

ViNN:Lab

Systematic Development of Solutions in the Creative Lab

ANALYSIS ■

In order to develop a beneficial solution, it is required to systematically analyze the respective initial situation, involved parties, drivers and barriers, technological trends, social change as well as expectations of the society.



In the analysis approach, we are using a set of different methods. Methods include business and environment analysis, trend radars, technology boards, scenarios as well as observations and participatory methods. The analysis helps us to understand the roles, needs and different opinions of the involved parties, users, and affected environment.

IDEAS GENERATION ■

In consideration of the information gained from the analysis, an in-depth process to generate ideas begins. The aim of the process is to develop the best possible solution for the specified

field of problem. Different methods are used in the ideas generation process. Methods ranging from provocation approaches like „What-if...?“-questions, different variations of brainstorming, visualization techniques and storytelling methods, to scenarios. A mix of methods is used tailored to the problem. In the next step, the ideas are going to be systematically clustered and evaluated. Usually, three to four different solution ideas are developed in this process.

CREATION ■

During this phase, we are testing and revising the ideas step by step. For that purpose, we gather additional information regarding the field of investigation. Ideas are going to be amended and combined to solution concepts.



ITERATION ■

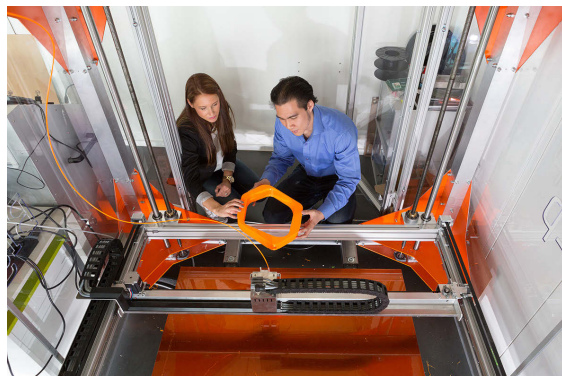
We develop prototypes and examine how they are perceived by potential users. In the process, we are going through different phases. Before the finalized concepts are going to be

presented, we elaborate the concepts, do prototyping and execute two to three test runs.



RAPID PROTOTYPING ■

Depending on the requirements, our prototypes have a range between simple process descriptions, to demonstrators at 1:1 scale which can be for example realized by 3D-printing.



Our prototype equipment includes:

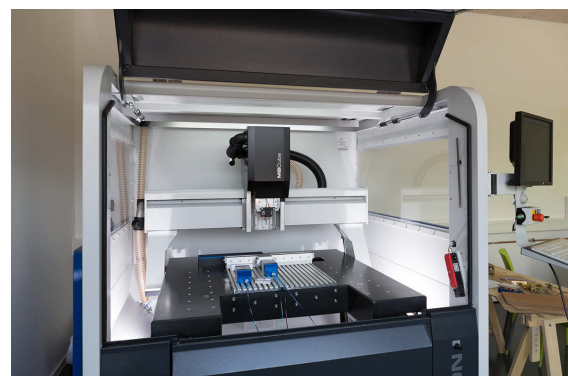
- **Additive manufacturing** FDM 3D-printer up to a volume of 1,3m³; layer resolution 100µm – 1mm for the development of complex prototypes and models.
- **Subtractive manufacturing** Triaxial portal milling cutter for building highly precise work pieces made out of metal and plastic.



- **3D-scanning** Real time geometry- and texture scanner for digitalization; accuracy up to 50µm
- **Laser cutting** Cutting and milling of organic and non-organic materials, processing vector and raster data.



In the ViNN:Lab, we use precise, but relatively simple to use devices, which allow to visualize features, make tests and evaluations. Therefore, the Proof-of-Concept is quickly feasible in the lab environment.



COLLABORATION ■

Depending on the problem, different types of collaboration are possible.



You want to further develop an existing product or a specified application case? Or maybe you want to offer something completely new? You want to review your current business model and learn about opportunities for new business areas, spin-offs or start-ups?

In the ViNN:Lab, we adapt the methodical approach to the respective context and problem. In cooperation with you, we develop a solution for your company and organization.



SCENARIO-BASED BUSINESS MODEL DEVELOPMENT

The aim of the scenario-based business model development is (1) the evaluation of the current situation of the company, (2) the identification of influential factors which could initiate a change of the business situation, (3) to discuss trends and scenarios which help to visualize possible future developments, (4) the proactive search of opportunities and possibilities with the help of the scenarios and (5) the identification of specific measures for a strategic growth plan. This strategic approach allows to review the current business model and enables its further development. Next to the reflection of the complex and dynamic business environment, it allows to perceive opportunities as well as risks of the company which have to be understood and used as basis for making strategic decisions for growth.

ESTABLISHMENT OF STATUS QUO ■

In this step, different methods of business review are used. The initial point is suitable for the visualization of the business model with the help of the Business Model Canvas. Furthermore, it is possible to make a SWOT-, market- and competitor analysis. The decision which suitable methods are going to be used for the local determination often depends on the available resources and information for this process. The visualization of the business development with the help of the Business Model Canvas can be realized within a relatively short time. At the same time, the Business Model Canvas

eliminates ambiguities and helps to create a common understanding within the management team for the chosen business model.

On this basis, it is facilitated to make a SWOT-Matrix which also contains relevant information of the market and competitors.

IDENTIFICATION OF DRIVING FACTORS ■

Information on new developments and trends in the business environment are highly relevant. It enables to recognize opportunities and risks at an early stage, to develop a proactive strategy and to identify new business opportunities. In this step, the focus is on the analysis of typical influencing factors, but also on the analysis of megatrends which can initiate strategic decisions.



The area of influence, with all its influencing factors, can be in the range of economic market forces like the intensity of competition, the entrance of new competitors or the cooperation ability of companies. Additional areas of influence are social and cultural trends like the attitude of customers regarding sustainability and social issues or demographic developments.

An important area of influence is very often the technological change. Different factors are summarized in this

area of influence like the pace of the technological development, usability-aspects, substitution technologies or the performance of technologies. Other areas of influence which are very often dealt with, are political and regulatory changes. Depending on the organization/company, other areas of influence and corresponding factors are possible.

DEVELOPMENT OF PROJECTIONS AND SCENARIOS ■

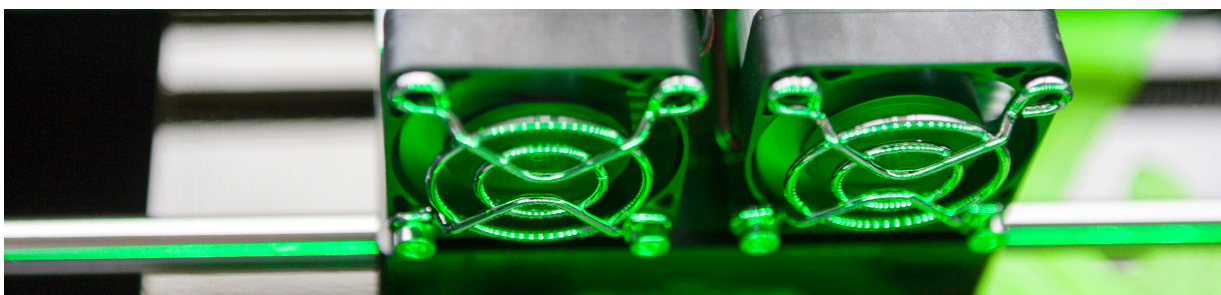
In this step, possible **projections** are developed based on the identified key factors. The described developments in the megatrends are also included in the projections. Therefore, a scenario can be characterized by effects of the shared economy or by new forms of work. It also can show the consequences of the demographic change as a key element.

The visions help to develop a broad **understanding of possible future developments** and a sensitivity for **business opportunities** and risks.

Different scenarios which describe a possible projection of the future, are developed by clustering the projections. The development of the scenarios on the basis of the projections can be for example realized, a **software-based consistency analysis** in the ViNN:Lab or within the framework of workshops.

DEVELOPMENT OF STRATEGIC OPTIONS AND MEASURES ■

In the last step of the development of the scenario-based business model, the current business model is examined against the backdrop of the scenarios. Therefore, it is recommended to look for key issues in each scenario, in order to identify opportunities, possible risks as well as to develop corresponding measures. The analysis of the business models on the basis of the scenarios allows **developing strategic options** as a basis of concrete measures which have to be prioritized as well as operationalized by project overviews and work packages.



INNOVATION CAMP

INTERDISCIPLINARY NATURE ■

The ViNN:Lab, together with the Research group for Innovation and Regional Development organize innovation camps. Depending on the problem, experts from different disciplines and students of UAS Wildau from different fields of study are involved.

ViNN:Lab offers the space and opportunity for interdisciplinary work for collaborative development processes and supports, as a creative lab, the identification of application options for new technologies.

VARIETY OF METHODS ■

Within the framework of the innovation camps, new ideas for innovative approaches of products, services and technologies are developed, determined by the application of methods of the innovation- and marketing management. The focus of the interdisciplinary project teams is on the development of solutions with a high level of innovation. This is supported methodically by the development and analysis of concept ideas. Methods include Design Thinking, Creativity Methods, Desk-Research, Feasibility Check, Rapid Prototyping or Eye Tracking.

TYPICAL PROCEDURE ■

Innovation Camps can be organized into the distance and attendance phase. The distance phase is used for research of topic specific facts and for exchange of knowledge between all participants. The customer defines

specific aims and is available for questions during the distance phase. Usually six weeks are between the kick-off meeting and the attendance phase. The attendance phase is a 3 to 5 day block course which is used for the intensive development of solution ideas.



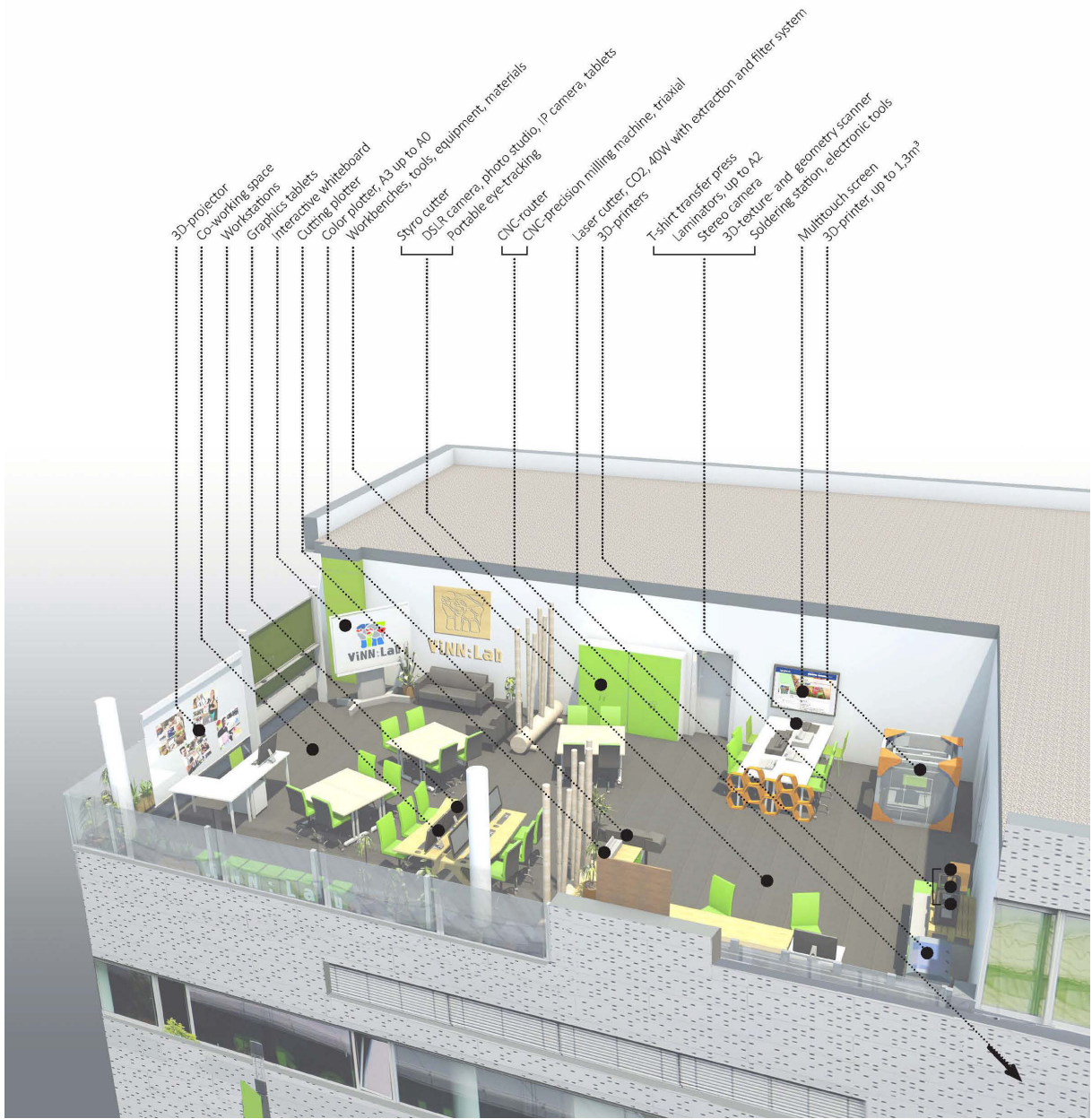
The one-week attendance phase organizes into the five following fields.

Analysis	<ul style="list-style-type: none">■ Presentation of the results from the research phase■ Discussion and merge of the results
Idea generation	<ul style="list-style-type: none">■ Ideas- / Creative phase - creative methods■ Evaluation of ideas/ selection of ideas
Prototyping	<ul style="list-style-type: none">■ Visualization■ Rapid Prototyping
Testing & Modification	<ul style="list-style-type: none">■ Lead-User Tests with potential groups of customers■ For example, use of eye-tracking for prototype testing
Presentation	<ul style="list-style-type: none">■ Presentation of the concept profiles■ Delivery of management summaries

EXPECTED RESULTS ■

After the Innovation Camps, the company receives accordingly to the target objective, visualized concepts (prototypes), analyzed usability-tests, a business models-, services- or product ideas portfolio in the form of a management summary.

ViNN:Lab Gadgets





University of Applied Sciences Wildau ■

You are welcome to visit us on **Open Lab Day**, Wednesday between 9am and 7pm. Learn more about us as well as our infrastructure and methodical approaches.



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