

Health Product Wheel

Guide and Toolbox for Successful Product
Development in the Healthcare System



The Health Product Wheel

The Health Product Wheel lets you visualise and work on complex topics related to product development in the healthcare sector.

It helps you consider all relevant aspects, better understand interrelationships, and guide your product to success.

Contents

1 Introduction

- 5 The Health Product Wheel:
Both a Guide and Method
- 6 The Contents
- 7 How It Works
- 8 The Process

2 Sections of the HPW

- 10 Section 1: Initial Situation
- 11 User Groups
- 12 User Motivation
- 13 Problem
- 14 Section 2: Idea
- 15 Healthcare Goals
- 16 Validation
- 17 Value Proposition
- 18 Section 3: Resources

19 Team and Skills

20 Partners and Networks

21 Solution

22 Section 4: Market

23 Hurdles, Regulations and Market Access Barriers

24 Financing

25 Competition

3 The Stakeholders

27 What Information is Relevant for Whom?

28 Users

29 Partners

30 Investors

31 Insurance Funds

32 Elevator Pitch

33 Interrelationships Between the Sections

34 Interrelationships Between Core and Context

35 Interrelationships Between Centre and Core

4 Supplementary Methods

37 Overview of Methods

53 Customer Segments

54 User Motivation

55 Value Proposition

56 Distribution Channel

57 Relationship and Communication with the Users

58 Business Segments

59 Motivation of Business Partners

60 Benefits for Business Partners

61 Partner Resources

62 Relationship and Communication with the Partners

63 Key Resources

64 Activities

65 Cost Structure

66 Revenue Streams

1

Introduction

What exactly is the Health Product Wheel? How can it help you with your product development and innovation?
What is the ideal way to use it?



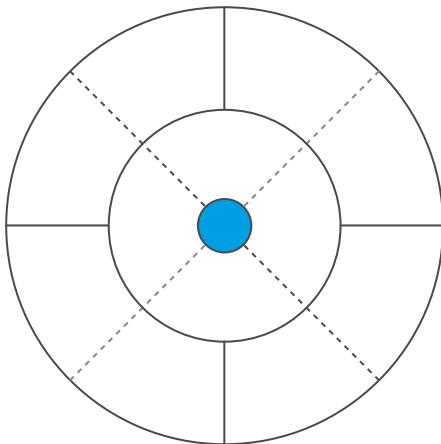
The Health Product Wheel: Both a Guide and Method

The Health Product Wheel supports you on the path to developing an innovative health product Product innovation is multi-faceted and depends on various factors. It has to meet the needs of the user groups and at the same time, in the context of large companies such as TK, it can have an impact on their processes. These complex dimensions and interrelationships are visualised by the Health Product Wheel.

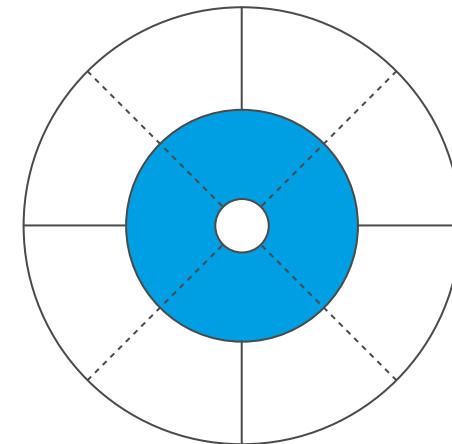
Your product is at the front and centre of the wheel. You can gradually fill in the other fields as you progress. If you do not have some of the information at hand, no need to worry! We will help you expand your wheel. Section 4 introduces suitable methods for each field that you can use to find what you are looking for.



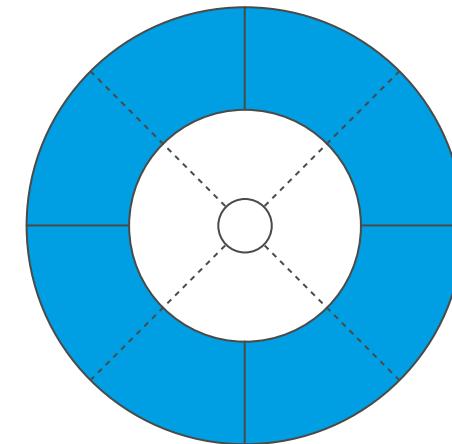
The Contents



Centre Your product is at the front and centre of the Health Product Wheel.



Core The core comprises the four key aspects of your product.



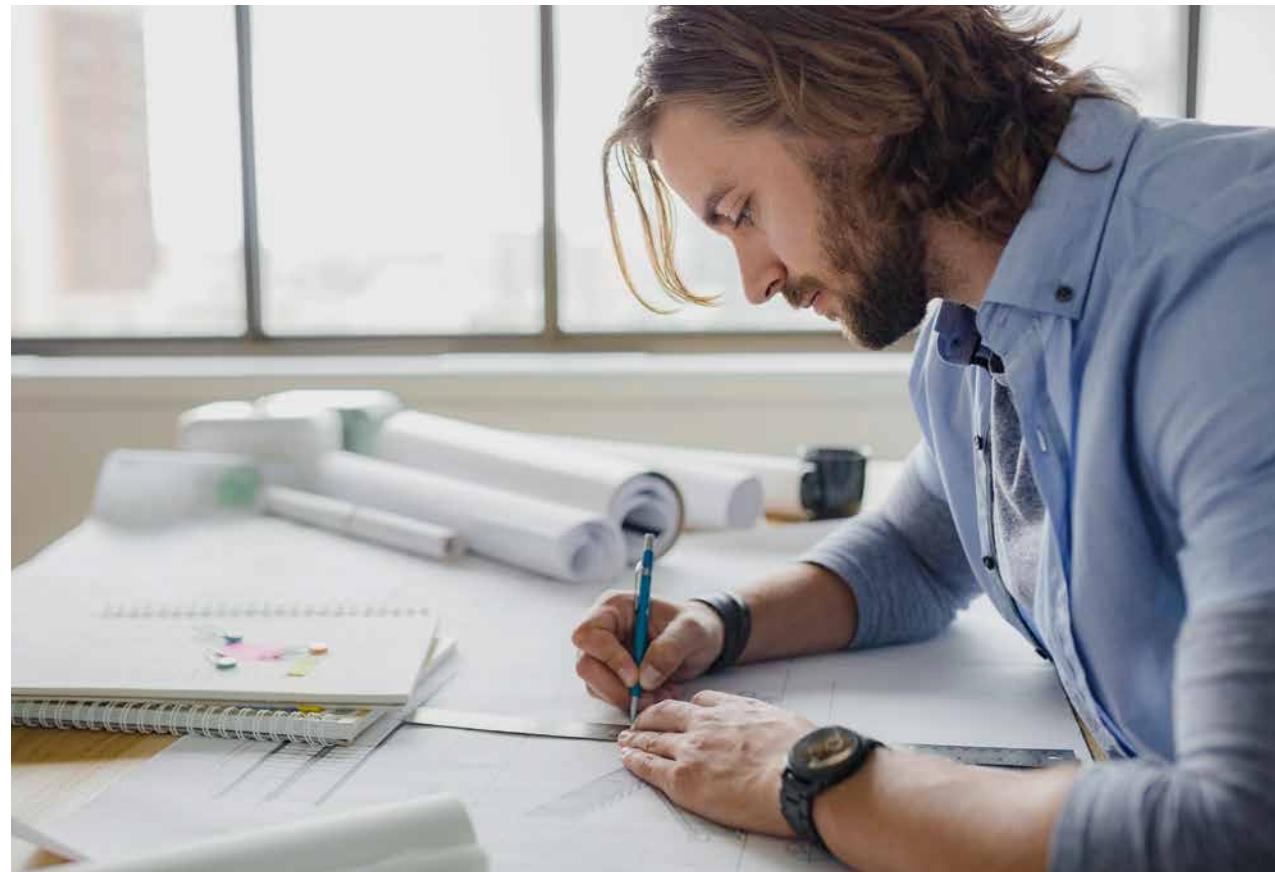
Context The context describes all factors that have an influence on the core of the product. It is essential to understand the context if you want to develop a product that can succeed and thrive on the market.

How It Works

Hang the Health Product Wheel on the wall For the best results, draw the Health Product Wheel on a large sheet of paper, pin it to the wall or a pinboard and keep it hanging there. That way, you can always see your progress at a glance.

Get your materials ready Gather your pens and sticky notes together: only one thought/idea/aspect per sticky note!

Begin! Go through the sections one by one. You will probably find that some questions will be easy to answer, while others may be more difficult. That is why we've provided methods to assist you in each section. Once you have a completed wheel, you will be well-prepared to successfully develop and market your product.



The Process

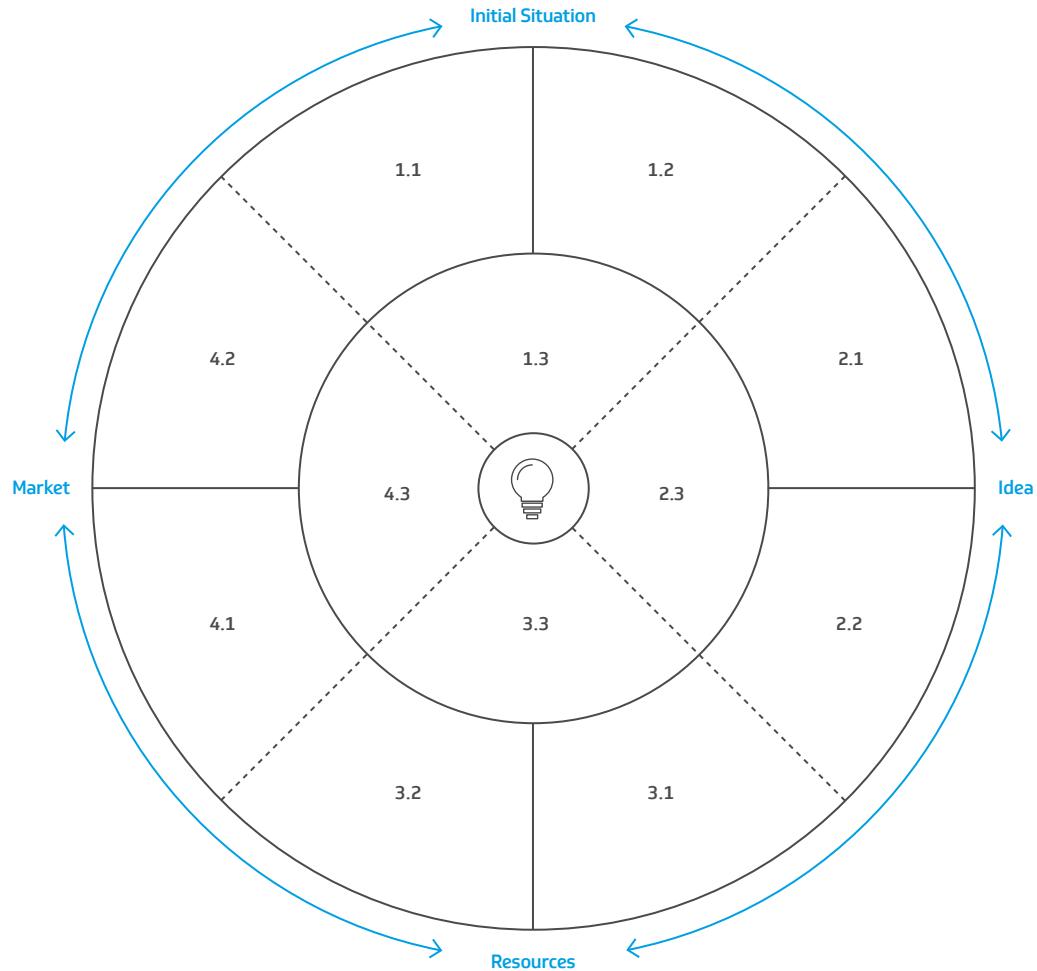
How to Use the Health Product Wheel

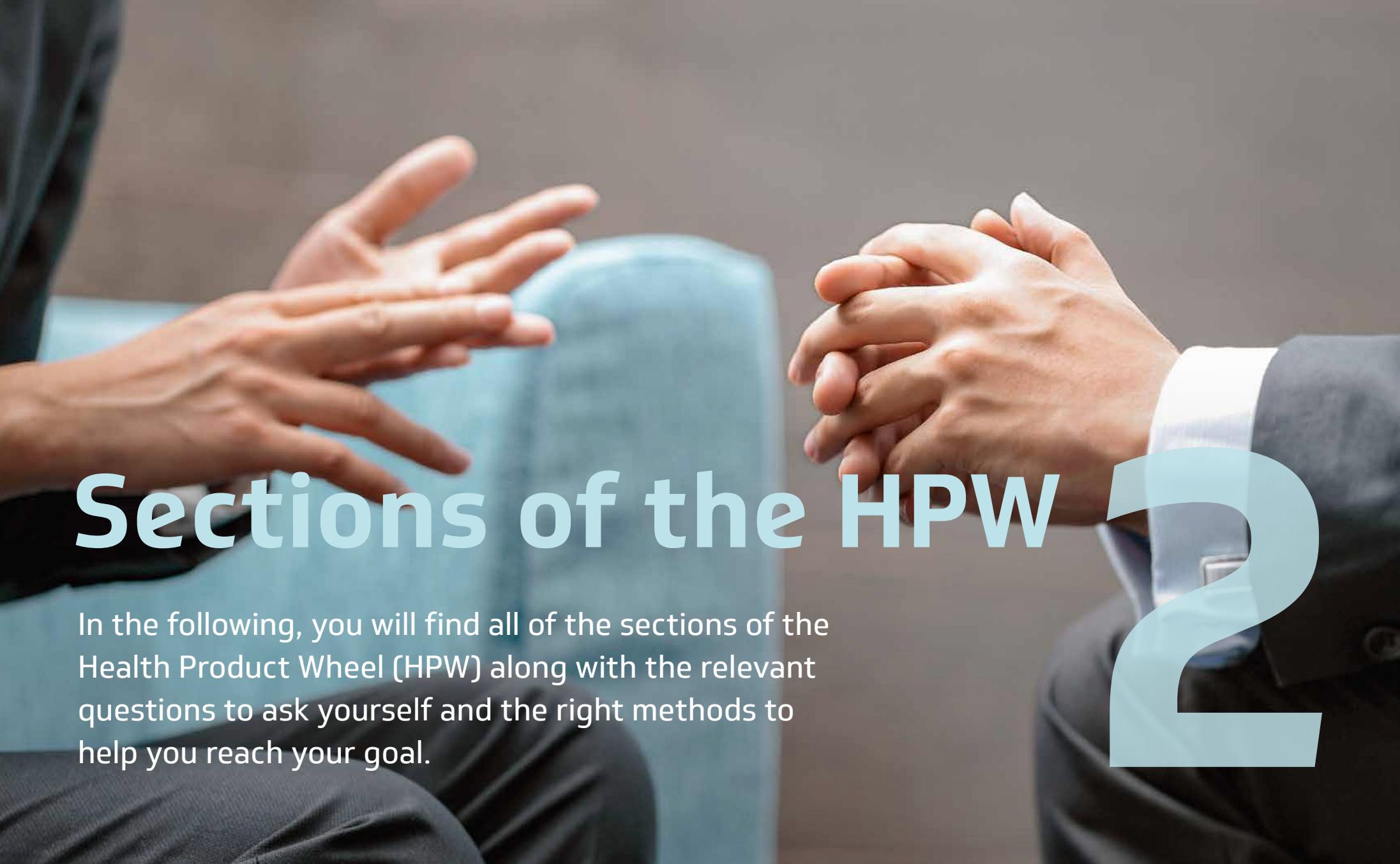
1. From context to core For each section, the best approach is to start from the outside in: Work on the context first and then move on to the core.

Example In the ‘Initial Situation’ section, start with 1.1 User Groups, then move to 1.2 User Motivation, and after that, work on 1.3 Problem.

Tip The Health Product Wheel is a continuous loop. Using the knowledge gained from the previous go-through, you can repeat the circle at any time to iteratively reach the best result.

2. Move clockwise Start with the initial situation and work your way clockwise through the idea section, the resource section, and then to the market section.





Sections of the HPW

2

In the following, you will find all of the sections of the Health Product Wheel (HPW) along with the relevant questions to ask yourself and the right methods to help you reach your goal.

Section 1: Initial Situation

The initial situation is the foundation for your product and its success. All further steps are based on this.

Examining the initial situation ensures that you will be solving real problems for your user groups.

Sometimes, however, things don't go according to plan A. Maybe you have an idea for a product or the use of a certain technology but did not consider the initial situation first? In that case, you should definitely tackle this section as the next step to ensure that your product actually addresses the needs of real users.

For this section, ask yourself the following questions:

- What user groups will use my product?
- What motivates my users?
- What problems do my users have?



User Groups

Who will use your product? The goal of every product innovation should be to provide added value for a defined user group. Identifying relevant user groups thus plays a key role in the product development.

For example, once the user group(s) are identified, product requirements can be developed, sales channels can be specified, and potential sales volumes can be determined.

Use these questions as a guide:

- Who will use the product?
- Which user group is the most important, and why?
- Are there primary and secondary user groups?

Useful methods:

- User research
- Persona
- Empathy map



User Motivation

Why will your product be used? Each user group has its own motivations for using a product. These are influenced by personal factors such as worry, fear, environment, safety, pain, standard of living, fun or pleasure, for example.

Understanding the motivations of the users and incorporating them in the product innovation process will help you define the requirements for the product.

Use these questions as a guide:

- What or who motivates the users to use the product?
- What effect should the product have on the users?
- What benefits are the users expecting?

Useful methods:

- User research
- Persona
- Empathy map
- Need statements



Problem

What problems do the user groups have? The aim of a product innovation is to solve problems for the user or to help users solve the problem themselves.

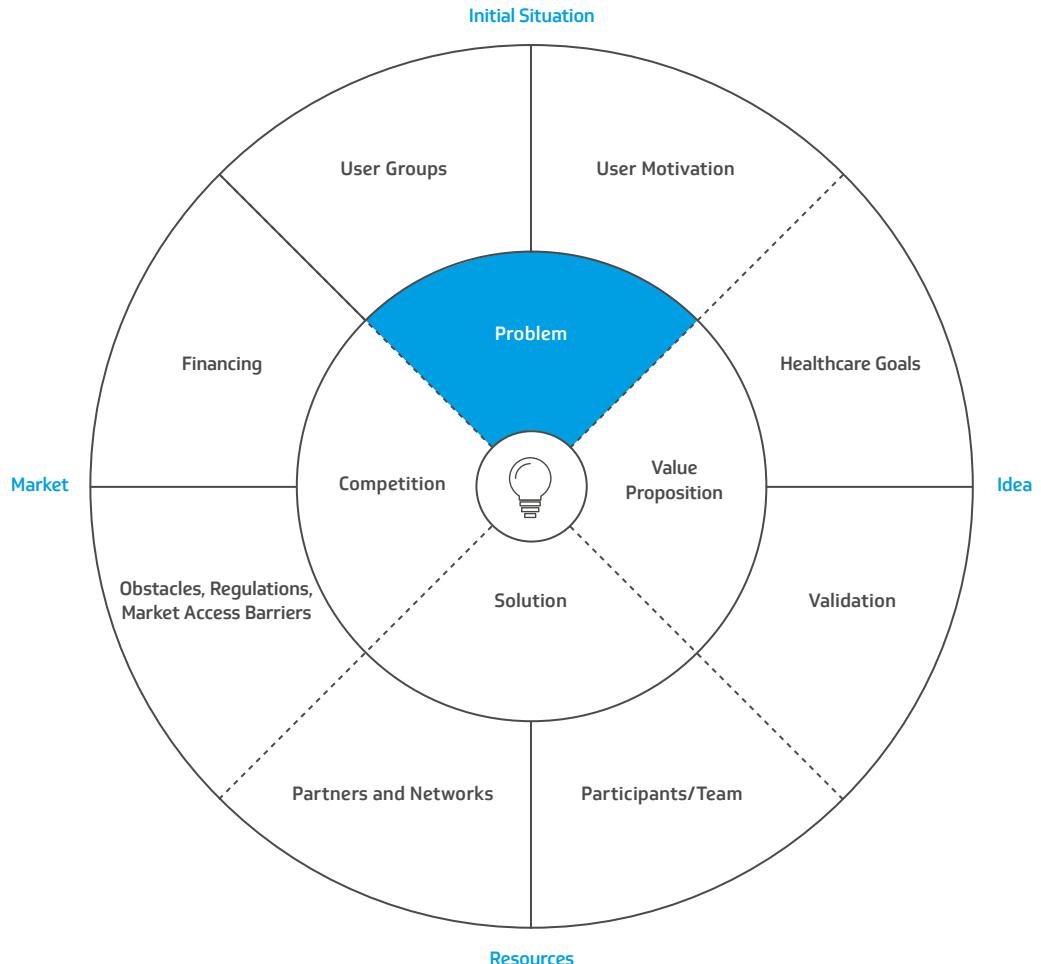
However, problems are not always obvious. They have to be identified and clearly described. Triggers such as physical pain or lack of knowledge on the part of the user need to be explored, closely examined and prioritised. Once the problems are defined, they can be used as the basis for developing solutions.

Use these questions as a guide:

- What problems are preventing users from achieving their goals?
- What problems will the product innovation solve?
- Which problem is the most serious?

Useful methods:

- User research
- Problem statement
- User journey map
- As-is scenario



Section 2: Idea

The idea summarises the value of your product.

What value does the product have for individual users in particular and for the healthcare system in general?

This section describes the value proposition, which has to succinctly convey the benefits of your product. It also addresses the validation of the healthcare goals that will be the benchmark for your product.

For this section, ask yourself the following questions:

- What healthcare goals is the product intended to achieve?
- How will the achievement of the healthcare goals be validated?
- What improvements will the product provide to the users?



Healthcare Goals

What goals do you need and want to achieve with your product? In order for a product innovation to be established on the healthcare market, it must have an impact with respect to optimising care in the healthcare system: for example, to increase quality, facilitate cross-sector care, lead to cost savings, or have an influence on an issue of public relevance.

Therefore, it is essential to define, pursue and meet healthcare goals to ensure the efficient use of resources.

Use these questions as a guide:

- What advantages does the solution create in terms of cross-sector care?
- What improvement does the product create for the users?
- Which healthcare goal is pursued by the product innovation in the short, medium and long term?
- What are the social benefits of the product?

Useful methods:

- ZEIG analysis
- KPI canvas
- To-be scenario



Validation

How will you validate the achievement of your healthcare goals? Before a product or healthcare measure can be established on the market, its capability and validity must be assessed and verified based on defined criteria.

Indicators that can be used to assess and verify the impact of products and services are measured on the basis of standards, behavioural changes, risk mitigation, and certifications.

Use these questions as a guide:

- How will the achievement of the healthcare goals be validated?
- What seals of approval and quality seals have to be obtained in order to validate quality classes?
- Do users realise the added value of the product?

Useful methods:

- Usability test
- Prototyping



Value Proposition

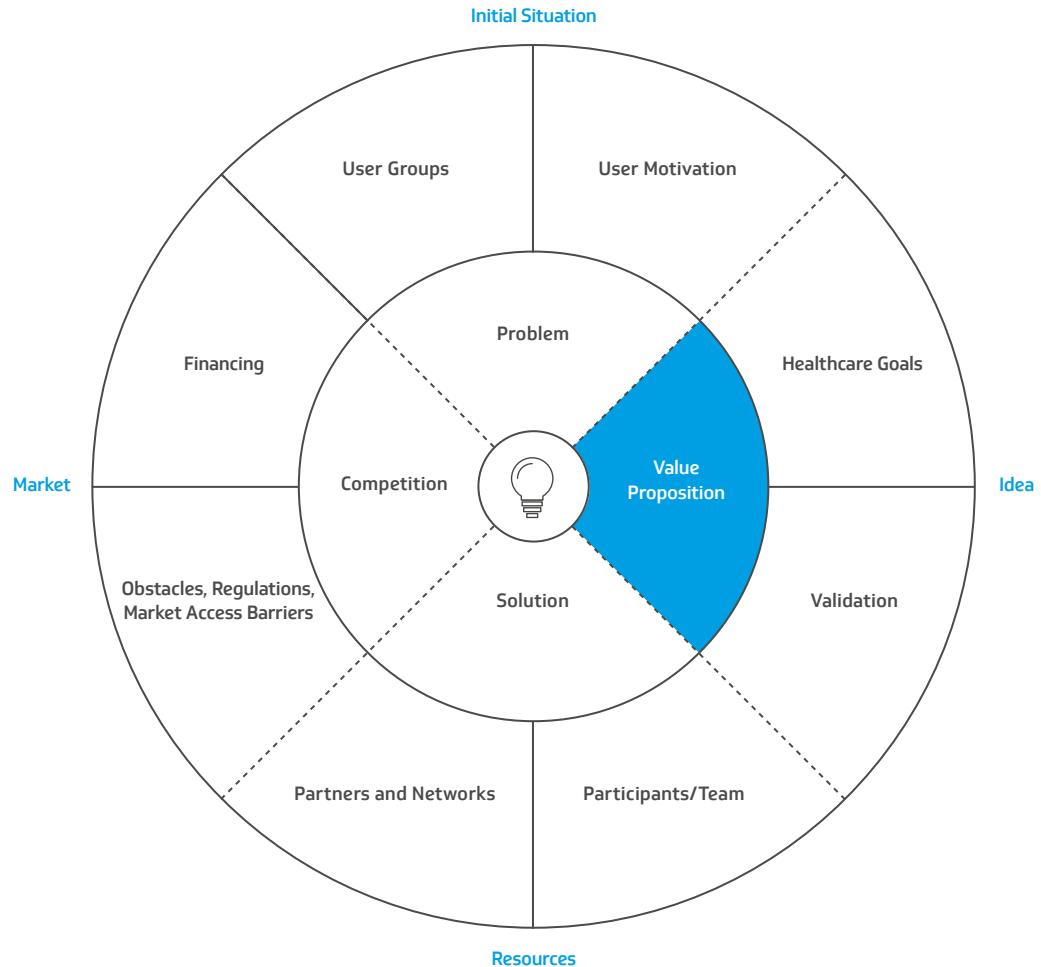
What added value does your product offer? How do you capture the uniqueness of your product? The value proposition must clearly express what benefits it offers users and the healthcare market. The value proposition is derived from the healthcare goals and can be measured by key performance indicators. Examples of targeted healthcare goals can be to reduce the amount of medication taken or raise patient awareness of effective behavioural changes (and thus potentially save on treatment expenses).

Use these questions as a guide:

- What advantages and benefits does the product offer the users?
- What advantages and benefits does the product offer the healthcare market?
- How does the product influence the users' behaviour?
- How does the product help the users achieve their goal?

Useful methods:

- Problem statement
- ZEIG analysis



Section 3: Resources

There is no product development without the right skills and partners

In this section, it is time to think about how to transform the results from the ‘Initial Situation’ and ‘Idea’ sections into a feasible solution and what skills you need to make your solution a reality. For example, do you need someone with specific technical skills? Should you seek strategic advice? Who should be permanent members of the team and who is only needed on a temporary basis?

In addition, it is also important to not only to engage with the core team, but also with the extended network and potential partners. Product development is a team sport! Your product will only be a success if you have the right people at your side.

For this section, ask yourself the following questions:

- Who does the core team comprise and which skills are (still) lacking?
- Who are already our partners and who do we (still) need?
- What measures do we use to solve the users’ problems – taking the healthcare goals into consideration?



Team and Skills

Who and what do you need internally in order to develop the solution? The people responsible for the product form the core team and are considered to be the drivers of the innovation.

The core team is responsible for the design and coordination of the development process and thus pursue the objectives of your company. To be successful, your team needs to have the appropriate skills. Making a list of skills facilitates decision-making processes and helps you identify any resources that may still be needed.

Use these questions as a guide:

- Which team members are already available?
- What expertise is (still) needed?
- Which competencies and skills are (still) lacking?

Useful methods:

- Stakeholder map
- Health business model canvas



Partners and Networks

Who and what do you need to move forward? You need measures and means (resources) to drive the creation and development of your idea to the finished product. Accessibility to resources is crucial for the success of your product.

To identify the product and business potential, it is useful to describe the resources that are already available as well as those that are lacking. These include cooperation partners, expertise, laws, infrastructure, and technology.

Use these questions as a guide:

- Which cooperation partners are relevant?
- Who could 'open doors' for us?
- Which partners are available, which ones are not yet?
- What other resources (for example people and infrastructure) are still needed?

Useful methods:

- Stakeholder map
- Health business model canvas



Solution

What solution is the answer to the users' problem?

The product, process or service serves as a solution for the user. Describing the solution will enable you to identify a strategic orientation and thus potential conflicts of goals.

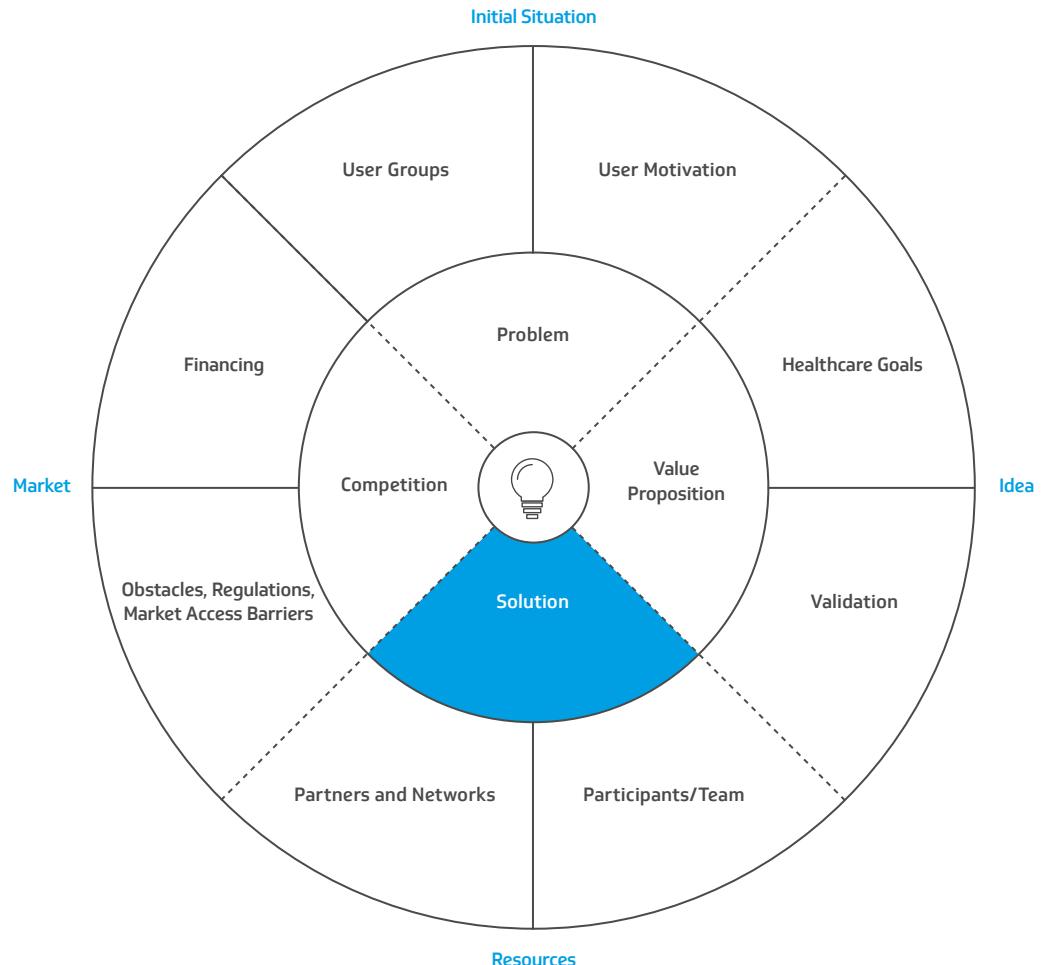
The advantages and benefits for user groups, such as providing options for action or the ability to obtain information very quickly, must be evident. Solutions can be in the form of hardware, software, services, etc.

Use these questions as a guide:

- Which solution helps the users to achieve the goal?
- What exactly does the solution look like?

Useful methods:

- Storyboard
- To-be scenario
- Ideation methods
- Service blueprint



Section 4: Market

The market creates the framework for your product and its success.

To be accepted by users, your product has to stand out from the competition, which means that positioning in the market and highlighting its uniqueness are essential for success.

However, positioning is only part of the market, there are also hurdles, the legal framework and other market access barriers – i.e. risks that you need to assess before launching your product on the market.

Another important factor is money: If you want to survive on the market in the long run, you have to decide how you want to finance your product early on.

For this section, ask yourself the following questions:

- How does the business model look?
- What are the risks?
- Where should you position your product on the market?



Hurdles, Regulations and Market Access Barriers

What restrictions do you need to consider? Placing a product on the market is a major challenge and is hindered by market access barriers. These types of hurdles can include legal and political restrictions, for example.

Identifying and listing the barriers can give you a clear picture of the obstacles that need to be overcome. This can be helpful when devising a market access strategy and estimating the costs of it.

Use these questions as a guide:

- What are the relevant challenges and market access barriers?
- What legal, political or social framework conditions have to be observed?

Useful methods:

- Benchmarking



Financing

How will you finance your product in the short, medium and long term? Product innovations require financial resources. For a good product development process, it is important to understand where these financial resources come from as well as the terms and conditions attached to them.

All stakeholders affected by the cash flow of the product need to be identified and listed in order to reveal potential conflicts or new solution paths. These stakeholders can be existing or potential cooperation partners, investors, and self-payers of the product. The cash flow determines, among other things, whether the product innovation can be marketed on the secondary or primary healthcare market.

Use these questions as a guide:

- Who will invest in your solution?
- What is the status of your business plan?
- What revenue streams are available?
- Which healthcare market should I launch my solution on?

Useful methods:

- Health business model canvas
- Product roadmap



Competition

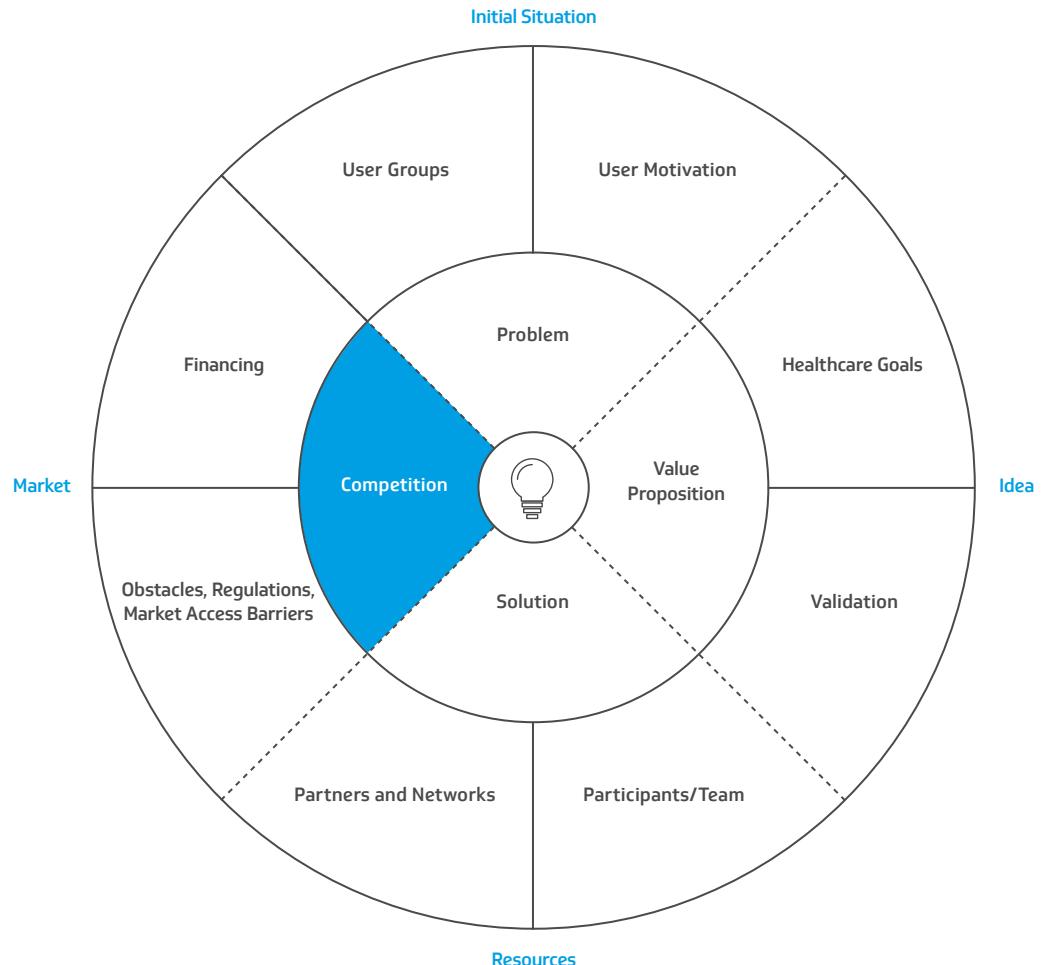
Who are your competitors and what do they do well/poorly? Competition arises when participants contend with each other on the market. By pinpointing the competitors, you can identify existing solutions that already focus on the problem. The overview of the competition provides a realistic view of future developments, which can then be used to define further assumptions about the product.

Use these questions as a guide:

- What competitors are on the market?
- What distinguishes the various competitors?

Useful methods:

- Benchmarking
- SWOT analysis
- Value proposition canvas



3

The Stakeholders

This section shows you which aspects are relevant for investors, partners, users, and insurance funds – and how you can convince someone of your product in just a few minutes.



What information is relevant for whom?

The Health Product Wheel as a whole depicts all of the aspects you need for a successful product. However, not every piece of information is relevant for every stakeholder.

Investors need different information to base their decisions on than users do. Therefore, in this section, we will discuss which areas you need to focus on to convince the following stakeholders of your product:

- Users
- Partners
- Investors
- Insurance funds
- Elevator pitch



Users

Core and initial situation (user groups and motivation)

The users of the product are probably the most important stakeholders. Your product will only be successful if you reach and convince this group.

For the users themselves, one question is the most relevant: Does the product offer me real added value? In this connection, the value proposition and the concrete solution to a problem are of particular interest. It should also be ensured that users recognise what differentiates your product from the competition. To make your product a success, you have to communicate these aspects to your potential users in a convincing manner and through the right channels.



Partners

Core and idea (healthcare goals and validation) Partners can include hospitals, doctors, pharmacies, or other companies. They want to use your product to help them achieve their own goals, such as more efficient patient care or to stand out from the competition, for example. Accordingly, this group is primarily interested in the core of your product:

- The description of the problems that your product helps solves
- Your concrete solution to these problems
- The positioning on the market, i.e. how you are different from the competitors
- The value proposition

Tip Always take an in-depth look at the potential partners you want to acquire and consider the challenges they face. For example, you may need to emphasise different aspects of the core for hospitals than you do for doctors.

Furthermore, measurability is an important factor. If all these aspects are presented in an understandable and convincing way, it will make it easier for your potential partners to decide whether they want to cooperate with you.



Investors

Core and market (financing and risks) Investors are interested in one thing above all: profit. In essence, what is relevant to them is whether their investment pays off. For this group, facts and figures count the most:

Financing How will the product be financed in the short, medium and long term? What does the business model look like? (In this context, an important question for investors is whether there are already other investors they would have to share their profits with!)

Risks What obstacles are there? What are the legal restrictions?

Tip Look for and examine potential investors carefully, because not every investor is suitable for your project. In general, investors are very knowledgeable about the sector they invest in. Therefore, you should primarily seek out potential backers in the environment that are relevant to your product.

The core of your product is also relevant for investors in terms of deciding if it would be an interesting investment. Success factors include whether your product solves a real problem for the user.



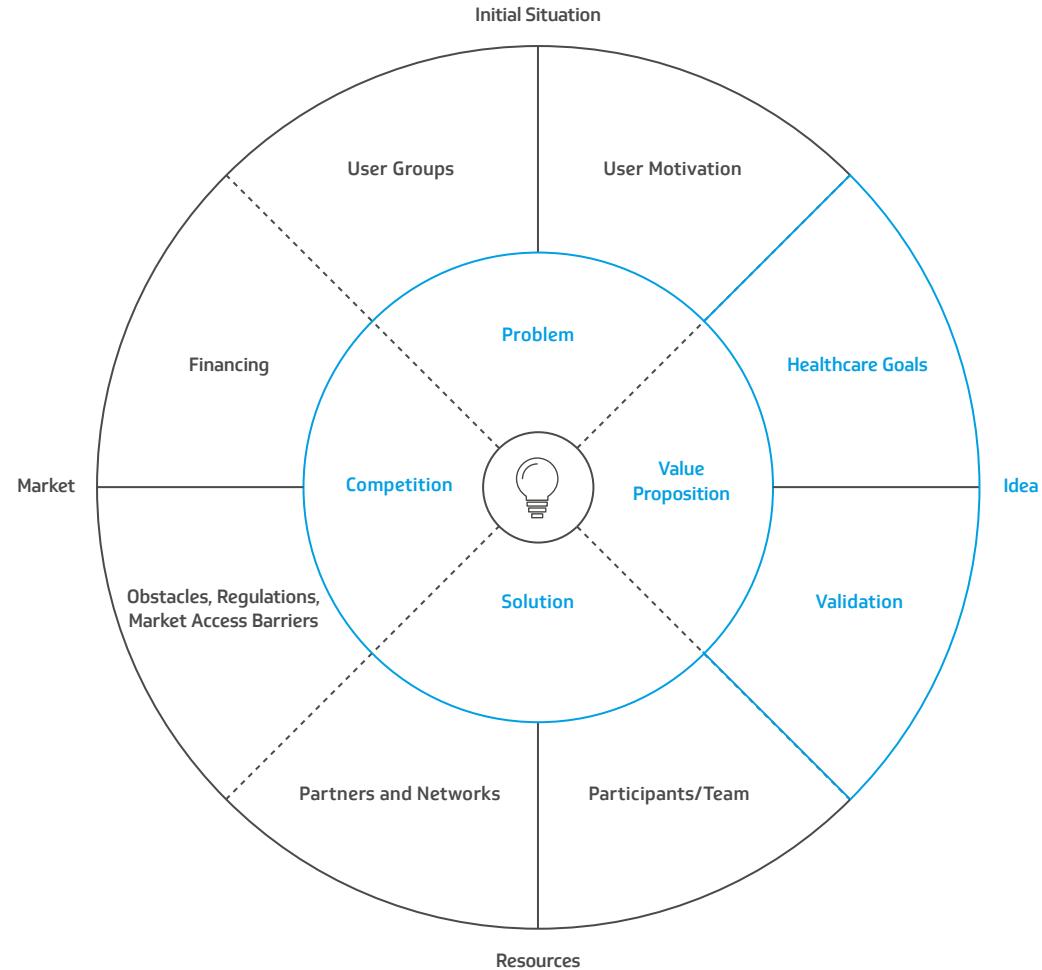
Insurance Funds

Core and idea (healthcare goals and validation) Insurance funds aim to ensure the highest level of care for their members. In the case of statutory health insurance funds, they also have a legally binding mandate to achieve the four healthcare goals in the best way possible.

This means that the same aspects that are relevant for potential partners are relevant to insurance funds as well, but they have a focus on the value proposition, the concrete healthcare goals, and their validation. It is crucial to communicate these points in a convincing manner in order to win over insurance funds for you and your product.

Tip For private insurance providers, financial aspects play an even greater role than for statutory insurance funds. Depending on which insurance fund you pitch your product to, you should thus focus on other points.

The other aspects of the product core are also relevant for insurance companies – among other reasons, to ensure that neither they nor anyone else offers a similar product, and that by offering the product, they can solve a real problem for their members.



Elevator Pitch

Ideally, you can specifically prepare to pitch your idea to one of your stakeholders (users, partners, investors, insurance funds). That is the best prerequisite for striking the right tone and getting them excited and enthused about you and your product.

However, sometimes you may have to (or be allowed to!) pitch your product to an unknown stakeholder or you might meet an important person and only have a few minutes to convince them of your product. In these cases, you should also be well prepared and have an 'ace up your sleeve'. You should be able to convince someone of the value and uniqueness of your product in as little time as an elevator ride takes.

For this purpose, prepare a few sentences that optimally describe your product, in the following order:

User group Who are you developing the product for?

Users' problem What problem does the product solve?

Value proposition What improvements will the product make possible?

Solution How will these improvements be achieved?

Market positioning What makes your product unique on the market?



Interrelationships Between the Sections

It is important to have a vision in mind that you can work towards. It can be useful to formulate the key goals according to a certain pattern, in order to provide clarity, but also to create room for flexibility for the solution (= the 'how'). The purpose of defining such goals is to construct a framework for possible solutions.

To be able to formulate these goals, the section must be presented in a relative context. The following questions are always key:

Who Who wants to do something?

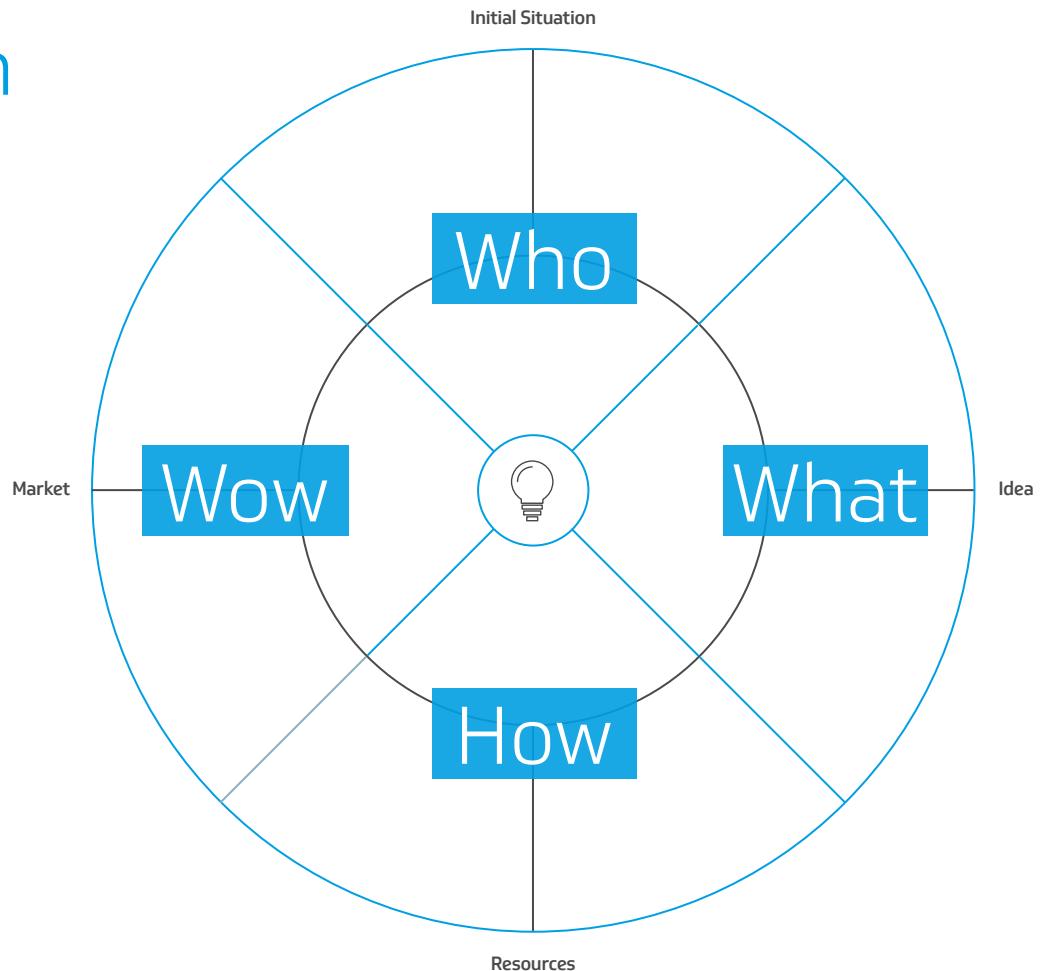
What What does he/she want to do?

Wow What makes a potential solution unique and measurable?

How Can we make it happen? (The 'how' is what we want to figure out.)

Example A patient (**Who**) can measure and assess his blood sugar (**What**) in **ten seconds** (**Wow**).

The '**how**' in this case could be an app that enables the blood sugar measurement and assessment or a new type of measuring device (i.e. hardware), for example.



Interrelationships Between Core and Context

Initial Situation:

- The users have both a problem and a certain motivation at the same time.
- The problem and motivations of the user groups define the initial situation.

Idea:

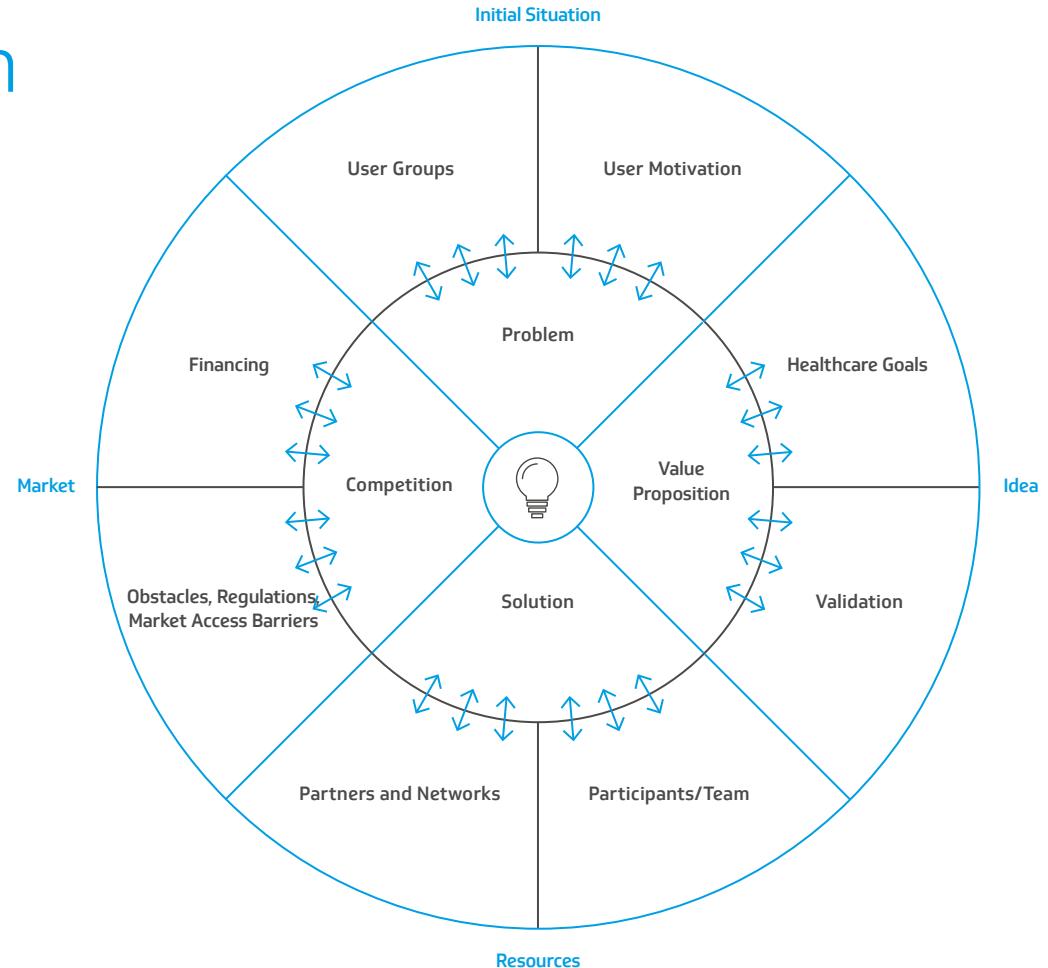
- The value proposition communicates the value of the product and is validated by reviewing the healthcare goals.
- Validated healthcare goals in the form of a value proposition define the idea.

Resources:

- The team and network enable the solution to be produced.
- The team and network define the resources for developing the solution.

Market:

- The market positioning is the basis for financing and is complicated by the risks.
- The market positioning – taking into account financing and risks – defines the market.



Interrelationships Between Centre and Core

Your goal: your product:

- The problem justifies the product.
The product solves the problem.
- The value proposition communicates the product.
The product fulfils the value proposition.
- The product defines the solution.
The solution realises the product.
- The product is positioned on the market.
The market helps to fine-tune the product in order to achieve uniqueness.



The background of the slide features a soft-focus photograph of a stack of books. The spines of the books are visible, showing various colors like yellow, blue, and red. The lighting creates a warm, academic atmosphere.

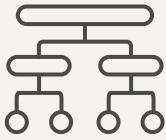
Supplementary Methods

In the following, we will introduce you to suitable methods you can use to work on the different fields of the Health Product Wheel.

4

Overview of Methods





Stakeholder Map

Visualised stakeholders, their expectations and their relationship to each other

A stakeholder map can be used to identify the key stakeholders for a product as well as their goals, motivations, and attitudes.

In the first step, stakeholders are identified and then their interests are analysed to ensure that all relevant expectations and requirements are taken into account.

Involving the various stakeholders at an early stage gives them the opportunity to participate in shaping the project and thus also boosts their commitment.

Preparation To use the stakeholder map, the stakeholders have to be known or the map must be created together with people who know the stakeholders (for example in a workshop). Various methods can be used to identify stakeholder interests, such as online surveys or personal interviews.

Process

1. Hand out sticky notes to everyone participating in the exercise and write down all the stakeholders you can think of (e.g. departments, individuals, other companies, investors, etc.).
2. Hang the sticky notes on the wall and highlight the most important stakeholders from your viewpoint.

3. Visualise connections with lines and clusters: Which stakeholders are connected to each other?
 4. Add the interests of at least the most important stakeholders – but preferably for all stakeholders.
 5. Reflect on your findings and determine together how you can incorporate the stakeholders' interests into the product development.
- Result** Visualisation of all stakeholders, differentiation between important and less important stakeholders and their interests.



User Research

User research helps to identify and better understand user needs and derive conclusions

User research is about generating insights into relevant user (groups) of a product, which in turn can be used as a basis for deriving conclusions for the product development.

Basically, there are two types of user research that should be used in conjunction to obtain the best possible results:

1. Quantitative: This type of research involves determining the representative values based on a large number of answers (e.g. responses obtained from online surveys; in general, questions should have response options that are easy to evaluate, such as 'yes/no' or 'on a scale from one to five').

2. Qualitative: The aim of this research method is to gain in-depth insights into the needs of the respondents (for example through interviews, focus group work-

shops, product diaries, etc. in which the participants can and should answer freely and in detail).

In addition, demographic data and market research findings help to accurately summarize and describe the context and needs of users.

The results sharpen your awareness about the needs of the user groups. The goal of user research is always to increase the users' acceptance of a product.

Preparation Not every research method is suitable for every question or every phase of the product development. Therefore, in the preparation phase, the methods should be selected and the right questionnaire for the respective method should be created.

Process

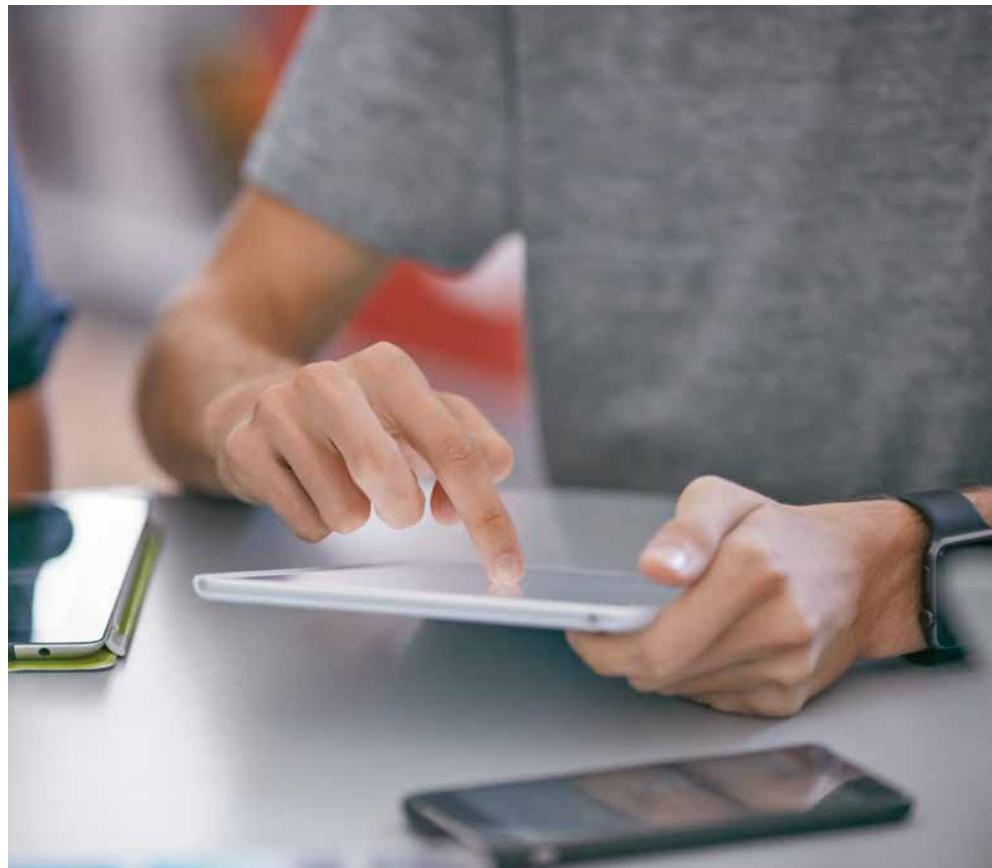
- 1.** Define the objective of the research: What do you want to find out?
- 2.** Select the appropriate method for the research question (see the next page for tips).
- 3.** Create a 'screener' and use it to define which user (groups) you want to survey (amount, age, gender, sociodemographic data, etc.).
- 4.** Conduct the user research method or designate someone to conduct it.
- 5.** Analyse the data and derive conclusions for further product development.

Result Generation of data and insights as a basis for the product development

Preparation In principle, user research can be roughly aligned with the product development phases.

You are still in the early stages of the product development and do not know your user groups well yet A combination of qualitative individual interviews, group interviews or observation of suitable participants is a good method to use to gain more in-depth information about their needs. Based on this, hypotheses can be generated that can either be directly incorporated into the product development or validated by conducting a quantitative online survey.

The product has already been developed and you want to know if your product works In this case, a usability test is helpful. With this method, you can test a click dummy or prototype with real users using interview questions. A personal interview is important here, because you can compare the response to the statements by the participants and draw your conclusions.



You are already at an advanced stage of the product development, perhaps you have already released a version and want to know how to proceed Here again – as it was when you started the research – qualitative interviews are a good way to find out if your users' needs have changed. In contrast to step one, however, ideally you should now have additional quantitative tracking data that you can analyse along with feedback from users in the form of emails, ratings in app stores, etc. Combined together, all this data together will give you a picture to use as a basis for determining the next steps.

Qualitative methods

- Individual interviews
- Focus groups
- Usability testing
- Observation (e.g. participant or non-participant, shadowing)
- Diary study
- Workshop with users

Quantitative methods

- Online surveys
- Tracking/web analysis

How do I find suitable participants? Here again, there is no across-the-board answer to this question. Depending on the method, you may need more or fewer participants, and depending on your budget, one option may be to work with external companies (e.g. market research institutes) to find suitable people.

You want to conduct qualitative research, but don't have the budget If you are fortunate, the relevant user groups are similar to your peer group, so you can recruit about ten participants from your extended circle of acquaintances. Important note: The participants should be distant acquaintances and not close friends, so that the answers will not be influenced by your personal relationship. A little research is always better than no research!

You have a budget and want to conduct qualitative or quantitative research In this case, you can work with external companies that specialise in recruiting or even conducting interviews. Market research institutes now often offer user research and usability testing for digital products as well.

If you want to conduct an online survey, there are useful tools such as Typeform and others that can be used to create and analyse surveys. In this case, the external company would 'only' have to find you the right participants. Other companies, such as Applause, also conduct online surveys according to your specifications. It depends on what you can or want to do by yourself.



Problem Statement

The goal of this method is to formulate a ‘mental stepping stone’ as a basis for finding solutions.

Only those who are aware of the real problem can develop a good solution for it. The ‘problem statement’ method helps you get to the root of the user’s problems or goals and thus create a basis for developing the solution – a ‘mental stepping stone’ for coming up with the right ideas.

The problem statement describes the problem, who is affected by the problem and what framework conditions need to be considered, i.e.: Persona X has problem Y under condition Z. A design challenge formulates a question, i.e. ‘How can persona X achieve goal Y under condition Z?’

In both cases, the solution can be developed based on the statements or questions. Measurability can supplement both methods, i.e.: how can you assess the success of the solution?

Preparation The formulation of a problem (as a statement or question) is the key to a good solution. The basis for implementing this method is knowledge about the relevant user groups (obtained through user research, for example), because it is essential for expressing the users’ real problems.

Process

1. Hand out sticky notes and pens to the participants in the exercise.
2. Together as a group, review your findings from the user research.
3. Have everyone write statements or questions to describe the most important problems of the users in their opinion and then hang them on the wall.
4. Examine your results together and group them so that you can identify main issues.
5. Prioritise the statements/questions (for example, everyone can give three votes/points).
6. In the group or individually, consider possible solutions for the three most important statements/questions and prioritise them.

Result Formulate relevant problems as a ‘mental stepping stone’ for developing solutions and find potential solutions for the most important statements/questions.



Personas

Personas are fictitious people who represent typical user groups and are created to make the users more real and tangible.

Personas are based on user research. In addition to socio-demographic and psychological characteristics, they are primarily defined by their jobs, needs, challenges, goals and desires.

One or more personas should be created at the start of a project. A persona provides a common understanding of typical users and their needs and is used as a decision-making basis for the further development process.

Taking the users' perspective helps the team (or also the stakeholders) to develop a user-centred product.

Preparation Extensive data collection and analysis of the user groups based on various data collection methods such as user research (e.g. in the form of interviews or focus groups) and desktop research.

Process

1. Review the results of your user research together.
2. Define a persona for each user group; give each persona a name and assign demographic data to them, such as age, gender, marital status, etc.
3. Find a suitable photo that shows some context and personal surroundings, if possible.
4. Think of a fictional quote that makes the background of the persona real and tangible.
5. Depending on the product, you can describe further elements and characteristics to embody the whole complexity of the persona (for example, goals, previous knowledge, daily life problems, etc.).

Result Personas provide a comprehensive picture of a specific user group and facilitate making decisions based on underlying data.



Empathy Map

An empathy map helps you understand the users' emotions in order to develop a solution that appeals to the users' motivation.

In contrast to personas, the empathy map focuses less on the framework conditions or the context of a person, but much more closely on their emotional state.

Background: There is often a large discrepancy between what users say and what they do, think and feel. It is precisely these differences that the empathy map is intended to identify.

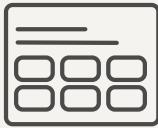
A combination of a persona and empathy map will help you understand a person on a holistic level: their context, their feelings and their desires.

Preparation Ideally, an empathy map is based on real surveys (such as interviews) or observations (e.g. shadowing). If possible, real users should be invited to help create the empathy map.

Process

1. Review the results of your user research
2. Draw the canvas for the map on a large sheet of paper or whiteboard.
3. Hand out sticky notes and pens to all participants.
4. Answer the following questions (each person individually first): What does the user say? What does he/she think? What does he/she do? What does he/she feel? (One aspect per note!)
5. Categorise your findings thematically to help identify the main points.
6. Discuss the results together as a group.

Result If you can answer all the questions, you will learn to think from your users' viewpoint, understand their feelings and draw conclusions for the product development.



KPI Canvas

KPIs (key performance indicators) are key figures that are used to measure the performance of activities in companies.

KPIs (key performance indicators) are key figures that can be used to measure specific targets and goals of companies and their related activities. KPIs help determine, for example, what the degree of goal attainment is and where there is potential for optimisation.

The KPI canvas can be viewed as a structured memory aid. It helps you navigate through the most important questions that need to be answered in order to fully define the KPIs.

Which KPIs are most appropriate depends on the respective product.

Preparation To fill in the KPI canvas, you should already know your value proposition, healthcare goals, and user and stakeholder interests.

Tip KPIs are often particularly important for investors. The development of a product can be gauged and evaluated on the basis of measurable key figures. The figures can therefore be a criterion when deciding on future investments.

Process

1. Draw the canvas on a large sheet of paper or a whiteboard and hand out sticky notes and pens to all participants in the exercise.
 2. Now go through all the fields (together or in groups) and answer all the relevant questions for each (healthcare) goal or interest of the users and stakeholders. For example: Why should we measure the goal? Who benefits from achieving the target KPI? Which KPI is realistic? Where does the data come from?, etc.
 3. Once you have filled in all the fields, you can define the KPIs for your product and specify a timeframe for achieving the target values.
 4. On this basis, you can then consider what measures you can best use to achieve which values in the defined period.
- Result** Fully defined KPIs as a basis for taking further steps and measures in the product development phase.



ZEIG Analysis

The ZEIG analysis is an evaluation tool that is used to validate individual innovations and measures in the healthcare system.

ZEIG is an indicator-based evaluation tool that can be used to review individual innovations, measures, strategies, activities and projects in the healthcare system to determine to what extent they contribute to achieving the twelve overriding goals in the healthcare system and thus to a positive overall development of it.

It can be used to evaluate innovations before or after they have been launched on the market. Further information on the ZEIG analysis is available at: zeig-analyse.de.

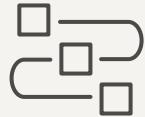
Preparation As a first step, it is important that the innovations or measures to be analysed are clearly defined. In addition, you should know the twelve overriding goals that the ZEIG analysis focuses on and familiarise yourself with the various assessment questions.

Tip Since the evaluation of the aspects is based either on empirical data or subjective experience, the assessment of the source/data basis must always be taken into account when examining the result. Therefore, it is all the more important to ensure that the analysis makes the underlying considerations transparent.

Process

1. 'Quick and dirty' (one to two hours): As a first step, you can conduct the analysis without gathering information beforehand and without giving detailed reasons for the evaluation. This can be useful as an initial, preparatory step to the more in-depth analysis process.
2. More intensive analysis (weeks and months): Collect relevant information on all relevant target areas, compile new data if necessary, etc. The better your evaluation can be supported by data, the more meaningful, coherent, understandable and robust it will be.

Result A final report contains a summary of the ZEIG results and all the details about the evaluations, including your notes.



User Journey Map

A user journey map can be used to identify problems, needs and wishes of the user over time, along a course.

User journey maps (also called ‘customer journey maps’) help to create a fundamental understanding of the users and their behaviour.

A user journey map identifies and documents a customer’s path across different touchpoints – online and offline – to a specific destination.

A user journey map can be used to pinpoint the problems, needs and desires of the user along a specific course of action.

Preparation Customer journeys should be based on user research and/or prepared in workshops with project participants who are very familiar with the users’ needs.

Process

1. Define the user (such as a previously developed persona) and the goal that he or she wants to achieve.
2. Hand out sticky notes and pens to all participants in the exercise.
3. As a group, define the approximate course of action (often there are four to six general phases that the user moves through) and write it on a whiteboard or large sheet of paper.

4. Define the user’s specific, discrete steps for each phase (What happens? What does the user do?) – one aspect per sticky note, so that you can assign them to the phases.
5. Once you have visualised the entire journey, highlight the pain points/challenges for each phase.
6. Derive the user’s needs/wishes from this and, if necessary, formulate quotes that express these needs.
7. Reflect on the results and discuss how they can be incorporated into your product development.

Result An in-depth understanding of the user’s steps on the path to a certain goal; knowledge of the points where action is required.



As-Is Scenario

The as-is scenario provides a better understanding of the status quo of a user experience.

As-is scenarios visualise the status quo of a usage scenario. In essence, they map how the user currently achieves a goal and what thoughts and feelings he/she experiences during the scenario.

An as-is scenario can be used to identify the points where users are frustrated, which steps work well and which do not, and other factors. It creates a basis for to-be scenarios, in which the goal is to optimise or completely replace the as-is scenario.

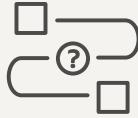
Tip This method can be used together with stakeholders to attain a shared and better understanding of the user experience.

Preparation Similar to the other methods, as-is scenarios should be based on real data, for example interviews or observation. Ideally, real users should be present during the creation of the scenario.

Process

1. Hand out sticky notes and pens to all participants in the exercise.
2. Draw four rows on a whiteboard or large sheet of paper and label them as follows: 1. Phase, 2. Doing, 3. Thinking, and 4. Feeling.
3. As a group, define the persona and the goal you want to focus on.
4. Next, go through the canvas step by step. Describe each phase of the user journey in detail – what does the persona do, think, and feel during each phase? One aspect per sticky note!
5. Finally, highlight the pain points and breaks that you have identified within the journey.

Result Understanding of the actions and feelings of a persona on the path to a certain goal as well as identification of pain points. The map serves as the basis for the to-be scenario.



To-Be Scenario

Development of a vision for the user experience in the future

Like the as-is scenario, the to-be scenario is also filled in step by step; the aim is to create the vision of an ideal process the user can utilize to achieve his or her goal.

A to-be scenario is therefore a vision of an optimal user journey, which is developed taking into account the challenges, pain points and needs of the users identified in the as-is scenario. The to-be scenario should ideally solve the problems of the users.

However, although these future scenarios are created under consideration of the status quo, they do not have to be aligned with the current situation, but can also show a completely new path instead.

Preparation You should have created the as-is scenario before the to-be scenario, since the steps of the to-be scenario are intended to provide responses to the pain points and weaknesses of the as-is scenario.

Process

1. As you did for the as-is scenario, draw four rows on a whiteboard or large sheet of paper and label them as follows: 1. Phase, 2. Doing, 3. Thinking, and 4. Feeling.
2. Next, describe each phase of the user journey step by step – one aspect per sticky note!
3. Since the to-be scenario describes an ideal path, it also contains potential solutions. As a group, decide which approaches you want to pursue and how you can realise them.

Result The to-be scenario maps an ideal user journey for achieving a certain goal and thus contains solutions or approaches to solutions based on previously gained insights into the problems or needs of the users.



Need Statements

Need statements help you keep the users' motivations in mind.

Need statements clearly articulate the user's needs and motivations. They help teams to keep the users' motivations and needs in mind.

Need statements focus on the user and not on individual features, and are always formulated according to the following pattern:

User X needs to be able to achieve a **certain goal** in order to benefit from a certain **added value**.

Examples A frontend developer needs to have the option to access specifications of static designs so that he can create prototypes more quickly.

A traveller needs to have the possibility to order a taxi online to get to the airport quickly.

A runner needs to have the option to document her run in order to improve her performance.

Preparation Need statements should be formulated based on user research or together with real users.

Process

1. Write the pattern in large print on a whiteboard.
2. Hand out sticky notes and pens to all participants in the exercise.
3. Define the personas/users you want to focus on.

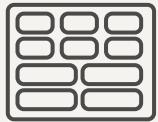
4. Have each person write statements following the specified pattern.

5. Cluster the need statements by topic/areas and discuss them as a group.

6. Prioritise the statements and identify the most important one.

7. Have the participants think about what solutions they could come up with for the statements and how they could realise them.

Result Need statements concretely define what problems need to be solved and serve as a 'mental stepping stone' for developing possible solutions.



Health Business Model Canvas

A method for developing and fine-tuning your business model

Tip You may already be familiar with many of the aspects from the Health Product Wheel. In the health business model canvas, you can therefore draw on much of the information you already know and concentrate on the new, still unfamiliar aspects.

There are basically two ways for health innovators to place their product innovation on the healthcare market.

In both cases, the health business model canvas can be useful. In contrast to the Health Product Wheel, the health business model canvas primarily focuses on the business side of the product development. The format helps you take into account all business-relevant requirements and pinpoints which aspects need to be elaborated on in more detail.

Path a: Secondary healthcare market You can initially market your service or product as a self-pay product on the secondary healthcare market (= all privately financed products and services, for example over-the-counter medicine, but also fitness, wellness, etc.). This means that patients pay for the service or product themselves.

Path b: Primary healthcare market The primary healthcare market includes everything that is covered by statutory and private health insurance funds (including long-term care insurance). Once you have made it on this market, patients can settle the payment for your service or product through their health insurance, for example. To obtain this type of revenue via the primary healthcare market, you need to understand the motivations and challenges of the stakeholders in the healthcare system and use it as a basis to develop a product that meets the specified requirements.

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
What is needed to develop and launch the product? Skills, resources, ...		What are the next steps? What still has to be done?		
Cost Structure		Revenue Streams		
What costs will be incurred, and for what?		What does the financing model look like? Who will pay?		

The individual sections of the health business model canvas are explained in more detail on the following pages.

Customer Segments

Supplementary to the 'User Groups' section of the Health Product Wheel The aim of every product innovation should be to generate added value for a defined user group. Therefore, the identification of relevant user groups plays a key role in the product development.

For example, identifying the user groups help you develop product requirements, select the right distribution channels, and determine sales potential.

Use these questions as a guide:

- Who will use your product?
- Which user group is the most important and why?
- What user groups could potentially be paying customers or subscribers?
- Are there primary and secondary user groups?

Useful methods:

- User research
- Persona
- Empathy map

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
Key Resources	Activities			What are the next steps? What still has to be done?
Cost Structure	Revenue Streams			What does the financing model look like? Who will pay?
What is needed to develop and launch the product? Skills, resources, ...				
What costs will be incurred, and for what?				

User Motivation

Supplementary to the 'User Motivation' section of the Health Product Wheel Each user group has its own motivations for using a product, which are influenced by personal factors such as worry, fear, environment, safety, pain, standard of living or pleasure. Understanding the users' motivations and incorporating them into the product development process helps define the requirements for the product.

Use these questions as a guide:

- Who or what motivates the users to use the product?
- What effect should the product have on the users?
- What benefits are the users expecting?
- What pain or suffering motivates the users?
- Why will the customers use the product?

Useful methods:

- User research
- Persona
- Empathy map
- Need statements

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?		What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?		How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
		What is needed to develop and launch the product? Skills, resources, ...		
Cost Structure		Revenue Streams		
		What costs will be incurred, and for what?		
		What does the financing model look like? Who will pay?		

Value Proposition

Supplementary to the 'Value Proposition' section of the Health Product Wheel The value proposition must clearly express what benefits the product offers users and the healthcare market. It is derived from the healthcare goals and can be measured using key performance indicators.

Examples of targeted healthcare goals can be to reduce the amount of medication taken or raise patient awareness of effective behavioural changes (and thus also potentially save on treatment expenses).

Use these questions as a guide:

- What advantages and benefits does the product offer the users?
- What advantages and benefits does the product offer the healthcare market?
- How does the product influence the users' behaviour?
- How does the product help the users achieve their goal?

Useful methods:

- Problem statement
- ZEIG analysis

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?		How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
		What is needed to develop and launch the product? Skills, resources, ...		
Cost Structure		Revenue Streams		
		What costs will be incurred, and for what?		
		What does the financing model look like? Who will pay?		

Distribution Channel

New aspect The ‘Distribution Channel’ field depicts how a product or service is made available to the user. Components of distribution can include marketing, logistics, channels and technologies, among others. In general, there are two types of distribution:

1. **Direct:** The product is sold directly to the user.
2. **Indirect:** The product is sold via intermediaries, for example.

Example: If a physical product is distributed via intermediaries who undertake the logistics, there is no need to set up an internal logistics system.

Use these questions as a guide:

- How will a potential customer become aware of the product?
- What channels do we use to reach the customers?
- How does the product reach the customers?
- Who will sell the product?
- Who will deliver the product?

Useful methods:

- User research

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?		What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
		What is needed to develop and launch the product? Skills, resources, ...		
Cost Structure		Revenue Streams		
		What costs will be incurred, and for what?		
			What does the financing model look like? Who will pay?	

Relationship and Communication with Users

New aspect To ensure the product's success, a relationship between the user and product should be established and there should be relevant communication on a regular basis. Relationships with your customers are built via various channels. They can vary in depth and duration and aim to acquire customers, retain customers, or increase sales (cross-selling and upselling). The type of customer relationship has a major impact on the overall customer experience.

Use these questions as a guide:

- What is the current relationship with the users like?
- What type of communication is there with the users, and how often?
- What kind of relationship and communication do users expect?
- What costs are incurred for communication with the users?

Useful methods:

- User research

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
What is needed to develop and launch the product? Skills, resources, ...		What are the next steps? What still has to be done?		
Cost Structure		Revenue Streams		
What costs will be incurred, and for what?		What does the financing model look like? Who will pay?		

Business Segments

New aspect For the business model to work, a company needs partnerships. They mitigate risks, supply resources, or undertake other activities. It is important to identify where support is needed (for example in logistics or marketing) and then find relevant partners. It is essential to identify such gaps so that you know which partners to look for.

Use these questions as a guide:

- Which areas do we need support in?
- Who or what company has the resources we are still lacking?
- What companies are particularly good in the areas we need support in?
- Which partners do our competitors collaborate with?
- What business partners do we need?

Useful methods:

- Benchmarking
- SWOT analysis

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
		What is needed to develop and launch the product? Skills, resources, ...		
Cost Structure		Revenue Streams		
		What costs will be incurred, and for what?		
		What does the financing model look like? Who will pay?		

Motivation of Business Partners

Supplementary to the 'Stakeholders' section of the Health Product Wheel Partners can include hospitals, doctors, pharmacies, or other companies. Each business partner has its own motivation for using or promoting a product, such as the desire for more efficient patient care or to stand out from the competition. Knowing these motivations and incorporating them into the product development process will help you understand the intentions of (potential) partners and provides a clear overview of what requirements the product must meet for a successful collaboration.

Use these questions as a guide:

- What or who motivates the partner to support the product?
- What effect does the product have on the partners and their environment?
- What benefits is the partner expecting?

Useful methods:

- | | |
|----------------------------|-------------------|
| ▪ User research | ▪ Empathy map |
| ▪ Value proposition canvas | ▪ Need statements |

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?		How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
		What is needed to develop and launch the product? Skills, resources, ...		
Cost Structure		Revenue Streams		
		What costs will be incurred, and for what?		
		What does the financing model look like? Who will pay?		

Benefits for Business Partners

Supplementary to the 'Stakeholders' section of the Health Product Wheel Motivations and benefits go hand in hand. If certain motivations or goals of a potential partner are met, it provides certain benefits for the partner – directly or indirectly.

Examples of such benefits could include an image boost, a decrease in certain diseases, or raising market awareness.

Use these questions as a guide:

- How does the project pay off?
- What motivations can be met?

Useful methods:

- User research
- Value proposition canvas
- Empathy map
- Need statements

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?	What are the general goals of the business partners?	What do the partners contribute to the project?		
Key Resources		Activities		
What is needed to develop and launch the product? Skills, resources, ...		What are the next steps? What still has to be done?		
Cost Structure		Revenue Streams		
What costs will be incurred, and for what?		What does the financing model look like? Who will pay?		

Partner Resources

Supplementary to the 'Partners and Networks' section of the Health Product Wheel

To propel the creation and development of an idea to the finished product, resources such as specific team skills, infrastructure or certain technologies are needed. The accessibility of these assets is crucial to the success of the product. Sometimes these resources are not available within the core team. Collaborating with business partners is often a good way to access needed resources. To identify gaps and options here, it is useful to review, list and describe the existing and lacking resources.

Use these questions as a guide:

- Which cooperation partners are already available?
- What skills can they provide to the product development?
- Which competencies and skills are still lacking?
- What other resources are still needed (e.g. infrastructure)?

Useful methods:

- User research

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?		What is the relationship with the business partners like?
Key Resources		Activities		
		What is needed to develop and launch the product? Skills, resources, ...		
Cost Structure		Revenue Streams		
		What costs will be incurred, and for what?		
			What does the financing model look like? Who will pay?	

Relationship and Communication with Partners

New aspect In terms of optimising efficiency and the product, partners can help achieve specific goals. Relationships between two companies can take different forms and levels. Most partnerships give companies the opportunity to share infrastructures or outsource some activities to less expensive options. Maintaining close relationships with partners is beneficial for long-term success.

Use these questions as a guide:

- What are the relationships to current business partners like?
- How can we improve the relationships?
- How can we ensure a close relationship in the long term?

Useful methods:

- Stakeholder map

Health Business Model Canvas					
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication	
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?	
Business Segment	Motivation	Benefits	Resources	Relationship and Communication	
What business partners do we need?	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?	What do the partners contribute to the project?		
Key Resources		Activities			
What is needed to develop and launch the product? Skills, resources, ...		What are the next steps? What still has to be done?			
Cost Structure		Revenue Streams			
What costs will be incurred, and for what?		What does the financing model look like? Who will pay?			

Key Resources

Supplementary to the ‘Resources’ section of the Health Product Wheel To propel the creation and development of an idea to the finished product, resources are needed. They form the basis of the product development and are essential for the functionality of a product/service. Such resources can be physical, financial, intellectual, or human.

Key resources include specific team skills, a certain infrastructure or technologies, for example. The accessibility of these assets is crucial to the success of the product.

To identify gaps and options here, it is useful to review, list and describe the existing and lacking resources.

Use these questions as a guide:

- What skills do we already have in our team?
- What do we need to be able to work well together?
- Which competencies and skills are still lacking?
- What other resources are still needed (e.g. infrastructure)?

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
		What are the next steps? What still has to be done?		
Cost Structure		Revenue Streams		
		What does the financing model look like? Who will pay?		

Activities

New aspect Key activities refer to all the main activities required to offer a product or service.

Related key resources are required for each key activity. These key resources must be accessible either at the company itself or at one of the partners (outsourcing).

Use these questions as a guide:

- What actions are needed to deliver the value proposition?
- What activities are needed for the product, for the sales side, and with regard to the relationship with the customers and partners?

Useful methods:

- Product roadmap

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
		What is needed to develop and launch the product? Skills, resources, ...		
Cost Structure		Revenue Streams		
		What costs will be incurred, and for what?		
		What does the financing model look like? Who will pay?		

Cost Structure

New aspect The cost structure provides an overview of all finances and the key costs incurred for implementing the product.

These include costs directly related to the product as well as costs for administration, required materials, office space, etc.

A good bookkeeping system and efficient budget planning are essential for keeping track of costs.

Use these questions as a guide:

- Which resources or activities are the cost drivers?
- Where can we cut costs, where not?
- What tasks will be required in the future that will have to be financed?

Useful methods:

- Product roadmap

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
		What is needed to develop and launch the product? Skills, resources, ...		
Cost Structure		Revenue Streams		
		What does the financing model look like? Who will pay?		

Revenue Streams

Supplementary to the 'Financing' section of the Health Product Wheel Without financial resources, a product cannot be developed at all or only to a very limited extent. To ensure a good product development process, it is important to understand where these financial resources come from as well as the terms and conditions attached to them.

The first step is to identify which healthcare market the product should be placed in. In the secondary market, users pay for your product themselves. This could therefore be a source of revenue, and marketing should be aligned accordingly. In addition, there may be other sources of income, such as investor funding.

Use these questions as a guide:

- Who will pay for the product?
- Which products or services are customers willing to pay for?
- What does the business plan and business case look like?
- What are other revenue streams are there?

Useful methods:

- Product roadmap

Health Business Model Canvas				
Customer Segment	Motivation	Value Proposition	Distribution Channel	Relationship and Communication
Who are the users of your product?	Why does your customer use the product?	What problem does the product solve for the user?	How will the users be reached?	What is the relationship to the users like? How do you communicate with the users?
Business Segment	Motivation	Benefits	Resources	Relationship and Communication
What business partners do we need?	What are the general goals of the business partners?	How does the project benefit the goals of the business partners?	What do the partners contribute to the project?	What is the relationship with the business partners like?
Key Resources		Activities		
		What is needed to develop and launch the product? Skills, resources, ...		
Cost Structure		Revenue Streams		
		What costs will be incurred, and for what?		



Value Proposition Canvas

A value proposition canvas is used to align the needs of customers with the product and service being offered.

The value proposition is the promise of value to the customer or user. It describes the benefits that customers can expect from your products and services.

The value proposition canvas is a good method that is used to understand the needs of the users and develop the desired products or services as well as to pinpoint the added value for the user group.

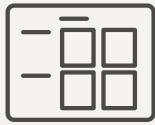
It consists of two segments: The user profile (jobs the users want to perform, problems and needs of the users) creates the 'customer understanding'. The value map describes how your product creates real added value for these users.

Preparation The canvas should be drawn up on the basis of user research results or in cooperation with real users. It can be supplemented with the business model canvas.

Process

1. Draw the canvas on a large sheet of paper or whiteboard.
2. Identify the customer jobs (tasks the customers want to perform), write them down on sticky notes and hang them on the canvas.
3. Identify and compile pain points and gain points.
4. Think about what solutions could be suitable for the pain points and gain points and add them to the canvas.
5. Use the canvas to derive a product, service, or individual features and ideas.

Result The value proposition canvas helps to align the needs of the customers with the products/services being offered and/or new ideas, and analyses whether the product actually solves the customers' problems and thus delivers added value.



SWOT Analysis

SWOT = Strengths, Weaknesses, Opportunities, Threats

Together with the most important project participants, suitable strategic solutions are developed from these four aspects.

The SWOT analysis assesses the positioning of the company's activities in relation to the competition. It represents the first step of corporate and strategic planning.

In the analysis, the internal factors (strengths/weaknesses) and external factors (opportunities/threats) of a product, business model, company or project are identified, and measures are defined to leverage opportunities while minimising risks at the same time.

The SWOT analysis is an important component of the business plan. It helps devise the strategy for the company, appropriately allocate resources and budgets, initiate projects and implement measures.

Useful tip In practice, companies frequently only map the information that will legitimise strategic decisions which have already been made. Don't fall into this trap!

Preparation Do research (or joint research if you are doing the exercise in a group) to obtain relevant information or attributes that describe what is happening in the company's environment, on the market, and within the company itself.

Process

1. All participants list strengths, weaknesses, opportunities and threats on sticky notes.
2. Each person presents his/her results.
3. Cluster your results in order to visualise key points.
4. Working together as a group, assess the company's attributes as a strength or weakness.
5. Assess the attributes, trends and developments on the market or in the company's environment as a chance, possibility or potential (opportunity), or as a risk or danger (threat).
6. As a group, consider what actions or measures you want to take with regard to each aspect.

Result Diagram showing a comparison of strengths/weaknesses and opportunities/threats along with the relevant actions/measures in each case.



Ideation Methods

Methods for brainstorming ideas based on a systematic, conceptual approach with special techniques

The process of brainstorming ideas and solutions is called ideation. ‘Ideation’ can be both an informal process and a systematic, conceptual approach based on special techniques.

Ideation does not focus on the company’s perspective, but rather on the user’s perspective.

Ideally, ideation exercises bring together people from different disciplines, departments, and hierarchical levels to generate and evaluate different ideas. Possible methods include ‘Big Idea Vignettes’ and ‘Crazy 8’.

Preparation First step: Define the problem or issue you want to find ideas for. Then you can continue with various exercises. For the exercises, you will need pens and sticky notes.

‘Crazy 8’ Process

1. Have everyone fold a sheet of paper three times so that there are eight sections to be filled in.
2. Next, fill in each square with a solution sketch for the jointly defined problem within one minute.
3. Present the solutions to each other, evaluate them and decide together which solution(s) you want to pursue.

‘Big Idea Vignettes’ Process

1. Set a time limit (e.g. 10 minutes) and write the title of the first idea on a sticky note.
2. On another sticky note, draw a sketch of the idea, so that there is always one pair of sticky notes for each idea.
3. Repeat step 2 for more ideas until the time runs out.
4. Present the ideas to each other and decide together which ideas you want to pursue.

Result Generation of different ideas and potential solutions within a short time



Storyboard

A storyboard visualises a concept or an idea.

A storyboard helps to visualise your ideas by creating a story and making them more concrete and tangible for other people. Sometimes this is easier than communicating an idea through words alone.

Usually, a storyboard consists of several sketches that are supported by speech and thought bubbles as well as captions to create a story – similar to a comic. It is important to reflect the behaviour and motivations of the users in the individual parts of the story.

Like a classic story, a storyboard should also have a line of suspense and be dramaturgical in nature.

Preparation Once the problems have been pinpointed and the users' needs have been researched, a storyboard can be developed.

Process

1. Visualise your story like a film: with participating characters, a line of suspense, a conflict, and a resolution.
2. Hang six sticky notes ('frames') on a sheet of paper and sketch one part of your story on each note, then add a caption that briefly describes that part. Goal: The story should ultimately lead to solving a user problem!
3. Present and discuss your storyboard with other participants in the exercise.
4. To find the best solution and a common understanding, combine the best parts of each storyboard into a 'master story'.

Result Storyboarding is a method used to depict contexts of use, communicate potential user experiences, and jointly develop solutions that the whole team can agree on.



Prototyping

Prototypes bring ideas to life by visualising possible solutions and making them tangible. They enable you to get initial feedback from users and/or team members at an early stage.

The prototyping method is used to visualise ideas, explore aspects of a solution, or test a preliminary result.

Prototypes can be very ‘rough’ at the early stage of product development and are fine-tuned in the development process – up until the product is designed in detail.

Prototyping can be used to determine early on whether the product/service meets the users’ needs and whether the users understand the solution.

By working with prototypes and testing possible solutions at an early stage, errors or wrong assumptions can also be remedied early on, which saves a lot of time and expense during the product development process.

In the case of digital products, prototypes can be:

- Storyboards
- Mock-ups
- Paper prototypes
- Clickable prototypes

Preparation To develop a prototype, the goal of a product, the user group(s) and personas as well as the most important use cases should be defined in advance.

Process

1. Select one or more use cases that you want to visualise.

2. Draw up a list of steps that the user within the use case has to take in order to achieve the goal (and think about what you need to visualise for the steps).
3. If needed, draw a rough sketch or outline for each of the steps (e.g. on paper).
4. Select a suitable tool (e.g. paper or a digital programme like Sketch).
5. Create all the main screens/views either as rough outlines (as paper sketches or digital wireframes) or in more detail if you are further along in the design process.
6. For digital prototypes, you will need to link the screens together (using Invision, for example), so that users can click through the prototype.
7. Test the prototype with users and iterate until you get a satisfactory result.

Result A visualised solution or idea that can be used to obtain feedback from users in a test.



Product Roadmap

The roadmap visualises the goals, intermediate steps, and stages of your project over time.

A roadmap is a useful guide and navigation aid and also creates a basis for the short, medium and long-term planning of the product development phase.

Roadmaps are a type of ‘timeline’ or map that show what goals you want to achieve with your product in a certain period of time and which tasks have to be completed on the path to the goal.

When creating a roadmap, it can be helpful to formulate sentences according to the following pattern, for example: ‘With the help of our product, our users can complete task X/Y/Z in the short/medium/long term’.

Based on this visualisation, a timeline can be created that shows which projects, actions and measures need to be

implemented in the short, medium and long term in order to achieve the specified goals.

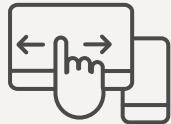
There are different types of roadmaps – strategic roadmaps, technology roadmaps or, as described above, roadmaps that focus on the needs of the user.

Preparation Once the users’ real needs and problems have been identified and a course for solving them has been set, it is advisable to prepare a (user-focused) roadmap. The roadmap will provide clarity with regard to short-term measures and help you get a first impression of the long-term measures as well as the vision.

Process

1. Draw three columns on a whiteboard and label them: Short-term, Medium-term, Long-term.
2. Together as a team, write down all the goals you want to achieve on sticky notes and break down your product vision into goals. Then hang all the goals in the ‘Long-term’ column.
3. As a group, evaluate which of these goals are the most important. Based on your evaluation, move your goals to the ‘Medium-term’ and ‘Short-term’ columns (or leave them in the ‘Long-term’ column). Iterate together until you have agreed on an order.
4. Together, discuss what actions or measures you need to take or what tasks you need to perform to achieve these goals. Think about technologies, processes, skills, dependencies, etc.

Result A roadmap illustrates the product vision and the steps towards its realisation.



Usability Test

Method for testing and optimising the user-friendliness (usability) of a product, in the initial development or for the purpose of further advancement and optimisation.

The aim of a usability test is to evaluate the user-friendliness of a digital product (e.g. software, app or website) by conducting test sessions and involving real users.

The participants are often given tasks to solve by using the product. During the test, they are encouraged to comment on their approach. At the same time, the participants' behaviour is observed and recorded. The participants are then subsequently asked about their experiences in a short interview.

Different methods can be used in usability testing, for example task solving, eye tracking, surveys based on interview guidelines, standardised questionnaires, observation, and others.

Preparation Define the question or problem for the test, look for suitable participants (for more on how to do this, see the 'User Research' section), and prepare a questionnaire for the test. You will also need to have the required test equipment ready. It is best to perform a test run in advance. After the usability test has been completed, evaluate the results and use them as a basis for the further product development.

Process

1. First representations of a product using a paper prototype
2. Wireframes or linked design screens
3. Click dummies, prototypes
4. An application that has already been developed

Result The weaknesses and strengths of a product are identified and then evaluated. These are then used as a basis for deriving suggestions for improvement and further steps.



Service Blueprint

Method for analysing, visualising and optimising processes

A service blueprint visualises the documentation of all processes, interactions and stakeholders involved in a service and helps you identify weaknesses and potential for optimisation.

The service blueprint thus provides insight into all sides of a product: the user's perspective, the service provider's perspective or roles involved on the service side, the underlying processes, and the technical framework conditions.

To put it simply, the service blueprint is a user journey map enhanced with additional dimensions.

Preparation The starting point is the journey mapping of a scenario with the associated actions/experiences of the users.

Process

1. Draw the diagram on a whiteboard or large sheet of paper and hand out sticky notes to the participants in the exercise.
2. Define a persona and use case that you want to examine.
3. Write down the user journey step by step along with the respective aspects of the other lanes. For example: What does the user experience? What does the service provide in the same step? Is a real employee involved in this step (for example in a chat) and what does that employee do in this step? What technical or support processes are running in the background? And so on...
4. Next, reflect on the entire blueprint and jointly discuss where there is potential for optimisation and what actions or measures you can take.

Result An overview that visualises the status quo of all processes involved in a service. It can be used as a basis to address potential for optimisation, challenges, weaknesses, etc.



Benchmarking/Competitor Analysis

Benchmarking is a type of competitor analysis that primarily examines successful competitors in order to learn from their products, processes and experiences and/or differentiate from them.

Knowing the competition is essential for the success of your product. A competitor analysis can examine all competitors or – as in benchmarking – only those who are very successful. After all, aligning yourself with successes drives you to do it just as well or even better.

The advantage of the benchmarking method is that you can learn and profit from the successes of your competitors. What do they already do well, what can I maybe adopt (= best practices)? How can my product be even better than the competitors?

Benchmarking involves a structured evaluation and comparative analysis of successful competitors. Comparison criteria can include, for example, design quality, usability, added value, accessibility, etc.

Preparation Make a list of competitors and products to be analysed and define the categories to be used for the analysis.

Process

1. Create a scheme for analysing your competitors.
2. Evaluate the individual competitors according to this scheme.
3. Ask yourself the following questions: What can I learn from my competitors without copying them? What can my product do better than all the others?

4. Position your product in the field of the competitors and briefly and concisely summarise the findings.

Result The goal is to obtain an overview of the market and a sound market positioning of your own product based on objective evaluation criteria – in order to learn from others and, if necessary, to gain a competitive edge over competitors.

All the best success!



Find out more here:
tk.de/innovations



Health Product Wheel - Guide and Toolbox for Successful Product Development in the Healthcare System. Techniker Krankenkasse, Hamburg, Healthcare Management Development Team, Manager: Dr. Alexander Schellinger; Editorial management: Luisa Lichtenberg; Design: The Ad Store GmbH, Hamburg; Litho: Hirte GmbH & Co. KG, Hamburg; Photos: TK image database, GettyImages; Print: TK in-house print department

© Techniker Krankenkasse. All rights reserved. Reprints, including excerpts, are only permitted with the written consent of TK. The information contained herein has been carefully researched. We cannot assume any liability or responsibility in the case of any changes.



TK Innovations Portal

Is your idea innovative and has what it takes to make a difference in the healthcare system?

Find out more here:
tk.de/innovations