

TOOL 2b - DESIGN AND IDEATION



MODULAR

This workshop can be used in a modular way; the presentation structure matches the facilitator guide enabling you to mix and match to create bespoke workshops.

TIME DURATION

The workshop is designed to be run over three to five days, depending on the learning outcomes and focus of the course that it is offered within.

SPACE & SET UP

Room with tables and chairs for teamwork
Fashion Lab with sewing machines or specific
Tech lab if needed for the prototypes

GROUNDING EXERCISE & GROUP FORMATION

Arrange students into their groups/sitting together. You may want to consider a low risk ice breaker activity here to get the groups to feel at ease with one another. For example, two truths and a lie, crack a smile, would you rather, etc. Find more icebreaker activities [here](#).

STAGE ONE: BRAINSTORM AND RESEARCH

1. Brainstorm

- 1.1 Ask the team to organise round the table
- 1.2 Explain the rules and the aim of the 55-card task
- 1.3 Production of group of keywords with K-Cards;
- 1.4 Assignment of macro-areas to each participant with A-Cards;
- 1.5 Pick an idea

2. Research

Materials: A2 paper, pens, post-its

- 2.1 Research the identified key-words in a transdisciplinary way in the following fields: aeronautic, architecture, art, automotive, biology, fiction, furniture, gaming, medicine, military, robotics

AUDIENCE

The suggested audience for this workshop are design students with an undergraduate degree in design (e.g. fashion, product, etc.), while suitable also for any audience interested in the technical side of fashion-tech products. The suggested group size is 5 students per group.

Materials

Pens
Post-it
Printed A-Cards
Printed K-Cards
Paper
Computers
Materials for prototypes (depending on what to test in the prototype: cardboard, glue, fabrics, electronics ...)

2.2 Download images

2.3 Identify materials and technologies

2.4 Add interesting keywords

3. Observation (look into Tool 4 – Work Based Learning to complement the methods activities in this workshop)

4. The 5 Why's

Materials: A2 paper, pens, post-its

4.1 Why? Ask to frame the design challenge.

4.2 Where? Provide to the students the 'Dichotomy boards' to identify the space. Ask to the students to geographically identify the place.

4.3 When? Provide the 'Calendar matrix' to the students and ask them to indicate when the product/process will be used.

4.4 Who? Ask to the students to compile the 'Persona' sheet through research, interviews, image research for a lifestyle board/collage.

4.5 What? Wearable technology, smart textile or digital manufacturing. Once the product/process is decided to ask to the team to design a storyboard.

5. Share back

Materials: timer, student design sheet

STAGE TWO: CONCEPT GENERATION

1. Introduction

Materials: presentation

2. Selecting Ideas

Materials: paper, pens/pencils

2.1 Defining the features of the product:

2.2 Product personality is defined as the appearance of the product and how the user's senses react on the appearance as well as the associations it elicits in the user.

3. Materiality & Functionality (look into Tool 2 – Human, Social, Psychological & Economic Contexts to complement the methods activities in this workshop)

Materials: paper, pens/pencils, internet access

3.1 Function is defined as the aim of the product and the way it operates. The function of a product is what you can do with it and what you achieve.

3.2 Use is defined as the designed interaction the user can have with the product. The interface of a

product enables utilization.

3.3 Materials are defined as the physical and chemical substances the product is made of. Materials have characteristics on different aspects including e.g. strength, color, possible glosses and textures.

3.4 Shape is defined as the geometry of the product including details such as texture or finishing. Printing and patterns are also part of the shape of a product.

4. Trouble-shooting

Materials: timer, paper, pens, post-its

4.1 Manufacturing processes are defined as the processes that are needed to make the product including tooling, assembling, shaping, joining and finishing.

5. Design & Develop

Materials: paper, pens/pencils

STAGE THREE: PROTOTYPE PLANNING

1. Strategy

Materials: presentation

1.1 What to test (strategy, shape, technology, interaction.);

1.2 Sort out the logistics of the Prototype (storyboard, role plays, models, mock-up .)

2. Define

Materials: paper, pens, post-its

2.1 Define what is needed;

3. Prototype

3.1 Make the prototype;

3.2 Never stop iterating, capture feedback.

4. Share

Materials: paper, pens, post-its

4.1 Pick the groups and ask them to share their final idea and explain the main features.

4.2 Ask student to compile the 'students' sheet'

5. Evaluate

Materials: timer

5.1 Ask to the other group to evaluate, with the support of the models, the following aspects:

- desirability
- feasibility
- level of innovation
- tech readiness level
- marketability
- sustainability

