A case study about the transformation of a Co-Working Space in the Netherlands from the linear to the circular economy.

Bachelor Thesis / Graduation Project
Lisa-Marie Möllmann

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Author:
Lisa-Marie Möllmann
#1676208

HOGESCHOOL UTRECHT

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First Examiner: Scholten, K. (Karlijn)

Second Examiner: Gomes Sousa e Sousa, L. (Luana)

Executive Summary

In a society in which climate change is becoming one of the biggest enemies, but there is still no unified solution to combat it, there are still the heroes who rely on new concepts and economic solutions that would be able to solve the problem. The Netherlands wants to create that change, they want to completely transform their economic system and move from a linear economy to a circular economy by 2050 (Dutch Government, 2016).

Evert-Jan Velzing, client of the group and researcher at the Hogeschool Utrecht, has the task to advise the Werkspoorqwartier in Utrecht on new circular solutions. Task is to transform the linear co-working space towards the C.E. as a business.

Hereby, understanding the core Business Model and its Value Proposition and transforming those is an opportunity deriving from that (Guldmann, 2016). The business model transformation of a co-working space, transforming from the linear to the circular economy and where one has to start in order to achieve this builds the core of this research thesis.

Research has proven that one way to transform a business can be based on the design process, when putting the end-user and stakeholder in the center of change.

The prototype represents a playbook with an approach in the design process grounded and thereby considering all stakeholders when transforming a business model and value proposition of a company. This playbook can be used by Evert-Jan Velzing as a first starting point towards transforming a linear co-working space into a circular co-working space.

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Abbreviations

BM - Business Model
VP - Value Proposition
C.E. - Circular Economy
e.g. - for example
CWS - Co-Working Space
VPC - Value Proposition Canvas
BMC - Business Model Canvas
Linear Co-Working Space - Co-Working Space based on the economic system of linearity
Circular Co-Working Space – Co-Working Space based on the economic system of circularity
CBM – Circular Business Model
CBMI – Circular Business Model Innovation

1 Introduction

1.1 Thematic Background

Co-Working Spaces

The concept of co-working spaces (CWS) has been an existing trend and is still continuously developing since 2005 when Brad Neuberg invented - at least the name of it - the first shared workplace for individuals to collaborate at (Spinuzzi, 2012). By 2020 more and more CWS will be built, Statista claims it to be 36.000 spaces in total worldwide and the number will predictably grow. Even though most CWS claim to be sustainable when being part of the sharing economy already, in the end, it is fair to say that they are still part of the linear economy, in the end, those places are still creating waste, do not keep material in use, do not mainly focus on regenerating natural resources.

The Linear and Circular Economy

At the same time in the past few years, the problem of climate change has become one of the most important terms in humanity and one of the causes of that is the linear economy we are living in, which means producing and living off the concept Take-Make-Waste (Ellen MacArthur Foundation, 2012). The linear economy thus reduces resources that we have in this world. The problem here is inefficiency, because they do not manage to increase the value of materials and products (Singer, 2017).

An answer to that problem is the rise of the concept Circular Economy (CE), which is an economic system that focuses on three main principles, designing waste and pollution out of the system, keeping products and material in use and regenerating natural systems (Ellen MacArthur Foundation, 2012). The Ellen MacArthur Foundation as a frontier in the transformation of companies and economies starts with its mission where they think it makes the most sense, namely that it is possible to change and redesign systems with the right approach of design (Ellen MacArthur Foundation, 2019). Furthermore, the Ellen MacArthur Foundation has just updated once again and proved that the CE can be the solution to the existing climate change, because it is capable of achieving the UN Sustainable Development Goals (Ellen MacArthur Foundation, 2019).

Research Framework

The client of this research group is Evert-Jan Velzing, who is part of the research institute at the Hogeschool Utrecht and researching on the Circular Economy, and who is consulting the Werkspoorkwartier in Utrecht on how to make that place a circular creative space for young entrepreneurs and makers, also called co-working spaces.

But how do you create exactly such a transformation for a co-working space from linear to circular?

The research group came up with the following framework.

FRAMEWORK OF RESEARCH GROUP
CIRCULARITY IN COWORKING SPACES

LINEAR COWORKING SPACES   CIRCULAR COWORKING SPACES

VALUE PROPOSITION   OPERATIONS   INSTITUTIONAL DRIVERS   VALUE PROPOSITION   OPERATIONS

TRANSITION DESIGN   CIRCULAR OPPERTUNITIES   BARRIER ASSESMENT   CIRCULAR VALUE MAPPING   CIRCULAR MATCHMAKING
PLAYBOOK

LISA-MARIE MÖLLMANN   MARA NELDNER   MALOU APPEL   AGNES WEBER   QENDRESA REXHEPI

FIVE MODULAR PROTOTYPES COMBINED INTO A CIRCULAR TRANSITION TOOLKIT FOR COWORKING SPACES

(Image 1: Research Framework)

The main focus of this thesis lays in in finding out how to drive such a transformation within a linear CWS via the Business Models (BM) and Value Proposition (VP).

2 Current Knowledge

As quite problematic revealed is, that the Circular Economy concept currently focuses mainly on the technical transformation of products and services and therefore loses its focus on the costumer that actually drives sales (Lofthouse and Prendeville 2018). Though, it is key to understand the end-user of the business and in order to continuously solve them with the offered service or product, to be able to further drive profit (Singer, 2017).

That problem has been so far rarely explored in the literature and rather only displays very specific use-cases and therefore does not give an easy adaptation process of CBMs for a CWS currently.

An opportunity deriving from that is the approach of the design methods and process, which has proven it can enhance significantly innovation, transformation and change (Kumar, 2012).

Therefore, the researcher has decided to further explore the following frameworks, to better understand on how to actually adapt a linear BM towards becoming circular, while not losing sight of the customers when using design methods and processes for transformation.

1. Linear Business Models & Value Proposition
2. The role of the customer and stakeholders in both economies
3. The design process used for user-centered transformation and innovation

2.1 Linear Business Models and Value Proposition

The BMs and VP overlaid by the right business strategy are the heart of every company. It shows how they propose, create and capture value for all stakeholder of the products and/or services being used and how they function in the market compared to their competition and what differentiates them (Peter Drucker in HBR, 2011).

The Business Model Canvas (BMC) and Value Proposition Canvas (VPC) according to Osterwalder and Pigneur are tools to understand and analyze a company better, therefore serving as basis to build BMs and VPs surrounding them. Hereby, the two tools offer to acknowledge in which of the building blocks of the business models are opportunities laying for circular transformations (Ellen MacArthur Foundation, 2012). And even more they provide a

way to communicate across all stakeholder and co-create on new ideas while speaking the same language (Amarsy, N. (Strategyzer), 2015).

2.2 The Role of the End-Consumer in both Economies

The center of a Customer Value Proposition, which is also key essential part of a co-working space and its BM, is the end-user and how it delivers value to them by solving their need(s) or pain(s). Especially in recent years, the concept and value of the end customer and their experience has become the focus of attention of companies. Understanding customer's wishes, values, pains and hardships today is the main focus of the most successful companies and their products and services and can significantly drive revenue (McKinsey, 2017).

"Designing high-end services that users will take up is critical (Vogtlander et al. 2017), yet so far service design knowledge within this space is under-developed." (Lofthouse and Prendeville, 2018)

Many more academic reports and case studies report in their recommendations that there must be more focus on the end-user and all stakeholder included when implementing the economic concept (Singer, 2017; Vogtlander et al. 2017; Lofthouse and Prendeville, 2019).

2.3 The Design Process used for Transformation towards User-Centered Circular Business Models

The Ellen MacArthur Foundation, the pioneer of the circular economy, already uses design principles to transfer concepts tailor-made for companies, institutions and the public. Though, the main concept used here focuses on business-to-business models rather than business-to-consumer models (Lofthouse and Prendeville 2018).

"Changing the way that the circular economy is framed so that it is more inclusive of people and their behaviors would open up a broader and more nuanced debate on the role of design within a multitude of possible circular economy futures" (Lofthouse and Prendeville 2018).

It has been proven that design places the experience of people in the center of its existence (Dunne 2011) and this can therefore be seen as the most important starting point for real innovation (Verganti 2008) of products and services. Designers have the ability to understand people better, their pains and needs (Vezzoli and Manzini 2008), which is a missing piece in CBMI.

The User-Centered Gap of the Design Principles in the Circular Economy

After the literature analysis, the researcher aims to find out more about the successful implementation of design principles with a user-centered focus and the transformation of a linear CWS to a circular CWS.

Deriving from the theoretical framework with its concepts the following questions have been developed.

2.4 Research Question and Sub-Questions

How can a non-circular co-working space adapt their Business Models, taking advantage of the design process when transforming from a linear business into a circular business in 2020 while still being able to answer the needs and pains of their customers in the Netherlands?

| Sub-Question	Concept	Methodology	Tools
What is the current business model and value proposition of linear co-working spaces?	Linear Business Model and Value Proposition	Literature Analysis & Exploratory Methodology: Integrated Design Research Approach as a Workshop	Business Model Canvas & Value Proposition Canvas
Which role does the end-users pains and needs play in a both economies?	The role of the end-user in both economies	Desk Research/ Literature Analysis + Integrated Design Research Approach as a Workshop (Experimental Methodology) + Epistolary in depth-interviews with experts and customer	Value Proposition Canvas, Questions re Value Proposition and the role of the end-user + Interviews with co-working customers
How can the design process drive transformation within a co-working space when moving from a linear BM to a circular BM?	The design process used for change and transformation towards user-centered Circular Business Models (CBM)	Desk Research/ Literature Analysis + In-depth epistolary interviews + Iterative Prototyping	The Design Process for Transformation and Change from different perspectives of experts from different areas

(Table 1: Sub-Question)

3 Research Procedure

Please find table 2;3;4 in this section to receive more information on methodology, sampling and iteration of the research procedure and here of the exact research procedure with images (https://drive.google.com/file/d/1VYKNv0bo1wWNg9Ikc-hflwgS4xptVcCL/view?usp=sharing).

3.1 Mixed Method Approach: Qualitative Methodology

To identify and design possible ways to transform the CWSs business model accordingly to the concept of circular economy, the researcher will make use of the qualitative methodology leading to qualitative empirical data with an overall mixed method approach. Qualitative methodologies are primarily associated with exploratory research, intended to provide insights and an understanding (Malhotra, Birks & Wills, 2012). The findings are first theoretically substantiated in order to be able to provide well-founded explanations, from which hypotheses are finally formulated. New aspects can be discovered through the open approach. As well as the possibility of personal inquiry in case of uncertainties. The flexibility of this approach was necessary in order to find the best solution possible for the client (Saunders; et al., 2012).

(Image 2: Data Gathering)
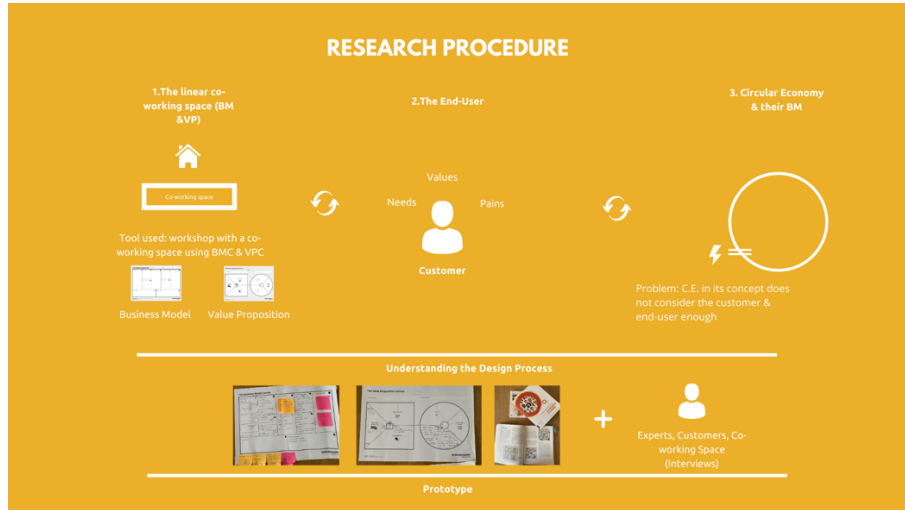
(Image 3: Research Procedure)

SQ	Concept	Dimension	Method
1	Linear Business Model and Value Proposition	Existing BM with BMC and existing VP with VPC	Integrated Design Approach in form of workshop (Experimental Methodology)
2	The role of the end-user in both economies	Stakeholder and user pain, needs and the VP	Expert interviews, customer interviews
3	The design process used for change and transformation towards user-centered Circular Business Models (CBM)	Design as a process enhancing user-centered transformation towards CBM	Expert interviews, literature review, iterative prototyping

(Table 2: Sub-Questions & Methodologies)

3.2 Desk Research

First of all, the current literature was reviewed and analyzed, the internet and books where searched for an existing and adaptable case. The specific transformation of CWSs is still very rare in the literature and therefore alternative solutions needed to be developed.

3.3 Integrated Design Research Approach (Experimental Methodology)

In order to better understand the BM and VP of a linear CWS, the researcher held a small integrated design research in form of a workshop (Mintjes, 2016), conducted with an interview thread while using the tools Business Model

Canvas and Value Proposition Canvas by Strategyzer to analyze the space. This experimental method helps to co-create with important stakeholder and therefore gain deeper insights (Mintjes, 2016). This approach was done with the CEO of the co-working space. This method can be biased because it only focuses on one perspective of one co-working space, has a very small sample size.

3.4 Semi-structured Interviews with Experts and Co-Working Customers

The researcher decided to work with experts in the fields of design, because such an approach can significantly drive transformation and change (Vogtlander et al. 2017).
Semi-structured in-depth interviews were conducted using the epistolary approach. The researcher spoke to the interviewees and then provided them with a document on Google Drive in which the experts and the co-working customers could insert their answers. A total of 11 interviews were conducted. The interview questions were always slightly adapted to the interviewee and his or her core area of knowledge and yet they all concerned the process of transformation or the needs and pains that drives them to work in a CWS.
The analysis of the results was made in an excel list in which the results were clustered in categories, code and synthesis, mainly considering the different parts of the transformational process or the customers' needs and pains. Very interesting insights by experts and customers, such as their views and experiences were found, thus it can be biased because it is only the perspective of a few, a small sample size and.

3.5 Prototype Iterations and Testings

In the end, it was necessary to test the prototype iteratively and get feedback from experts. Accordingly, she met with experts again. She carried out this process four times. Additionally, the client himself got one prototype presented and challenged a few features.
This is also methodologically an explorative research approach, the feedback was recorded and stored in audio form and noted, implemented and documented right away.

Interview Number	Methodology + Sampling	Job Description / Position	Most important insight
Co-Working-Space_1	Integrated design workshop guided by a semi-structured in-depth interview / random sampling	CEO of a Co-Working Space	The question of the CEO, why they should change if there are no incentives existing and that the end-user is the center of their BM (mindset & need)
Expert_1	Semi-structured in-depth epistolary interview / Random sampling	Business Design Expert in German leading innovation agency	Purpose-Value Driven Proposition and BM are the key + mindset + process
Expert_2	Semi-structured in-depth epistolary interview / Random sampling	Change Management & Internal Communication Expert in major consultancy + Service Design Expert	How does change work within a company and what needs to be communicated when transforming a business
Expert_3	Semi-structured in-depth epistolary interview / Random sampling	UX & Service Design Director / Team lead	Understanding the importance of the user and their needs and pains + Process
Expert_4	Semi-structured in-depth epistolary interview / Random sampling	Professor/ Doctor for Business Model Innovation in a big corporate company	When transforming a business model and innovating on it, how would that be done, what is important to consider

Expert_5	Semi-structured in-depth episto-lary interview / Random sam-pling	Organizational Design Expert in German leading innovation agency	Understanding the Importance of the Value Propo-sition and that all stakeholder need to be included in process
Co-Working Cus-tomer_1	Semi-structured in-depth interview / random sam-pling	Sustainability Manager and En-trepreneur	Sustainability is important to her, she would even pay more
Co-Working Cus-tomer_2	Semi-structured epistolary in-depth interview / random sampling	Entrepreneur and Employee at ma-jor Consultancy	Sustainability im-portant, would pay more when using a circular space
Co-Working Cus-tomer_3	Semi-structured in-depth episto-lary interview / random sampling	Creative Director at major consul-tancy & Entrepre-neur	Sustainability im-portant to him, has doubts about paying more but would take a look and is interested in the VP
Co-Working Cus-tomer_4	Semi-structured epistolary in-depth interview / random sampling	Business Develo-pment Manager	"As they are sup-posed to be a center for innova-tive thinkers and a space where the next big things are being developed, I defi-nitely think they should set an ex-ample by fulfilling or even surpas-sing sustainability standards"

Co-Working Cus-tomer_5	Semi-structured epistolary in-depth interview / random sampling	Student & Entre-preneur (B2B)	"I think that the sustainability could be visible in the co-working space, and that could actually add to space in a way that it is more inspiring to sit there."
Co-Working Cus-tomer_6	Semi-structured epistolary in-depth interview / random sampling	Student & Part-time as an IT En-gineer	"Nevertheless, for CWS like the XX, where the com-pany owns the facility - the po-tential is huge. Requirements could be that the team has at least one specialist to support their idea to cooperate with CWS to improve sustainability"

(Table 3: Interview Partner List)

Iteration	Who	How	What
Iteration Number 1	Business Design Di-rector	Video Conference	Challenged the process of the Playbook
Iteration Number 2	Change Management & Internal Communi-cation Expert / Service Designer	Video Conference	Challenged the order of the playbook
Iteration Number 3	The Client	Video Conference	Challenged if it is also ap-plicable for other busi-nesses than co-working spaces
Iteration Number 4	Change Management & Internal Communi-cation Expert / Service Designer	Video Conference	Challenged the Kick-off meeting & value of C.E. section

(Table 4: Iteration Prototype)

4 Results

4.1 Sub-Question 1: Business Model & Value Proposition Adaptation – Stakeholder Alignment

At the heart of any business model is the value proposition, and therefore the needs and pains of the customers, solved by the business. This need also requires an adjustment when transforming a business. The key lesson from the discussions with the experts is the central role of the end user and their desire for a VP that promises higher value (Interview Expert 1;2;3;4;5, 2020). Today it is a matter of developing purpose-driven value propositions, which would be possible if the concept of circular economy was slowly implemented within a linear business model (Interview Expert 1, 2020). This can only be achieved if the interrelationships and the ecosystem of a company are fully understood (Interview Expert 1;2;3;4;5, 2020). This, in turn, needs to be brought together with the concept of the C.E. within the current business model and value proposition and is therefore looking for ways to align it with all stakeholders included (Interview Expert 2, 2020).

Experts have also confirmed that such a transformation must be a slow adaptation process, in which piece by piece the BMs and thus the VP will be expanded (Interview Expert 1;2;3;4;5, 2020). After all, the end user of a linear co-working space pays for the best existing, functioning service that answers their needs and values (Customer 1;2;3;4;5 and Co-Working Space, 2020). Thus, another problem is the access to circular principles in various industries for companies, also proven by the research of the client, Evert-Jan Velzing (Velzing et al., 2019). It is important to note that the adaptability of the concepts is still difficult to transfer and individual solutions have to be found from one company to another company and their customers.

Another very important outcome and aspect is that the Co-Working Space asked correctly, why should they change at all (Co-Working space, 2020)? And that must be guaranteed. The right mindset is one very significant part, but if you're not offered anything in return, it's hard for companies to change their business models, which do work. There are three things that are very important for this, it must be understood why it is so important to change and that becoming more sustainable is important: politically, economically and/or socially. And this is one of the biggest burdens to carry right now, because if

there is no need to change for the CWS, then it needs at least nudges in order to really understand the value of the Circular Economy for one's business (Interview Expert 2, 2020).

4.2 Sub-Question 2: The Customer and the Value Proposition

One strategy, also proven in some of the conducted interviews is, if the customer is seen as a stakeholder of a CWS (Interview Expert 2,2020) because they are the centerpiece of it. They do not only buy the product, no, they actually live off the service and are a major part in co-creating the environment. Therefore, the awareness and education must increase, not only in the company but also inside the customer. The mindset of today's customer is already changing strongly, an important milestone towards sustainability has already been reached, companies can see that and the general pressure is increasing (Interview Expert 1, 2020). However, the users of the spaces that have been talked to say, if there was a corresponding offer of more sustainable spaces, they would also be willing to pay more, because they see the value in it and would like to promote it (Co-working customer 1,2,3,4,5 2020). Nevertheless, it is about building services and products around them, creating the best experience possible (McKinsey, 2017). And the main focus of the design process is on building products and services for the customer, which is the deriving opportunity from it and proven by the experts.

But at the same time, it is not about imposing the principles of the circular economy on a company and their customers with a 180-degree turn (Interview Expert 1;5, 2020), but rather about dealing with the core business, taking the company in its current state, analyzing and understanding it. The BM and VP should be examined for their heart and soul and then can be transformed in combination with design principles (Expert 2, 2020), aligned with the understanding and analysis of the stakeholder and customer of the CWS.

4.3 Sub-Question 3: Design Methods and Processes driving Innovation and Transformation

The Design principles generally include: Understanding, analyzing, creating, building, testing, implementing and using it (Kumar, 2012).
Experts have slightly different opinions of the process and how it looks like, but the insights clearly show that it is about designing for the human, building hypotheses and testing them before implementing pilots. Therefore, the general approach of designing for the CE, invented by the Ellen MacArthur

Foundation could be changed towards not only designing for the circular economy but especially for the end user of the products and services (Expert 1;2;3;4;5, 2020). This is currently one of the problems, as also confirmed in the literature research several times. If the CE would include in their design more of the user perspective it would broaden the field of adaptation (Lofthouse and Prendeville 2018).

Own experiences in the iteration phase of the prototype with the experts confirmed that following the design process when developing such a prototype, it helps to receive instant feedback, because more perspectives are necessary (Iteration Number 1;2;3;4, 2020).

To sum up with a synthesis of the research procedure, it can be said that a clear strategy is necessary, which can be built and driven by the design process in order to gain a deep understanding of the stakeholder, especially customers. As well as the understanding of the business and its BM(s) is necessary. It further needs to be clear why the BM(s) and VP will change, therefore the need of the CE is clearly communicated and opportunities gathered. Then the newly developed hypothesis and concepts need to be tested and iterated before being implemented.

More results of what has been found have been tackled in the prototype in the form of a playbook. It includes a clear strategy on how to assess all the findings and on creating a value for the co-working space when transforming towards the CE. Moreover, please find table number one in the research procedure to receive more information on insights per interviewee if necessary.

5 Conclusion

PLEASE FIND THE FINAL PROTOTYPE HERE:
https://drive.google.com/file/d/1z0_2-
CNv2qy2kO59rQok266VSYpVlER9/view?usp=sharing

5.1 Results

All the findings throughout the entire process of the thesis suggest that a deep understanding of the user needs to be developed in such a transformation, because they can directly and indirectly drive and change businesses, their models and success. In addition, the company has to be taken slowly on the journey in order to convey the benefits and values that arise from such a transformation from linear to circular. It is not a matter of coercion, but rather of establishing a new value proposition and business model in the long term, which targets the values, pain and desires of the customer and above all integrates a holistic and larger purpose.

It is about communicating the circular economy and its concept more strongly to the individual company with the right design approach for the implementation of the concept. However, this can only succeed if the customers and all stakeholders are picked up, only then the company creates true value for all parties involved.
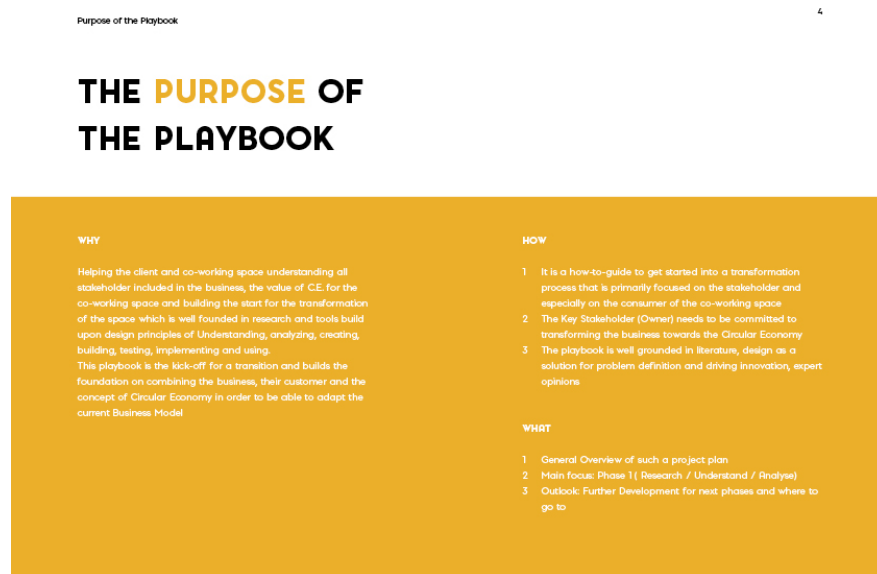
5.1 The Prototype

Therefore, the prototype in the form of a playbook/ guide aims to take the customer and the company on this journey, understanding all stakeholder included, using a collaborative environment grounded in the design principles while tackling the needs and pains of all: the CWS, their customer, all stakeholder included while communicating the value of CE.

The researcher of the thesis built a project approach and transition plan according to the design principles and divided it into 3 phases.

It therefore outlines a complete plan, but only deeply emphasizes on the first phase. The first phase contains multiple actions and ground strategy which include an

1. The exploration of the Business Model and Value Proposition
2. A research plan considering stakeholder (internal) , customer, the market & topic
3. The value of the CE for the business

The client is able to take that approach to a customer and use the play book when approaching them for a transformation towards the CE.

Purpose of the Playbook   4

THE PURPOSE OF THE PLAYBOOK

WHY

Helping the client and co-working space understanding all stakeholder included in the business, the value of C.E. for the co-working space and building the start for the transformation of the space which is well founded in research and tools build upon design principles of Understanding, analyzing, creating, building, testing, implementing and using.
This playbook is the kick-off for a transition and builds the foundation on combining the business, their customer and the concept of Circular Economy in order to be able to adapt the current Business Model

HOW

1 It is a how-to-guide to get started into a transformation process that is primarily focused on the stakeholder and especially on the consumer of the co-working space
2 The Key Stakeholder (Owner) needs to be committed to transforming the business towards the Circular Economy
3 The playbook is well grounded in literature, design as a solution for problem definition and driving innovation, expert opinions

WHAT

1 General Overview of such a project plan
2 Main focus: Phase 1 (Research / Understand / Analyse)
3 Outlook: Further Development for next phases and where to go to

(Image 4: Purpose of the Playbook)

5.1 Recommendation and Limitations

Further, within phase two and three, hypotheses and concepts, deriving from the last workshop of phase one, for the transformation process could be developed avoiding exactly what the experts and literature suggest, a 180 degree turn without involving the customer. When these concepts are finally validated in phase three, they can be integrated into the company as pilots.
This long-term process ensures that the implementation works without losing sight of anything and can be successful drivers when turning linear to circular in regards to the BM and VP. Further, the client can not only use the Playbook in cooperation with a co-working space, but also with any other business that drives for becoming circular.
Due to the time limits of the thesis, the exact planning of the Black Box Workshop as final part of phase one was not possible and would be the first recommendation to finish, such as a detailing phase two and three.

| List of Recommendations |
| --- |
| Black Box Workshop (Final step of phase 1) |
| Finishing the Playbook (Phase 2 & Phase 3) |
| Building Phase 2 (After phase 1 has been finished) |
| Building Phase 3 (After phase 2 was created) |

(Table 5: List of Recommendation)

(Image 5: Playbook Project Approach)

Additionally, the research group made it possible to merge their insights and findings in an approach that follows a process in order for a business to become circular.
Please note that this website is not my prototype, just a link of the research group to show the interconnection of our insights and prototypes.
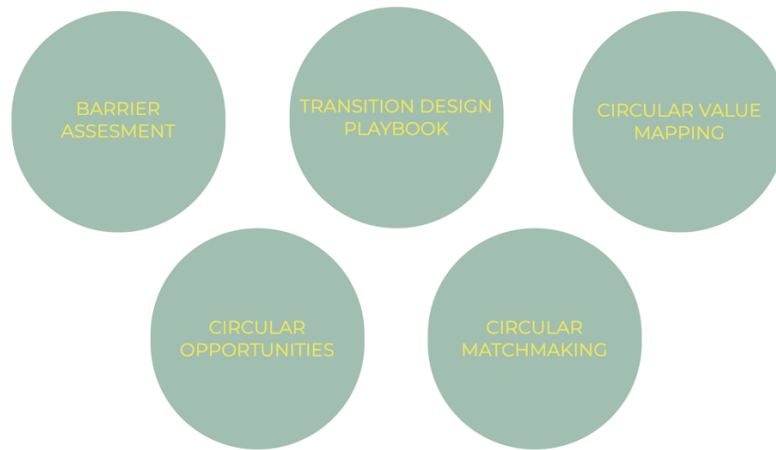
(Image 7: Research Group – Overall Prototype Approach)
Link: https://appelmalou.wixsite.com/circulartransitions

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Appendix

Table of Appendix

A1: The Final Playbook Prototype
(https://drive.google.com/drive/folders/1fHDleaZsi4KMOxaoCLNa7g0pwz_Bc1MM?usp=sharing)

TRANSITION DESIGN PLAYBOOK

A Guide designed for Businesses that want to become circular based on the Principles of Design

AGENDA

DISCLAIMER

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THE PURPOSE OF THE PLAYBOOK

WHY

Helping the client and co-working space understanding all stakeholder included in the business, the value of C.E. for the co-working space and building the start for the transformation of the space which is well founded in research and tools build upon design principles of understanding, analyzing, creating, building, testing, implementing and using.
This playbook is the kick-off for a transition and builds the foundation on combining the business, their customer and the concept of Circular Economy in order to be able to adapt the current Business Model

HOW

1   It is a how-to-guide to get started into a transformation process that is primarily focused on the stakeholder and especially on the consumer of the co-working space
2   The Key Stakeholder (Owner) needs to be committed to transforming the business towards the Circular Economy
3   The playbook is well grounded in literature, design as a solution for problem definition and driving innovation, expert opinions

WHAT

1   General Overview of such a project plan
2   Main focus: Phase 1 (Research / Understand / Analyse)
3   Outlook: Further Development for next phases and where to go to

THE PLAYBOOK

The task of the Playbook is to transform a linear CWS towards the circular economy, but not to lose sight of the user and other stakeholders when the current business model is being adapted.

The main focus is the combination of the three overarching concepts. Collaborating throughout the design process and developing a new value-driven purpose.

CO-WORKING SPACES

Government

Investor

Corporates

Owner

+

CUSTOMER

+
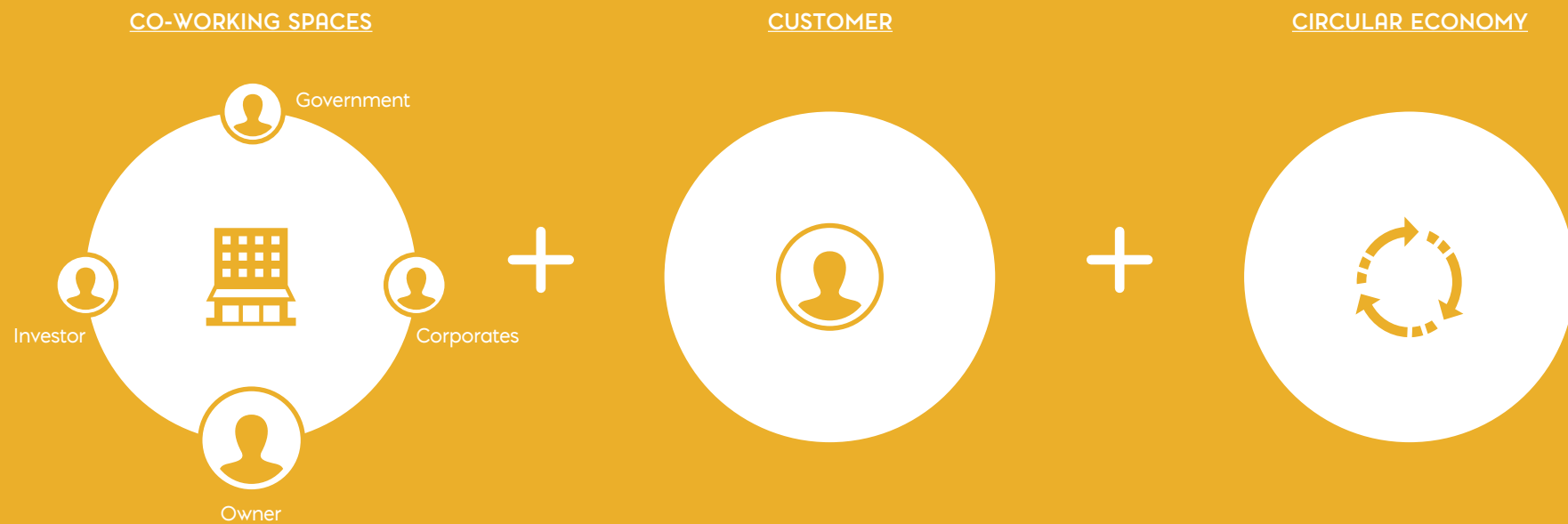
CIRCULAR ECONOMY
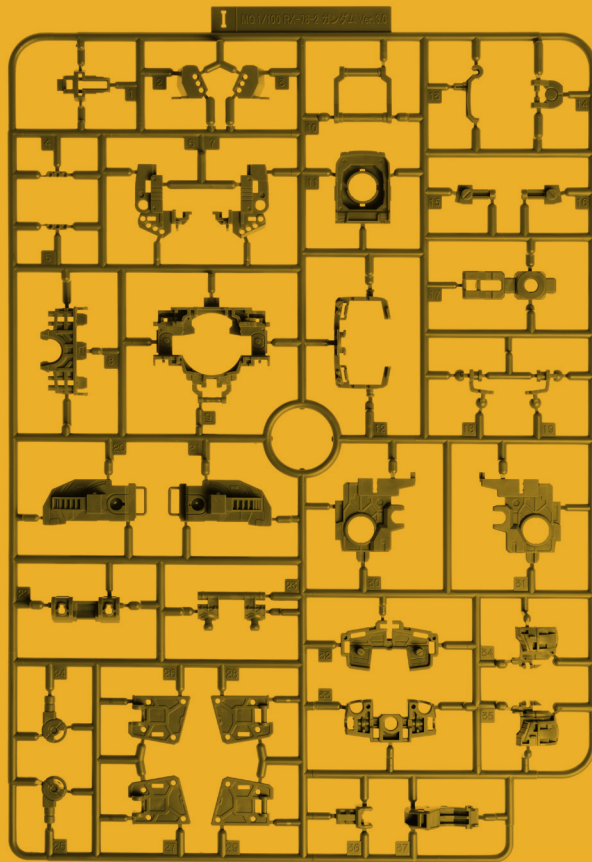
PROJECT PLAN

You can follow the framework of the project plan with its overlaying design process throughout every step of transitioning a business towards the Circular Economy, which means implementing any kind of circular principle.
This How-to-guide here gives you the starting point on how to align the stakeholder and finding with them included a feasible approach on how to transform the current business model and value proposition, while understanding the urgency and value of the Circular Economy.

The Project Plan is split up in 3 Phases. The first phase, which is the main part of the playbook, is to understand the current business model and value proposition, the current ecosystem of the co-working space, creating a project plan, understanding the value of the Circular Economy, understanding all stakeholder and finally creating together a plan of transition, which can be conceptualized, tested and validated in phase 2 and 3.

PROJECT APPROACH

What to do in each phase on the way of transitioning towards the Circular Economy

PHASE 1

Research
Understand
Analyse

PHASE 2

Ideate
Create

PHASE 3

Test
Iterate
Implement

You will need a holistic understanding of user groups, whose needs and conditions are most important.
In a scalable project approach you need to develop a comprehensive understanding of the user groups to be considered, their needs and expectations and the space which they are using with all its features.

Extended pool of methods with relevant and adaptable concepts - prototyped and validated. The iterative development of concepts involving users and all other stakeholder included to ensure relevance and feasibility. Gained insights and ideas as stimuli. Establishment of a pool with applicable concepts & solutions.

Concepts are being taken, sustainably implemented and tested in this phase. The scalability is provided and the outcome should be clear. In the end the concept is a validated output of the whole transition process and can be used by the business.

PROJECT PLAN

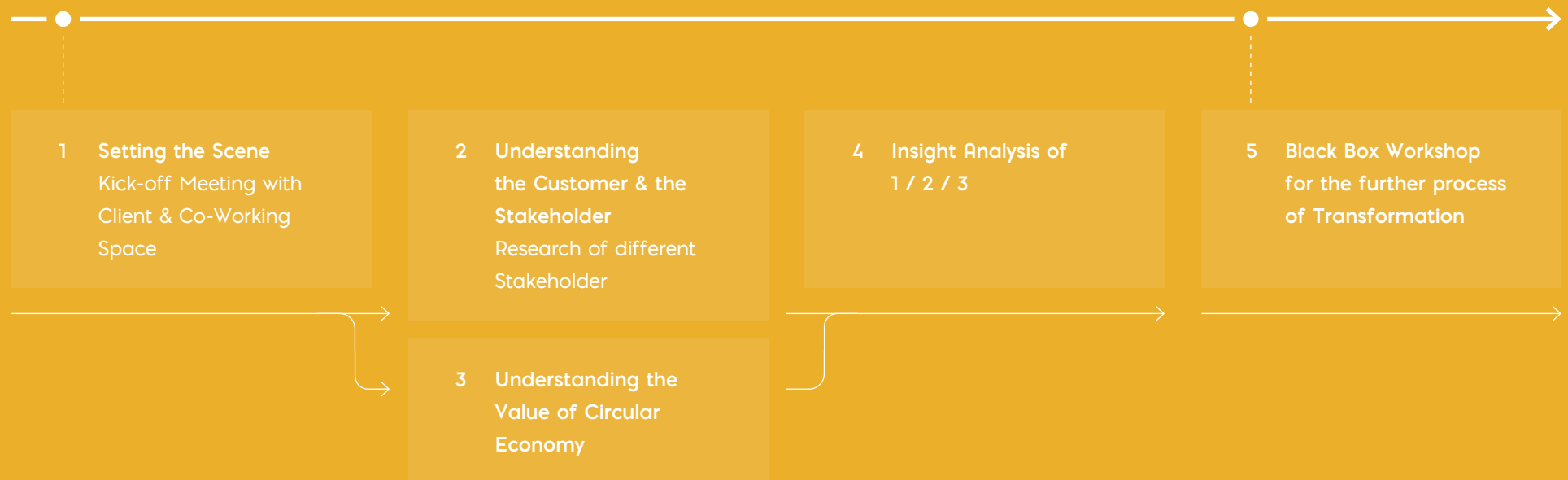A How-to-Guide towards the Circular Economy based on the design process

CIRCULAR ECONOMY

1 Research Understand Analyse

2 Ideate Create

3 Test Iterate
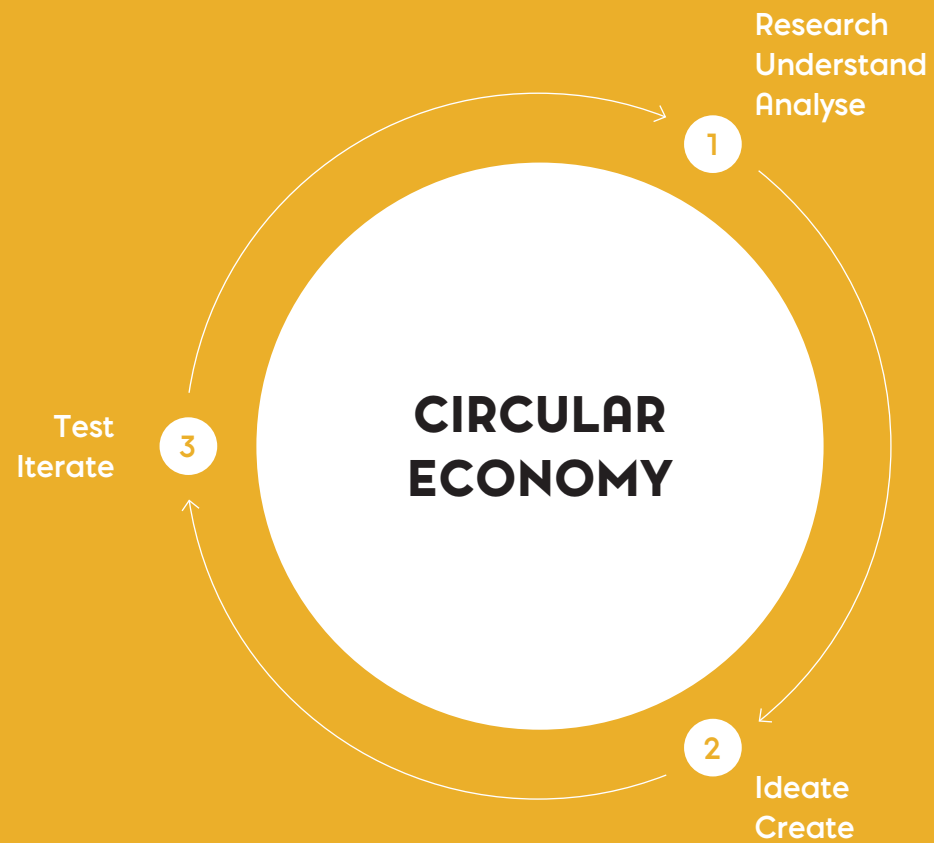
PROJECT PLAN:
RESEARCH, UNDERSTAND & ANALYSE
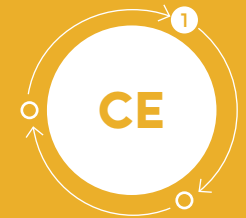
CE

A How-to-Guide towards the Circular Economy based on the design process

WEEK

1 Setting the Scene
Kick-off Meeting with
Client & Co-Working
Space

**2 Understanding
the Customer & the
Stakeholder**
Research of different
Stakeholder

**3 Understanding the
Value of Circular
Economy**

**4 Insight Analysis of
1 / 2 / 3**

**5 Black Box Workshop
for the further process
of Transformation**

PROJECT PLAN:
IDEATE & CREATE
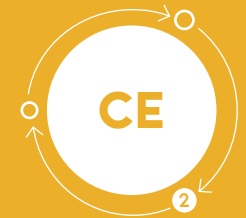
A How-to-Guide towards the Circular Economy based on the design process
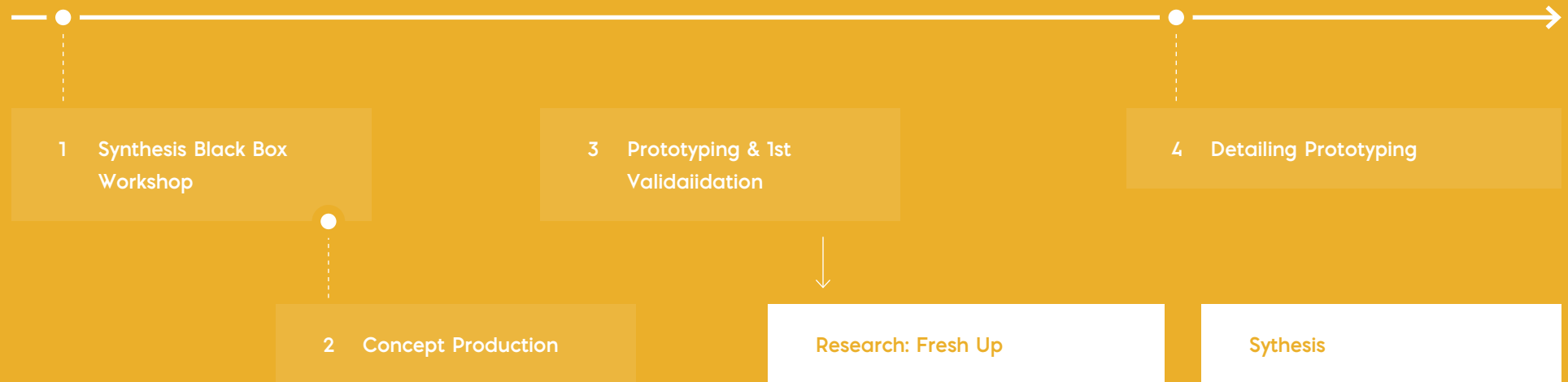
WEEK

1	Synthesis Black Box Workshop

3	Prototyping & 1st Validaiidation

4	Detailing Prototyping

2	Concept Production

Research: Fresh Up

Sythesis

PROJECT PLAN:
TEST & ITERATE

A How-to-Guide towards the Circular Economy based on the design process

WEEK

1	Concrete & Detailing the Concept

2	Pilot Development

1	Concrete & Detailing the Concept

2	Pilot Development

3	Launch Preparation & Skaling

CE

3
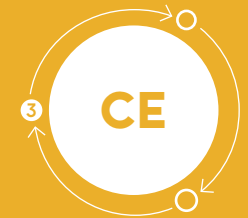
DEEP DIVE

Phase 1

PROJECT PLAN: UNDERSTAND PHASE

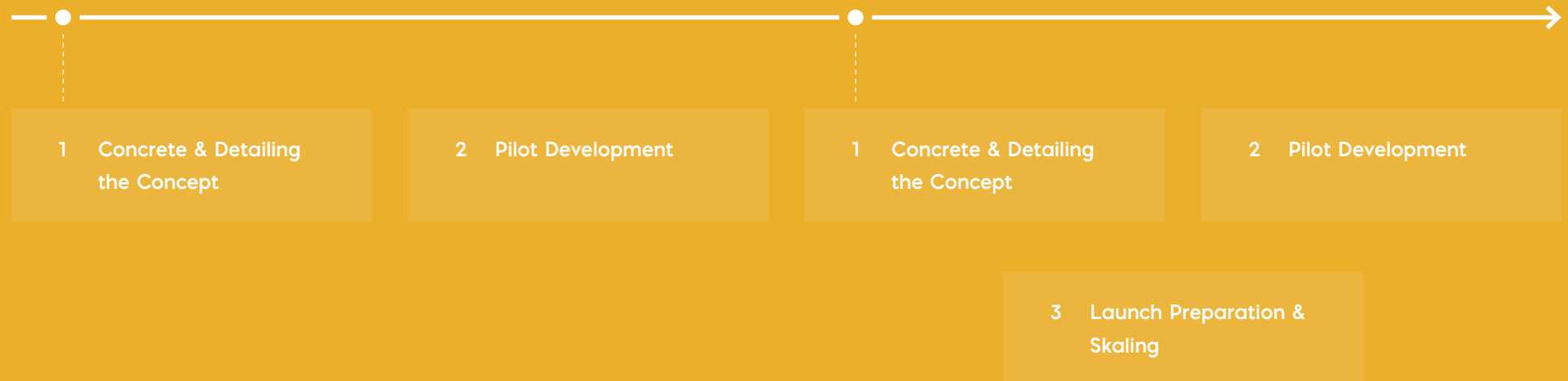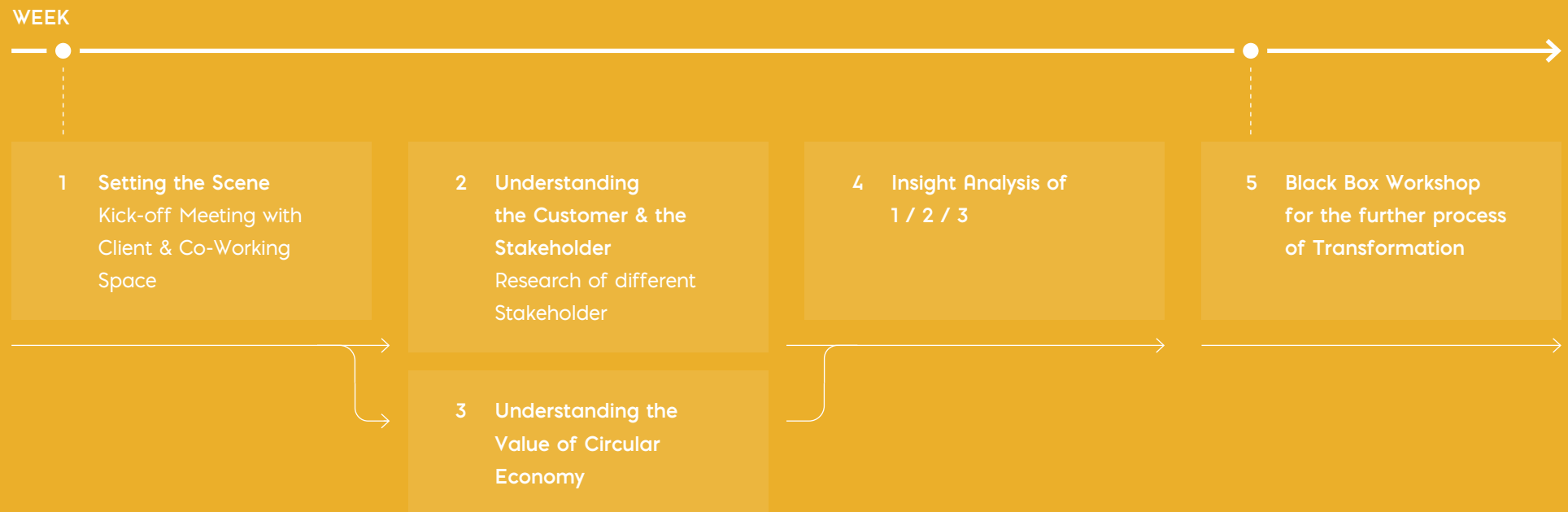**A How-to-Guide towards the Circular Economy based on the design process**

CE
1

WEEK

1 **Setting the Scene**
Kick-off Meeting with
Client & Co-Working
Space

2 **Understanding
the Customer & the
Stakeholder**
Research of different
Stakeholder

4 **Insight Analysis of
1 / 2 / 3**

5 **Black Box Workshop
for the further process
of Transformation**

3 **Understanding the
Value of Circular
Economy**
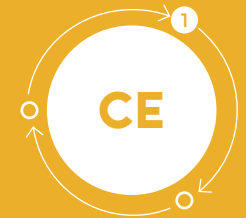
ACTION PLAN FOR PHASE 1
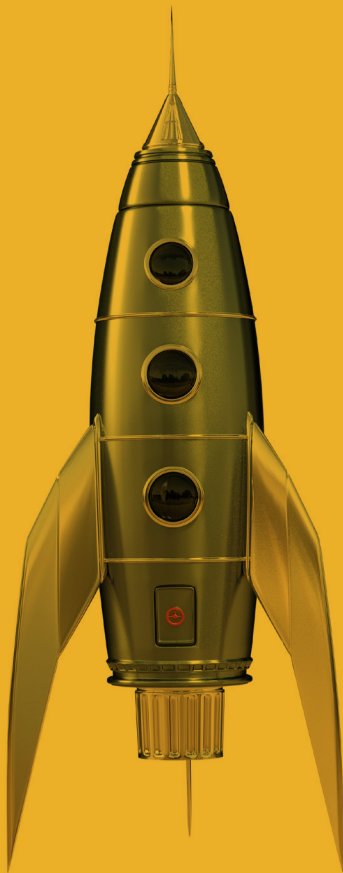
1 **Settling the Scene Meeting:** You will follow the main kick-off meeting, which will be introduced in the following, in which you settle in together with the co-working space, understand their current business model & value proposition, the stakeholder map and their eco-system and create a research plan with them together

2 **Stakeholder Research:** Secondly you will go in the research, you need to understand all stakeholder and the connection of them, a detailed research plan needs to be implemented and executed in order to understand who will need to be included in the whole process of transformation

3 **The Value of the C.E. for you:** Understanding the Value of C.E. preparing for the Black Box Workshop, this part will be the centerpiece of the Black Box workshop & needs to be aligned with the space & insights of the stakeholder research

4 **Insight Analysis:** Everything important, the key takeaways from the previous three steps need to be analysed & prepared for the Black Box workshop in order to build valid hypothesis & concepts that can be tested in the upcoming phases

5 **Black Box Workshop:** The workshop in which the outcome of the previous parts will be presented, worked on & concepts for the actual implementation settles, working groups are being built and a real plan on how to adapt the business model and value proposition

DEEP DIVE

PHASE 1 · PART 1

Setting the Scene Meeting

PRECONDITIONS

☑ The onboarding in the circular economy and the intrinsic motivation of the co-working phase to transform has already been done and the co-working space is ready to transform mindset wise

☑ The co-working space needs to be active member of change and willing to communicate clearly across all level and the whole business and stakeholder

☑ The general understanding that a transition is a long process and that the Business Model and the Value Proposition will change in schedule which is step-by-step planned

☑ The co-working space needs to be aware of onboarding all stakeholder and that all stakeholder need to be researched

WHY - HOW - WHAT

WHY

Taking the co-working space on their transformation journey, while understanding their current business model and value proposition, together we are setting the scene and it is clear that there is a long journey for them ahead, in which they will transform

HOW

A meeting + defined objective/outcome/output

WHAT

Methods and Tools needed for the meeting

DETAILED DESCRIPTION

Description

Making the co-working space aware of that it is about adapting the existing business model and not setting it up from scratch. It is about a process that must be carried out in detailed steps and in which the end user of the space must be at the forefront. Nevertheless, the Co-Working Space must have a clear vision and definition of the motivation to take the step to a circular economy. In this meeting it is important to bring the client and customer together, to analyze the current state of the business together, to define the stakeholders, to see the end user as a stakeholder with a clear vision and goal.

Structure

Participants
· Evert-Jan Velzing (Coach for C.E)
· Important Stakeholder of Co-Working Space (Owner, Mindset Driven Employees)
· Possible: Service Designer / Business Designer (as Transformation Coach)

Timing
1 Day in the beginning before the transformation and change process starts

OBJECTIVE - OUTCOME - OUTPUT

The importance of the combination when implementing the Circular Economy principles and concept is understood: Co-working space and its business model + their customers + the C.E.

OBJECTIVE

1   Get to know the space + their BM / current VP
2   Understanding the process of transformation
3   Making a research plan to understand stake-holder and users involved in the Co-Working Space
4   Settling a date for the Black Box Workshop

OUTCOME

1   Understanding of the BM and VP
2   A detailed Project Plan -› Outlook on the who-le transition
3   Stakeholder & user overview + research plan
4   Understanding what input is needed for the Black Box Workshop

OUTPUT

1   BMC and VPC filled out
2   The Project Plan filled in, tailored for the co-working space and a clear timeline for deliver-ables and milestones
3   Stakeholder Map & Eco-system overview of the co-working space
4   Clear Vision of the Black-Box Workshop and what needs to be done until the date (Re-search, Value of C.E. etc)

TOOLS
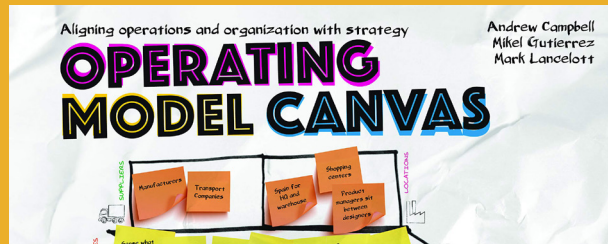
OPERATING MODEL CANVAS

Understanding the current system of the co-working space and how it is operating
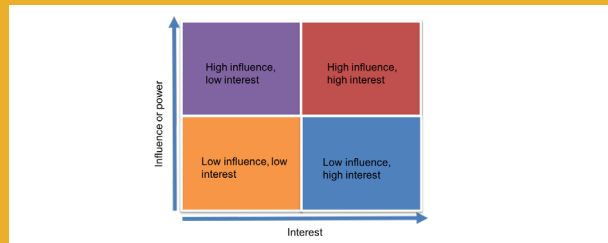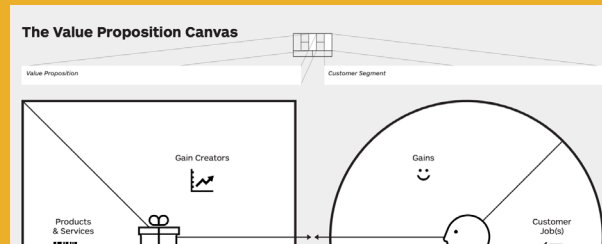
VALUE PROPOSITION CANVAS

Understanding the stakeholder and their pains & needs

BUSINESS MODEL CANVAS

Grasping the complexity of the co-working space and how it delivers value to the stakeholder currently

STAKEHOLDER MAPPING

Which stakeholder are involved in the space, what are their values, how should they be mapped and prioritized.
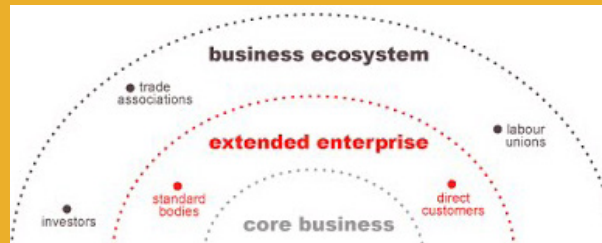
ECO-SYSTEM OVERVIEW

Understanding how the co-working space is inter-connected and which are the ways of communication and dependencies

DEEP DIVE

PHASE 1 · PART 2

Research Of
All Stakeholder

PRECONDITIONS

☑ Stakeholder Map and Ecosystem, Value Proposition Canvas, Business Model Canvas are filled in and understood

☑ A research plan has been settled and it is clearly structured timing wise

☑ It is clear that this phase takes some time and planning and that important stakeholder of the co-working space need to be involved

WHY - HOW - WHAT

WHY

Creating awareness for the understanding that all stake-holder need to be included in such a transformation and on how to actually do it. Understanding the customer and their current needs and pains which needs to be next to the concept of the Circular Economy the center of everything. Alignment of stakeholder with the co-working space, the value of Circular Economy and their own needs and pains.

HOW

Research phase which will be detailed planned throughout the kick-off meeting and then executed afterwards

WHAT

Methods + Tools used throughout the research

DETAILED DESCRIPTION

Description

The following steps need to be fulfilled and there-refore have a more detailed description than the phase beforehand

1   Market Research & Trend Analysis - Case stu-dies and adaptability of them (for understan-ding the value of C.E.)
2   Internal Research - Employee as a stakeholder, Investor, Partner, Supply chain etc.

3   Customer/ End-User Research

For all of them:
·   Preparation / Goal definition
·   Guide (Interview guides etc.)
·   Synthesis (Persona, Journey, Blueprints)

Structure

Participants
·   Evert-Jan Velzing (Coach for C.E)
·   Important Stakeholder of Co-Working Space (Owner, Mindset Driven Employees, Customers, Suppliers, Partners)
·   Possible: Service Designer / Business Designer (as Transformation Coach)

Timing
A phase of about 3-5 weeks, 1 week preparation, 1 week Guide and 1 week documentation

OBJECTIVE - OUTCOME - OUTPUT

A detailed research plan is what's needed here, including the right methods, tools and approaches. These need to be tailored to the individual co-working space

OBJECTIVE

1   Stakeholder Mapping
2   Tailored Research plan
3   Doing the Research accordingly
4   Analysing the Information

OUTCOME

1   Overview of all stakeholder included and their importance for the space
2   A guide on how to conduct the research
3   Finding insights that help the process of trans-formation because the stakeholder become actual faces
4   Preparation for the insight analysis phase

OUTPUT

1   In-depth stakeholder map that displays all stakeholder more detailed
2   A clear panning, when, what, how research will be done
3   Interviews, Maps etc. tools to fill in the research
4   Screening of the information gathered and what is needed for the insight analysis phase

WHY IS THIS SO IMPORTANT?

USER GROUPS

To carry out research activities in a targeted manner, you need to work out a behaviour-based model for segmentation of existing and future users - entrepreneurs, cooperates, freelancer etc. Existing (quantitative) information sources within the co-working space or in the further environment are identified for this purpose and and serve as a starting point for the development of an initial hypothesis, which in the course of the research activities is refined.

Also you need to work out a basic structure for the development of a holistic overview of the locally to be included stakeholders and potential partners.

INTERNAL RESEARCH ACTIVITIES & STAKEHOLDER ANALYSIS

In terms of efficiency and scalability I highly recommend one at the beginning focused approach in form of Phase 1, in understanding the need of C.E., all stakeholder included and the space itself.

This allows you a deep understanding through qualitative research activities and at the same time the value of the Circular Economy for your business.

Besides insights into user needs as well as the co-working employees, the supply chain and focus on business partners (investors e.g.) - in the co-working space itself and in the wider environment will be understood and analysed.

MARKET/TOPIC ANALYSIS & RESEARCH SYNTHESIS

In parallel with the actions aimed at users and stakeholders focused research activities, you need to develop an understanding of the market and the topic itself, which is an important aspect regarding feasibility of future concepts. All knowledge gained will be and for the next project phase provided. Your focus is on a comprehensive and traceable presentation of topic specific insights and the identification of initial commonalities.

MARKET RESEARCH / TOPIC UNDERSTANDING

Alternatives to the co-working space in the public and private sector and their understanding. Gathering inspiration, from use cases, case studies or within international environment. Understanding the relevance of C.E. for the particular space.

ACTIONS

· Selective online research with focus on alternatives to the space itself
· Linear & Circular co-working spaces in other cities, at home and abroad
· Innovative service providers from other industries (Case studies)

RESULTS

· Research documentation
· Synthesis of the main findings
· Collection of inspiring impressions

INTERNAL RESEARCH

Perspectives of co-working space employees regarding motivation and possible hurdles. Technical framework in terms of possibilities and limits re operations and the whole ecosystem.

ACTIONS

· Interviews with selected employees in Various position
· Synthesis of the results
· Analysis of the existing ecosystem
· Analysis of the operational processes and touchpoints regarding control & influence - especially re material flow etc

RESULTS

· Research documentation
· Synthesis of the main findings
· Deeper insight into ecosystem especially regarding operational processes and therefore C.E. matter

PREPARATION OF USER RESEARCH (1/2)

Selection of target groups and identification of test persons. Selection and adaptation of appropriate methodology. Detailed planning of the implementation.

ACTIONS

- · Definition of necessary hypotheses, key questions and approach
- · Identification of user groups (screener)
- · Establishing the criteria for the selection of test persons and the interview guide
- · Recruitment of test persons, depending on context directly, use of existing co-working network
- · Definition of the research approach
- · Creating stimuli if necessary (Digital Probes)
- · Scheduling of interviews

RESULTS

- · Research and recruitment plan
- · Selection criteria
- · Interview guidelines
- · Templates for documentation
- · Digital stimuli
- · User profiles
- · Interview schedule

IMPLEMENTATION OF THE USER RESEARCH (2/2)

Qualitative research with selected test persons of different target groups in their respective context. Understanding of User needs and behaviour, expectations and problems.

ACTIONS

· Conducting interviews with test persons (max. 6 per target group, max. 3 target groups)
· Additional interviews with experts and relevant stakeholders (max. 5)
· Interviews are ideally conducted in the context of user (see also the following slide) If possible, prepared stimuli are already provided to the test person in advance.
· Research results are immediately documented and analysed)

RESULTS

· Research documentation, such as notes, photos, video or audio recordings
· Research material from the upstream preliminary research
· First analysis of the results or needs to be determined and relevant possible solutions

TOOLS

USER RESEARCH -
A SELECTION OF METHODS

IN CONTEXT INTERVIEWS

The encounter with users in their familiar Space reduces the formality of the interview, calls for authentic answers and allows you certain statements or observations to directly question and check. You lead qualitative interviews through to patterns. Similarities and differences in user behaviour to recognize.

INTERVIEWS WITH EXPERTS

Experts can contact neutral project members such as the quickly introduce the interviewer to a topic and give him important insights into the relevant history, the context and innovations. You can create systematic view of the project area, about the latest innovations, successes and Report failures and perspectives on organisational level.

USER INTERVIEWS

The interviews are the main part of the Understand Phase. People-centric design is about reaching the people you're designed for and get answers in their own words. Whenever possible, interviews should be conducted in the personal environment of the person carried out will be. The goal is to get through talks with the person something about their way of thinking, their behaviour and to experience their lifestyle.

USER RESEARCH - A SELECTION OF METHODS

DAY IN THE LIFE

"Day in the Life" means a day more intense, con- textual examination of a user, where you enter his world to deepen your understanding of his needs. This includes, for example, the observation of users in their home or everyday context. At the beginning of the process, it allows you to use the research phase start pragmatically and make assumptions and to clarify and define the team's goals.

OBSERVATIONS (SHADOWING)

Observation helps us to gain insights into the natural behaviour of users by monitoring their ob- serve actual actions instead of letting us to rely on statements. We're watching the User e.g. on travel or during execution relevant, specific activities. We respect not to influence the course of events, and lead therefore context-related interviews after- wards through.

FEELING ASSOCIATIONS

During an interview, it may be necessary for a respondents sometimes be difficult to sensitive things like formulating feelings and so on. Here it can be helpful in providing respondents with suggestions for his feelings about a certain situ- ation and select cards for him and have them sorted. Each card is a new Entry point for in-depth questions.

USER RESEARCH - A SELECTION OF METHODS

DIGITAL/ANALOGUE JOURNALLING

From users, experts or the community to learning about a particular subject can also means that they're put in a position to carry out part of the research themselves. A digital or analog form of a diary can be sent to participants and must be distributed during a to be filled in within a certain time (e.g. 4 days). Valuable information can be collected, for example also in the run-up to an interview.
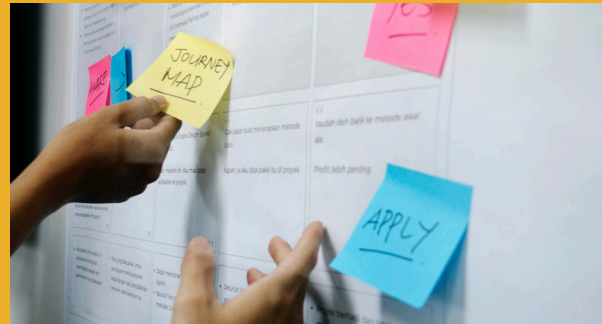
CULTURAL PROBES

"Cultural Probes" are short exercises in self-obser-vation. These playful exercises are a good intro-duction to the upcoming interview. By using words and pictures, the user is prompted, to reflect on habits. It gives the team concrete and individual material, with which he can work during and after the interview.

SERVICE SAFARI

A safari is a design activity that can give an un-derstanding of a specific context of the Service that is delivered by the co-working space. The aim is to document the interactions and points of con-tact between services and really develop a deep understanding of them.

WAYS TO PRESENT RESULTS (1/2)

PERSONAS

We develop fictional personas on the basis of our observations of research participants. Each profile is a compilation of the Properties of an existing group: From social and demographic characteristics up to individual needs, wishes, habits and cultural backgrounds.

GUIDING PRINCIPLES

When designing a new product or service, most product need some kind of specification which states the goal and purpose of that product/ service. It also displays the planned functionality. All the points are defined through guiding principles in a design document.

USE CASES / SCENARIOS

Scenarios or also called use cases are depending on your developed persona. It displays a specific use case tailored to the user guiding principles defined. It could display a specific situation of using e.g. a waste operation in the co-working space and therefore empathize with the service.

WAYS TO PRESENT RESULTS (2/2)

STAKEHOLDER MAP

The Stakeholder Map provides a holistic Overview of involved actors regarding Customer interaction - both in direct contact with customers, but also behind the scenes. An important Tool to create overall contexts understanding, and dependencies between visible to various stakeholders do.

EXISTING CUSTOMER JOURNEY

During a field research different Information about needs and habits of the user is collected. By the illustration of all elements in a "Current Customer Journey" an overview of the actual procedure and the information collected can be set in relation to each other. The Current Customer Journey shows the status quo of user.

OPPORTUNITY MAPS

Opportunity Areas allow us to capture the essence of the search results and the areas with great innovation potential to describe. Swap team members knowledge gained, consider potential opportunities from all perspectives and overlapping user needs, customer, the brand and - services and competitors.

DEEP DIVE

PHASE 1 · PART 3

Understanding the Value of the Circular Economy

PRECONDITIONS

☑ Intrinsic motivation towards transitioning towards the concept of the Circular Economy by the co-working space

☑ The importance of the combination when implementing the Circular Economy principles and concept is understood: Co-working space and its business model + their customers + the C.E. need to be combined

☑ Topic and Market research was done in the Research Phase

WHY - HOW - WHAT

WHY

Asking the right question + understanding the value of the Circular Economy and how they can actually transform towards becoming circular. Ready to be combined with the needs and pains of the customer.

HOW

Needs to be prepared before the Black Box Workshop, based on the information gathered from the kick-off meeting and further market/ topic research

WHAT

A clear vision and understanding of the value of C.E. for the co-working space through different tools and methods as a centerpiece of the Black Box Workshop

DETAILED DESCRIPTION

Description

Only if the need for change is understood & the positive impact of the Circular Economy a transition can be made.
Most importantly: The right mindset is needed, which can be triggered through:

1   A sense of urgency (societal - e.g. Corona; these events in history are rare, but they represent pivotal moments in the way society as a whole, hence the markets, end up operating)
2   Institutionalized changes (lead by governmen-

tal institution due to alignment to regional/ global standards - see initiatives like the SDGs). The challenge here is that they are imposed regulations, but suggested conducts and practices.

3   Awareness & education (this is currently the model that is put in place, but it's a very lengthy process, expensive and for a long time now, ineffective approach for change. And this is where I make now the connection also with the second point, the tools

Structure

Participants
·   Evert-Jan Velzing (Coach for C.E)
·   Important Stakeholder of Co-Working Space (Owner, Mindset Driven Employees)
·   Co-working customers who analyse the C.E. on their needs and pains

Timing
·   Part of the research phase - Market & Topic Research
·   Centerpiece of the Black Box Workshop - preparation of opportunity in BM and VP

OBJECTIVE - OUTCOME - OUTPUT

Understanding the value of the Circular Economy and why it is more than smart to be one of the first movers. Adapting the Business Model and Value Proposition sounds bigger than it is and that implementing such an economic system in nudges will be more accessible than thought, also without changing completely the revenue streams

OBJECTIVE

1   Understanding the Value of C.E. for Co-Working space
2   Topic understanding & Use Case developing
3   Opportunity Mapping for the Value Proposition and the Business Model with tools
4   A visionary plan

OUTCOME

1   Why is it important to become circular and implement circular principles in the Business Model
2   A vision of a circular future
3   Where can the BM and the VP being adapted with the help of tools
4   Project plan for the Value of C.E.

OUTPUT

Finding answers to the tool: Asking the right question + using the BMC of Ellen MacArthur × IDEO

1   Agnes Value Proposition Tool + Statement for Intent
2   Nudge Theory for the process + Design Guide of IDEO × Ellen MacArthur
3   Action Plan + Workshop preparation

TOOLS
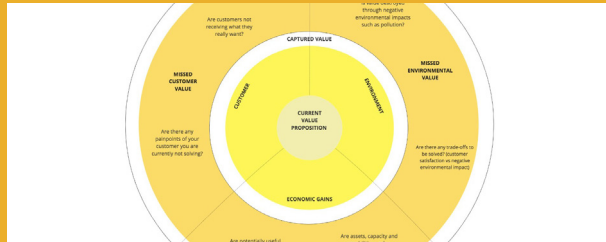
## AGNES WEBER: CIRCULAR VALUE MAPPING CANVAS (CVMC)

The tool is designed to support CWSs in their transition towards circularity by assisting them in understanding potential VPs, through the practice of mapping. Therefore, it solves the knowledge gap regarding how the adoption of CE in the context of CWSs translates into superior value propositions and resulting economic gains. By showing how the integration of circular principles holds a promise of value for the environment, consumers and the business itself, it solves the research problem by communicating the benefits for CWSs of transitioning towards circularity.

ASKING THE RIGHT QUESTIONS

Business needs to answer, so they have a real purpose to change

· Why should we change towards a circular business model/ value proposition and be 1st movers?
· What is the outcome of changing towards the circular economy concept for us?
· How can we still answer the needs and pains of our customers?
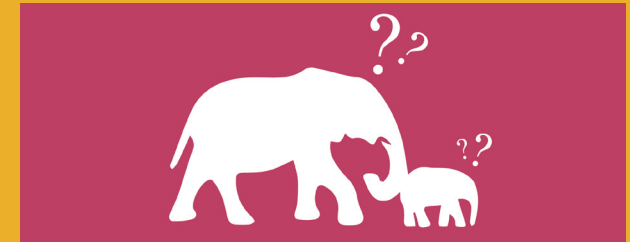
NUDGE THEORY

Nudge theory is a flexible and modern concept for:

· Understanding of how people think, make decisions, and behave
· Helping people improve their thinking and decisions
· Managing change of all sorts
· Identifying and modifying existing unhelpful influences on people.

TOOLS
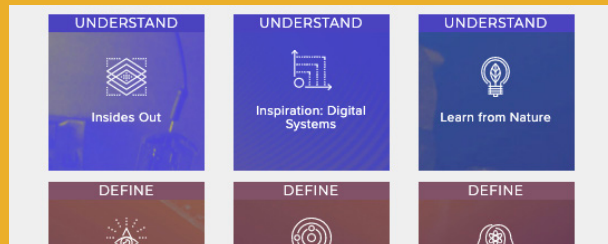
IDEO DESIGN GUIDE AS HELPERS

Design guide for designing for the Circular Economy product and service wise
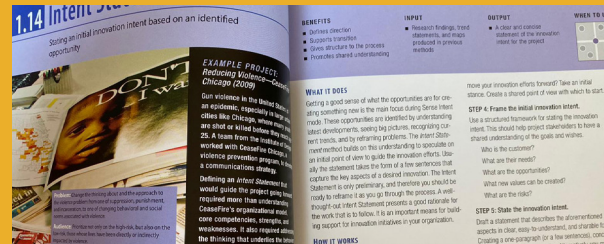
INTENT STATEMENT AS A METHOD

Kumar, Vijay. 101 Design Methods: A Structured Approach for Driving Innovation in Your Organization - October 9, 2012
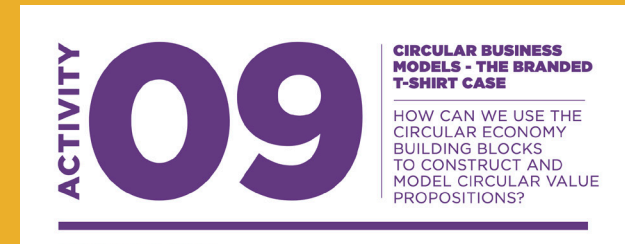
CASE STUDIES

Best Practice examples that help finding precise answers on implementation

DEEP DIVE

PHASE 1 · PART 4

Insight Analysis

PRECONDITIONS

☑ Data needs to be already gathered from part 1,2,3 in order to analyse the insights for the Black Box Workshop

☑ Tools from previous section need to be filled in or at least have an idea for the input/ content in order to find out which make the most sense

WHY - HOW - WHAT

WHY

Being able to understand what the data gathered in the previous parts is necessary key point for the Black Box Work-shop and the whole outcome of the transformation. There-fore this phase is very crucial for the further progress of the process. Only if the generated information of Space + Cus-tomer + C.E. is visualized and understood it can go further.

HOW

Part of the Preparation for the Black Box Workshop

WHAT

Tools that help displaying the gathered insights

DETAILED DESCRIPTION

Description

In order to better understand the data gathered it is necessary to cluster them in specific ways. As already mentioned in the research phase tools like Customer Journey, Personas, Touchpoint Maps etc. need to be used in this phase here to gain a deeper understanding of the three: Co-working Space (BM) + Customer (VP) + The Value of the Circular Economy for the Space (CE).

Structure

Participants
· Evert-Jan Velzing
· Important Stakeholder of Co-Working Space (Owner, Mindset Driven Employees)
· Co-working customers who analyse the C.E. on their needs and pains

Timing
· After part 1,2,3, before the Black Box Workshop
· It takes up to 1-3 weeks, depending on the amount of data gathered and needed

OBJECTIVE - OUTCOME - OUTPUT

Insight analysis and synthesis. The results of different parts of phase 1 are being sorted and clustered, ready for the Black Box Workshop.

OBJECTIVE

1   Understanding the as-is-analysis of the co-working space
2   Understanding the research phase: Stakeholder, topic, market, internal
3   Understanding the individual value of the Circular Economy for the co-working space

OUTCOME

1   Analysis and synthesis of information, insights, needs and identified problems
2   Creation of specific customer journeys
3   Analysis and synthesis of comprehensive needs, requirements, problems
4   Develop relevant solution areas (Opportunity Areas)
5   Collaborative Workshop for Discussion of the results

OUTPUT

1   User archetypes (Personas)
2   Identified patterns of over-grabbing user needs and problems, including prioritization,
3   Concrete defined and formulated user needs that are directly related to the following development phases are included
4   Summary presentation, relevant for co-working space
5   Recommendation for action with regard to relevant measures and next steps (Black Box Workshop & Phase 2, 3)

TOOLS

PERSONAS

Potential existing and future user of the
co-working space

Baster; Courage; Caine. Understanding You User -
A practical guide to user research methods. 2015.

Kumar, Vijay. 101 Design Methods: A Structured
Approach for Driving Innovation in Your Organiza-
tion - October 9, 2012

CUSTOMER JOURNEYS

OPPORTUNITY MAP
Deriving from the BM analysis before, market
research & VP

USER ARCHETYPES

Kumar, Vijay. 101 Design Methods: A Structured
Approach for Driving Innovation in Your Organiza-
tion - October 9, 2012
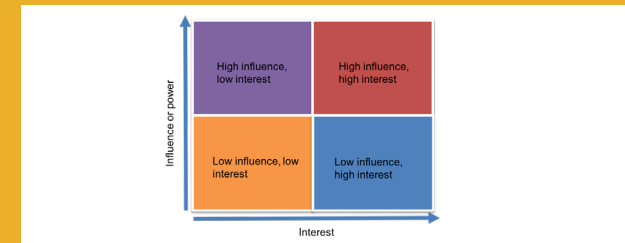
STAKEHOLDER MAPPING

Which stakeholder are involved in the space, what
are their values, how should they be mapped and
prioritized

OUTLOOK

Everything in this section is
work in progress & not fully developed yet.

OUTLOOK

PHASE 1 · PART 5

Black Box Workshop

PRECONDITIONS

☑ Phase 1, Parts 1-4 have been successfully completed and the Black Box Workshop can be prepared on the basis of the Insight Analysis part

☑ Stakeholder such as: The space itself, Employees, Customers, Investors, Partner and Supplier are ready to co-create and have the mindset for change

☑ Ready for a workshop that might take up to 3 days

☑ There is an existing understanding for the BM of the CWS, the VP for different customer segments, the value of the CE for the space and its opportunities

BLACK BOX WORKSHOP: CLIENT & CO-WORKING SPACE/BUSINESS

The co-creation workshop of all stakeholder of the co-working space and the client and if necessary support by designers (service, business etc)

OBJECTIVE

1   Talking about and analysing insights
2   Building hypothesis and experiments to test & validate them in phase 2
3   Concluding and further process of the transformation (detailed planning for phase 2 and 3)

OUTCOME

1   Insights being formulated in hypothesis and ideas
2   Hypothesis cluster and deriving concepts
3   Plan of testing and for phase 2

OUTPUT

1   Clear Hypothesis of insights
2   Established experiments around the hypothesis
3   Plan of Action for the change of the BM and how to test and validate the concepts

HOW TO CONCEPT SPRINT

0	Setting the Scene

- Get to know each other
- Warm up

1	Inspirational & Information Input

- Especially from Part 4: Insight Analysis

2	Sprint 1: Ideas

- Together they need to develop ideas

3	Presentation of Ideas

4	Voting and getting a clear vision

5	First Concepts & Hypothesis

6	First Concepts & Hypothesis

7	Feedback + Prep next sprint

FOR **FURTHER** IMPLEMENTATION

Every concept/ valid hypothesis that comes out of the

Black Box Workshop will go in Phase 2 & 3.

PROJECT PLAN: CREATE PHASE

A How-to-Guide towards the Circular Economy based on the design process
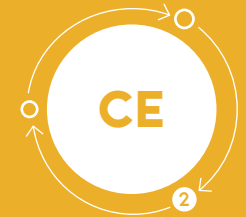
CE

WEEK

| 1 | Synthesis Black Box Workshop |

| 2 | Concept Production |

| 3 | Prototyping & 1st Validaiidation |

Research: Fresh Up

| 4 | Detailing Prototyping |

Sythesis

PROJECT PLAN: TEST & ITERATE

A How-to-Guide towards the Circular Economy based on the design process

WEEK

| 1 | Concrete & Detailing the Concept | 2 | Pilot Development | 1 | Concrete & Detailing the Concept | 2 | Pilot Development |

| 3 | Launch Preparation & Skaling |
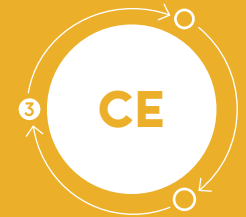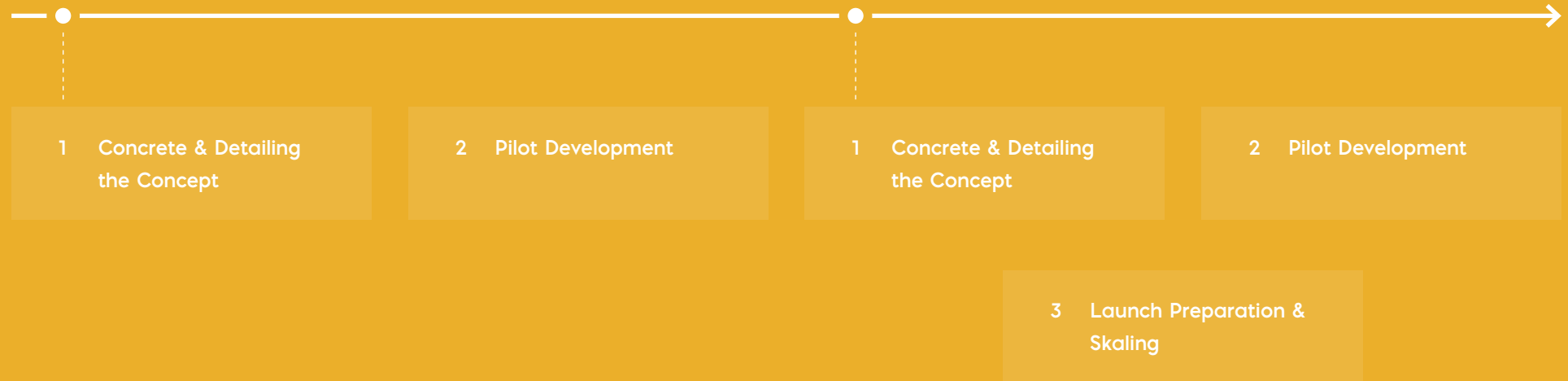
A2: Research Procedure & Prototype Iterations Presentation
(https://drive.google.com/file/d/1VYKNv0bo1wWNg9lkc-
hflwgS4xptVcCL/view?usp=sharing)

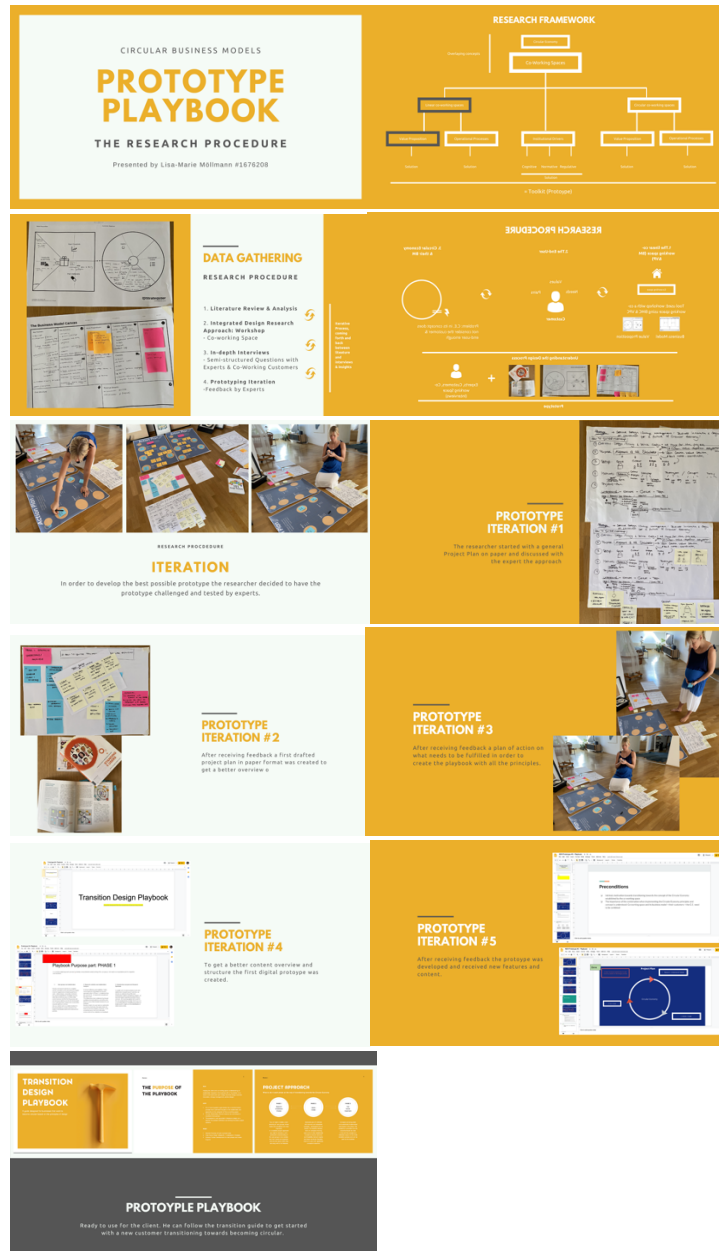| Expert / Categories	Business Model	Value Proposition	Transformation	Process	Design Process / Methods	Most important insight	Disablers
Expert 1: Business Design	Two reasons why a client would reach out to me: either he needs to improve his current business model or processes, or he is looking into opening a new revenue stream	The Meta level of change is your Value Proposition. In Design, we use User Research to collect these points and address them in the design of the future solution. It takes time, a lot of creativity, but it's a mandatory process.	1. The awareness & the mindset (for a circular / regenerative model) 2. The tools (know-how about the process)	1. A sense of pragmatism 2. A sense of patience 3. An understanding of the extrinsic motivations and intrinsic needs of stakeholders	We follow a human-centric design process, meaning we always start and design around the people.	Purpose-first to the value proposition = purpose proposition	
Expert 2: Change & Communication	A business model functions like a framework for handling expectations: Be it internally or the external community including broader society, a business model of a company clearly defines what one can expect from a relationship. It builds on the cornerstones of each business: their Value Proposition in direct relation to internal key success factors as well as external offerings and the way they interact with their key stakeholders.	In fact, keeping a culture alive will only work when the value proposition will be extended/ narrowed down based on the existing one. In any case, it cannot be out of the blue.	Enablers: 1.Solid strategy (number one!) 2. Transparent communication on the way forward (next steps and outline of a future business model state) 3. Creating a sense of urgency 4. Maximising employee engagement 5. Thoroughly planned communication plan with milestone communication and different formats on how to continuously engage with various stakeholders 6. Break down the storyline of value proposition/ expected change outcome into stakeholder-specific reasons for change, without losing the vision implied 7. Proactively deal with resistance	1. clearly articulate reason for change in directly relation to a systemic approach: A co-working space is an ecosystem as such, highly relating on different stakeholders to make it successful 2. clearly articulate benefits of all stakeholders	Tools: Popular change management models include: Prosci's ADKAR model Lewin's Change Management Model McKinsey 7-S Framework Kotter's Change Model Nudge Theory (see end section for details)	This is a classic human centred endeavour. Businesses cannot change their value proposition without reflecting ongoing changes in the market as well as stakeholder preferences, nor underlying societal changes. The initial idea to change the value proposition can, but most not be triggered from external developments. It can also result from bold business approaches claiming first-mover dynamics in the market. However, ongoing business decisions thereafter should be tested and iterated with internal and external stakeholders alike, leaving enough space to change prior assumptions and thus changes in value prop and business strategy.	Disablers: 1. A leadership (and mid-management) team not a 100% committed 2. Wrong timing/ wrong cascade announcement wrt the overall process 3. The reason is not communicated clearly 4. Undervaluating the need of proper change management wrt allocation of time, hours, alignment to overall corporate strategy (and thus identifying any roadblocks, barriers and potential for change) ahead of the change endeavour). When change communication is involved at the end of consideration regarding a change of business model, most of the effort leading to unprecedented outcomes have already been achieved. Every effort to erase previously mistakes will likely be cover-up tactics. 5. Silo-thinking of the management team: focus on performing and driving change within an org quickly increases, implying the risk that important focus and culture get undermined. 6. The leadership team hasn't defined where they want to go, what success looks like, how this will be measured, how resistance will be managed, what happens after the "programme" has finished. Often cynicism within the business grows and values of (prior) employee engagement dissipate. 7. Change initiatives announced with much ceremony, but then fail to follow The enthusiasm that was initially built up fades, with changes never implemented. As a result, employees unengaged and distrustful towards management, having a bad influence on a given culture. 8.Breaking the routines don't break the business along the way. Throwing everything up in the air at the same time will increase uncertainty, reflecting demotivation and increased reluctance to change
Expert 3: Service Design & Customer Experience	you consider the impact that the change has on your value proposition to your customer. Make sure to focus on testing - Regularly checking in with the customers - don't change the business model without testing assumptions first, otherwise it's too risky you might lose customers	If the value proposition of the new business model does not meet the needs and pains of the customer segment, it won't be successful.	The ability to test the hypotheses.	Workshop combined with design process: Analysis of the current state busiesm model, build hypothesis along with research, new V.P. and then test!!	Yes, the design process in my opinion is also helpful in testing the new business model. If you have your hypotheses, you can start your research, build prototypes or test scenarios and get feedback from your users. So I would combine the double diamond with the business model canvas.	We need to make sure that we really understand what the value proposition in our current business model is. If we adapt our business model and do not consider the existing value that we create, we might lose the existing customers.	
Expert 3: Service Design & Customer Experience	you consider the impact that the change has on your value proposition to your customer. Make sure to focus on testing - Regularly checking in with the customers - don't change the business model without testing assumptions first, otherwise it's too risky you might lose customers	If the value proposition of the new business model does not meet the needs and pains of the customer segment, it won't be successful.	The ability to test the hypotheses.	Workshop combined with design process: Analysis of the current state busiesm model, build hypothesis along with research, new V.P. and then test!!	Yes, the design process in my opinion is also helpful in testing the new business model. If you have your hypotheses, you can start your research, build prototypes or test scenarios and get feedback from your users. So I would combine the double diamond with the business model canvas.	We need to make sure that we really understand what the value proposition in our current business model is. If we adapt our business model and do not consider the existing value that we create, we might lose the existing customers.	
Expert 4: Business Model Innovation	Listen to the customer and its pains, address relevant market needs Be open to pivots! Every BM needs to pivot! Talk to customers to in-/validate your hypotheses (talk to the relevant people, get the right data)	As the core of every good business model is the value proposition, it is essential for the transformation of a business model. If the value proposition of the new business model does not meet the needs and pains of the customer segment, it won't be successful.	You do not know if you have a viable business model until you found (enough) data to validate your hypotheses.	It needs to become clear why the BM is apparently not viable? Weak value proposition, e.g.?... Most often the product-market fit is not given, which means the business model addresses not a relevant pain (market need). This easily leads to "solution seeks problem" - absolutely not the right approach!	You do not know if you have a viable business model until you found (enough) data to validate your hypotheses.	1. Listen to the customer and its pains, address relevant market needs	
Expert 5: Organisational Design	Creating true value for the user and all stakeholders and by that creating a common understanding of the need of the transformation towards a new business model/concept and the activities which are coming along with it.	Understand the needs and pain points and the (personal) success factors of all stakeholders as a basis for a holistic concept of all initiatives of the transformation process. Identify overlaps and thereby derive opportunity areas for new initiatives, plus define success criteria for existing initiatives and carry out a corresponding assessment of them.	As we can see in the current situation (C19), change or transformationen happens faster if there is a necessity to change. The stronger the necnecesstyessety,	Common understanding for the need of the change Participation-process where people can contribute and get incentivised accordingly Create a way how to translate the new value(s) for customers also into the organization internally, to bring them alive and truly live the change Make change tangible → communication effort should be aligned with activation effort	*	Creating a Purpose Driven Value Proposition (Create meaningful interactions between service and product development (what a company does externally, values that it carries outwards) as well as the internal organizational structure and cooperation (how an organization works on service and product development and which values it lives internally).)	
Codes & synthesis	- Need for change, need for improvement - Framework for all stakeholder to handle expectation/needs - Exploring Opportunities, building hypothesis and test/validate them	- Only with user research - Purpose driven value propositions - Needs and Pains of the stakeholder - Expansion not change - Core of the BM - Opportunity area	- The awareness & mindset & urgency - The tools & methods (Design/ BMC/ VPC) - Strategy grounded in Design process - Test hypothesis / concepts	- A clear reason to change (motivations) - Including all stakeholder (benefits, pains, needs) - Clear communication - Participation of stakeholder	- Current state analysis - Research stakeholder - Opportunity area identification: stakeholder, customer, value etc. - Build Hypothesis - Test & validate concept - Implement valid - Participation of all stakeholder	- Have a strategy - Know your stakeholder - user needs, pains etc, - Participation of the whole ecosystem - VP to purpose driven VP - Design Process: Research, Ideate, Create, Validate, Iterate, Implement - The urgency/need/mindset/ value of change & transformation = clear	- Lacking communication - Transparency - Missing Strategy

Codebook:
(https://docs.google.com/document/d/1Jg6b-
p1d124VWaEYESPM2Nug5VElZGGH0iNdEKLy8aQ/edit?usp=sharing)

Data Analysis

Categories:

1. Business Model
2. Value Proposition
3. Transformation
4. Process
5. Design Process / Methods
6. Most important insight
7. Disablers

Codes:

1. Business Model

Codes/ Synthesis:
- Need for change, need for improvement
- Framework for all stakeholder to handle expectation/needs
- Exploring Opportunities, building hypothesis and test/validate them

2. Value Proposition

Codes/ Synthesis:
- Only with user research
- Purpose driven value propositions
- Needs and Pains of the stakeholder
- Expansion not change
- Core of the BM
- Opportunity area

3. Transformation

Codes/ Synthesis:
- The awareness & mindset & urgency
- The tools & methods (Design/ BMC/ VPC)
- Strategy grounded in Design process
- Test hypothesis / concepts

4. Process

Codes/ Synthesis:
- A clear reason to change (motivations)
- Including all stakeholder (benefits, pains, needs)
- Clear communication
- Participation of stakeholder

5. Design Process / Methods

Codes/ Synthesis:
- Current state analysis
- Research stakeholder
- Opportunity area identification: stakeholder, customer, value etc.
- Build Hypothesis
- Test & validate concept
- Implement valid
- Participation of all stakeholder

6. Most important insight

Codes / Synthesis:
- Have a strategy
- Know your stakeholder - user needs, pains etc,
- Participation of the whole ecosystem
- VP to purpose driven VP
- Design Process: Research, Ideate, Create, Validate, Iterate, Implement
- The urgency/need/mindset/ value of change & transformation = clear

7. Disablers

Codes/ Synthesis:
- Lacking communication
- Transparency
- Missing Strategy

A4: Data Analysis Co-Working Customer
(https://docs.google.com/spreadsheets/d/135FROjIuLTPI-OsC4hT5_vpZ8FF6PB8KKMI4XzF84Iu0/edit?usp=sharing)

Customer / Categories	Pains	Needs	Features Co-working Space	Further values	Co-Working Space	Sustainability	Sustainable Space/ Circular Space
Customer 1:	Noisy in the space, somtimes too crowded.	Space to meet with colleagues and collaborate on the work	place, accessibility, community	More sustainability, more equipment, still very pricey when wanting a private office	It is just to solve the need of collaborative work on her business with her colleagues	Highly interested in sustainability and is actually a sustainability entrepreneur, in a lot of groups and networks interconncted, knows the CE.	Would be paying more if there would be a accessible space in Frankfurt, but there is juyst none, though the community and mindset is increasing
Customer 2:	I don't want to sit at home with my two friends working on my app I need the inspiration by others A more familiar atmosphere, more digital products (laptops)	Since you get feedback like critiques etc. that you can revise your product from a different perspective Keep on building and developing my own application I need to be satisfied with that app and at the same time it needs to solve my customers needs	I think the biggest plus point to go to work was their pricing, since we are at the beginner stage and only meeting Fridays it was necessary to afford the spot.	More screens and technical equipment	Community, feedback, connecting events, space & silence, beverages, open minded people (new friends)	I would be willing to pay even more for a sustainable space. Because I think it is super important to already start now for a sustainable future.	Could imagine working in it, if ther would be an accessible offer, though
Customer 3:	The space is quite noisy though, that is sometimes very annoying, but it solves my main pain, collaborating with the co-owners on our business, which is the most important part	It would actually be nice to network a bit more, but honestly I am not taking advantage of the existing network there.	Actually they do offer everything you need in order to get your work done. You can rent different kinds of seats, offices etc. But they have grown so big, that the individual and personalized experience got a bit lost	If I would look for another space, I think I need to get inspired a bit more: Interieur/ Looking and a creative community, WeWork is quite anonymous	Currently enough to work with his team, but he would like for the future a community that fits better his background of creativity. His space is anonymous and he misses the creativity	It is important, but in a co-working space so far not really a matter, but if there would be an offer of more sustainable spaces he would actually like to use it	Could definitely imagine working in such a space, if there would be an accessible offer, though they would still need to solve his old needs and pains especially re flexibility & place
Customer 4:	Other people who leave rooms, kitchens and bathrooms super messy Working material (e.g., whiteboard markers) missing in meeting rooms or not working material People using the space just for fun and being super loud	Not having a professional environment to work on idea with partners Needing a post address for your company Calm area to stay focus and get shit done Equipment for brainstorming (e.g., whiteboards)	It is great that they have free water Networking possibilities Meetups and cool events Having fun during breaks (e.g., they have a piano, ball pool, table football)	Nap area would be great Fully equipped working places (including display, mouse, etc.) or possibility to rent this equipment out (I think it would be a great idea for grover to rent out stuff for a day, month, week or year. directly in coworking spaces:) I think legal and tax advice would be great	It is great that they have free water Networking possibilities Meetups and cool events Having fun during breaks (e.g., they have a piano, ball pool, table football)	Of course it is, as there is no planet B we need to act fast to stop global warming. Sustainability is one of the puzzle pieces that can help. I love the ocean and therefore are super sad to see so many of our corals die / bleach and so much plastic in the water	As they are supposed to be a centre for innovative thinkers and a space where the next big things are being developed, I definitely think they should set an example by fulfilling or even surpassing sustainability standards
Customer 5:	Boring, far from the city, sometimes the other startups are quite far from my ideas (they are more tech-focused) (I mean these are the pains in the relationship with me and the space) Startup on workspace pains is that I just need a place that I can call office and where I can work in peace, but I don't really have a huge budget yet	A reasonably priced location where I can sit with team.	Nice people (community), good facilities, inspiring environment	Sometimes people have different expectations regarding the co-working space. Like if it is allowed to talk out loud or not. I think yes, and I just get annoyed of people who whisper the whole time :DD so I would love the common rules to be out a bit more clear	It is perfect for the days when I have off- or online meetings, and when I know that I need to really focus on something. Utrechtinc is not the most inspiring as a location, so for the most creative days, I go for a coffee. Also, if I need help with something, I know I can always find someone from the co-working space who can help me.	Of course. I wish that we are able to live in this earth as long as possible. I want to think of future generations too.	I think that the sustainability could be visible in the co-working space, and that could actually add to space in a way that it is more inspiring to sit there.
Customer 6: Martin	There is only one - if you are not a student of the university, it can be crowded especially in summer, which makes it difficult to find a real calm spot for deep work. Missing more efforts to improve sustainability in both Factory Facilities (however, it is already improving)	I was looking for a place where I have the space, community to network, food, playground and park within one campus. Calm working environment (as mentioned: it is currently one pain point)	Offering a space to work and network Provide the necessary resources → library, desks, events to network, playground, a helpful community (I have met a few of very good and close friends there), and healthy food in one spot It is also the campus of our University	It is already improved a lot, but there is still much space to improve more - since it's an old factory building, the facility is literally sucking energy, especially in winter. Waste management can be improved Support more projects which can create a reasonable impact for the environment and society (the focus is currently to much on profitable or commercial businesses)	a. Product: office desk with all necessary equipment b. Service: kitchen, playground, support and advisor for founders after validating your idea / product (can be a NGO, Foundation, Company, etc.), creating helpful contacts to help you grow in every aspect.	It is important to me because we have already altered ~ 51% of the habitable land of the earth mainly for agriculture. Mainly for meat consumption, crops, bioethanol, etc. besides 91% of the produced plastic waste since 1950 wasn't recycled - and 8 billion tonnes of plastic enters the oceans, every year. it is time for to stop suffering - for the environment, the wildlife and us	CWS are a perfect playground for innovation, cooperation and community work. I would welcome more events and community efforts to improve the sustainability of the whole campus. Could be only selling products without plastic (or at least to 100% recyclable) We already started two years ago a Green Campus project with vertical farming, however this applies only for the University Space. Therefore, I would welcome to see more support from the Factory, so that the community can create more sustainable vertical farms within the campus. This would also be beneficial for the kitchen. (from draft → to a real world project)
Codes/Synthesis	Noisy Messy Equipment (devices, material) Synthesis:: Individual Pains Accessibility	Community / Inspiration Pricing Synthesis:: Individual Needs Community	Community Space / Desks Synthesis: Pricing (not everyone) Community Network Good Environment	Technical Equipment Synthesis:: Better Pricing for small offices More sustainability	Place/ Location Community / Network Interior Synthesis: CWS = perfect place for more innovation	Important Saving the planet Synthesis:: Everyone interested Is a value	Missing offer Opportunities Synthesis:: No offers Would all like to take a look

Codebook:
(https://docs.google.com/document/d/1Jg6b-p1d124VWaEYESPM2Nug5VElZGGH0iNdEKLy8aQ/edit?usp=sharing)

Data Analysis

Categories:

1. Pains
2. Needs
3. Features Co-working Space
4. Further values
5. Co-Working Space
6. Sustainability
7. Sustainable Space/ Circular Space

Codes

1. **Pains**
   - Noisy
   - Messy
   - Equipment (devices, material)

Synthesis:
- Individual Pains
- Accessibility

2. **Needs**
   - Community / Inspiration
   - Pricing

Synthesis:
- Individual Needs
- Community

3. **Features Co-working Space**
   - Community
   - Space / Desks

Synthesis:
- Pricing (not everyone)
- Community
- Network
- Good Environment

4. **Wished Further values**
   - Technical Equipment

Synthesis:
- Better Pricing for small offices
- More sustainability

5. **Co-Working Space**
   - Place/ Location
   - Community / Network
   - Interior

Synthesis:
- CWS = perfect place for more innovation

6. **Sustainability**
   - Important
   - Saving the planet

Synthesis:
- Everyone interested
- Is value

7. **Sustainable Space/ Circular Space**
   - Missing offer
   - Opportunities

Synthesis:
- No offers
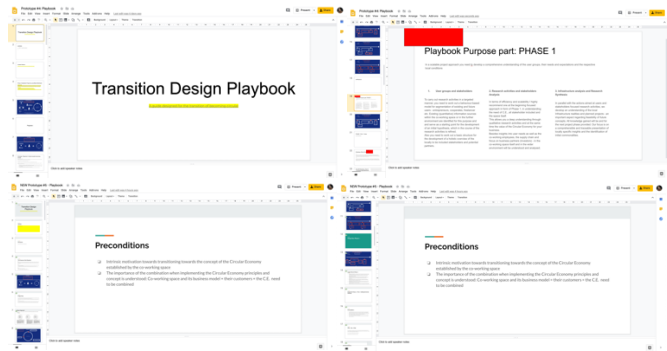- Would all like to take a look
-

A5: Integrated Design Workshop CWS
(https://drive.google.com/drive/fold-
ers/14BwosVtlds9WDp22ld5qtbst4ysalnrl?usp=sharing

A6: Prototype Number 4 & 5
(https://drive.google.com/drive/folders/1lxF1dkQUtdQ8rQ8HQt-GRUw1REf7Gl03c?usp=sharing)

A7: Images Research Documentation
(https://drive.google.com/drive/folders/1VJRKUuC3VmM9j_qqzVilZzwMF-tM9qT9?usp=sharing)