



# VAUDE

## A Circular Business Model Innovation Journey

(A Part of Deliverable 5.2)

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## Executive Summary

This report provides an overview of the circular business model innovation journey guided by the R2 $\pi$  project team for VAUDE. The team customised the innovation process to suit the specific needs of the company in order to help them explore opportunities to become more sustainable and circular.

An ambition of the company relates to making their products available on a rental basis. Currently it offers tents, rucksacks and bicycle panniers with its “i-Rent-it” model. Functional accessories are not part of this assortment and therefore VAUDE has the ambition to offer its *child-carrier* as a rental item. It would redesign the product to adapt it to this more circular approach.

The time available for the R2Pi and VAUDE teams was limited and therefore a streamlined version of the Circular Innovation Journey was executed. Hence the scope was circumscribed to the *understand* and *innovate* phases. While VAUDE’s existing rental offering has been operating for a number of years, the workshop highlighted improvement potential with regard to material flow and customer interaction.

To reflect on the requirements of a rental model for a newly designed child carrier, the R2 $\pi$  team made use of design thinking methods and tools so as to determine the issues around such an innovation. In particular, much emphasis was laid on defining the value proposition. As a result, the project team could identify a host of customer needs and potential design elements for this new circular business model. Many of these aspects need to be validated by the company. VAUDE will undergo an iterative process to produce and refine its business model canvas to crystallise this endeavour (market introduction is planned for 2022).

We are confident that VAUDE can achieve this innovation since, as an organisation it has key enablers:

- Company philosophy – products to enjoy the environment/the outdoors
- Clear ambition to remain a sustainability pioneer
- Willingness to invest time in innovation

From this case and others in Work Package 5, it seems that the facilitated circular business model innovation process and tools can be valuable, replicable and transferable to other companies and other industries. It is important to note that the generic process and tools are not always suited to the specific needs and constraints of the company and the current context, however, by being flexible, collaborative and innovative, a co-created, customised process and toolset can be derived and can support the transition to the next stage of development. Furthermore, there has been strong feedback from the collaborators in these cases and in various stakeholder dialogues that the facilitation by outside experts is highly valued and that a process and toolkit alone are not enough to help them accelerate the transition to circular business models.



# 1 Introduction

## 1.1 Background and context

R2π – Transition from Linear to Circular is a European Union Horizon 2020 project focused on enabling organisations and their value chains to transition towards more viable, sustainable and competitive economic models and supports the European Union’s strategy on sustainability and competitiveness.

R2π examines the shift from the broad concept of a Circular Economy (CE) to one of Circular Economy Business Models (CEBM) by tackling market opportunities and challenges (businesses, consumers) as well as policy opportunities and challenges (assumptions, unintended consequences). Its innovation lies in having a strong business focus (including designing transition guidelines) as well as in the role of policy development (including designing policy packages).

The ultimate objective of the R2π project is to accelerate widespread implementation of a circular economy based on successful business models and effective policies:

- to ensure sustained economic development,
- to minimise environmental impact and
- to maximise social welfare

The mission of the project is therefore to identify and develop sustainable business models and guidelines that will facilitate the circular economy, and to propose policy packages that will support the implementation of these sustainable models.

A core part of this project is to work with organisations who are already on the journey towards developing circular economy business models, as well as those who have the ambition to do so but have not yet begun. The project has conducted case studies with 21 selected organisations, their business models and their value chains.

The chosen cases cover all five priority areas highlighted in the EU Action Plan on the Circular Economy: plastics, food waste, biomass/bio-based, important raw materials, and construction & demolition, and additionally, the water sector. The cases were selected also to ensure learning in each of the seven business model patterns defined by the R2π project: re-make, re-condition, circular sourcing, co-product recovery, access, performance and resource recovery, and these will be discussed in more detail in this report. To gather wide-ranging lessons from differing company sizes and maturities, the following were selected: 9 large corporations, 9 small, medium enterprises, 1 public entity, 1 public/private value chain with both government and corporate organisations and 1 ongoing social entity.

This report presents the case study of VAUDE. This organisation was chosen due to its ambition in terms of sustainability and Circular Economy.



## 1.2 Business overview

VAUDE is a German brand for the 'outdoor'/mountaineering market. It has a premium positioning and prides itself on being a sustainability leader.

**Industry:** outdoor articles and clothing

**Founded:** 1974

**Headquarters:** Tett nang, southern Germany

**Area of operation:** international

**Sales:** about € 100 Million

**No. of Employees:** 500

*FIGURE 1: VAUDE RUCKSACKS*



Source: Vaude website

Vaude has been at the forefront of ecological development of its products and participates in a number of sustainability initiatives in the clothing sector: Fair Wear Foundation, Greenpeace Detox and Bündnis für nachhaltige Textilien. It has received a number of awards and accolades for its products and role with regard to sustainability.

It has been innovative in terms of creating a circular approach for one its prominent product lines: "Green Shape", where emphasis is laid on quality materials, design and reparability to ensure long-life.

FIGURE 2: GREEN SHAPE AS A 'DURABLE' COLLECTION



Source: Vaude

Outdoor clothing and products are faced with a range of challenges:

- **Manufacturing** performed in South-East Asia where social and labour standards are not always adhered to. Vaude, while having some Chinese suppliers concentrates its manufacturing in Vietnam and to a lesser extent in Myanmar; it performs social audits of its suppliers
- **Base Materials** many are synthetic and of petroleum origin. Vaude seeks to source materials compliant with environmental standards; in the design phase it seeks to incorporate bio-based materials such as cotton, hemp and felt
- **Functional Materials** to achieve impermeability, the outdoor industry often uses Per- and Poly Fluorinated-Carbons (PFC), known for their toxicity to the environment. Vaude has committed to eliminating all PFC from products by 2020
- **Durability** hindered by design, low grade materials or lack of reparability. Vaude's positions itself as offering durable products including a repair service
- **Recycleability** due to multi-materials or complexity of disassembly, little recycleability has been achievable for outdoor articles. Moreover, there are few specific collection points at end-of-life. Vaude seeks to increase this feature by incorporating higher grade materials
- **Low usage rate** given both the seasonal and leisure profile of outdoor activity, it is conceivable that outdoor products have, when purchased by the consumer, relatively low usage

rates. Vaude has conceived the i-Rent-it rental model, enabling a single product to have higher usage rates.

#### HIGH-LEVEL BUSINESS MODEL SUMMARY

For a majority of its products, VAUDE sells them through its distribution network (retailers and franchisees), i.e. it operates on a strictly B2B model. However for some selected articles, namely tents, rucksacks, trolley suitcases and bicycle pannier bags, it offers them for rent via its website and thus has a B2C offering. The rental business model enables a higher usage of the product. Moreover it is part of Vaude's *post-growth* strategy, in which new models of consumption are being anticipated.

### 1.3 The circular business model innovation process

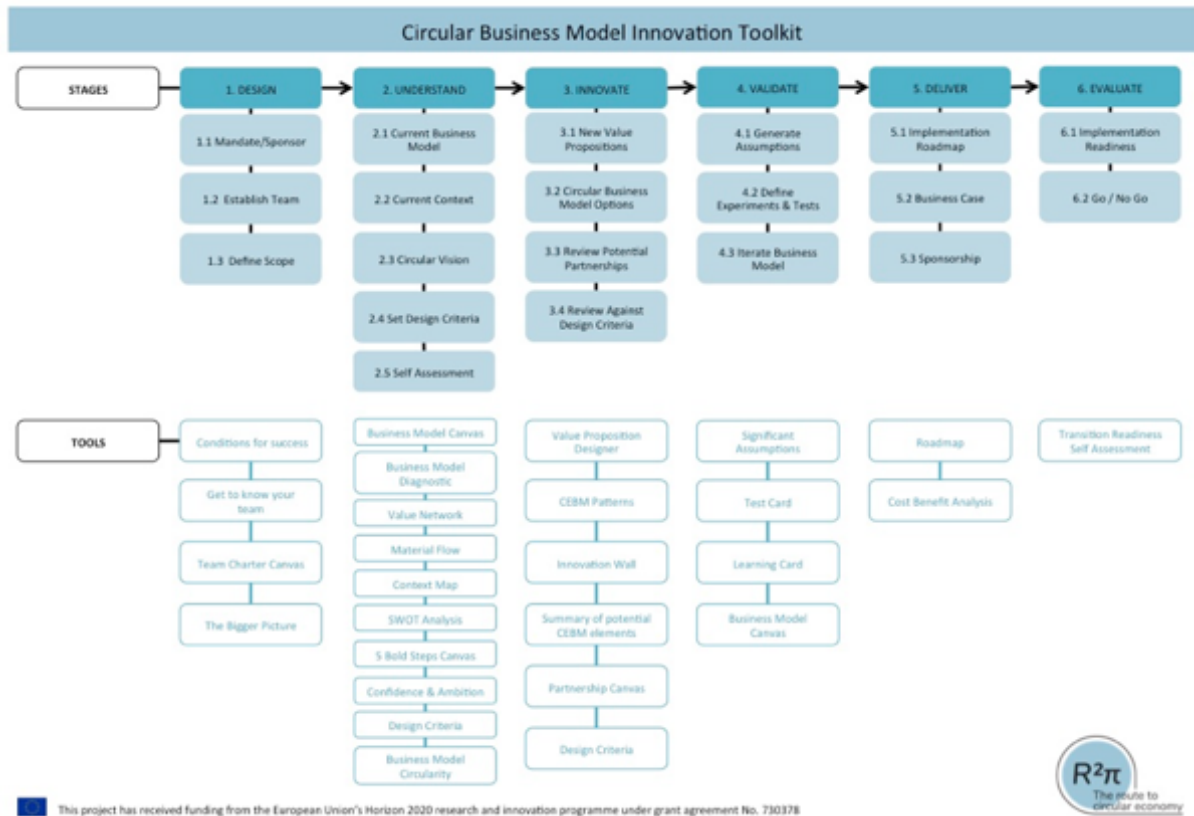
The case study process is a circular business model innovation journey based on the process and tools in Figure 6 below, however, customised in collaboration with Vaude to meet their specific needs and ambitions. It was structured in a preparatory phase of telephone meetings with relevant staff followed by one workshops with Vaude collaborators in a multi-disciplinary team of about eleven people.

*Generally*, the innovation journey covers six main stages: 1) design, 2) understand, 3) innovate, 4) validate, 5) deliver and 6) evaluate. The innovation journey process would ideally be facilitated all the way to the company's final decision to implement a new circular business model in the market. In this case, due to the time constraints of both the R2π project and the Vaude team, the journey was customised and focused on 'understand' and 'innovate'. A pathway for achieving the validate stage was established for continuation beyond the project.

The figure below shows the generic process stages, their sub components and key tools. In Vaude's case, a sub-set of these tools was used.



FIGURE 3: GENERIC CIRCULAR BUSINESS MODEL INNOVATION PROCESS AND TOOLS



Source: R2π Deliverable 5.1

### 1.4 Report outline

The first chapter introduction has provided a high-level overview of the case and innovation journey process. Chapter 2 presents a more detailed description of the innovation journey stages: design, understand, innovate, validate, deliver and evaluate. The chapter will show the big picture surrounding the business and the context in which it operates as well as the key external factors. This is followed by the innovation of new circular business model options and the associated assumptions and the next steps to further test and evaluate the circular business model. Chapter 3 draws conclusions and recommendations for the continued transition to circularity. Given the reduced nature of the engagement between R2Pi and Vaude, some of these chapters are abridged.





## 2 Circular Business Model Innovation Journey

### 2.1 Design

The objective of the design stage is to establish to what extent the circular economy already has significant footholds in the organisation and to design the upcoming innovation process to take the organisation from this current state to an improved future state. For circular business models to be successful, there is a need to involve dedicated people from across the entire organisation and sometimes beyond to external collaborators. Therefore, establishing the right team, evaluating their influence and competencies, and defining the roles they will play throughout different parts of the innovation journey needs to be a priority. Only then, can an organisation properly scope the process and next steps. Vaude as a sustainability pioneer, had already had some reflections on circular business models and had implemented, for a restricted assortment, a rental offering on a B2C basis.

#### 2.1.1 Mandate & Sponsor

There are several questions to understand at what level of CE ambition is mandated (i.e., who drives CE in the organisation and why):

1. Is there a clear circular ambition within the organisation?
2. At what level is that mandated within the organisation (e.g executive level; business unit; project level; individual)?
3. What evidence is there that the organisation can sustain attention and focus throughout the entire business model innovation journey?
4. What level of access does the organisation have internally (within the organisation) & externally to other key stakeholders?

R2 $\pi$  found that Vaude has a strong ambition towards more sustainable and circular business models, all the way up to executive level management. Their desire to create a rental offering for the child-carrier was clearly defined and a project manager to interact with R2Pi project team was made available: both Hilke Patzwall and Petra Schmid were involved in the definition of the scope of the project. From the R2Pi project team, Alexis Figeac and Patrik Eisenhauer (both CSCP) directed the innovation journey process.

#### 2.2.2 Establish Team

Innovation journeys can be long and complex, and therefore there is a need to define a core team & wider cohort that will participate in each stage of the journey. The team needs to include a range of managers and employees to ensure full coverage and proliferation through every relevant department. This will ensure that every aspect of the business is being considered while working towards a new circular business model.

The team at Vaude which took part in the workshop consisted of a wide selection of representatives from across the organisation, covering product design, sales, marketing, quality, product management, human resources, CSR, repair and IT along with the external CE and innovation support from the R2 $\pi$  team.



### 2.2.3 Define the Scope

The scope was defined in the course of several telephone meetings and homed in on the rental model for the child carrier as a circular business model. Whereas Vaude's current assortment contains 3 models as products for sale, it was felt that a child carrier for the rental market may need to incorporate other features, e.g. wear-and-tear indicator and ease of cleaning, while also paying attention to liability issues given its child-transporting nature.

FIGURE 4: VAUDE'S 'SHUTTLE BASE' CHILD CARRIER



**Source:** Vaude website

## 2.2 Understand

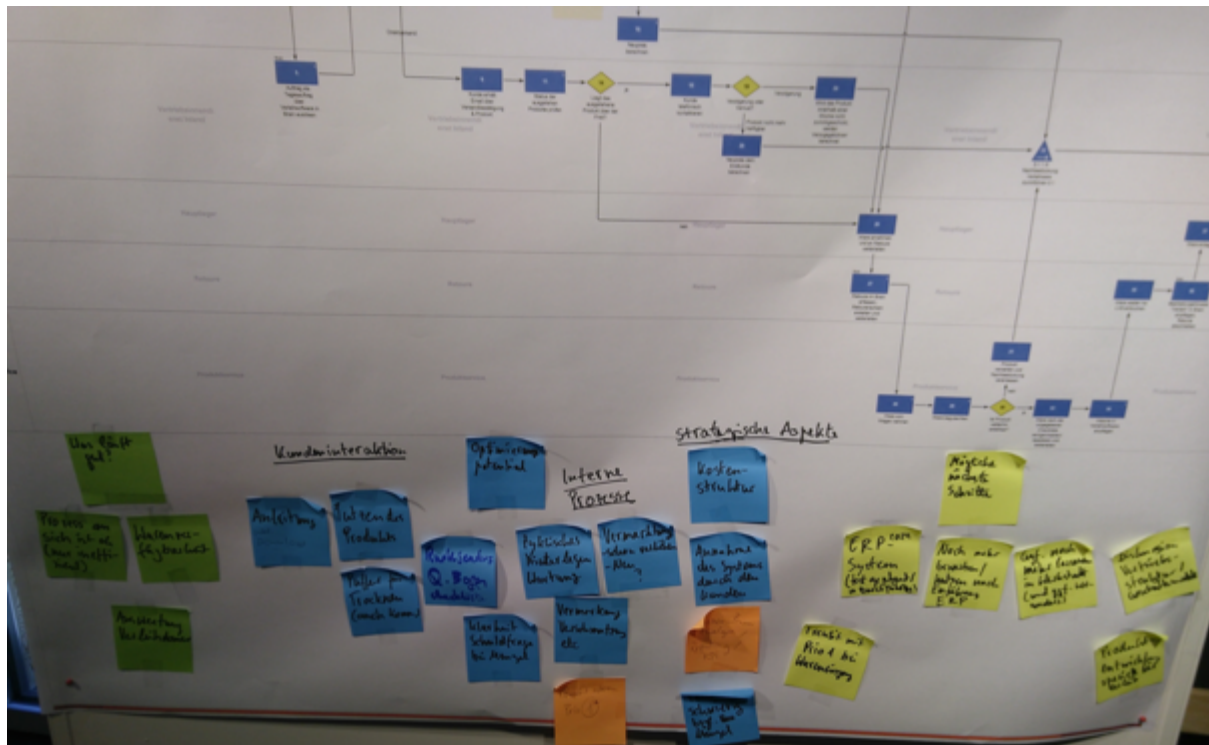
Before establishing the future vision and ambition of the business, it is imperative to get a common understanding of the current business model and the context in which it operates. For instance, to understand the impact that changes in customer needs, demographics or technology can have on the future of the business. Therefore, the tasks are to understand the current business model, its core strengths and weaknesses and evaluate how well these are aligned against the opportunities and threats of the current context. This stage can be accomplished with some of the recommended tools: adapted business model canvas, context map, SWOT analysis and circular vision.

### 2.2.1 Current Business Model

During the workshop at Vaude, we reviewed the current i-Rent-it model, particularly with respect to the material flow. It emerged that much optimisation can be achieved in the current model. This may be partly resolved with the introduction of an ERP-system. Nonetheless, some aspects of customer

interaction were highlighted, which could be implemented in the short-term, e.g. instructions/checklist when returning the product; fast track internally for processing rental returns and a host of strategic questions.

FIGURE 5: MATERIAL FLOW COMMENTED



Source: R2Pi workshop

Having looked internally at the Material Flow of the current rental, the next step was to consider the surrounding context and conditions in which the business operates.

## 2.2.2 Current Context

Since the ambition of Vaude is to extend its circular rental model, R2Pi/CSCP specifically looked at *good practice* in rental for outdoor articles. An analysis and comparison of various businesses and their offering was drawn up. This was discussed during the workshop.

FIGURE 6: COMPARISON OF RENTAL MODELS OF EXISTING OUTDOOR BUSINESSES



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 730378

Source: R2Pi workshop

Particular attention was paid to the assortment, the process and liability. The latter was of significant concern to VAUDE due to potential accidents with children.

FIGURE 7: COMPARISON OF MARKET OFFERINGS

Anbieter	INTERSPORT Rent	raus&weg – outdoorverleih	Rausleihen
Option Kaufen	<ul style="list-style-type: none"> <li>✓ <b>Test &amp; Buy:</b> Ski-Verleih vor Neukauf möglich inkl. Rückerstattung der Mietgebühr für bis zu 2 Tagen</li> </ul>	<ul style="list-style-type: none"> <li>✓ Nicht direkt über die Plattform aber über <a href="#">eBay</a></li> </ul>	<ul style="list-style-type: none"> <li>✓ Mietgebühr wird bei evtl. späterem Kauf gutgeschrieben</li> <li>Betreibt über eigene Plattform einen <a href="#">Second Hand Shop</a></li> </ul>
Sicherheit/ Gewährleistung	<ul style="list-style-type: none"> <li><b>Ski-Verleih:</b> Ski- und Board-Service, Skischuhfitting, Skidepot, Beratung, Sicherheit durch moderne, elektronische Prüflgeräte und Servicemaschinen von Montana und Wintersteiger, Garantien (Passform, Fachberatung, Umtausch, usw..)</li> <li><b>Fahrrad-Verleih:</b> Beratung und Garantien</li> <li>Haftung des Vermieters: hat den Mieter auf ordnungsgemäße Handhabung der Mietgegenstände und Notwendigkeit personenbezogener Einstellung der Sportgeräte hinzuweisen, keine Haftung bei selbstverschuldeten Unfällen oder Personen Schäden des Mieters</li> </ul>	<ul style="list-style-type: none"> <li>Ausrüstung wird nach jedem Verleih gereinigt und einwandfrei in Ordnung gebracht</li> <li>Equipment wird regelmäßig ausgetauscht um Sicherheit zu gewährleisten</li> <li>Austausch findet statt, wenn Equipment noch vollkommen i. O. ist und wird dann über eBay weiterverkauft</li> </ul>	<ul style="list-style-type: none"> <li>Equipment wird nach Verleih vom Team geprüft und gereinigt, sodass es voll funktionstüchtig und optisch in einem guten Zustand ist</li> <li>Sobald Equipment größere Abnutzungserscheinungen hat, geht es in den Second Hand Shop über</li> </ul>

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 730378

Source: R2π Workshop (research by CSCP)

With regard to VAUDE's objective of developing a child carrier as a rented product, we researched current offerings of this particular product.

FIGURE 8: CHILD CARRIERS FOR RENT (PLAYERS AND MODELS)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 730378

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**Source:** R2π Workshop (research by CSCP)

## RULES AND REGULATIONS

An important issue is the classification or not of the child carrier as a *PSA* (personal security equipment). Currently this is viewed as a grey area, which may require certain features in design, if it does become a *PSA* in the German context.

## 2.3 Innovate

The main objective during this stage was to formulate the Value Proposition around the innovation, constituted by designing a child carrier specifically for i-Rent-it.

### 2.3.1 Create new value

The value proposition is one of the most fundamental building blocks of a business model, and it is also one of the most complex ones. The overall success of a new business model is contingent upon the value that it creates for customers, and by designing a sound and relevant value proposition, a

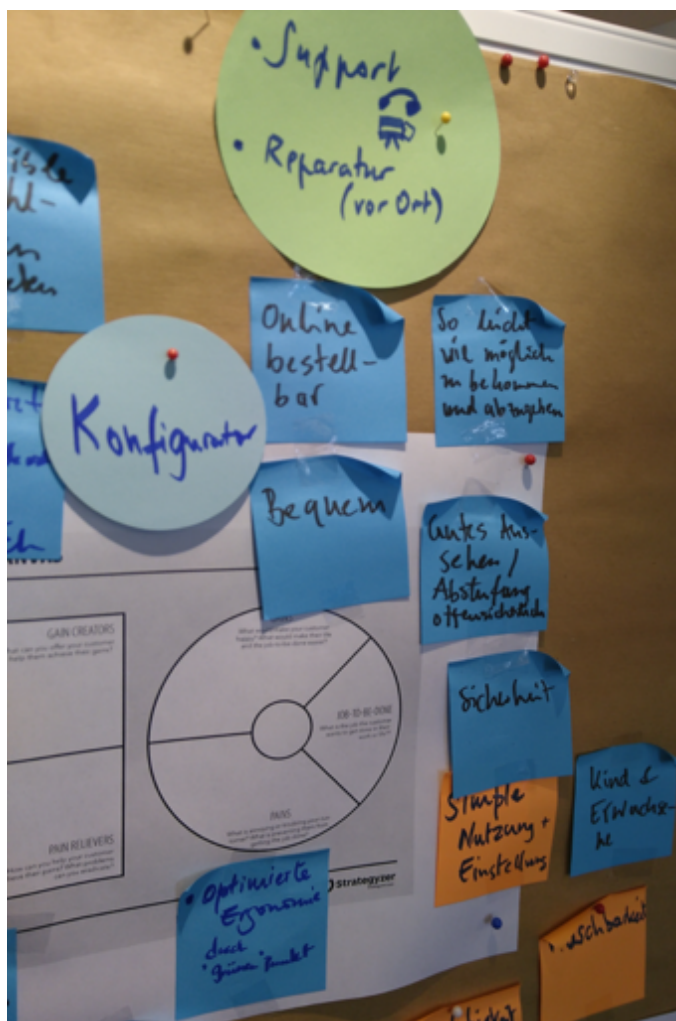
13



business is able to create, test and deliver precisely what customers want. A direct result of the well-designed value proposition is reflected in the profitability of the business model. Simply, the more directly and effectively a value proposition addresses customers' most pressing issues, wants, and desires, the more likely it is to be a profitable and long-lasting model.

Naturally, this was a key topic discussed among the participants in the workshop. This was performed as a group exercise to understand value from the customers perspective and discussed questions such as: What are the customers "jobs-to-be-done"? What "pains" are they having that need to be addressed? What "gains" are they seeking where we can help them? This can be done using a tool such as the value proposition canvas, prompting a dialogue around the key questions. Naturally, customers in this sector value such things as comfort, safety and simplicity but the participants were also trying to innovate beyond the existing product (and potentially for the rental model as a whole), so it was important to explore many possibilities and ideas that could inspire a more circular business model. We spent much time on the Value Proposition Canvas, seeking to identify which are the perceived customer needs.

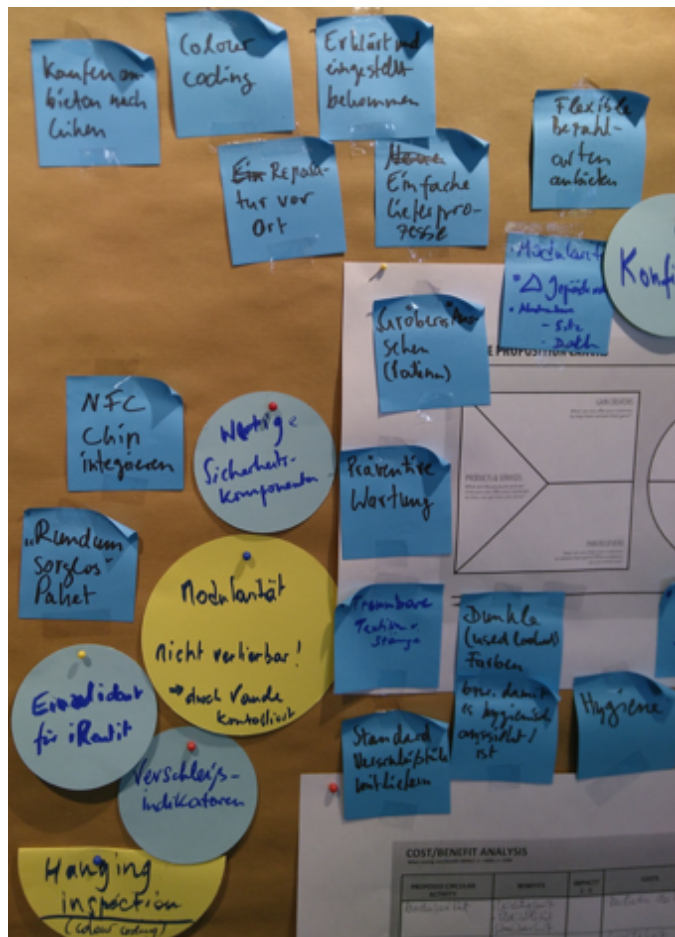
FIGURE 9: VALUE PROPOSITION CANVAS FOR CHILD CARRIER AS RENTAL PRODUCT (CLIENT NEEDS)



Source: R2π Workshop

On the basis of customer needs which were thought to exist, the team then developed corresponding design, feature and service ideas around this.

FIGURE 10: VALUE PROPOSITION CANVAS INTERNAL DESIGN AND SERVICE FOR CHILD CARRIER



Source: R2π Workshop

Such a Value Proposition contains many assumptions which the team sought to identify in the next stage

## 2.4 Validate

Thus far, some of the innovations of the circular business model ideas have come in the form of assumptions or hypotheses. Now, it is necessary to begin testing and validating these as efficiently and effectively as possible in order to verify the viability of the business model. Only by testing these hypotheses and validating or invalidating them, can there be progress towards an implementable model. The aim of early innovation is to maximise the learning per amount of time and money spent. It is important to find the right starting points for testing, and therefore, identifying the assumptions is key.



### 2.4.1 Generate Assumptions

In the workshop, the participants identified several critical assumptions for the circular business model ideas. It became immediately clear that further investigations must be done in order to test whether their ideas were valid or not. Some test cards were drafted so that these assumptions may be tested, including timing for results.

FIGURE 11: TEST CARD FOR DESIGN FEATURE 'MODULARITY'

**Test Card** Strategyzer

Test Name: \_\_\_\_\_ Deadline: \_\_\_\_\_

Assigned to: \_\_\_\_\_ **1 Monat**

**STEP 1: HYPOTHESIS**  
We believe that **Modularität positiv**  
**Kd-Seitig** Critical: ▲ ▲ ▲

**STEP 2: TEST**  
To verify that, we will **Screening von Daten-Erhebung**  
**(35 Interviews etc.)** Test Cost: \_\_\_\_\_ Data Reliability: \_\_\_\_\_

**STEP 3: METRIC**  
And measure **# Benefit erwähnt**  
**e ggf. explizit abfragen** Measured: \_\_\_\_\_

**STEP 4: RESULT**  
We are right if **< 20% Ablehnung**


Source: R2π Workshop.

Moreover, there is also a cost-benefit associated with the design features. A first attempt was made to highlight those. Once the test cards have produced results, the design features may be thus confirmed or changed.



FIGURE 12: COST-BENEFIT ANALYSIS OF SOME DESIGN FEATURES

**COST/BENEFIT ANALYSIS**  
When scoring cost/benefit IMPACT: 5 = HIGH, 1 = LOW



PROPOSED CIRCULAR ACTIVITY	BENEFITS	IMPACT? 1-5	COSTS	IMPACT 1-5	COST VS. BENEFIT
Modularität	Leichtigkeit Flexibilität Wartbarkeit		Verlieren des Teils		COST BENEFIT
Wichtige Sicherheitskomponenten			Leichtigkeit		COST BENEFIT
					COST BENEFIT
					COST BENEFIT

Source: R2π Workshop

## 2.5 Deliver

To deliver the circular business model, a roadmap ought to be followed.

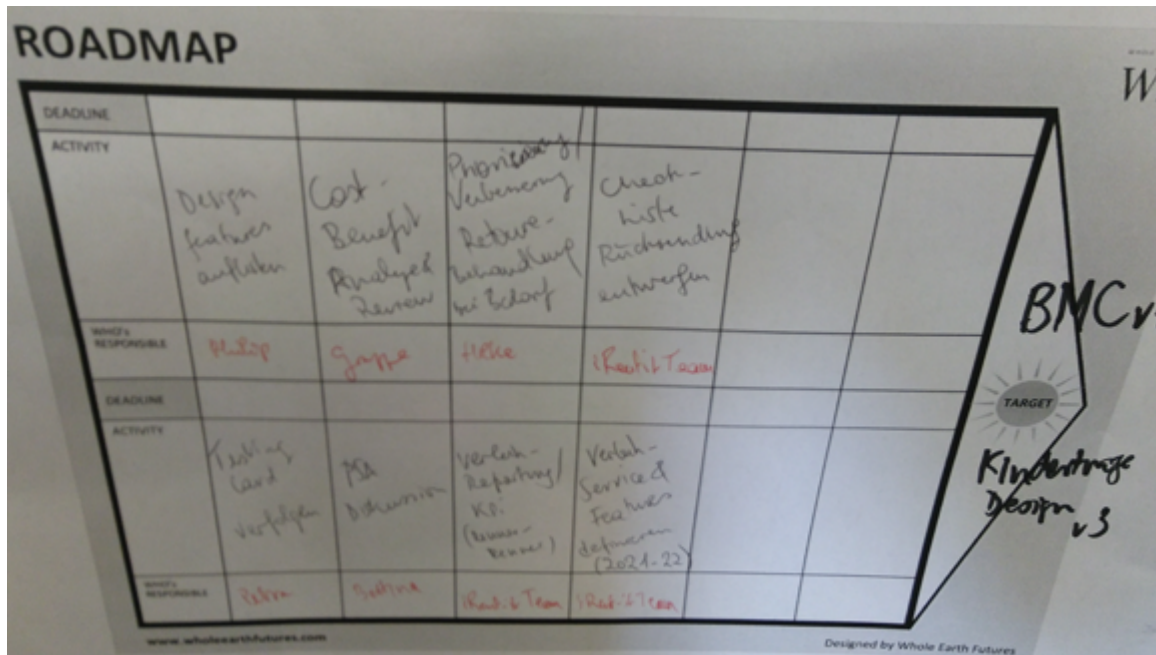
### 2.5.1 Implementation Roadmap

The roadmap provides a simple layout to set out activities, responsibilities and deadlines over a period of months to detail the ambition and help reach the circular business model. The outputs of this tool are clear tasks and deadlines allocated to the right team members. During the workshop, participants agreed on the steps for the roadmap.

Given the compact interaction between R2Pi and Vaude, the goal of this roadmap is to lead to

- creating the first Business Model Canvas for the child carrier rental model
- furnishing inputs to a further iteration of the product design

FIGURE 13: ROADMAP TO DELIVER BMC AND NEXT ITERATION OF PRODUCT DESIGN



Source: R2π Workshop

This first Business Model Canvas is the start of an iterative process, in which the BMC shall have to be revisited, adjusted and validated.



### 3 Conclusion and Recommendations

The R2π facilitation of the process came to an end, but the circular business model innovation journey of VAUDE shall continue. Even though there was not sufficient time to go through all stages and tools, the feedback from Vaude was positive, and the workshop and exercises developed were said to be valuable for critically reflecting on the existing i-Rent-it rental model and for defining concrete actions with regard to the child carrier.

Our recommendation to Vaude is to continue with the innovation process, to fill in the knowledge gaps, test the assumptions, pilot the circular business model and iterate improvements based on these lessons learned until they are able to go to market with a viable circular business model (child carrier rental). They can continue to make use of the Circular Business Model Innovation Toolkit (R2π Deliverable 5.1.) to support these next steps.

During this innovation process, facilitated design thinking methods and tools were used to identify opportunities on how Vaude can innovate circular business models that increase business value while simultaneously reducing negative impacts on the environment.

We are confident that Vaude can achieve this innovation since, as an organisation it has key enablers:

- Company philosophy – products to enjoy the environment/the outdoors
- Clear ambition to remain a sustainability pioneer
- Willingness to invest time in innovation

More generally, from this case and others in Work Package 5, it seems that the facilitated circular business model innovation process and tools can be valuable, replicable and transferable to other companies and other industries. It is important to note that the generic process and tools are not always suited to the specific needs and constraints of the company and the current context, however, by being flexible, collaborative and innovative, a co-created, customised process and toolset can be derived and can support the transition to the next stage of development. Furthermore, there has been strong feedback from the collaborators in these cases and in various stakeholder dialogues that the facilitation by outside experts is highly valued and that a process and toolkit alone are not enough to help them accelerate the transition to circular business models.



## Annexe

Market research on rental models for outdoor equipment and clothing (good practice examples)

Due to the file size of this Annexe, the data is available at the following location

[https://freedcamp.com/R2Pi\\_Team\\_A64/WP5\\_Feasibilit\\_VP0/files/versions/7456725](https://freedcamp.com/R2Pi_Team_A64/WP5_Feasibilit_VP0/files/versions/7456725)

