



**DIGITRANS** - Digital Transformation In The Danube Region

# Validated DIGITRANS Method Framework

VERSION 1

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## 1. Introduction

This document gives an overview on the DIGITRANS Method Framework which was developed by the DIGITRANS consortium in 2017. It outlines the main steps within the method framework and their purposes to create value for SMEs when it comes to their digital transformation and more specifically - for development of innovative digital business models.

To ensure soundness and applicability, the DIGITRANS method framework ran through several rounds of validation by internal as well as external quality gates. Internally, all project partners were involved to guarantee fitness regarding regional challenges and needs. Externally, expert interviews were conducted and participants of the pilot workshops at Herman Hollerith Centre, Böblingen (Germany, HSRT) as well as Petru Maior University, Tirgu Mures (Romania, AUPM) were asked for feedback. These feedback loops did not only serve the refinement of the DIGITRANS method framework but also supported the transfer of methodological knowledge. The input from various sources of feedback was implemented where adequate in the present method framework.

The method framework is the basis for the blended learning training which will be offered to SMEs between May 2018 and April 2019 in the seven partner regions and also for the training content to be developed for the e-learning platform by March 2018. It is expected that when offering the trainings small changes might still be needed to be made in the method framework depending on the lessons learned and feedback received from the participants.

## 2. Method Framework

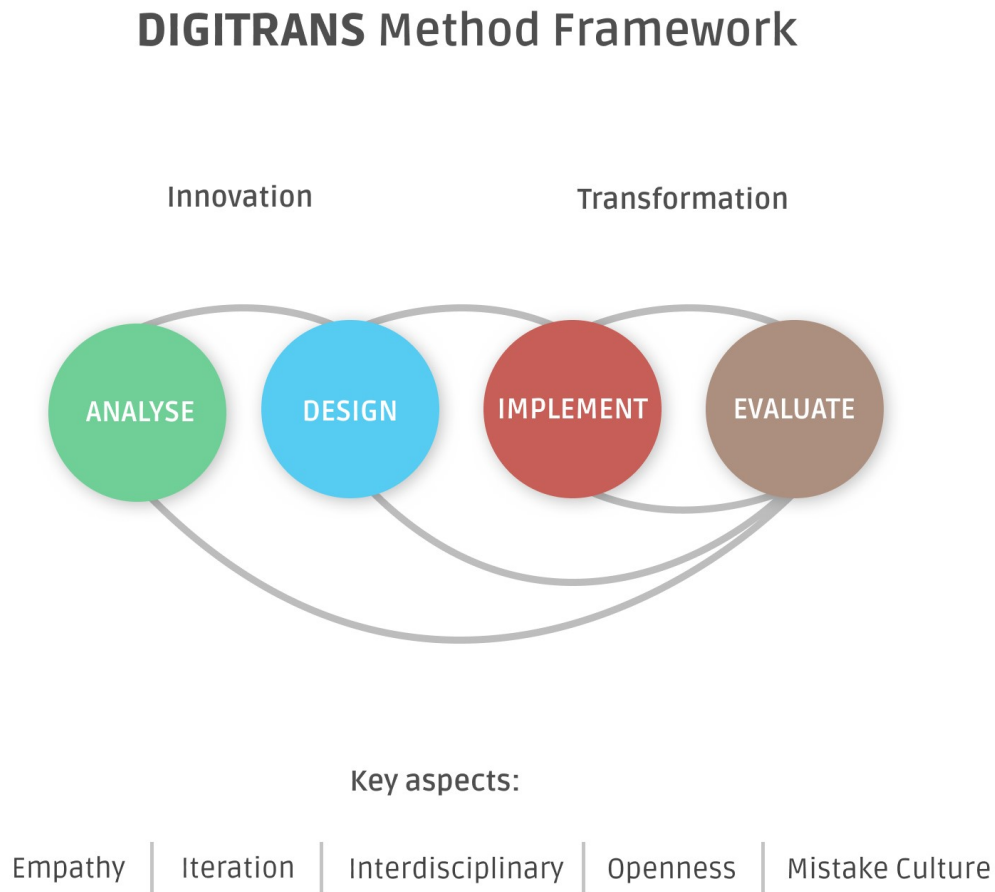
The validated DIGITRANS Method Framework is divided into three main elements that describe the two main phases – the innovation and the transformation phases - as well as the methods and tools accompanying the phases.

The first phase is called Innovation (see Figure 2) and contains two main processes:

- a) The analysis process, including the initial identification of the innovation potential of the respective company / of the concrete business case to be tackled during the workshop and the analysis of the stakeholders (targeted customers as well as potential partners).
- b) The design process, comprising ideation, selection of potential solutions and creation of prototypes. The cost-benefit analysis of these potential solutions is also assigned to this phase.

The second phase contains all relevant processes for digital business model transformation like testing, development and organizational implementation including the change management at its core. Each phase has specific methods and tools assigned to it that are regarded as best suiting the development of a digital business model. The result of the DIGITRANS process is a new or enhanced idea for a digital

business model as the starting point for the digital transformation. A simple presentation of the method framework, empathizing the iterativeness, is given in Fig. 1.



*Fig. 1: Presentation of the DIGITRANS Method Framework*

The overall method framework process is further depicted in Fig. 2.

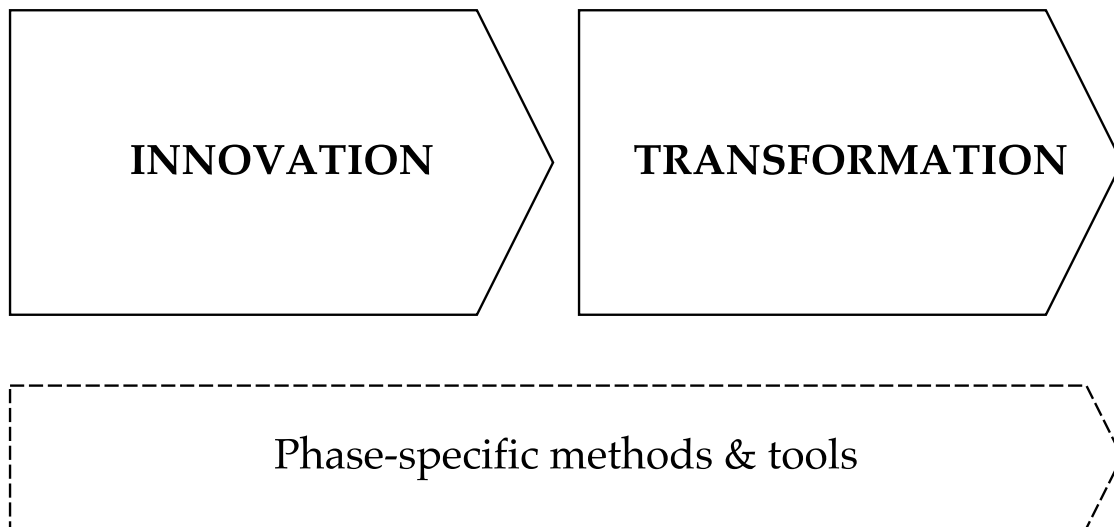


Fig. 2: Overview of Method Framework

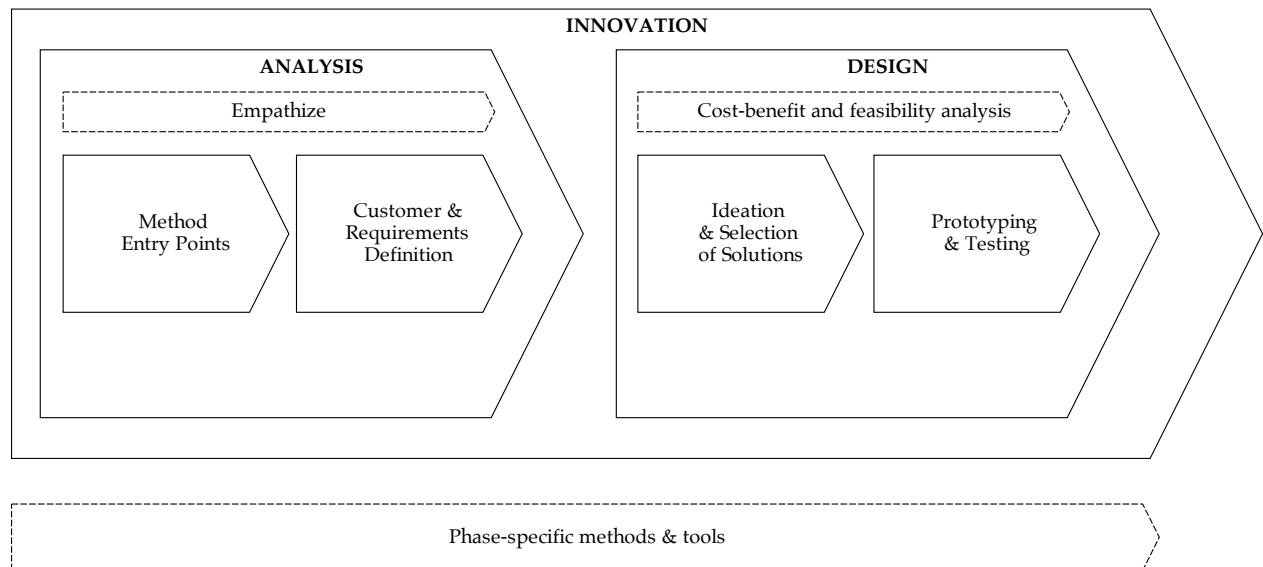
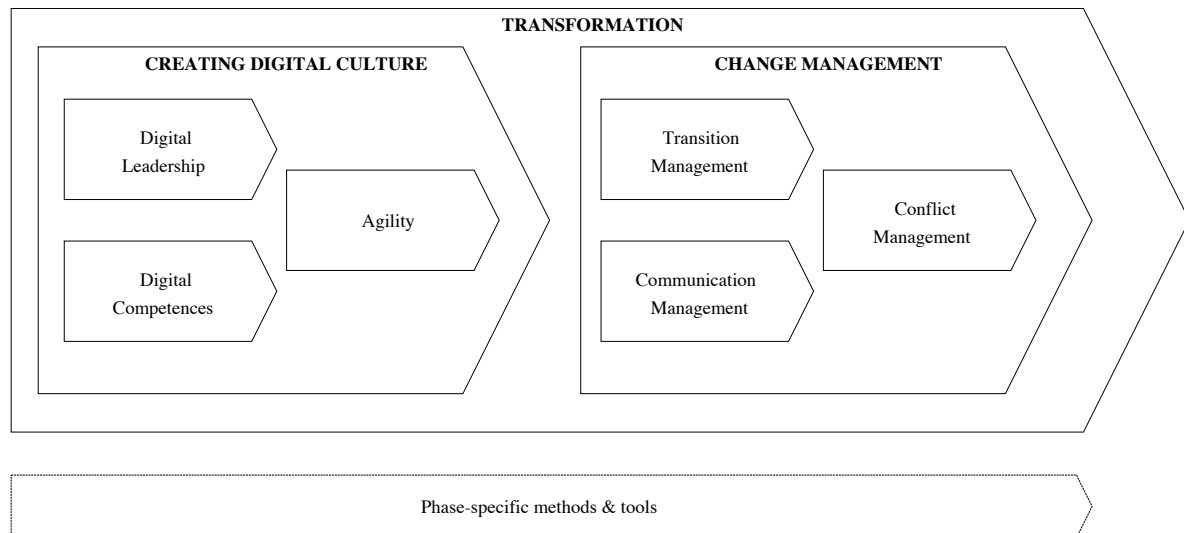


Fig. 3: Overview of the Innovation Phase of the Method Framework



*Fig. 4: Overview of the issues to be addressed in the Transformation Phase (to be further developed in WP6)*

Fig. 4 presents an overview of the main topics that have to be addressed when speaking about the transformation of a company's business model into a digital one, the so called transformation phase. This includes the creation of a digital culture and traditional change management aspects that have to be considered from the vantage point of digitalization.

The method consists of adopting a highly iterative approach and thus loops should be expected and anticipated throughout the whole process including the innovation and the transformation phase.

### 3. Innovation Phase

The innovation phase is divided in analysis and design phases, which are subdivided as well. The analysis phase mainly focuses on the determination of the company's situation regarding its business model on a very high level. It's important to stress on the difference between the DIGITRANS method and the classic problem analysis that is often presented in the other methods, where the concrete problem definitions or challenges are derived. Being an innovation method, the room for thoughts should not be narrowed down, as it will most likely lead to a restricted mind-set with poor innovation ideas as the result. Therefore, the analysis should be regarded as a stage that is strongly focused on empathizing. Similar to Design Thinking, empathy is crucial to an innovation-centered method as it allows the participants to set aside their own assumptions in order to gain insights into the organization's situation with respect to the digitalization. Therefore, not concrete problems or challenges are addressed, but general business objects like products, customers and partners are roughly captured to initially identify potentials for innovation. It should give a clearer view on where the company currently stands with respect to the digitalization.

The analysis phase will be followed by the design phase aiming to develop the first concrete digital business model ideas and prototypes based on the findings carved out in the analysis phase. Within this phase the SMEs will be encouraged to create new digital business solutions using methods to support open minded thinking e.g. brainstorming, prototyping etc. To sensibilise SMEs on the importance to implement iterative working processes in their organisation testing will also be part of this phase and how this will influence the further development in the company.

#### 3.1 Innovation Method Workshop Description

The following table gives an overview on the structure of the face-to-face workshop addressing the innovation phase to support SMEs in the development of a digital business model by using the DIGITRANS method framework. The table does not only offer a general overview and structure but also includes propositions in relation to which method tool might be best suited to further develop a digital business model.

At the end of the workshop:

- the participants will have developed a new digital business model by having developed and tested a first prototype of their digital business model idea and completing a business model canvas to outline the additional value of the new digital business model.
- the participants should be able to work with the DIGITRANS method framework in their own working environment and should know how to use the different tools to develop a digital business model with their colleagues/staff.

For the company it will be the starting point to transform its business model into a digital one.



The indicated timing is meant as an orientation. It should be adapted to the different regional needs, skills and expectations of the training participants. Before offering the face to face training participants should be invited to go through the general input on the current digital trends which will be offered through the e-learning platform ensuring that all participants will have a the same knowledge at a certain level allowing them to better follow the method.

*Tab. 1: Validated DIGITRANS method framework – Innovation phase*

Phase	Programme item	Aim & Method/tools to be used to achieve the aim	Media/Instruments (needed to conduct the method)	Additional Methods
	<b>Introduction</b>  (time needed: ca. 30 min.)	<p>Aim</p> <ul style="list-style-type: none"> <li>- Getting to know each other;</li> <li>- Giving a short overview on the overall DIGITRANS method framework;</li> <li>- Short introduction into the topic of digital business model incl. good practice presentation;</li> </ul> <p>Method/process</p> <ul style="list-style-type: none"> <li>a) Presentation round;</li> <li>b) Presentation of the overall DIGITRANS method framework and DIGITRANS learning platform;</li> <li>c) Presentation on digital business model incl. good practice presentation;</li> </ul>	Print out of the method framework	

		<p>Remarks:</p> <ul style="list-style-type: none"> <li>• At any point, provide information on why the specific method is used and how it integrates into the overall process</li> <li>• Ideally, have someone take notes/minutes during the workshop or record it if accepted by the participants.</li> <li>• Provide the possibility to either capture all results from the workshop or simply take them to their companies</li> </ul>		
<p><b>I.</b></p> <p><b>Analysis (Empathize)</b></p>	<p><b>1. Method entry point definition</b></p> <p><b>(time needed: 1h incl. case reading)</b></p>	<p>Aim</p> <ul style="list-style-type: none"> <li>- Clear definition/idea where the company stands at the moment in relation to digitalisation and in which direction it wants to go taking into account the overall company strategy;</li> </ul> <p>Methods/process</p> <p>a) Value Curve (Blue Ocean Strategy <a href="#">Blue Ocean Strategy Canvas</a> and <a href="#">“Strategic Landscape Analysis”</a> to identify the current strategic landscape and the future prospects of the</p>	<p>Whiteboard, metaplan wall, sticky notes (coloured), moderation cards, magnets</p> <p>As an entry point: Card game to get a better idea on what technology exist and can influence ones business model -&gt; this is currently under development by HSRT.</p>	

		<p>company in relation to the market, the customers, noncustomers, competitors.</p> <p>How to generally conduct this process:</p> <ol style="list-style-type: none"> <li>1. Let the participants read the case (10 min)</li> <li>2. Present &amp; explain the method (Blue Ocean Strategy), the “Strategic Landscape Analysis” template and the “Competence Analysis Template” after they have read the case, not too much information at the beginning before they know anything about the case.</li> <li>3. Participants draw their own blue ocean strategy diagram on a whiteboard/metaplan wall, define the competing factors and their value for the business case.</li> </ol> <p>y-axis: value scale</p> <p>x-axis: Competing Factors</p> <ol style="list-style-type: none"> <li>4. Participants complete the “Strategic Landscape Analysis” template.</li> <li>5. Participants complete the “Competence Analysis table” following the instructions from the <a href="#">Competence Analysis description</a></li> </ol> <p>b) If necessary: In case participants need further information on the business case</p>	<p>Tools:</p> <p><a href="http://strategycanvas.org/#/edit/dcGLAmyG1M">http://strategycanvas.org/#/edit/dcGLAmyG1M</a></p> <p><a href="#">Strategy Canvas (Blue Ocean Strategy)</a></p> <p><a href="#">Strategic Landscape Map template</a></p> <p><a href="#">Competence Analysis Template</a></p>	
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		<p>they can conduct a desk research on the case topic in parallel to the development of the blue ocean strategy and the completion of the “Strategic landscape analysis” and the competence analysis template participants.</p> <p>c) In parallel to the development of the blue ocean strategy canvas and the “Strategic landscape analysis” template a stakeholder map (incl. customers) will be developed on a separate board.</p> <p>d) Mark customer and partner/stakeholder with special colour; use different coloured sticky notes;</p> <p style="padding-left: 40px;">a. Partner/Stakeholders (yellow)</p> <p style="padding-left: 40px;">b. Customer (pink)</p> <p>e) Select customer groups to work with (1 customer group per team).</p> <p>Short break 5-10 min.</p>		
	<b>2. Customer and Value Definition</b>	<p>Aim:</p> <ul style="list-style-type: none"> <li>- Definition of the customer, understanding the customer(s) and their needs;</li> </ul>	Value proposition canvas should be started to be filled in on the white board and	a) Expert and customer/target group interviews to get additional insight on the

	<p><b>(time needed: 1h30)</b></p>	<ul style="list-style-type: none"> <li>- Definition of customer's pains, tasks, gains;</li> <li>- Synthesize the results per customer segment (customer profile);</li> </ul> <p>Methods</p> <ul style="list-style-type: none"> <li>a) Value proposition canvas (will be used and continuously be added throughout the process) <a href="https://strategyzer.com/canvas/value-proposition-canvas">https://strategyzer.com/canvas/value-proposition-canvas</a>  Fill in the template using sticky notes; prioritise/rank the different findings within jobs, gains, pains;</li> <li>b) Desk research to gather information about the customer;</li> <li>c) Interviews with potential customers depend on the case if it can be realised in the workshop session but it is an extremely important method to get better insight;</li> </ul> <p>One option is that the moderator takes the customer role and will be interviewed by the participants if a real situation is not possible</p>	<p>should be continuously filled in throughout the process</p> <p><a href="https://strategyzer.com/canvas/value-proposition-canvas">https://strategyzer.com/canvas/value-proposition-canvas</a></p> <p>Templates for <a href="#">persona development</a></p> <p>Whiteboard/Metaplan wall</p> <p>Different coloured sticky notes</p>	<p>topic/challenge/product</p> <p>b) Information gathering</p> <ul style="list-style-type: none"> <li>a. Conference participation</li> <li>b. Analysis and collection of existing experiences from the company itself</li> <li>c. Observation</li> <li>c) Customer journey description</li> <li>d) Role play</li> <li>e) Persona development, based on the feedback received from the different interviews; persona development</li> </ul>
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		<p>(<a href="https://designthinkingformuseums.files.wordpress.com/2013/04/cheat-sheet-1-interviewing.pdf">https://designthinkingformuseums.files.wordpress.com/2013/04/cheat-sheet-1-interviewing.pdf</a>)</p> <p>Ideally, before the lunch break, participants define 2 questions per customer profile including jobs, gains, pains that can be answered in the brainwriting session.</p>		<p>helps to better understand a (potential) customer's needs and also identifying its hidden needs.</p> <p>Keep the completed persona template on the whiteboard.</p> <p>After having developed the persona, development of three needs-oriented "how might we...?" questions to solve the overall challenge which needs to be answered in the brainwriting part under 3. Ideation. Be aware to</p>
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				<p>formulate only understanding questions. Solutions should not be discussed.</p> <p>Remark:</p> <p>In the workshop setting at least one persona should be developed.</p> <p>Highlighting towards the workshop participants that in real case they should develop as many personas as target groups exist and complete the business model canvas respectively.</p> <p>Use different coloured sticky notes in case you identify specific needs which are</p>
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				<p>only relevant for a specific customer group/segment.</p> <p>In case more personas will be developed key questions to solve the overall challenge should also be developed for them to be included in the brainwriting session within the ideation phase.</p>
II. Design (cost-benefit analysis)	<b>3. Ideation</b>  <b>(time needed: 1h)</b>	<p>Aim:</p> <ul style="list-style-type: none"> <li>- Development of innovative digital ideas that fit to the customer profile (first two listed jobs)</li> </ul> <p>Before participants start with the ideation phase let them first present their results from the first phase to each other.</p>	<p>Post its, whiteboard/metaplan wall,</p> <p>Template for <a href="#">brainwriting</a></p> <p>Timer</p>	<p>a) Moodboard (additional possibility)</p> <p>b) Storytelling (additional possibility)</p> <p>c) Use case diagram -&gt; template still</p>



		<p>Method:</p> <p>a) Brainwriting using the respective template (detailed information can be found on the template for brainwriting)</p> <ul style="list-style-type: none"> <li>- The first two jobs will be selected per customer profile for which the participants should develop three ideas corresponding to the defined gains and pains;</li> </ul> <p>2:00-2:30 min per round</p> <ul style="list-style-type: none"> <li>- Templates will be added to the customer profiles on the wall;</li> <li>- 3 points shall be awarded to the different ideas in order to select the best ideas;</li> <li>- Best three awarded ideas will be selected.</li> </ul> <p>b) Brainstorming on the best three selected ideas with sticky notes (what would Mrs. Merkel, Steve Jobs... do?); 5 min/idea; quantity before quality! Ideas will not be criticised or discussed in this phase</p> <p>c) .....</p>		needs to be developed (additional possibility)
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	<p><b>4. Selection of best solutions</b></p> <p><b>(time needed: 30 min.)</b></p>	<p>Aim:</p> <ul style="list-style-type: none"> <li>- Select the best idea for a digital innovative business model addressing the selected customers' profile and company's added value;</li> </ul> <p>Method</p> <p>a) Discussion and selection of idea for prototyping</p> <p>Is the idea innovative? Is it really a new digital idea?</p> <p>Is the idea feasible from technical and economic point of view (discussion on cost-benefit analysis)?</p> <p>Can also be a mixture of the different ideas;</p> <p>Interim-result: Formulating the concrete idea in a slogan to be prototyped;</p> <p>b) ...</p> <p>Remark:</p> <p>After having selected the best solution to be further developed one team member should take care on process cost calculation (to be integrated on the learning platform);</p>		
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		During the face-to-face training: hypothetical cost calculation will be made available, with which the team will work. The trainer explains the aspect of process cost calculation within the innovation phase.		
	<b>5. Prototyping</b>  (also including short Testing?)  (time needed: 30 min)	<p>Aim:</p> <ul style="list-style-type: none"> <li>- Development of a first prototype reflecting the defined slogan to make it haptical and to better understand it and test it;</li> </ul> <p>Method</p> <ul style="list-style-type: none"> <li>a) Mock-up</li> <li>b) SAP Scenes <a href="https://experience.sap.com/designservices/approach/scenes">https://experience.sap.com/designservices/approach/scenes</a></li> <li>c) Role play</li> <li>d) Lego</li> <li>e) Modelling clay</li> <li>f) All sort of handicraft material</li> </ul>	<p>Everything that is needed to do handicraft work</p> <p>SAP Scenes, Lego, clay, all sort of handicraft material</p> <p>Noun project <a href="https://thenounproject.com/">https://thenounproject.com/</a></p>	

		<p>g) Flowchart, type of diagram that represents an algorithm, workflow or process, showing the steps as boxes of various kinds, and their order by connecting them with arrows. This diagram representation illustrates a solution model to a given problem.</p> <p>h) ....</p> <p>Remark:</p> <ul style="list-style-type: none"> <li>• Provide and explain all kinds of materials for prototyping and do not put any restrictions on the participants by specifying one way of prototyping. This will limit the space of ideas / visualisation.</li> <li>• When using digital mockup tools, provide support on how to use it for visualising ideas</li> </ul>		
	<p><b>6. Business Model Canvas</b></p> <p><b>(time needed: 1h)</b></p>	<p>Aim:</p> <ul style="list-style-type: none"> <li>- Summarising all relevant results in the business model canvas also in relation to cost structure and revenue stream to see if the new digital business idea really contributes to the added value;</li> </ul>	<p>Metaplan wall/whiteboard</p> <p>Business model canvas (A0)</p> <p>Different coloured post its</p> <p>Lean entrepreneurship schemes (key questions)</p>	

		<ul style="list-style-type: none"> <li>- Drafting a first draft of the roadmap to initiate the transformation phase;</li> </ul> <p>Method:</p> <ul style="list-style-type: none"> <li>a) Completing value map as part of the value proposition canvas (matching between customer profile and value map);</li> <li>b) Business model canvas (BMC);</li> </ul> <p>Transferring the main results of the value proposition canvas into the BMC;</p> <p><a href="https://strategyzer.com/canvas/business-model-canvas">https://strategyzer.com/canvas/business-model-canvas</a></p> <ul style="list-style-type: none"> <li>c) In addition to listing the key partners in the respective fields participants should draw a network of key partners outlining the specific relations to the company (e.g. partner X offers software to the company, partner Y supports the company in IoT aspects).</li> <li>d) Prototype and Digital Business Model testing:</li> </ul> <p>In workshop setting: Testing the Digital Business Model (and the prototype) from the perspective of</p>	<p>Budgeting, Activity Based Costing, cost – benefit analysis/process cost calculation template</p>	
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		<p>the different players within the Business Model Canvas (key partners);</p> <p>In real life situation: Test it with your potential customers and partners (see methods on the right), keep getting feedback during the further development process.</p> <p>e) Next steps in the company process: Defining first roadmap draft for transformation phase, e.g. defining relevant measures and concrete activities to realise the measures in relation to change management linked to a timeline respecting the testing results.</p> <p>f) Positioning the new digital business model in the blue ocean strategy canvas: Each team adds its new digital business model into the initially drafted blue ocean strategy to reflect where the new business model stands in comparison to the old, the competitor's business model and how it modifies the previous business model;</p>	<p>Testing tools/method</p> <ul style="list-style-type: none"> <li>• Five Why's question</li> <li>• NABC Pitch (Need, Approach, Benefit, Competition)</li> <li>• MVP (Minimum Viable Product)</li> <li>• Osterwalder, <a href="https://assets.strategyzer.com/assets/resources/testing-your-business-model-a-reference-guide.pdf">https://assets.strategyzer.com/assets/resources/testing-your-business-model-a-reference-guide.pdf</a></li> </ul>	
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## 4. Transformation Phase

Within the transformation phase the company needs to deal with the sustainable implementation and realisation of their digital business model idea developed during the innovation phase. This requires on the one hand the application of new structures and organisational processes such as iterative, interdisciplinary working processes and on the other hand to equip their employees with new skills and competences to involve them actively in the transformation process. During the transformation phase, DIGITRANS will offer SMEs assistance by providing them guidelines and raising their awareness on the importance of proper change management mechanisms as well as on the creation of digital culture elements within the organization. A vivid connection will be established between the method framework and the blended learning training concept and the e-learning material to be developed in WP6.

Another important part of the transformation phase will be the Digital Business Model Workshop which will be offered to the companies who already have a concrete digital business model idea. The workshops will be offered in the new established project partners' incubator spaces.

### 4.1 Structure of the Transformation Phase

The following table gives an overview on the structure of the transformation phase. The transformation phase will mainly be covered by online training material offered on the DIGITRANS e-Learning platform which will guide the SMEs through this phase.

#### *Transformation*

Introduction into the transformation phase
Step 1: Create a vision of your future digital business model based on the results of the DIGITRANS workshop (Innovation part)
Step 2: Roadmap development/refinement (interdisciplinary team)
Step 3: Implement a digital leadership framework
Step 4: Bring your employees on board
Step 4 a: Communication strategy (listen and communicate)
Step 4 b: Qualification of your employees (Organise trainings for your employees on digital competences, digital literacy, new methods) to realise your digital business model
Step 4 c: Reward system
Step 5: Implement open, interdisciplinary team structure
Step 6: Implement new working processes/culture
Step 6a: iterative working processes (prototype, share, get feedback, refine/improve...)
Step 6b: agile working processes
Step 6c: open collaboration (internally & externally)
Step 7: Evaluation/Lessons Learned of the transition process for your digital business model
Step 8: Revise your vision/strategy of your digital business model

For the whole DIGITRANS method framework it is crucial to progress iteratively not only within one phase but also between the innovation and the transformation phase. This means that feedback loops are highly recommended and after each step it should be considered to jump back for changes or adaptations. This will also support SME to become more agile and to react more quickly on new developments which is essential in remaining competitive in our digital economy that is changing so fast.