**GROUP DETAILS**

**SESSION**

* Morning
* Afternoon

**PRODUCT CATEGORY**

* Electronics
* Plastics
* Textiles
* Wood

**MATERIAL EXPERT**

**GROUP FACILITATOR**

**GROUP MEMBERS**

**INVESTIGATING: Prompt Questions**

**ACTIVITY 1: SOURCE**

What materials is the product made from?

Where was it made?

Under what conditions was it made (i.e. labour/ environmental)?

Any observations about sustainability of materials for the product – e.g. carbon footprint, use of finite resources, value/cost of material)

**ACTIVITY 2: DISASSEMBLY**

* Start timer before dissembling

How long did it take to dissemble? (minutes)

 What tools did you need/use?

|  |  |  |
| --- | --- | --- |
| **Tool name** | **At home tool****(✓)** | **Specialist tool****(✓)** |
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|  |  |  |

What did you notice about how easy (or hard) it was to disassemble?

**ACTIVITY 3: REPAIRABILITY**

|  |  |  |
| --- | --- | --- |
| First sort | Weight (kgs) | Materials/ components |
| The ‘average’ person can repair at home |  |  |
| Requires specialist skills/ tools to repair |  |  |
| Cannot repair |  |  |
| Unsure |  |  |

Can you find spare parts for components that can’t be repaired? If so, where?

What barriers are in place to prevent you from repairing? (financial, skills, psychological, convenience)

What are the things that would motivate you to want to repair this product instead of discarding/replacing it?

How might Makerspace Adelaide consider measuring the repairability of this product?

Other comments

**ACTIVITY 4: RECYCLABILITY**

|  |  |  |
| --- | --- | --- |
| Second sort | Weight (kgs) | Materials |
| The ‘average’ person can recycle  |  |  |
| Requires high effort to recycle (e.g. services not readily available, specialised expertise) |  |  |
| Cannot recycle |  |  |
| Unsure |  |  |

What barriers are in place that prevent you from recycling it? (e.g. availability of recycling services, convenience, financial, knowledge)

How might Makerspace Adelaide consider measuring the recyclability of this product?

Apart from recyclability and repairability, what other measures may be important for measuring the circularity of the product? E.g. carbon footprint, use of finite resources, value/cost etc?

**REDESIGNING: Prompt Questions**

How would you design this differently to improve outcomes for durability, repair, reuse, and recycling?

What steps can be taken to reduce offcuts during design/production of this item?

Are there alternative materials that could be used in the design that better fit within the circular economy ethos?

What changes in design are likely to reduce embodied energy?

How do you deal with changing consumer demands that lead to products become obsolescent? (e.g. counteracting fast fashion, getting the latest phone)

How might Makerspace Adelaide best engage its members to encourage good design?

How might Makerspace Adelaide measure the savings in resources from undertaking circular design practices?