>
- How to make a pitch using a mood board <https://www.youtube.com/watch?v=8dg--KvDIX8>
- Rocket Pitch - Introduction to Rocket Pitch <https://www.youtube.com/watch?v=3UKzsnWU7-4>
- Rocket Pitch - Gamify your event <http://www.rocket-pitch.com>

Local Trip / Expertise / Additional Work and Assessments

Linked learning resources: Media Communication Skills micro-modules support the development of key skills for exhibition and presentations.

- Pitch their final idea to a Local Development company or community and business Alliance
- Visit from Local Enterprise Officer to consider their ideas
- Create a local space focused enterprise event / exhibition to share their work e.g. in school, end of school year, in the local library or online
- Develop a Rocket Pitch event – create a start-up event, link with other schools in your area, province or across Ireland and beyond - see media box
- Look at enterprise competitions, Young Scientist, Student Enterprise programme, encourage this as part of the students learning process



WHAT WHY WHO WHEN WHERE



1. WHAT Is the problem?

Give 3 reasons for your business, product or service



2. HOW does your solution 'fix' the problem?



3. WHO will use your solution?

Think of 2 - 3 users



4. WHY should anyone buy / use your solution?



5. WHERE / HOW will you reach your customer?



6. WHAT resources do you need for your business?



WHAT WHY WHO WHEN WHERE



7. WHAT will it cost?

8 WHAT is the investment?

How will you make the money you need to fund your solution?



9. WHEN should this be done?



10. WHEN / HOW will you know you are successful?



11. WHAT do you need to do next?

MM7 L7WSB: LEAN CANVAS

<p>Problem List your customer's top 3 problems</p> <p>-worry that pet will get lost -worry that pet is up to no good when home alone -miss pet and want a way to connect while at work</p>	<p>Solution Outline a possible Solution for each problem</p> <p>worry that pet will get lost-you will be able to track your pet at all times. worry that pet is up to no good when home alone-you will be able to see what your pet is doing at all times. miss pet and want a way to connect while at work-you will be able to connect using your voice while you're away</p>	<p>Unique Value Proposition Single, clear compelling message, that turns an unaware visitor into an interested prospect</p> <p>Love Paws makes it possible to be with your pet even when you're away.</p>	<p>Unfair Advantage Something, that can't be easily copied or bought</p> <p>I am Cesar Milan, world famous dog trainer and I have my own TV show and numerous celebrity clients.</p>	<p>Customer Segments List your customer segments and users</p> <p>Ideal customers are middle to high income, tech-savvy pet owners who spend a significant time away from their pets.</p>
<p>Existing Alternatives List how these problems are solved today</p> <p>There are various collars on the market that track your pet's location. Some track steps and various other stats. There is a separate camera device that can be worn by your pet, but nothing exists that works as a GPS, camera and communication device in one.</p>	<p>Key Metrics List the key numbers, that tell you how your business is doing</p> <p>Number of units sold.</p>	<p>High Level Concept List your x for y analogy (e.g. youtube = flicker for videos)</p> <p>Love Paws is the Nest of pet tracking devices.</p>	<p>Channels List your path to customers</p> <p>Give away for free to celebrity pet owners and celebrity TV personalities on Animal Planet, then do a billboard, print and web and social media campaign.</p>	<p>Early Adopters List the characteristic of your ideal customer</p> <p>Early adapters are pet owners who love to keep up and own the latest tech innovations as soon as they come out.</p>
<p>Cost Structure List your fixed and your variable costs</p> <p>Product design, sourcing of materials, production costs, engineering, marketing, PR.</p> <p style="text-align: right;">PRODUCT</p>		<p>Revenue Streams List your sources of revenue</p> <p>We will initially sell online with the goal to being on the shelves of major pet stores by end of year.</p> <p style="text-align: left;">MARKET</p>		



MM7 L7WSB: LEAN CANVAS

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



PROBLEM <i>List your top 1-3 problems.</i>	SOLUTION <i>Outline a possible solution for each problem.</i>	UNIQUE VALUE PROPOSITION <i>Single, clear, compelling message that states why you are different and worth paying attention.</i>	UNFAIR ADVANTAGE <i>Something that cannot easily be bought or copied.</i>	CUSTOMER SEGMENTS <i>List your target customers and users.</i>
	KEY METRICS <i>List the key numbers that tell you how your business is doing.</i>		CHANNELS <i>List your path to customers (inbound or outbound).</i>	
EXISTING ALTERNATIVES <i>List how these problems are solved today.</i>		HIGH-LEVEL CONCEPT <i>List your X for Y analogy e.g. YouTube = Flickr for videos.</i>		EARLY ADOPTERS <i>List the characteristics of your ideal customers.</i>
COST STRUCTURE <i>List your fixed and variable costs.</i>			REVENUE STREAMS <i>List your sources of revenue.</i>	



1. WHAT are you planning to do?



2. WHY do you want to do this project? WHO will benefit?



3. WHEN and WHERE will the activity take place?

Date:

Time:

Location:

4. WHAT funds are needed to do this activity?





5. WHO needs to approve this project



8 WHAT kind of publicity is needed? WHEN?

Type of publicity When needed?

- 1.
- 2.
- 3.
- 4.

7. WHO will do the WORK?

1 Task

Person Responsible

Date Due

2 Task

Person Responsible

Date Due

3 Task

Person Responsible

Date Due

4 Task

Person Responsible

Date Due



8. We're Done!! Was it Worthwhile?



WHAT went well?

WHAT didn't go well?

WHAT would you do differently next time?

WHO needs to receive a thank you note? Name WHO will write it?



**Develop the central message
this is an image that will
represent your business idea.**

**Keep it colourful and visual
Our brains love images.**



STEP 1 THE 'WHAT' OF YOUR BUSINESS

Develop an image that represents the reason for your business - the 'problem' you want to fix. Use pictures, texts or quotes that help you tell what your business is.

Use can use Pinterest, Google images, cut out images and texts from magazines and drawings

STEP 3 THE 'WHO 'OF YOUR BUSINESS

Develop an image of the people who will use your business. Use pictures, texts, quotes, statistics that help to you define your customers.



**Vision board examples on
Pinterest.**

<https://www.pinterest.ie/scrap-pinmichele/vision-board-samples/?lp=true>



STEP 2 THE 'WHY 'OF YOUR BUSINESS

Develop an image that will show what your business will provide for people or fix their problem. Use pictures, texts and quotes that help you show how your business helps your customers.

STEP 4 THE 'HOW' OF YOUR MARKETING

How will you reach your customers? Use pictures, texts and quotes, that help you tell the reason for our business.



STEP 1 MATERIALS

You can choose to do your vision board online but if you make it you will need to gather card board, card /paper, glue, scissors, images.



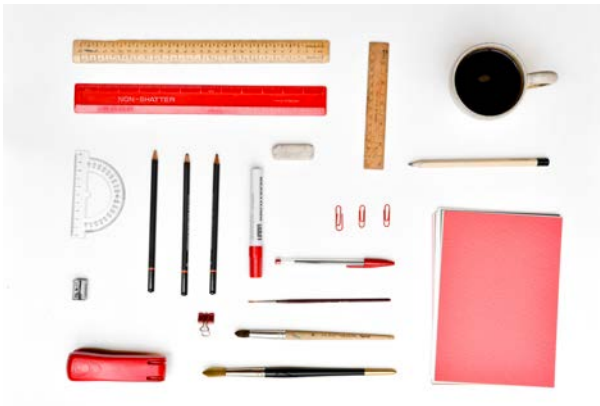
STEP 4 GATHERING IMAGES

Begin to gather images that tell the story of your project - you can use drawings, cut outs, images printed from Google or Pinterest or if digital, you can scan your images online.



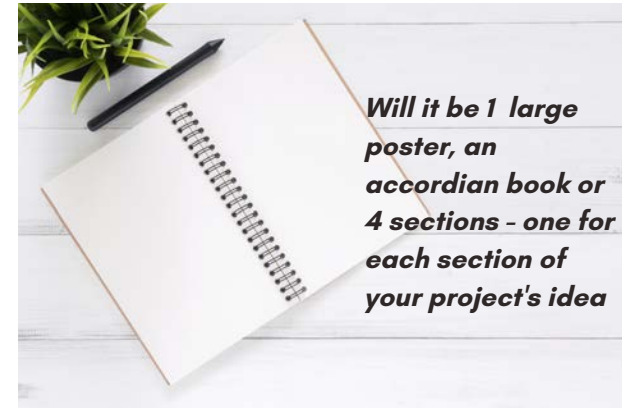
STEP 2 DECIDE ON WHO WILL DO WHAT

Each person should in the group should be responsible for one of the four sections in the image board worksheet.



STEP 5, ORGANISE YOUR INFO

You can organise the sections in different ways - think about your audience - who are you trying to reach? Look at examples of posters, communication for that audience.



Will it be 1 large poster, an accordion book or 4 sections - one for each section of your project's idea

STEP 3 PLANNING YOUR BOARD

As a group you can start to plan the size, shape and format of your vision board - see examples but don't be limited. It should reflect your project.



REMEMBER MESSAGE AND AUDIENCE

1. Will they read left to right?
2. Will you direct them how to read using arrows or numbers?
3. Will your central idea be the biggest image?



CREATING A DIGITAL VISION BOARD USING CANVA

Step 1: Gather and share your digital Images

When you have decided who is working on what section – gather your digital images and save them all together in a folder. You can create and use a shared drive folder to work in a group.

Step 2: Open an account in Canva

<https://www.canva.com/>

Step 3: Open a new design in Canva

Once you're signed in, you'll want to click "Create a Design," and choose the template you like, perhaps poster or photo collage.

If you plan on printing your vision board, you can choose **USE CUSTOM DIMENSIONS**. You can see this in the top right of the screen.

Step 4: Import your images into Canva



[HTTPS://WWW.PINTEREST.IE/SUNFLOWERWAYS/CREATING-A-VISION-BOARD/](https://www.pinterest.ie/sunflowerways/creating-a-vision-board/)

MM7 L7WS: ZONE MAP EXERCISE

A zone map allows us to start from ourselves (Zone 0 (our project or our town) and include other people, places or things in relationship to ourselves Zone 1 - 5

Zone 0 - the self, the project
Zone 1 - Location of project e.g. school or town
Zone 2 - Location of school or town
Zone 3 - Location of town e.g. Iveragh, Kerry
Zone 4 - Location of county e.g. Munster or Ireland
Zone 5 - Location of province or country e.g. Ireland or Europe

