The Multiple Use-Cycles Exploration Pack is part of the Use2Use Design Toolkit created by Dr. Anneli Selvefors and Dr. Oskar Rexfelt at Chalmers University of Technology. The toolkit includes five mind-expanding packs designed to boost product circularity. They aid development of products and services for circular consumption processes.

Learn more about the toolkit and how to design for Use2Use at www.use2use.se.
WHAT IS THE MULTIPLE USE-CYCLES EXPLORATION PACK?

The Multiple Use-Cycles Exploration Pack consists of a set of 14 empathy cards. Each card underlines an important aspect to consider when aiming to design products for use by a sequence of users. The cards have been developed for designers, user researchers, product and service managers, for their own use, or with users of circular products and services.

Using the set of empathy cards, you can identify design challenges of particular relevance to products that will be used by sequences of users. You may also gain insight into how certain frequent activities in circular consumption processes make it important to re-prioritise product requirements.

The cards are designed to stimulate a relay session in which a group of 4-8 people use the cards to explore people’s needs and concerns and identify important design challenges.

HOW TO USE THE TOOL

GETTING STARTED

Before initiating a session, choose a product, a product model, or a product type that you want to discuss and bring it to the session (or a depiction of it, if an actual product can’t be brought along). Additionally, you can also define a consumption scenario to base your discussion on. For instance, you may want to explore how people feel about renting the chosen product if that is of special interest to you.

EMPATHISING WITH USERS

During the session, the product or its depiction is passed between participants. Each time the product is handed over, the ‘new user’ draws an empathy card and follows the instructions on it. The card will highlight a specific need or concern, trigger discussion and support the identification of related design challenges. Note down relevant design challenges as you go along.

WRAPPING UP

Discuss and document your main insights. Based on this, identify key design challenges to address in future designs.
"I’ve just been offered the product (pre-used). I’m worried its aesthetic qualities will have been reduced by extensive use."

If this is a valid concern to the product user, try to describe why.

If relevant, discuss with the group:

- What aesthetic qualities are typically reduced by extensive use? Why?
- If the product becomes less aesthetically attractive from use/wear and tear, is it because of its design?
- What parts/aspects of the product are important in terms of its aesthetics?

Pass the product on and tell the next user to draw a card.
Read aloud:

"I’m about to obtain the product (pre-used). I’m worried that transporting it will be problematic."

If relevant, discuss with the group:

Will the product be transported many times during its lifetime?

Are these problems related to the product design, or to other factors?

In what way might it be considered problematic? Is it time-consuming? Expensive? Impractical?

Pass the product on and tell the next user to draw a card.
"I’ve got this product stored away unused. I don’t want to pass it on to someone else as I’m emotionally attached to it."

- If this is a valid concern to the product users, try to describe why.
- If relevant, discuss with the group.
- What is it that generates this emotional attachment?
- Is the emotional attachment related to the product’s design, or other factors?
- Is this attachment meaningful to people? Does it somehow enrich their lives?

Pass the product on and tell the next user to show a card.
Read aloud:

“I’VE JUST BEEN OFFERED THE PRODUCT (PRE-USED). I’M WORRIED ITS PERFORMANCE MAY HAVE BEEN REDUCED BY EXTENSIVE USE.”

If relevant, discuss with the group:

- How and why is performance typically reduced by extensive use?
- Will the product typically become obsolete for performance reasons?
- Are there people who still find the product’s performance sufficient? Is it likely they’ll be able to obtain it?

Pass the product on and tell the next user to draw a card.
"I’M ABOUT TO CLEAR THE PRODUCT. I’M WORRIED THAT IT WILL CONTAIN UNWANTED TRACES RELATED TO ME AND MY USE OF IT."

If relevant, discuss with the group:

- What kind of traces of previous use are typically found (personal data, modifications, signs of reckless use etc.)?
- Are these traces deemed unwanted regardless of how the product is cleared (sold, lent, gifted, returned etc.)?
- What traces are typically unwanted? Why?
Read aloud:

“I’VE JUST BEEN OFFERED THE PRODUCT (PRE-USED) BUT I’M FINDING IT DIFFICULT TO IDENTIFY ITS MODEL OR FIND INFORMATION ABOUT IT.”

If this is a valid concern to the product users, try to describe why:

If relevant, discuss with the group:

- What product information would a potential user typically want (brand, model number, bill of materials etc.)?
- Why would the users want this information?
- Is this information not available at all or is it just tricky to find?

Pass the product on and tell the next user to show a card.
Read aloud:

“I’VE JUST OBTAINED THE PRODUCT (PRE-USED). I’M WORRIED THAT IT MAY HAVE MISSING PARTS OR ACCESSORIES.”

If this is a valid concern to the product users, try to describe why:

If relevant, discuss with the group:

What parts of the product can typically get lost? How?

Does it matter how the product is obtained (rented, bought, borrowed etc.)?

Does it matter who the product is obtained from (companies, friends, unknown etc.)?

Pass the product on and tell the next user to draw a card.
"I'M ABOUT TO USE THE PRODUCT FOR THE FIRST TIME. I'M WORRIED IT WILL BE TRICKY TO UNDERSTAND AND DIFFICULT TO LEARN."

If this is a valid concern to the product users, try to describe why:

Will many first-time users use this product during its lifetime?

What makes this product difficult to use for first-timers?

Will a typical user spend a lot of time learning how to use the product, relative to his/her total time using it?

Pass the product on and tell the next user to draw a card.

If relevant, discuss with the group:
Read aloud:

“I’VE JUST BEEN OFFERED THE PRODUCT (PRE-USED). I’M WORRIED THAT ITS STYLE AND AESTHETICS ARE, OR WILL BECOME, OUTDATED.”

If this is a valid concern to the product user, try to describe why:

If relevant, discuss with the group:

What aspects of the product make it go out of style?

Will the product typically become obsolete for style-related reasons?

Do some people still find the product fashionable and is it likely they’ll be able to obtain it?

Pass the product on and tell the next user to draw a card.
"I'M ABOUT TO USE THE PRODUCT FOR THE FIRST TIME. EVEN THOUGH I KNOW THAT ITS FUNCTIONALITY IS FINE, I'M STILL UNEASY THAT IT'S BEEN PRE-USED BY OTHERS."

If this is a valid concern to the product users, try to describe why:

If relevant, discuss with the group:

What is it that the user might feel uneasy about? Hygiene? Status? "Privacy"?

Are there rational causes for this or is it just a feeling? (Is the product actually, say, unhygienic?)

Does this feeling depend on the product design, or other factors?

Pass the product on and tell the next user to draw a card.
"I’VE JUST BEEN OFFERED THE PRODUCT (PRE-USED). IT’S A LONG TIME SINCE IT WAS MADE AND I’M WORRIED IT MAY NOT BE COMPATIBLE WITH THE TECHNOLOGICAL SOLUTIONS I PLAN TO USE IT WITH."

If relevant, discuss with the group:

- What is it that makes the product eventually become incompatible with people’s other technological solutions?
- Will the product typically become obsolete for compatibility reasons?
- Are there people who still find the product compatible, and is it likely that they will be able to obtain it?

Pass the product on and tell the next user to draw a card.
"I’VE GOT THIS PRODUCT STORED AWAY UNUSED. I DON’T WANT TO PASS IT ON TO SOMEONE ELSE BECAUSE IT’S MORE PRACTICAL FOR ME TO JUST LEAVE IT AND FORGET ABOUT IT."

If this is a valid concern to the product users, try to describe why.

If relevant, discuss with the group:

What typically makes this product get stuck in "dis-use limbo"?

What can drive people to pass the product on to someone else?

Pass the product on and tell the next user to draw a card.
"I've just been offered the product (pre-used) but am finding it difficult to inspect."

If this is a valid concern to the product users, try to describe why:

If relevant, discuss with the group:

Will the product typically be inspected many times during its lifetime?

What makes the inspection tricky?

What aspects of the product do users want to inspect? Why?

Pass the product on and tell the next user to show a card.
"I’m about to clear the product. I’m worried that the next user will bug me with questions and complaints."

If this is a valid concern to the product users, try to describe why.

If relevant, discuss with the group:

- What kind of questions and complaints might a previous user of this product expect from a subsequent user?
- What are the typical responsibilities of the people and organisations involved in this process?
- How is such communication carried out, and who is involved?

Pass the product on and tell the next user to draw a card.