Principles of Digital Product Design for the Medical Industry



"We spend a lot of time designing the bridge, but not enough time thinking about the people who are crossing it."

Dr. Prabhjot Singh

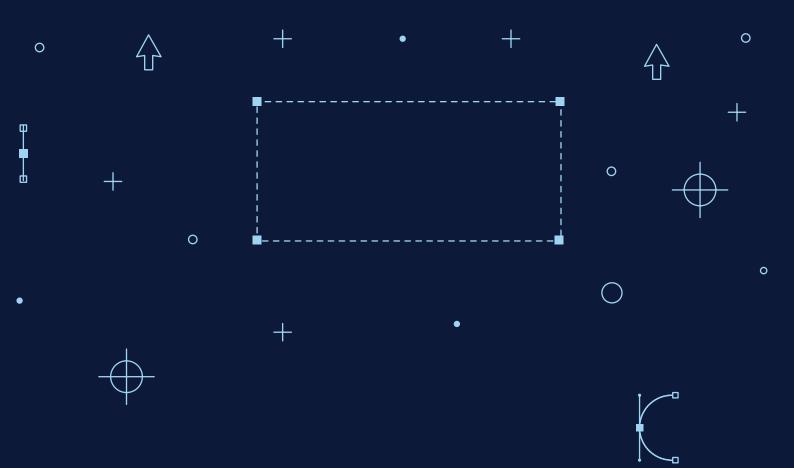
For more than seven years in the healthcare market expertise, the Brandmed team has been successfully helping healthcare businesses to turn ideas into well-defined healthcare products.

We've had our ups and downs, but we've grown from our own mistakes over the years, which has made us stronger. We know that creating quality healthcare solutions — it's such a chore with a lion's share of responsibility! But understanding the value that our customers and we bring to people encourages us to reach for greater heights. One of these is sharing our MedTech knowledge with you. Combining all of our expertise and knowledge base, we will guide you through one of the most important parts of medical solution development – digital product design.

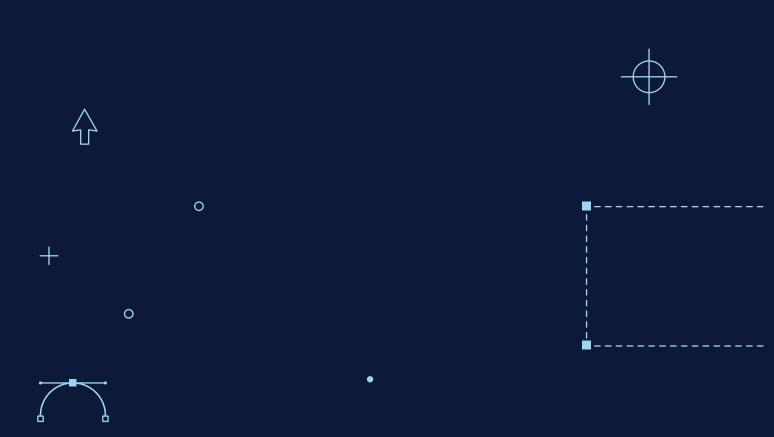
From the e-book, you'll learn how important the digital product design process is, what principles it involves, and how to reach a market-related and usercentric product for the healthcare sector.

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CHAPTER 1 Digital product design

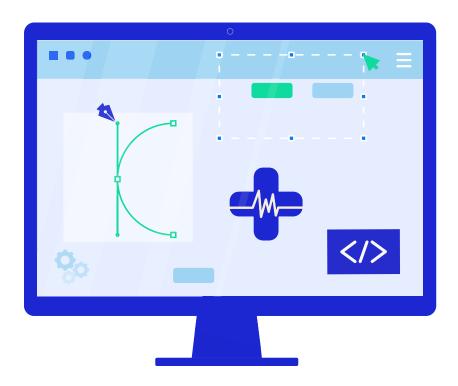


Let's be honest: today, consumers demand immediate solutions, forcing businesses to prematurely release digital solutions that often fail to survive the fierce competition.

With digital health, the situation is more complicated than ever: you don't just have to face the competitive market; you have to prove your solution is reliable, soughtafter, truly valuable, and the main one — it can ensure equality within healthcare. For the digital health business, inclusive and equitable health access is a core principle to be followed during the development of any med-related products, services, regulations, and technologies. According to the Forbes 2016 data [1], 98% of digital health startups faced serious problems, or worse — they were already dead. And the problem went far beyond an elegant-looking solution. They lacked a well-thought-out business strategy and a clear understanding of the market.

"Enough time has passed for the situation to have changed," you might say. And you would be right. The COVID-19 pandemic has facilitated the introduction of new digital health technologies, which means it's time for "dusty" ideas to become a reality. One can imagine how many startups have started to make their claims! As a result, digital healthcare ventures brought in \$14.7 billion in the first half of 2021 [2].

But new problems due to the growing demand for digital health solutions have not been long in coming. Unlike an entertainment app, medical solutions require a detailed approval procedure to succeed.



6 main reasons pushing medical startups to go bust



Lack of attention to patients and their diversity

It's hard to create valuable solutions without understanding "what a patient wants."



No scientific validation

A startup without tech-savvy medical professionals' contributions is unlikely to survive long on the market.

3 Ignoring the medical app development requirements A solution should be HIPAA, GDPR, privacy, and security compliant.

Lack of attention to patients and their diversity

It's hard to create valuable solutions without understanding "what a patient wants."

Further implementation ways are ignored

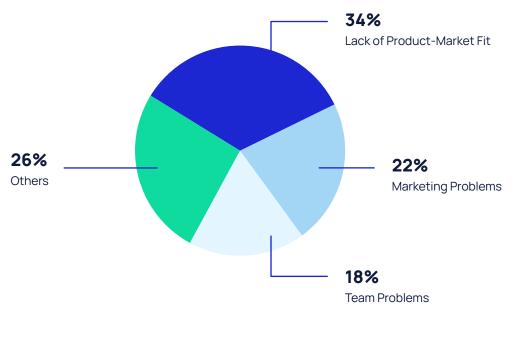
Failure to consider the solution's compatibility with the medical facility IT system can make the project a flop.

6 Sc

Scarce attention to the predevelopment stage

Skipping the digital product design step can make the solution development process futile.

In addition, there are common reasons for the failure of startups, including the lack of product-marketing fit, and team problems.



source: https://www.failory.com/blog/startup-failure-rate

What is digital product design?

Digital product design can be defined as a detailed study of whether your potential product can create and provide value to users and their needs.

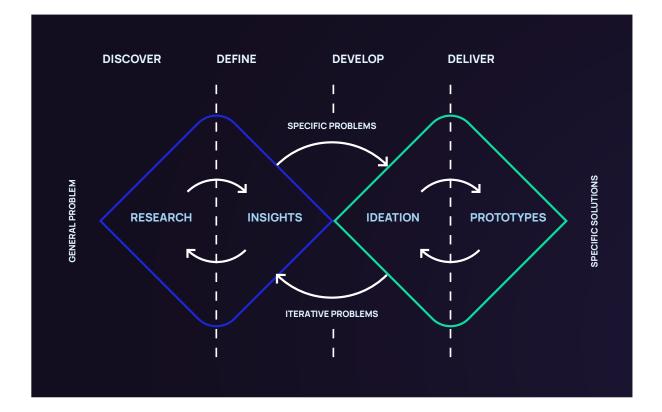
In other words, it involves designing a strategy of navigating customers through your product so they can get value out of it.

WWH Concept:

WHO the target audience is.WHY your solution should be introduced.HOW the solution will bring value to the audience.

"Design adds value faster than it adds costs." — Thomas C. Gale

Structurally, the whole process of digital product design resembles the double diamond design process, where the first diamond implies researching with insights generation and the second – ideation and prototyping.



Now the question arises: how do I go through the design stage effectively?

It's time to make the process of digital product design a crucial part of a successful business strategy for your startup.

"The ,greatest hits' of business strategy, innovation, behavioral science, and more – packaged into a step-bystep process that any team can use."

Jake Knapp, "Sprint: How To Solve Big Problems and Test New Ideas in Just Five Days"



3 key stages of the effective digital product design performance used in Brandmed

Phase 1. Understand

During this phase, the team creates a common knowledge base for all participants involved in the project. Brainstorming, researching the area, identifying problems from the perspective of the business, users, competitors, and tech stack, and then determining the direction to focus on and work with.

Phase 2. Create a solution

This step involves creating many possible solutions and ideas to fix the previously identified problem. Then the team decides which idea to prioritize and prototype for its validity testing.

Phase 3. Test and learn

It's time for testing validation of the "prototyped" idea via user feedback. Here is the moment of truth — the team is over the design with: A validated concept for moving it to the development stage or with **an invalidated concept that needs to be refined via another iteration.**

You have already succeeded and are closer to turning your idea into a healthcare-related and future-proof solution.

The whole process



What are the core benefits of following the digital product design for your medical business?

1. Reduced risks

By testing the prototype and the idea for viability, a team reduces potential time and money risks that could jeopardize your startup's success in the further stages of project implementation.

Forrester found that companies using "a design thinking approach reduced initial design and alignment by 75%," resulting in immediate product rollout for less money [3].

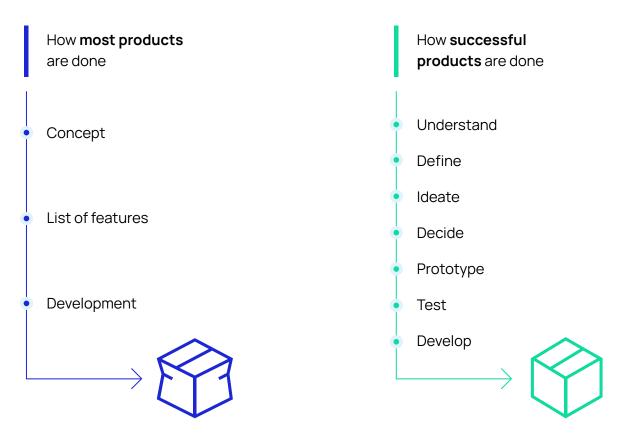
2. Increased speed

If you focus early on digital product design, you are more likely to come up with new business strategies that can be used later for rapid product development.

"Speed is the new currency of business." – Marc Benioff, Salesforce CEO

3. Proved validation by customers

A user-centered approach allows you to examine users and market needs from all angles. Thus, the chance of releasing a future-proof product from the users' perspective tailored to their needs increases significantly.



What do you need to perform the digital product design process?

The number of people and team composition may vary, depending on the business requirements and idea specifications.

Still, the agile process is nothing without cross-functional teams — that is its hallmark. Bringing together engineers, designers, and a product manager allows you to define the goals, come up with functions and see the potential of the future product.

Here is a basic team "makeup":



Product manager

A product manager is a nexus within the product design. He or she is responsible for preparing tasks, realizing strategy, inviting the other participants, and leading them through the entire workflow to obtain team cohesion and business goal accomplishment.



Designer

A person responsible for the visual part of the idea presentation.



Subject-related expert

Developing a healthcare solution requires medical-savvy professionals; otherwise, you may not reach your target audience.



Tech-related specialist

It will be up to an engineer to check if the technical part of the solution can be implemented.



A group of users

Prototype testing heavily relies on users. Without them, finding pain points and potential lapses would be highly challenging.

Product manager + Designer + Developer + Medical expert + User

=

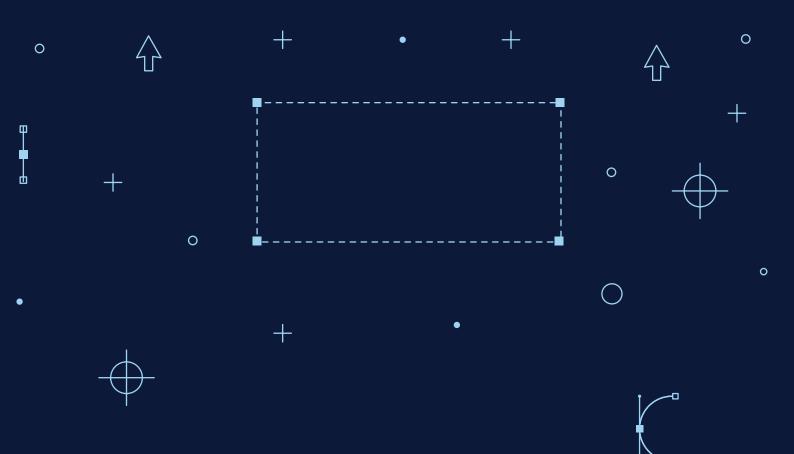
IMPACT

Digital product design layout

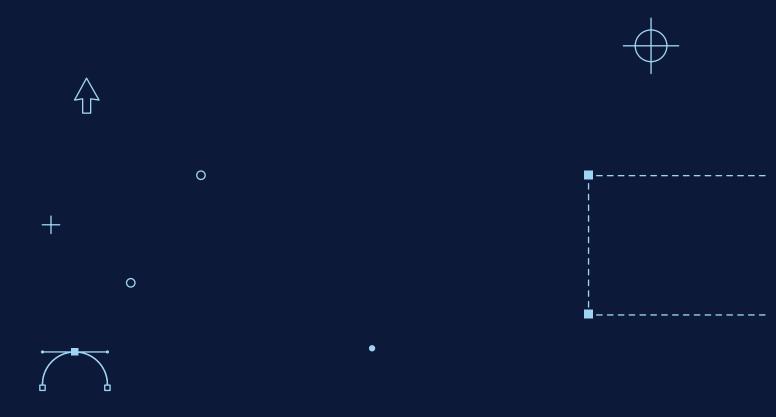
Before proceeding with the process, it is necessary to clearly outline the steps you need to go through and set a time limit.



Now let's move on to a detailed review of each stage of the digital product design process.



CHAPTER 2 Understand: user and business





As we see it, founding a start-up company typically involves four stages, coming up with an exciting idea, engineering, the launch, and finally scaling it up. Unfortunately, that approach is flawed in several ways.

Solely by following their instincts, medical companies may be tempted to jump into product design without conducting due diligence. Given how marvelous and innovative the idea seems, they want to develop a digital product as soon as possible. Consequently, some medical companies fail to evaluate market competitiveness and learn about customers and their specific needs.

A survey investigating unsuccessful startups shows that 34% attributed their failure to a lack of product-market fit, whereas 22% to marketing-related problems [4]. This means that a majority of startups do not invest enough time and resources to understand their users before starting working on a digital project. Consequently, their product may perilously overlook customers' and market's needs instead of satisfying them.

Considering this, understanding your user's and industry's needs is fundamental and has to precede the designing stage. To discover something that efficiently and profitably deals with a particular issue, you need to begin by determining the degree to which your digital product satisfies both customer and market demand. The ultimate goal of this chapter is to learn about the discovery part of your project, aiming to help you understand your customers and combine them with your business objectives and competencies.

1. Understand a user

Let's face it – when you know little about the customers you serve, you know little about how to succeed. When it comes to designing a digital product for the medical industry, recognizing the particular broad target audience that your sector includes is fundamental. Thus, defining whether you're creating a product for patients, patients' families or healthcare professionals is the initial stage of your understanding phase.



Once you decide, specify! Healthcare professional is a broad term encompassing various specialties, fields, and age groups. A mobile app dedicated to anaesthesiologists requires different features than for pediatricians, whereas a website app for digital native doctors demands different user experience solutions than for the older generation. Likewise, considering the variety of different emotions, mental schemes, and habits, patients should not be subjected to generalization. For instance, given how younger generations are more familiar with the blessings of technology, they may need different solutions than the older age groups.

Learn more about healthcare professionals' needs on our blog: How to Communicate with Increasing Number of Digital Native Doctors? Why Investing in Digital Native Doctors is Something You Should Start Doing Right Now TOP 3 challenges on how to target doctors on Google Ads

Learn more about patients' needs on our blog: The needs of patients in the tech-age and how to take care of them A key for 2022: Healthcare marketing trends for 2022

Once you distinguish and specify your healthcare target audience, you'll probably come to have some assumptions about this group – about how they behave, what they need, and what they think in particular circumstances. However, as our medical knowledge has taught us, each assumption should be scientifically proven through research and data. Analogously in the case of digital product design for the medical industry – the hunches may have fatal consequences for the future of your startup. Thus, relying on reliable research methods rather than hunches increases the likelihood of long-term success for your digital product.

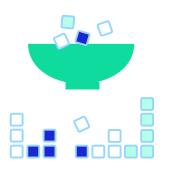
Research to guess less

Your research should start by defining the problem you want to solve and asking questions about its nature — why it exists, how users feel about it, or how widespread it is. For instance, when you come up with an idea of an app that serves young doctors as a medical calculator with complex medical formulas, you must investigate if they need it, why they need it, and under what circumstances. If they indeed struggle with having easy access to complicated medical classifications, you should explore why this problem exists, how they feel about it, and who particularly faces this challenge.

When you've defined the nature of your problem, you must check the assumptions you've made. Your role here is to emphasize and learn how your customer really thinks and feels so that you can discover his pain points, for which you will find solutions later on.

Depending on the kind of problem you're exploring, there are two types of research you

can choose to learn about your customers and their pain points:



Quantitative

Questionnaires and surveys are an easy and time-saving method to gather a large amount of information about a group. They're really good for answering questions regarding scale, like how common a problem is or how profound its effects are. A researcher can create a survey using tools like Google Docs or Wufoo, email it out, and receive hundreds of responses in just minutes. However, given that you've already defined your target audience, narrow your questionnaires to the appropriate group of people.

Tips about creating a survey:

- Keep your survey short less is more! When your survey takes more than 5 minutes, tell respondents up-front how long it'll take.
- Start broad and move to specifics ask about the overall experience and then dive into more detailed questions.
- Group related questions together to avoid confusion and context switching, list similar questions together [5].



Qualitative

Customer interviews are the best way to find the idea for your digital product because they allow us to explore and understand users' emotions, goals, and needs [6]. As they're open-ended, they help you gather a wide range of information and tend to be great for answering questions like why the problem exists or what it looks like.

Tips about conducting an interview:

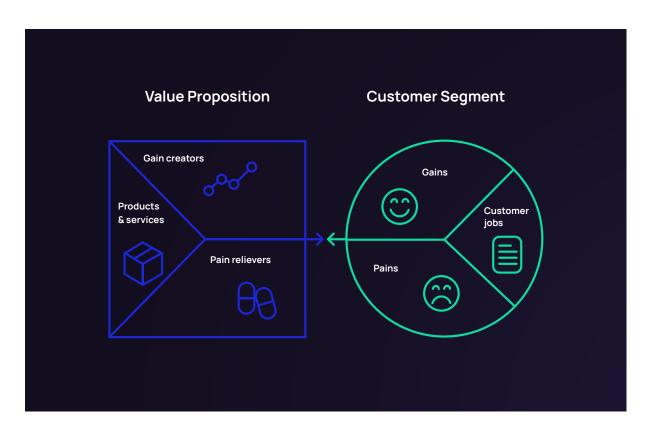
- Determine the main goal of the interview related to a specific aspect of the users' behavior or attitudes.
- Ask questions that will elicit user stories rather than yes or no responses.
- Make the user feel heard by taking notes, frequent eye contact, offering acknowledgments like "I see," and repeating the words the user said.

Once you've gathered users' insights, analyze and update your understanding of the original problem to make sense of the collected information. The scrutiny aims to draw insights from the data collected during the product research phase. Capturing, organizing, and making inferences about what users want, think, or need can help you begin to understand why they want, think, or need that. One of the beneficial ways to achieve this is the **Value Proposition Canvas**.

The Value Proposition Canvas

It is a tool that can help ensure that a product or service meets customer values and needs [7]. Its primary purpose is to create a fit between the product and the market. By following customer needs and wants, it supports your product design. Subsequently, it helps you to find your product-market fit.

Value Proposition Canvas is made up of two parts – **Value Proposition** and **Customer Segment** [8]. They are the core of the business model because they focus on "What" and "To whom".



The circle represents the Customer Profile that helps you think from the user perspective when defining tasks, challenges, and desires they'll have. In this part, the knowledge about the customers you've gathered through the research will be unprecedented.

The circle represents the **Customer Profile** that helps you think from the user perspective when defining tasks, challenges, and desires they'll have. In this part, the knowledge about the customers you've gathered through the research will be unprecedented.

- **Gains** include the positive experiences and desires that the customers wish to achieve. This includes functional utility, social gains, positive emotions, cost savings, etc.
- **Pains** are all factors that stop customers from completing a job, including negative emotions, undesired costs, situations, and risks.
- **Customer jobs** the functional, social, and emotional tasks customers are trying to complete, problems they are trying to solve, and needs they wish to satisfy.

When you've recognized your customer segment, identify your customers' jobs, pains, and gains, and prioritize them according to how important they are to your customer.

The square stands for **The Value Proposition** map. It opts to include all the features, services, and benefits that attract customers and fulfill their needs from the circle.

- Gain creators describe how your product creates benefits the customer expects, desires, or would be surprised by.
- **Pain relievers** a description of exactly how your product reduces or alleviates customer pains, including negative emotions, undesired costs, situations, and risks.
- **Products and services** this is the place to list all the features, products, and services you'll provide that help your customer get either a functional, social, or emotional job done.

After listing gain creators, pain relievers, and products and services, pick 3-5 gain creators and pain relievers that make the biggest difference to your customer.

Then, to make a broader picture of your Value Proposition Canvas, **link the pain relievers**, **gain creators**, **and product benefits to the pains**, **gains**, **and jobs they solve**.

A fit is achieved when the products and services offered as part of the value proposition address the most significant pains and gains from the customer profile.

Customer journey

Another advantageous and handy way to understand your users is to use some mapping methods, such as customer journey mapping.

In a nutshell, customer journey mapping is the approach that maps out a user's experience step by step as they encounter your problem space or interact with your digital product. Typically, it's presented as a series of steps the user has to take to accomplish a goal (such as buying a product). Thus, customer journey mapping enables the team to get into the mind of the customer, identifying opportunities to create new user experiences [9]. At the same time, it helps all team members to understand and follow the user's narrative.

Start by organizing all the information to transfer them to the mapping template. To begin the journey, start with the user's first step or the entry point of your product experience. While adding the subsequent steps to the mapping, remember to include the descriptions for each step and highlight the user's pain points.

Keep in mind that your digital product is dedicated to a specific industry. In health-related services, there is no room for understatements. While mapping, regardless of targeting patients or doctors, you must keep asking how it affects them, what will they do, how much time do they need to understand your way of thinking, and what are the features of healthcare.

Brandmed tip: Do not overcomplicate. Start from a simple user journey, with one user, one goal, and one path, even when the product would allow for multiple paths.



2. Understand a business

Learn about the industry

Once you have understood your user, you must understand your own mission and your market. To be competitive, you need to know what products are available on the market and how they perform. Thus, the next crucial step is to conduct market research. Define your competitors, meaning companies that share your goals and strive towards developing a similar product. Learn what solutions they've implemented, understand how they perform and don't forget about checking out the latest industry trends to follow.

Brandmed tip: Most likely, you will begin to learn about competitors way before you conduct competitive research. For instance, during user interviews, users might share names of products that they think are similar to the one you're proposing.

Meaning it is crucial to perfectly understand your industry. The medical sector has its own rules that you have to recognize before moving to the creation phase of your project. As some features are less demanding in the development, others may be challenging to expand due to the market's restrictions. Given that the medical industry is subjected to more or less stringent regulations, you're obliged to check if your product complies with local or/and worldwide compliances and standards. For example, as some content may be devoted only to the healthcare professionals with the license to practice a profession, bear in mind that you will need a certain protective solution from the access of normal, non-HCPs users.

Thus, whether you are expanding Pharma or Medical Devices sector and communicating with patients or doctors, <u>you need professionals that combine medical experience</u> with knowledge of design, technology, and marketing.

Your business objectives

When you've learned who your customers are and what your market landscape looks like, it is crucial to revise your business objectives and combine them with the collected data. Ask yourself what your startup wants to achieve and what are the corporate goals of your digital product. Depending on whether you want to boost sales or gather leads, you need to consider your possibilities and potential resources.

Thus, **define the specific focus for your digital product and the success criteria**. Defining explicit success criteria, such as key performance indicators (KPIs), establishes targets for evaluating progress. When you do it at the beginning of your digital product design, you will know how to measure your future success.

3. Define

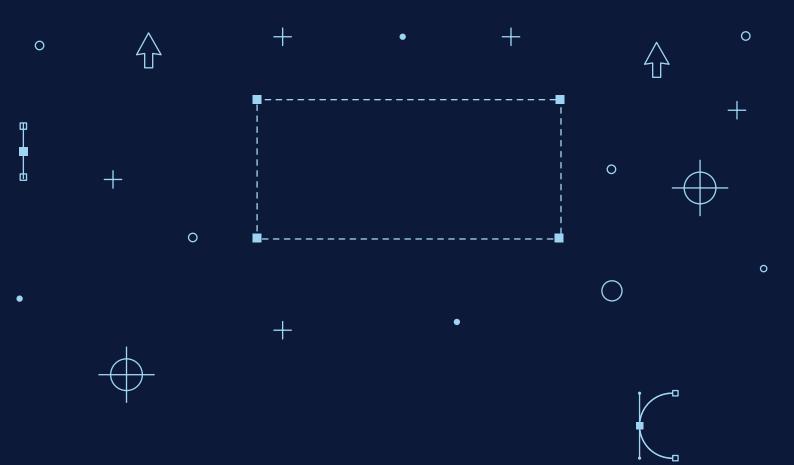
As the old Japanese proverb goes, "Vision without action is a daydream. Action without vision is a nightmare." Having understood your user, your business, and your product's context of existence, you will be able to define your product vision. This will set the direction and build a common understanding of "what we are trying to build here and why" among the entire team. A comprehensive vision will reveal all potential drawbacks and shift your focus to the most relevant issues. Hence, evaluate everything that you've learned and outline a vision.

On that account, at the end of the understanding phase, you should be able to answer the following questions with ease:

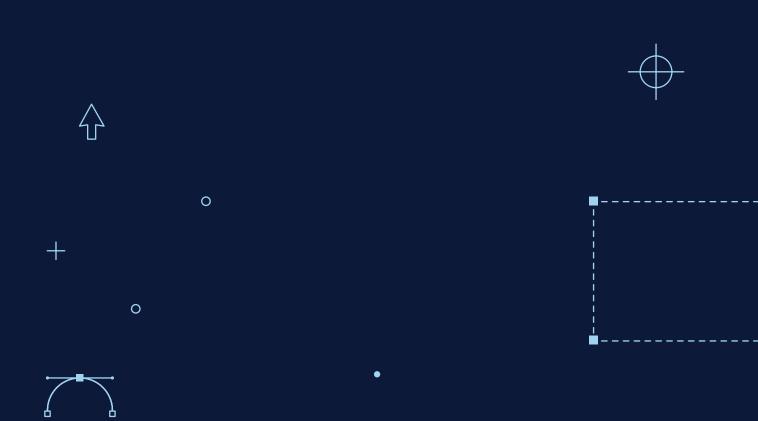
- What is the problem you are trying to solve?
- For whom are you solving it? Why should they care?
- What's the preliminary vision for the solution?

As you know the answers, let's jump to the next step of your Digital Product Design.





CHAPTER 3 Create a solution



"Good ideas are hard to find. And even the best ideas face an uncertain path to real-world success. That's true whether you're running a startup, teaching a class, or working inside a large organization."

Jake Knapp, Sprint: How To Solve Big Problems and Test New Ideas in Just Five Days

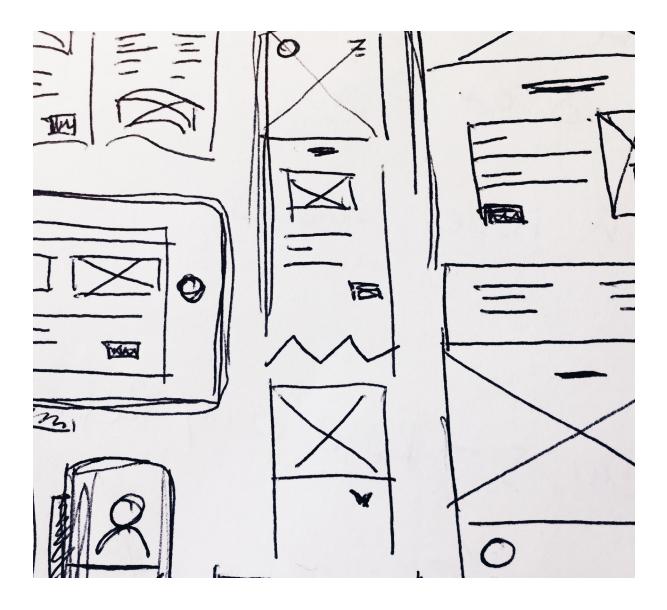
Creating a solution phase is when the team brainstorm on a range of creative ideas that address the project vision. During this stage, let your mind wander to explore as many thoughts as possible, regardless of how realistic or viable they may or may not be. These insights can become a valuable source of inspiration that again boosts new ideas and innovative insights. Once you gather a broad spectrum of solutions, you will reach the momentous point of deciding which one should be prototyped..., finally putting your brightest idea to action. In this chapter, we will introduce you to the most fruitful ways of generating innovative solutions that meet your customers' needs and your business objectives, as well as keep you ahead of the competition. Get your pencils ready - it is time to ideate, decide, and prototype.

1. Ideate

Some teams may be tempted to cling to the first solution that comes to their mind, as it seems satisfactory enough. Unfortunately, the first ideas are usually the most likely to fail due to design fixation.

Following the recent studies, design fixation refers to the situations where designers limit their creative output because of an overreliance on features of preexisting designs [10]. In other words, the first idea usually relies on a supply of previous solutions that you've come across - not only does it form a solution that already exists, but also its existence in your head blocks your imagination. Thus, fire up your team's imagination and encourage innovative thinking to go outside the box and arrive at a creative solution.

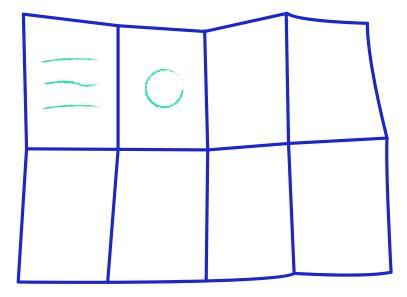
That is the role of the ideation process - generating a large number of solutions, regardless of their viability or feasibility. From sketching to mapping, let your imagination run riot and subsequently pick the most innovative ideas that are in line with your product's vision.



Start with pencils

A pencil is a humble tool responsible for sparking millions of great thoughts. It's simple and limited in functionality, but its limitations make it effective. Sketching is undoubtedly the easiest way to visualize a broad range of ideas. As your team may not only include designers, sketching with pencils would be a great way to keep your ideation phase inclusive while gathering new, bright solutions from everyone.

The beneficial method we would advise you is the Crazy 8's. It is a fast sketching exercise that challenges people to sketch eight distinct ideas in eight minutes [11].



The primary goal is to go beyond your design fixation while coming up with a lot of varied solutions very quickly.

The Crazy 8's Directions:

- 1. Hand out blank paper and pencils to all participants.
- 2. Each team member folds their piece of paper into eight sections.
- 3. Set a timer for 8 minutes.
- 4. Individually, each team member sketches one idea in each section, trying their best until all sections are filled.
- 5. When the timer goes off, all pencils are down.

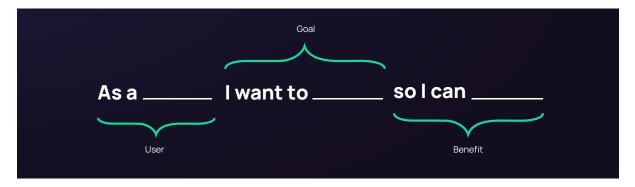
After your team has finished the sketching part of Crazy 8's, it is time to talk through the newly collected ideas and discuss their value. It may be a beneficial tool, as you want to quickly generate ideas and boost up the enthusiasm of your team.

User stories

"A story is a promise of a conversation" Mike Cohn, User Stories Applied

The next crucial element of the ideation phase is to define and visualize the functions of your digital product. A valuable method that we'd recommend to you is a user story. In essence, it is a first-person representation of a user's needs. It describes what the customer aims to accomplish by interacting with a particular product, helping you understand product functionalities.

User stories typically consist of three essential components - the subject of the action, the action they want to perform, and the desired transformation.



- "As a...., The role refers to the one who makes the action and who benefits.
- "I want…, It is the action executed.
- "So That..., It is the added value that the user gets from the action.

Putting theory into practice, the exemplary user story for the digital product dedicated to healthcare professionals would be:

As a patient, I want to provide my physician with regular updates on my sugar test results, so my health can be monitored.

As a physician, I want to manually correct information associated with a patient's record so that I can keep a detailed and up-to-date medical record.

A user story is a powerful tool since it is a source of empathy that provides your team with a more profound understanding of how users interact with your digital product. These insights will allow you to produce effective solutions.

Brandmed tip: After brainstorming on all probable user stories for an app, put them in a collaborative spreadsheet where you can evaluate all the ideas and review if anything is missing.

2. Decide

Good ideas lead to a successful digital product, whereas the bad ones increase the likelihood of failure. In this step, you have to narrow down the existing pool of ideas to the ones that are the most user-centric and align with your vision. This should lead to a discussion about what type of prototype will do the best job of validating or invalidating it

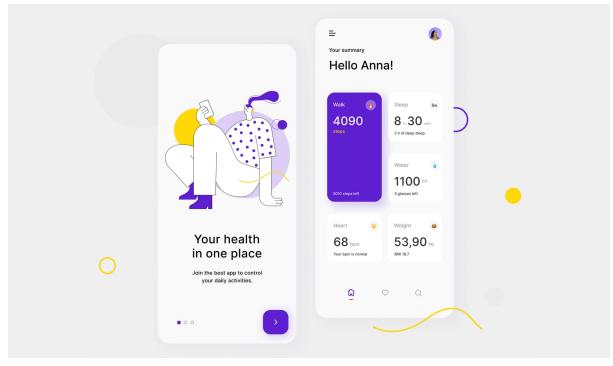
What we'd advise you to do is to put together each piece of data, information, and agreement that you've already gathered. Identify if there are multiple approaches to solving the same problem and determine which will work best, aligning with your initial assumptions, the result of the Value Proposition Canvas Model, and research findings. Keep in mind that conflicting approaches are helpful, as they illuminate possible choices for your product and may lead to beneficial innovations.

Industry insight: Keep in mind your primary vision, target audience, and your business goals. Considering that the healthcare target audience is broad, it demands the implementation of specific solutions that fit the industry. For instance, imagine that you're designing an app that helps patients manage their disease. As the patients are oftentimes lost and distrustful due to the delicacy of health, we would advise betting on simpler solutions. The patient using your application may be highly educated or not, young or old, digital native or not. No matter for whom you are designing, the created content has to be universally understood by all.

Thus, while deciding on what type of digital product you want to prototype, acknowledge the specifics of your industry. Choosing the most user-centric solutions must align with your market specifications (including the legal issues) and customers' needs.

3. Prototype

After you've ideated and chosen the brightest idea to develop, your digital product team should obtain a common and explicit understanding of what they want to build. Once you achieve that, start preparing a prototype to test the selected concept.



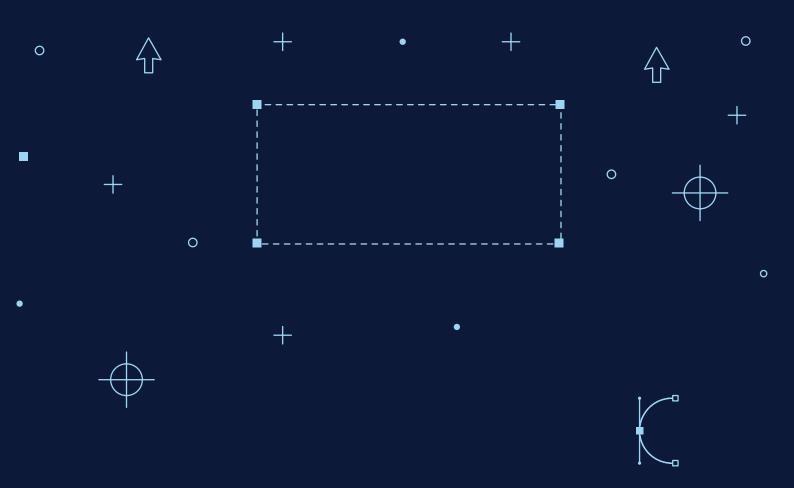
dribbble.com/brandmed

A prototype is an experimental model of an idea that enables you to test it before building the complete solution. When it comes to prototyping, efficiency is vital. Luckily, owing to technological development, you do not have to construct a final product to test it. These days, prototyping tools allow non-technical designers to create high-fidelity prototypes that simulate the functionality of a final product in just a few clicks. It is undoubtedly a faster, more efficient solution than developing a final product.

Recommended tools by our team:

- InVision
- Figma
- Adobe XD

Designing a digital product for the medical industry is a challenging task. Acknowledging that you're designing for the sector that has its own rules is crucial for the long-driving success of your digital product. While ideating, deciding, and prototyping, focus on which solutions would be the most efficient and reliable in a patient-doctor environment.



CHAPTER 4 Test and learn

Last but not least, before proceeding to the development of your medical solution — test the prototyped idea for "robustness" and prove the validity of your assumptions.

A test (aka validate) phase will give a final verdict: whether the idea is considered viable or whether it still needs to be fine-tuned in another iteration. The subject of your validation is considered a high-fidelity prototype. The main, but not the only, participants involved in the process are users and their feedback.

1. Test before learn

There are quite a few methods to test a prototyped solution. Here we will focus on some of the most crucial and effective ones used by the Brandmed team as well.

Usability study

Usability testing within the digital product design involves the identification of any usability issues with a prototype and determining the level of user satisfaction with it. Ideally, this method is done by placing users in special "lab testing" where they interact with the prototype while the team observes what challenges participants are experiencing with it.

Audience first

The hand-picked target audience is the backbone of a successful study.

A clear idea of the audience for whom your medical solution is going to be developed should not be sidelined at this stage.

If it is a solution for an upper-generation audience, they will be the main participants (testers) validating the performance of the idea via its prototype try-out.

According to Jakob Nielsen, 5 users is all your team requires for optimum phase-in to find 85% of the problems in your prototype [12]. This finding was reached via a mathematical model using binomial probability (aka Poisson Distribution).

Main points to focus on during the usability study:

- Does the prototype provide enough information to enable users to start a specific task?
- Is it difficult for users to perform tasks on the new UI?
- Is an element discoverable?

Brandmed tip 1: While usability testing, try focusing more on what users do with your potential product and how they operate within rather than what they say about it. Usability is proven in action.

Not only does a competent testing approach help you to identify user problems and understand them but also keep your business strategy time-and-cost-effective

Recommended tools by our team:

- Lookback
- SessionStack
- Google Hangouts
- ScreenFlow.

Brandmed tip 2: In the case of testing with remote users, it is advisable to make sure you have the users' approval to record or share their screen while they are performing a task.

Survey study

Survey studies are a well-known, albeit highly effective, method of reaching a lot of potential users and obtaining qualitative information about the success of your future medical solution.

Try to place a "questionnaire" in places where your predetermined audience congregates – healthcare-related forums, for example.

Recommended tools by our team:

- Google Forms
- FormKeep.

Stakeholder review

Ideally, leadership stakeholders should be involved in the whole process, especially if it concerns a complex subject like healthcare.

In practice, involving stakeholders throughout the whole process isn't a common experience in many companies, which also carries a certain kind of drawback. Stakeholder approval is the green light to move forward with a solution. So, it is in the best interest of the whole team to get that light without a long time commitment. Thus, it is optimal to have stakeholders participate at key moments, for example, after each phase, where a test one is no exception.

Tips to follow:

- Plan a review session in advance so that it does not cause time difficulties for both parties.
- It is preferable to plan a session after the user interaction stage in order to present a feedback analysis.
- A pre-prepared presentation containing both an overview of the prototype and the results of user feedback can be taken as the meeting baseline.

Technical feasibility

It's time to bring in an engineer, and answer the main question — is your prototype feasible and can it become a full-fledged go-to-market solution?

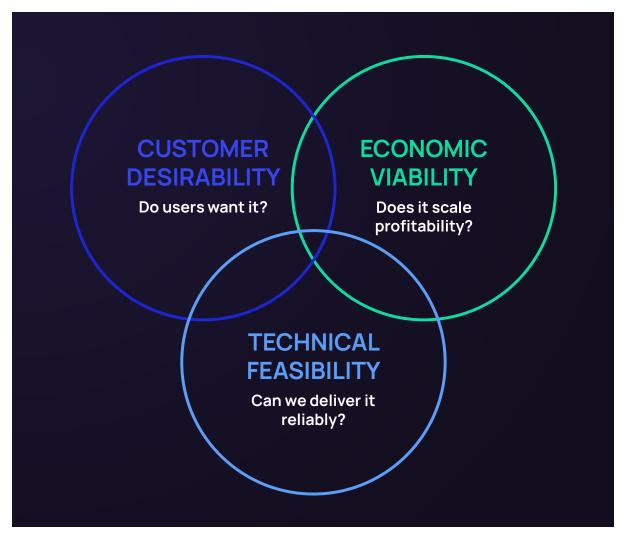
As in the case of the indispensable persons — it is better to involve an engineer or techrelated person throughout the entire digital product design. Nevertheless, an ultimate verdict is at the test stage.

Key aspects of a technical feasibility study:

Besides determining if it is possible to implement a solution from a technical standpoint, this study also focuses on legal and economic aspects.

The project's cost and return on investment can also determine the solution's feasibility performance.

At this stage, it is a good idea to create a backup plan (including a technically-oriented one) in case of unforeseen circumstances.



2. Learn: the next iteration or a development stage?

Good ideas lead to a successful digital product, whereas the bad ones increase the likelihood of failure. In this step, you have to narrow down the existing pool of ideas to the ones that are the most user-centric and align with your vision.

This should lead to a discussion about what type of prototype will do the best job of validating or invalidating it.

What we'd advise you to do is to put together each piece of data, information, and agreement that you've already gathered. Identify if there are multiple approaches to solving the same problem and determine which will work best, aligning with your initial assumptions, the result of the Value Proposition Canvas Model, and research findings.

Keep in mind that conflicting approaches are helpful, as they illuminate possible choices for your product and may lead to beneficial innovations.

The outcomes of the digital product design process



Fruitful failure

In this case, your prototype turns out to be off-target, and the development of the solution is doomed to failure. Nevertheless, it spurs your experience-filled team to draw conclusions and, perhaps, proceed with the follow-up iteration to troubleshoot all detected flaws. Either way, with this outcome, you will save the team months of work on a potentially failing project.

"Failure is simply the opportunity to begin again, this time more intelligently." – Henry Ford



Slight success

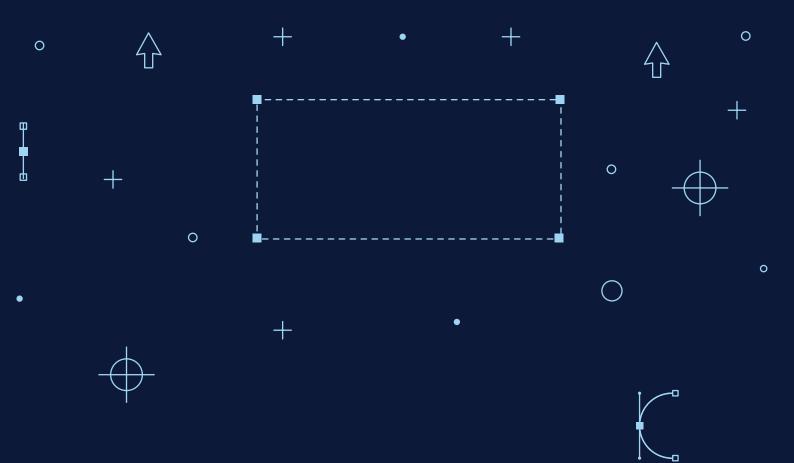
The result is fifty-fifty: some goals have reached the audience, and some need further refinement. Usually, in this case, a team plans one more iteration to address deficiencies point by point to eventually reach the next step.



Triumphant win

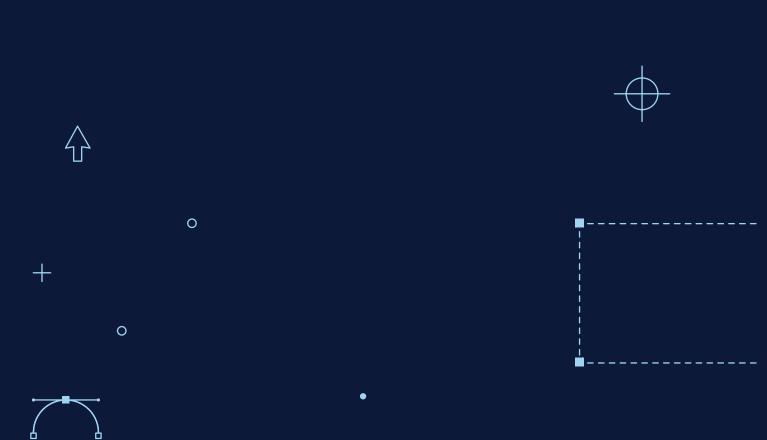
Your prototype achieved its ultimate goal: the audience met the objectives and found the feature-packed prototype easy to handle.

Are you ready to implement the solution and go through a smooth shift to the next stage – development?



CHAPTER 5

Summary





Any process that gets you closer to the main result, the launch of a ready-made solution, is challenging. Identifying the problem, understanding the demanding users, researching the ever-changing market, presenting the mocked-up version of the solution, and the list goes on and on.

As you name the boat, so shall it float

The digital product design process is like a benchmark, giving a sneak peek into the future and determining the product's longterm performance Given the main design process hallmark, such as limited time to create a wellthought-out prototype, it is often unavoidable for startups to encounter challenges during their runtime.

Biased medical data, skewed validation of an idea, poor feedback, and incorrect target audience identification are some of the reasons leading to team frustration and, as a consequence, project shutdown.

Still, there are other potential pitfalls that cause newcomers to ignore recommended steps and blow the whole process out of whack.

1. Goof-ups that can derail your digital product design

While large companies may not even be affected by the failure of digital product design, medical startups are exposed to more risks. Lack of experience does not play a key role here.

Having worked with startups for a number of years, Brandmed has identified 4 major mistakes for startups to avoid while engaging in digital product design.

Otherwise, the project will "be on its last legs", which will most likely lead to its failure while costing your company time and money losses.

They lack MedTech members

Looking for pain points in the demanding healthcare sector to create a digital solution without a medical background is like making a website design without a designer. There may be a result, but the question is, how powerful is it?

Even if your team is spurred on by the best designer, engineer, and product manager without a medical background or, at least, a medically savvy specialist you are more likely to generate a product for people but not patients.

• They don't take it seriously

Every business strives to release a product as soon as possible, which is logical and justified – the digital marketplace does not bear delays. But startups tend to underestimate how important is each step for the long-term sustainability of the product, especially within a fragile medical market.

They want to go faster and sooner without a solid foundation to withstand possible failure.

These three steps set a solid foundation for further product development. It doesn't matter how the workflow ends – the result will be in any case, and that's half the battle!

• They have a poorly efficient team on board

Having only designers on the team to accomplish the product design process is not the best way to go about it. The point is that team members with the same knowledge base and points of view, oddly enough, create the effect of so-called blind spots, which are fraught with a narrow understanding of the problem. Creating a diversified team with a process coordinator and medically savvy professionals at the core will significantly increase the likelihood of success.

• The process is out of control

This reason stems directly from a lack of experience. If you start designing a digital product for the first time, then deviation from the plan, which results in a slowdown to a crawl of the entire process, is a fairly common phenomenon among startups.

Nevertheless, the first round of testing and learning does not mean poor luck. It is crucial to make a detailed plan in advance by addressing questions such as: how will your process go, who will constitute the participants, and how much time each step will take.

Deviations, disagreements, and dragging out the process are normal. But it is advisable to make sure your team is able to bring the whole process back to square one and not turn the whole workflow into an expensive and worthless waste of time.

2. Digital product design: key takeaways

Having acknowledged all the mistakes that can derail your project, it is time to recapitulate all the key points you have to be mindful of in your digital product design process.



Understand

Each process should begin with defining the problem you want to solve and how your healthcare target audience feels about it. As we've shown you, the discovery part is the first phase of every human-centered design performance. Starting with diligent research will allow you to understand patients' or doctors' perspectives and what digital solutions are already in use. Once you gather all the data needed, define your success metrics to align them with your business objectives.



Create

Having acquired a good understanding of the project goals and what we want to solve, we can begin creating. That's when the journey of imagination begins. With the use of Crazy 8's, generate as many ideas as possible, regardless of their feasibility or viability. Explore and sketch! Subsequently, gradually start rejecting some of them, perform user stories, and decide which solution will serve the best for your users and business objectives. Finalize the second step by creating your first prototype...



Test and Learn

... and test it! Regardless of whether you're conducting a usability or survey study, your aim is to validate the realized ideas and reap the fruits of your efforts. Even though some solutions may turn out to be a failure, your desired outcome is to learn from all the findings. Testing and learning should be an ongoing iterative process, as your primary goal of this phase is to steadily improve the digital product and ensure its future success.



3. How can Brandmed help you design your digital product?

After performing healthcare projects for 7+ years and learning from one goof-up at a time, we've already helped deliver future-proof solutions and campaigns for medical-oriented organizations.

Thanks to our diverse MedTech team, we thoroughly discuss, understand, validate, develop and turn ideas into turnkey solutions for the healthcare sector, taking into account the specific approach that any project needs to address the target audience's pain points.

Talk to our team!

Let's discuss your ideas for your medical startup together to hit the bull's-eye.



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Sebastian Cencyk

Kasia Jezierska-Krupa

Kasia Lipińska

Anastasiya Oreshkevich

Daria Miller