



# KEY TOOLS PORTFOLIO FOR SERVITIZATION OF CE PRODUCT-BASED MANUFACTURING COMPANIES

## PHASE 2

D.T1.2.4

Version 1

4 2018

### Disclaimer

The contents of this document and the views expressed in this report are of the sole responsibility of the authors and the THINGS+ project team. They under no circumstances can be regarded as reflecting the position of the European Union or of the Central Europe Programme's management structures and in no way commit the involved organisations.

### Copyright



This work is licensed under the Creative Commons Attribution-Non commercial-Share alike 4.0 International License. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-sa/4.0/>

### Acknowledgement

This project was supported by the Interreg Central Europe Programme



## THINGS+

### Introducing service innovation into product-based manufacturing companies

01.06.2017 - 31.05.2020

Project number: CE 988

Interreg Central Europe Programme

Work package	T1	Activity	A.T1.2	Deliverable	D.T1.2.4
Date	April 4 <sup>th</sup> 2018			Due date	April 2017 <sup>1</sup>
Title	Key tools portfolio for servitization of CE product-based manufacturing companies - Phase 2				
Project Partner responsible	All partners				
Report Status (DR = Draft, FI = Final)				FI	
THINGS+ website	<a href="http://www.interreg-central.eu/Content.Node/THINGS-.html">http://www.interreg-central.eu/Content.Node/THINGS-.html</a>				

<sup>1</sup> The delivery month settled in the approved Application Form (December 2017) has been postponed upon decision of the Project Management Board to improve the quality of the deliverable. The delay did not have any negative effect on the project implementation.



## Contents

<b>1. Phase 2: Opportunities based on external developments and new insights - outside-in .....</b>	<b>2</b>
1.1. Customer segments list & description(s) .....	4
1.2. Customer Persona (per segment) .....	6
1.3. Customer Journey(s) (per segment) .....	10
1.4. Buyer utility map (Blue Ocean Strategy) .....	14
1.5. Servitization opportunities - Outside-in .....	17
1.6. Prioritized Opportunities (Company Perspective) .....	20
1.7. Servitization concept .....	22



## 1. Phase 2: Opportunities based on external developments and new insights - outside-in

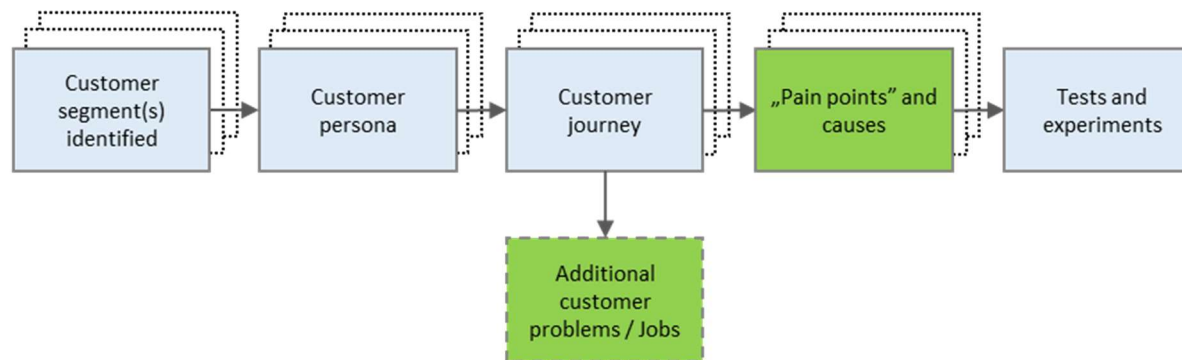
This document contains a set of tools to be used during the second phase of implementing the Service Innovation Methodology. Some of the tools and methods will be used during the second workshop with participating SMEs while the other will be used by the SMEs on their own in the period after the workshop. The companies will be instructed how to use these tools for self-assessment and data gathering, and also will be supported and mentored by the project staff if needed.

This second phase of implementation engages more in-depth analysis of the targeted customer and the problem they are trying to solve. The aim is to introduce companies with as much “outside” knowledge and customer centric perspective possible, so the most valuable servitization opportunities can be recognized. For this purpose, after the workshop companies will be assigned with using tools to document and assess new insights based on direct interaction with their customer segment.

The workflow of the second phase is presented in the following scheme.



## Workshop No. 2 or 1on1 consulting



## Homework (support and mentoring)

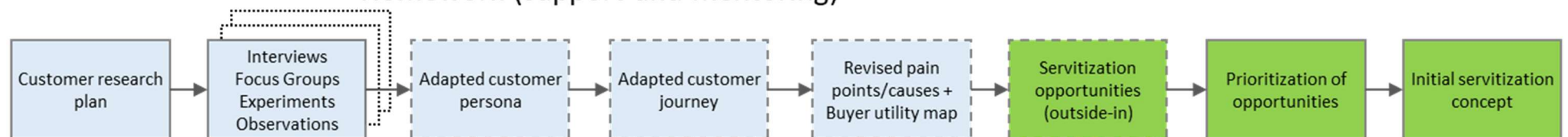


Figure 1 Workflow of the second phase of the Service Innovation Methodology



## 1.1. Customer segments list & description(s)

Companies should identify customer segments and then gradually shift the perception of them beyond the existing assumptions. Demographic, social and other features of customer segments should be documented in order to understand where to find them and who to target, and also how to adapt servitized offering.

**Guidelines on implementation:**

**D.T1.3.1 - Phase 2 - Workshop**

This tool serves as an addition to Customer problem/Jobs to be done description. Customer segmentation is the practice of dividing a customer base into groups of individuals with common characteristics or similarities in a specific way (age, gender, interests, habits, income), which can then be targeted with a specific value proposition. Customer segmentation relies on identifying key differentiators that divide customers into target groups. Companies need to divide their customers into measurable segments according to their needs, behaviours or demographics and also aim to determine the profit potential of each segment by analysing its revenue and cost impacts. Value-based segmentation evaluates groups of customers in terms of the revenue they generate and the costs of establishing and maintaining relationships with them. Company needs to understand how its best current customers are segmented so it knows how to allocate and spend its human and capital resources efficiently. While conducting the customers segments from a customer list or database, it should be considered not to take into account certain marginal customers that are positioned on the extremes of the customer base, determined by either revenue or deal structure.

The goal is to determine what makes a good customer for a company or product, which is often determined by the customer value - the total net present value of the cumulative profits generated by a customer over its lifetime.

Also, it is important to outline the way each customer segment is buying and using the product, not only to identify similarities and differentiators between the groups, but also to find the group that is most appropriate to be targeted with new value proposition.

**Additional sources:**

- <http://www.thebridgecorp.com/customer-segmentation/>
- <http://searchsalesforce.techtarget.com/definition/customer-segmentation>
- <https://labs.openviewpartners.com/customer-segmentation/#.WplFTejwaUk>



**Product:** \_\_\_\_\_

Customer segment (buyer or user) <b>Who is our customer?</b>	Demographics, social, geographical... characteristics <b>Where? Who?</b>	Time, place, sales, marketing and distribution channels <b>How to buy and use?</b>

## 1.2. Customer Persona (per segment)

After previous customer segment analysis, the focus should be directed to the most promising customer segment(s). It is suggested to proceed with no more than three customer segments. The aim is to describe the customer based on a specific individual - a real person representing the customer segment. Description includes every information available that will enable understanding of that particular segment beyond usual moments of interaction with company (buy/use/complaint), like: personal detail, demographics, social status, preferences and values, quotes or requests, etc. This information should enable to identify even more precisely who to target, when and how.

**Guidelines on implementation:**

**D.T1.3.1 - Phase 2 - Workshop**

Customer personas are fictional profiles developed as a way of representing a particular group based on their shared interests. Personas are created with a combination of raw data and educated guesses and building them can help improve the way of solving challenges.

The most common way of developing a persona is to collate research insights into common-interest groupings, which can then be developed into a workable “character”. Designer needs to collect information about the intended users, by doing qualitative research, using context-mapping techniques, interviews and observations.

Effective personas can shift focus away from abstract demographics, and towards the wants and needs of real people. Even though personas themselves are mostly fictional, the motivations and reactions they present are real, based on the feedback elicited during the research stage of the project, and as such embody the real-world perception surrounding a company’s service.

Personas help understand the customers (and prospective customers) better. This makes it easier to tailor the content, messaging, product and services development to the specific needs, behaviours, and concerns of different groups.

Some practical methods for gathering the information needed to develop personas are:

- Looking through the contacts database to uncover trends about how certain leads or customers find and consume content,
- Using form fields in website forms that capture important persona information,
- Take into consideration sales team's feedback on the leads they're interacting with most,
- Interviewing customers and prospects, either in person or over the phone, to discover what they like about the product or service.

Personas cannot be used as an independent evaluation tool, therefore, the real people are needed to test and evaluate the offering.



### Additional sources:

- Stickdorn, M.; Schnaider, J.; et al.: This is service design thinking, John Wiley & Sons, Hoboken, New Jersey, 2011
- <https://blog.bufferapp.com/marketing-personas-beginners-guide>
- <https://blog.hubspot.com/blog/tabid/6307/bid/33491/Everything-Marketers-Need-to-Research-Create-Detailed-Buyer-Personas-Template.aspx>

Where he/she works Details about her role	<b>Name</b> <b>Job title</b>	<b>Picture</b>
Demographics: • Age • Gender • Salary • Location • Education • Family	Goals and challenges	Marketing message
	Values and fears	Elevator pitch
<b>Additional information:</b> Hobbies - Real quotes from interviews with customers - Computer literacy - Where they get their news - Blogs they read		

Figure 2 Example template of a Customer Persona

The screenshot shows the UXPRESSIA interface with a sidebar of avatars and a main panel for 'John Henry'. The main panel includes a profile picture, a quote, demographic information (Male, 29 years, United States), background, goals, motivations, and frustrations.

**John Henry** [GENERATE NAME] [Guardian] [?]

**Quote**  
The single biggest problem with communication is the illusion that it has taken place.

**Demographic**  
Male 29 years United States  
Type here  
- ADD FIELD

**Background**  
John is a lead UX designer and is responsible for managing all design projects in his company. He takes part in design workshops, mentors other designers and presents all artifacts to customers.  
If there are no meetings and any activities in the office, John prefers to work remotely - it allows him to spend more time with his family and help his wife.

**Goals**  
• Being able to present his work results to customers, teammates, and management in a nice and digestible way without spending hours on drawing everything from scratch.  
• Having everything in one place and always at hand.

**Motivations**  
• Automation of routine operations  
• Single place to manage all the UX artifacts  
• Easy way to present work to the customer

**Frustrations**  
• Time wasted on setting up the tool instead of using it  
• Price/value ratio

Figure 3 Example of a filled-out Customer Persona  
(source: <https://www.smashingmagazine.com>)



## Customer Persona template A

<b>Work description</b> <b>Role details</b>	<b>Name</b> <b>Job title</b>	<b>Picture</b>
<b>Demographics</b>	<b>Goals and challenges</b>	<b>Marketing</b>
	<b>Values and fears</b>	<b>Elevator pitch</b>
<b>Additional information</b>		



### 1.3. Customer Journey(s) (per segment)

This tool is used to visually capture the entire cycle of customer's experience from the moment the customer's problem emerges until after the solution is applied. Stages of the journey can be generic (preparation, purchase, delivery, use, supplements, maintenance, disposal) or more precisely defined. After all stages are defined, customers behaviour at every stage should be analysed (define what is the customer doing-thinking-feeling) so any unsatisfactory experience (pain points) can be identified and recognized as possible opportunity.

**Guidelines on implementation:**

**D.T1.3.1 - Phase 2 - Workshop / Phase 3 - Workshop**

This Customer Journey form is used to describe and document tasks and behaviour of different customer segments while going through the cycle of using the product or service. The customer journey is the overall scope of the average customer's experiences with a product or service, from first touch to the moment they decide to move on to a competitor or no longer need the services. Describing the journey focuses on the customer's psychometric-emotional status related to a specific persona and contextual stream. It helps build customer-experience empathy and organizational capability to track and tune-up the customer experience into customer success.

Customer journey gives overview of key interactions that the customer has with the organization by describing user's feelings, motivations and goals for each of the touchpoints. It provides insight into customer motivation for what they wish to achieve and what are their expectations of the organization. This information allows companies to identify opportunities and possibilities to improve their offer and the overall customer experience by potentially adding a service component.

**Additional sources:**

- Stickdorn, M.; Schnaider, J.; et al.: This is service design thinking, John Wiley & Sons, Hoboken, New Jersey, 2011
- <https://www.patlive.com/blog/customer-journey-mapping-for-small-business/>
- <https://www.sailthru.com/marketing-blog/customer-journey-mapping-need-to-know/>
- <https://conversionxl.com/blog/customer-journey-mapping-examples/>
- <https://hbr.org/2013/09/the-truth-about-customer-experience>

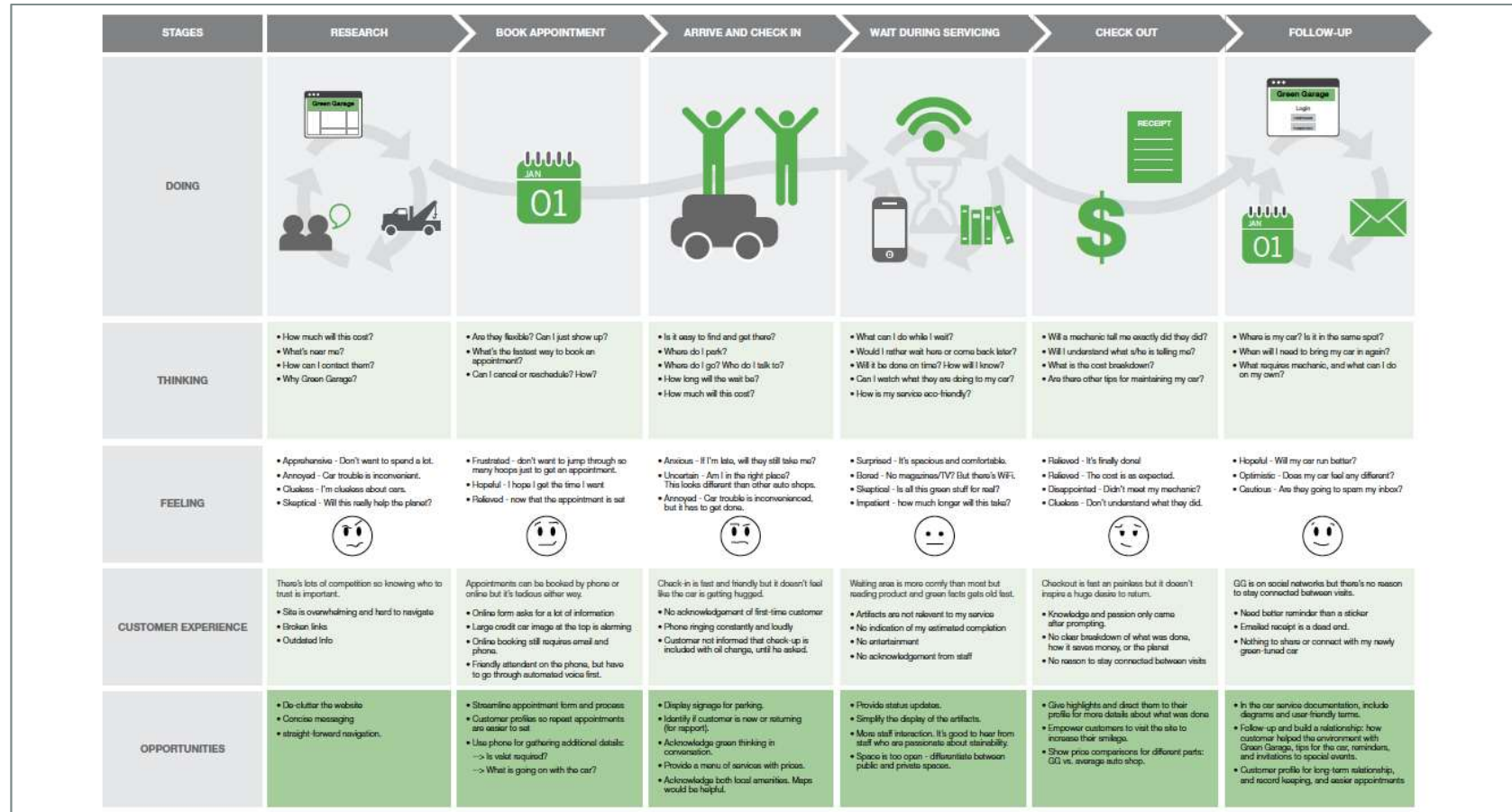
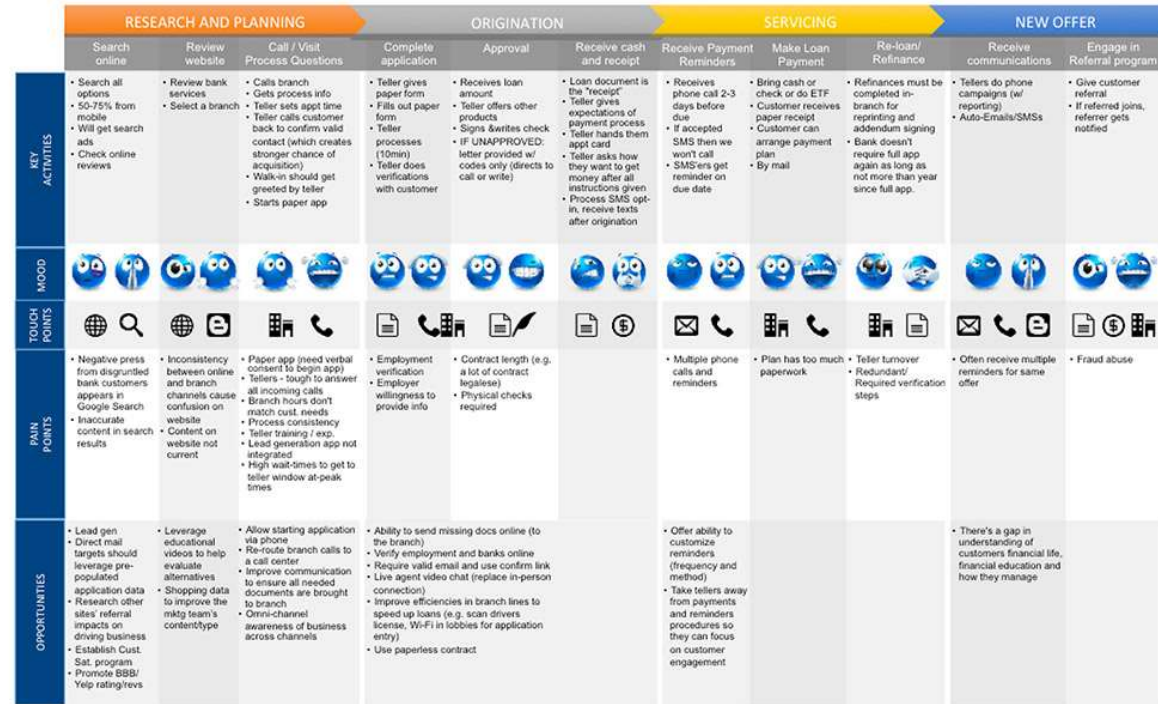


Figure 4 Example of a filled-out Customer Journey (source: <https://uxplanet.org/>)



## Customer Journey Map Example



CENTRIC CONSULTING  
((DIGITAL))

Figure 5 Example of a Customer Journey Map (source: <https://centricconsulting.com>)



Stages:	Getting information Preparing	Buy Purchase	Deliver	Use Consume	Add-ons Supplements	Maintenance	Disposal
Doing							
Thinking							
Feeling Experience							
Front end Touchpoints							
Back end Infrastructure							
Customer Pains Opportunities							

## 1.4. Buyer utility map (Blue Ocean Strategy)

It is an additional tool to identify pains points and their causes. The stages of the customer experience (generic or adapted/personalized) are assessed from the perspective of customer use (Productivity, Simplicity, Comfort, Risk, Fun and Image, Environmentally friendly). Based on the results from application of this tool, and also the previous ones, companies should prepare themselves for direct interaction with their customers (in period after the workshop), in order to validate assumptions generated so far. After gaining new insight, forms documenting customer profile, journey and pain points should be updated.

**Guidelines on implementation:**

**D.T1.3.1 - Phase 2 - Workshop (optional)**

The Buyer Utility Map is a tool initially developed by the authors of the Blue Ocean Strategy which helps the designers gain the demand-side perspective on their offering. It outlines all the “levers” organisations can “pull” to deliver improved utility to customers as well as the various experiences customers can have with a product or service. The different perspective stresses out the importance of product or service becoming less a function of its technical possibilities and more a function of its utility to buyers. This mindset helps designers identify the full range of utility spaces that a product or service can potentially fill.

The tool has two dimensions: **The Buyer Experience Cycle (BEC)** and the **Utility levers**. The Buyer Experience Cycle (BEC) presents a cycle of usually 7 stages of buyer’s experience where marketers can create value for the customers. They are occurring more or less sequentially from purchase to disposal. Utility levers are elements across the stages of the buyer’s experience that present the ways in which companies unlock utilities for their customers. At each stage, company should ask a set of questions to gauge the quality of customer’s experience.

To test the utility, companies should check if their offering has removed the greatest blocks to utility across all the stages of the buyer experience. The greatest obstacles to utility often represent the greatest opportunities to unlock exceptional value. Locating the offering on the utility map can show if the new idea creates a new utility proposition from existing offerings and also removes biggest blocks that stand in the way of turning noncustomer into customers.





Informing	Purchase	Delivery	Use	Supplements	Maintenance	Disposal
Where and when does the customer get the information about the product/service? Through which channels? What is the company's value proposition?	How long does it take to find the product you need? Is the place of purchase attractive and accessible? How secure is the transaction environment? How rapidly can you make a purchase?	How long does it take to get the product delivered? How difficult is it to unpack and install the new product? Do buyers have to arrange delivery themselves? If yes, how costly and difficult is this?	Does the product require training or expert assistance? Is the product easy to store when not in use? How effective are the product's features and functions? Does the product or service deliver far more power or options than required by the average user? Is it overcharged with bells and whistles?	Do you need other products and services to make this product work? If so, how costly are they? How much time do they take? How much pain do they cause? How easy are they to obtain?	Does the product require external maintenance? How easy is it to maintain and upgrade the product? How costly is maintenance?	Does use of the product create waste items? How easy is it to dispose of the product? Are there legal or environmental issues in disposing of the product safely? How costly is disposal?

Table 1 Questions to ask on each phase (source: Kim, W.C.; Mauborgne, R.: Blue Ocean Strategy: Harvard Business School Publishing Cooperation, Boston, Massachusetts, USA, 2015)

<b>Additional sources:</b>	<ul style="list-style-type: none"> <li>■ Kim, W.C.; Mauborgne, R.: Blue Ocean Strategy: Harvard Business School Publishing Cooperation, Boston, Massachusetts, USA, 2015</li> <li>■ <a href="https://www.blueoceanstrategy.com/tools/buyer-utility-map/">https://www.blueoceanstrategy.com/tools/buyer-utility-map/</a></li> <li>■ <a href="https://www.advantexconsulting.com.au/BOS-Tools/Buyer-Utility-Map">https://www.advantexconsulting.com.au/BOS-Tools/Buyer-Utility-Map</a></li> </ul>
----------------------------	---



## The Seven Stages of Buyer Experience Cycle

The Six Utility Levers	Informing	Purchase	Delivery	Use	Supplements	Maintenance	Disposal
	Customer Productivity						
	Simplicity						
	Convenience						
	Risk						
	Fun and Image						
	Environmental Friendliness						

Table 2 Adapted from the Blue Ocean Strategy - Six stages of Buyer Experience Cycle



## 1.5. Servitization opportunities - Outside-in

Just like the first one, the second phase also ends with the formulation and general assessment of newly recognized opportunities and revision of previously defined. This time the assessment is based on the insights gained from more detailed analysis of the customer segment, pain points identified during customers journey and feedback gained from direct interactions with the customers.

As previously, same framework is used - customer related advantages (importance and relevance) and general attractiveness for the company (possibility and profitability).

The same form from the end of Phase 1 (Inside-out opportunities) can be used by adding new opportunities and/or re-evaluating already identified ones.

**Guidelines on implementation:**

**D.T1.3.1 - Phase 2 - Homework**

Based on the insight and acknowledgments on external developments and customer behaviour acquired by using the proposed tools, servitization opportunities can be formulated and evaluated. Evaluation should be performed based on both the customer's and the company's perspective so it can be assessed if the opportunity presents important solution for the customer while also a significant value for the company.

Assessment of customer experience with a certain product should provide details on problems that arise during the customer journey. These problems and needs should be described along with evaluation of their importance for the customer.

Any idea for a new additional service or transformation of the product into a service, incremental improvements or radical initiatives, should be:

- Named (if possible) and briefly described

And assessed from:

- The customer perspective (Not just how the participants from the company think based on the experience and previous relations, but also based on the detailed assessment of customer segment through interaction with the customers during Phase 2):
  - Is it important for the customers?  
Will it create substantial benefits for the customers? Will customers experience tangible benefits from additional services?
  - Unsatisfied customer problem  
Do customers have unsolved problem during our product lifecycle? Is it important for the customers? Do we get a lot of complaints regarding it?



- The company perspective and its existing way of doing business, competences, organisational capacity, values and beliefs, etc.:
  - Is it doable?  
Is it possible to implement it with acceptable level of effort and investment? Within manageable timeframe?
  - Is it financially sound - lucrative?  
Are there great number of customers with that problem and purchasing power and willingness to pay?

## High value opportunities

<b>Outside-in opportunity</b>  What customer want? Or think that is important?  (description of a problem or challenge customer face while buying and using our product)	Customer perspective		Commercial - business perspective		Opportunity
	<b>Important for customers</b> Creation of substantial customer benefits which are considered to be relevant and important.	<b>Unsatisfied customer problem</b> Appropriate solution to unsolved problems, risks or damages; Superior to available solutions or previously underserved or excluded customers.	<b>Doable and scalable</b> Possible to implement with acceptable level of effort and investment; Having a substantial growth potential.	<b>Valuable and lucrative</b> Great number of customers with purchasing power and willingness to pay; Customers identified in different and unrelated markets.	
	A 1min-5max	B 1min-5max	C 1min-5max	D 1min-5max	
					A+B+C+D



## 1.6. Prioritized Opportunities (Company Perspective)

At the end of the second phase, key opportunities defined during both phases should be compared and evaluated in terms of their applicability, feasibility and sustainability. Most promising opportunity will be formulated into initial servitization concept. Previous prioritization of the opportunities was assessing opportunities - their market and industry perspective. Opportunity that has great potential in general might not be appropriate for the particular company - final assessment should be done from the perspective of the company and its capabilities to perform and implement.

**Guidelines on implementation:**

**D.T1.3.1 - Phase 2 - Homework**

After identifying different opportunities and possibilities to improve customer experience and their relation with the "industry", certain features of those that are the most interesting need to be defined and assessed from the company perspective. It needs to be understood which possible actions and improvements will have the greatest market and financial impact, while not being too demanding resource-wise and disruptive for the organisation's every day's business.

Previously identified opportunities are confronted with pilot company specifically defined solutions that are expected to address the identified particular opportunity.

Those company specific solutions for the most appealing opportunities formulated during previous steps shall be evaluated based on the same criteria:

- **Investment level** - Level of the investment needed for opportunity related servitization implementation.
- **Effort and time** - Expected duration, manpower use and total effort needed from the perspective of the existing workload and workforce capabilities; Complexity and scope of new employment, organizational change and adaptation.
- **Market risk** - Clear understanding of the needs of the accessible market, willingness to pay, size of the pilot actions and market testing and introduction efforts.
- **Technology risk** - Available technologies and implementation challenges, technology maturity and robustness, is it already in standard use or still in development, need for additional certification or industry standards adjustment etc.
- **Change level** - General need for transformation of the organization, distribution channels, new partnerships, scalability level (0,1x, 1x; 10x), access to new markets or different industries/value chain elements, cultural differences etc.

Opportunities with the lowest score are the easiest to implement and the result has to be compared with previously identified impact potential to identify opportunity with highest potential for reward with lowest challenge level.



Customer related opportunity	Company's solution	Investment level 1min-5max	Effort and time 1min-5max	Market risk 1min-5max	Technology risk 1min-5max	Change level 1min-5max	Score sum

## 1.7. Servitization concept

Key output of the second phase is the initial servitization concept - a brief description (or few of them) of the new service that will be complemented to the product chosen for the servitization initiative.

The aim is to identify key elements that are crucial for the implementation and to enable understanding of the organizational and operative changes that will be envisioned during next steps.

Guidelines on implementation:	D.T1.3.1 - Phase 2 - Homework / Phase 3 - Homework
-------------------------------	--

To sum up previously developed knowledge, insights and ideas, the second phase ends with the initial servitization concept which consists of:

- **Servitization idea tagline** - title or short description of the servitization initiative,
- **Service description** - full description of services that will be added or that will substitute particular elements of existing product offering,
- **Customer experience description** - service seen from the customer perspective (perception, timeline, sequence),
- **Service outcome description: *benefits*** - additional gains; ***emotions*** - what and how will customers feel; ***value*** - key elements of the value proposition,
- **Organizational aspects**
  - Human and other resources needed (what does company need to develop and to implement service in full),
  - Processes (new or alterations of existing activities; which activities should be included in the existing business),
  - Structure - organizational and hierarchical (transformations in information exchange and decision-making hierarchy),
  - Key performance indicators, main goals and outputs (key goals, performance indicators to measure and manage),
- **Responsibilities and management elements**
  - Key creation and development responsibilities (who will develop and “install” new services),
  - Implementation / commercialization responsibilities once the service is up and running (who will be in charge when the servitization initiative is “up and running”).



## Servitization concept

Key idea:		
Service description		
Service experience		
Benefits	Emotions	Value
Organizational aspects		
Development responsibilities	Implementation / commercialization responsibilities	