To MVP and Beyond

From Vision to Building a Great Product

Xebia

1. The MVP Playbook

In the constantly evolving world of tech, time is of the essence. The race is always on - to be the first to market, the first to innovate, the first to identify a problem and offer a solution. However, starting a new product can be daunting, particularly in emerging tech. The fear of missing out or being left behind by competitors is a tangible concern, not to mention the pressure to deliver value, justify budgets, and align with users' needs. This is where developing MVPs provide the perfect middle ground, enabling teams to validate their ideas, gather feedback, and make necessary adjustments without investing excessive time and resources into a fully-featured product.

Regardless, building a satisfactory MVP is challenging. Whether you're taking your first steps in MVP development or seeking to refine your approach after past challenges, Xebia's perspective aims to demystify the process and highlight the strategic value of MVPs in product innovation.

Turn Your Vision into a Product

Developing a new product is often a laborious process. It involves designing a full-fledged product from the get-go and using the entire allocated budget for its development. However, this usually results in a product that does not resonate with its users. As a result, the organization ends up spending more funding and time adjusting the product, ultimately making it riskier to get a return on investment due to the additional resources spent. Safe to say, this approach can lead to a less-than-satisfactory product while putting you in a riskier position in terms of return on investment.

In contrast, the MVP approach lets you start small with your vision, letting your users guide the way. Instead of assuming what your users want, let them press the buttons and them tell you what they need.
This approach turns your early adopters into the products' co-creators and consequently aligns your vision with your users' needs, allowing you to iterate, refine, and improve before the budget runs out.

After enough iterations your product will grow beyond an MVP and you'll end up with a Market-Adjusted Product (MAP), leading to a more predictable and favorable ROI outlook. The MVP approach allows for agility, enabling your business to adapt swiftly to market trends and user demands while competing effectively with established products.

Let's Dive Deeper into the MVP Approach

This paper will provide a comprehensive introduction to the MVP approach, highlighting its benefits, potential challenges, and solutions. It will serve as a helpful guide for management and tech leads looking to navigate the complex and rapid world of product development in today's tech industry. Whether you are venturing into emerging tech or competing in an established market, understanding, and implementing an MVP could be the game changer you need.
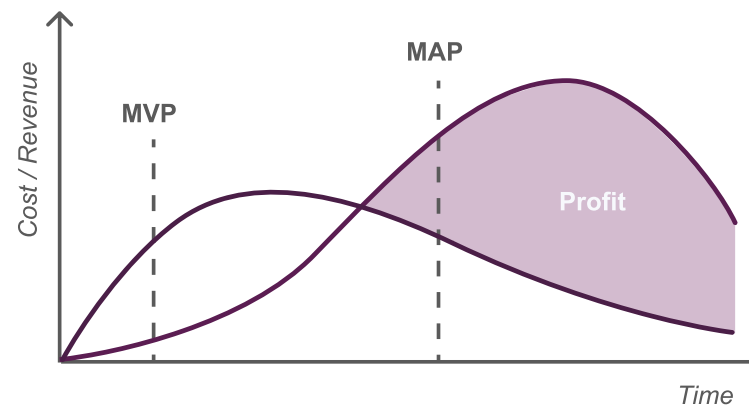

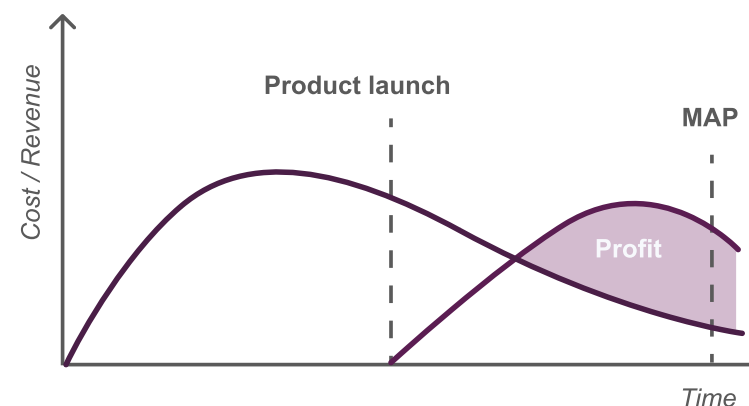
Figure 1: *Launching fast with an MVP*

Figure 2: *Spending lots of resources upfront*

2. Big Things Often Have Small Beginnings

Creating an MVP is like throwing a small pebble into a pond and watching the ripples turn into waves. It's about starting small, with the essentials, and growing from there. Let's start by looking at two tangible examples of products that used the MVP approach as a stepping stone for their success:

Airbnb: From Air Mattresses to a Global Marketplace

It's 2007. Two roommates living in San Fransico, Brian Chesky and Joe Gebbia, struggle to pay rent. They notice a design conference is coming to town and hotel spaces are running out. To earn some of the rent money, they decide to rent out air mattresses in their living room and offer breakfast to their guests. Thus, Airbed & Breakfast was born, a simple website created over a weekend.

The website consisted of nothing more than a few photos of their living space, a promise of homemade breakfast, and a simple booking system.It's as MVP as it gets. The goal? To solve an immediate need by providing accommodation for conference attendees with minimal resources. They managed to host three guests, proving that people were open to staying in strangers' homes for short stays, especially when traditional options were scarce or too expensive.

The beauty of Airbnb's MVP approach was its simplicity and direct response to a real-world problem. It did not start with algorithms or a global database of listings. It began with a simple webpage, a proposition, and air mattresses. From these humble beginnings, Airbnb evolved into a platform that now offers millions of listings across the globe, transforming how people travel and experience new places.
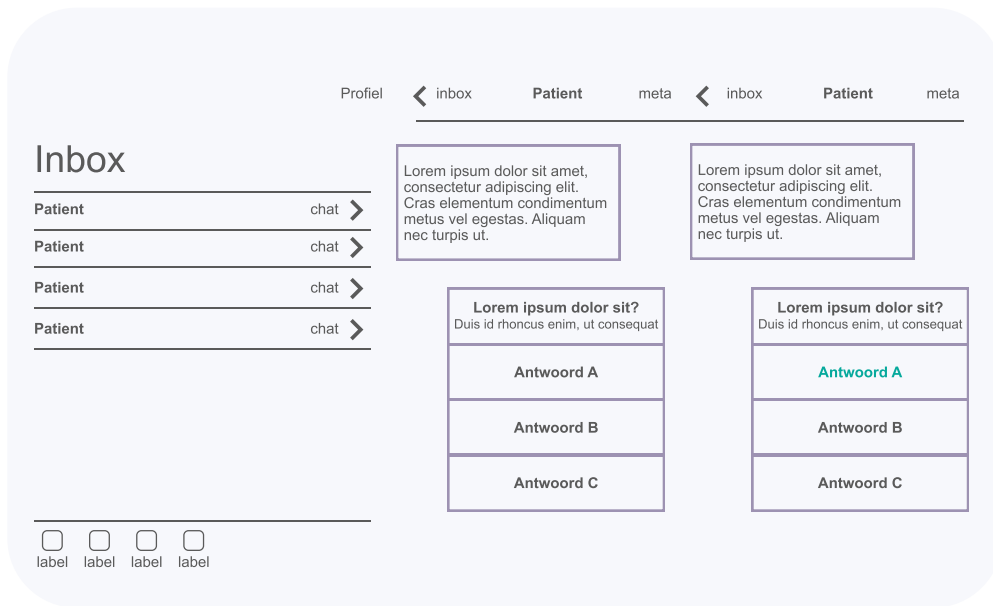
Figure 3: *The first wireframes for Virtual Patient. Wireframing is a great tool to explore and identify key features for your MVP*

Virtual Patient: a Race Against the Clock to Get the Product into the Hands of the Users.

Back in September 2023, UMCG (the University Medical Center Groningen) came to Xebia with a challenge; "We have a prototype for a medical simulation e-learning tool, Virtual Patient. Can you, with limited resources and an 8-week deadline, turn this prototype into a functioning mobile application so we can get it into the hands of our users?"

UMCG's Virtual Patient project was ambitious. The challenge was developing a functional platform and ensuring the result was an intuitive, informative, and engaging educational tool. With a tight deadline the team adopted the MVP approach. They focused on core functionalities. With the client, the team shortlisted three key initial features that would make the biggest impact: a user-friendly interface for the resident doctors, a selection of Q&A elements, and straightforward feedback mechanisms. Applying best practices and proven industry technologies and focusing on the essential features were crucial in navigating the complexities of this project.

As the clock ticked, collaboration between Xebia's developers, UMCG's medical experts, and early adopters became the project's backbone. Iterative testing and feedback loops helped refine the app, ensuring it met the users' needs while adhering to the educational goals. When the app launched, it was more than just a product; it was a testament to the power of starting small, focusing on the essentials, and setting the fundamentals to grow through user feedback and the ever-changing e-learning landscape.

The Ripple Effect of Starting Small

Both Airbnb and Virtual Patient exemplify the MVP philosophy: identify and start with the key features that deliver most of the value to your users, test it in the real world, learn from your users, and iterate. Their stories highlight several key takeaways for anyone looking to create an MVP:

Solve a Real Problem:
Both products addressed genuine issues their founders experienced, ensuring an initial market need.

Start Simple:
They launched with basic functionalities that solved these problems without overengineering the solution from the get-go.

Learn and Iterate:
Feedback is crucial. Both companies evolved significantly from their MVPs, driven by user insights and market demands.

Scale Gradually:
They did not try to conquer the world overnight. They started small, proved their concept, and scaled over time.

These MVPs were not just starting points but launchpads for experimentation, learning, and growth. Their stories are a testament to the power of MVPs in validating ideas, engaging early adopters, and setting the stage for scaling up. Whether you're building a niche e-learning application or the next Fortune 500 company, there's a lot to learn from throwing your pebble into the pond. Who knows how far your ripples might travel?

3. Embracing Agility - Your MVP Launch Pad

Imagine your business as a racing yacht; the market winds can be harsh, and sea changes are unyielding. In such an environment, agility is not just nice; it's your lifeline. Let's discuss the essence of starting with a Minimum Viable Product (MVP).

Setting Up Your Team:

The People Factor
At the heart of any MVP lies its creators. The team and its operation can make or break your MVP, so getting the composition and dynamic right is paramount. Empower the team with the autonomy to make decisions, validate hypotheses, and course-correct promptly. That decreases dependency on hierarchical clearances and speeds up the process.

Specialists vs. T-shaped people
While specialists are invaluable and can provide a depth of knowledge, T-shaped professionals with a broader skill set and diverse experiences are critical for success. Often honed in consultancy roles, T-shaped professionals pivot across multiple disciplines and delve deep when timelines are tight, and versatility is of the essence. Although a balanced team is always valuable, the agile nature of MVPs generally favors the flexibility of T-shaped talent, which companies like Xebia excel at nurturing.

Engineering Culture
MVP thrives in a culture where "done" is fluid, learning is cherished, and failure is seen as a stepping stone. Foster an open and communicative environment conducive to fast pivots and technical curiosity. If necessary, create a "bubble" inside your existing environment to remove pushback constraints. Of course, sometimes it is easier to let consultants tackle this barrier since they are almost hierarchy-independent and well-trained at breathing life into the fast-paced bubble.

Navigating Organisational Landscape

Does it Fit Your Organization?
Many leaders today still hail detailed business plans that boast certainty. While a robust strategy is still vital, the MVP philosophy advocates a distinct approach: plan enough to start, then iterate rapidly. If you're in a stiff organization, it's time to infuse some flexibility. If that feels like a change that is too big, fear not. Start an off-grid project on the side. The key is to incubate an MVP-friendly environment where rapid experimentation is possible and celebrated.

Stakeholders and Expectations
Stakeholders can be deeply passionate and highly invested, especially when capital and reputation are in play. Part of your role is to ensure that expectations are aligned with MVP principles. Communicate that the objective is to learn and iterate, not to launch a feature–stuffed first release.

Building MVP Mindset;

Agile

Agility should be your north star. Agile methodologies provide a blueprint for iterative development, which is critical for MVP success. By building a sprint rhythm and maintaining regular check-ins with users, you can ensure that the product evolves in step with the market.

Do Not Waterfall your MVP

Remember, an MVP is not a mini-waterfall project. It's not about delivering a lesser product; it's about delivering essential value quickly. The question to answer is: what's the least you can do to solve the core customer problem effectively? This approach requires shedding heavy documentation and embracing learning as you go.

Product as a Pivot-Ready Construct

Your product is an ever-evolving entity, so your technology stack should be agile enough to accommodate pivots without colossal waste. It's essential to let the Tech choices be driven by the problem you aim to solve instead of being dictated by a standards committee. Make sure to build with modularity in mind to allow for ease of adaptation when the inevitable course corrections arise.

Buy or Build

In MVP land, time is of the essence. Sometimes, it's wiser to buy off-the-shelf components and customize them rather than build from scratch. Assess each case carefully based on the time to market and the unique value you're seeking to provide.

The MVP Process Reimagined

Does your organization mirror the flexibility of a catamaran or the rigidity of an ocean liner? It's essential to ask because launching an MVP is a voyage that demands agility.

Balancing Business Value and User Value in the MVP Stage

Striking the right balance between what's good for the business and what delights the user is the MVP tightrope walk. Always focus on the core problem your product addresses. Then, iterate to meet user needs while keeping a keen eye on your business metrics. Each iteration should steer the product toward a broader market fit and better business viability.

The allure of perfection can be a siren call leading away from practicality. Remember, the goal of an MVP is not to launch a perfect product but to start the journey of crafting one. It's about building enough to learn what works – and, just as importantly, what does not.

Whether you have the luxury of a responsive environment or are fostering a renegade MVP team on the side, remember that the true spirit lies in agility, speed, and a relentless drive to deliver value. With the correct mindset, processes, people, and product perspective, there's nothing stopping you from embarking on your MVP adventure—even if that means starting tomorrow.

4. Mastering the Art of MVP Development

When we dive into the world of creating a MVP, there's a common misconception that it's a Herculean task reserved for those with deep pockets or vast technical resources. But with the right environment and approach, crafting an MVP is easy. Yes, you read that right: easy!

Let's break this down and turn the concept of MVP development from a daunting challenge into an achievable milestone.

Preparation Before Lift-off

Before development begins, it's critical for the team to align and choose the essential features that will shape the core of your MVP. By understanding and sticking to these early-stage steps, you ensure your product is well-equipped to meet users' needs and increase your chances of success in the market.

Step 1

Brainstorming Brilliance

This phase is all about getting everyone to speak the same language, letting ideas flow freely, and seeing where they take you. Once you have clarity on what problems your MVP should address and who the target audience is, kick things off with creative brainstorming methods. For example, event storming, where you map out your project events with all stakeholders to understand each other's language and determine the flow and dependencies. Google design sprints is another great option which pushes your team to think big before eventually narrowing down to what's essential.

Step 2

Identifying the Gems

Once you're brimming with ideas, it's time to sift through them and identify the key features that your MVP cannot live without. This is where a value-complexity matrix can help you out. You're looking for features that solve the core problem for your users, ideally, the ones that deliver the most bang for your buck.

Step 3

The Blueprint: PRD

Now, translate those ideas into a Product Requirements Document (PRD). This document lays out what you're building, why you're building it, and who you're building it for. The PRD is your blueprint; the goal of your MVP. But make sure to keep it short! A one-pager should suffice.

Step 4

Design Iterations: From Low-Fi to High-Fi

With your PRD ready, start sketching! Begin with wireframes to get a sense of the user flow. Then, move to low-fidelity designs to begin visualizing the user interface. Finally, polish those designs into high-fidelity versions that resemble your final product. Each step is an iteration, a feedback loop, a chance to refine and adjust based on feedback from your users.

Step 5

Determine the Metrics: Validated Learning

Before diving into development, clearly articulate the assumptions that underpin your MVP. Your MVP should test the core hypothesis about whether your product solves a meaningful problem for your target users. The key is determining what metrics will give you clear insight into whether your product meets its intended goals.

The Building Phase

Now, let's dive into the details of building a viable MVP. Stick to the features outlined in your PRD and resist the temptation to add more. Your goal is to create a functional MVP that addresses the core problem for your users.

Here are a couple of things to keep in mind while developing your MVP:

◉ **Avoiding the Overengineering Trap**
As you start to build, keep it simple. Remember, you're not creating the final product; you're building a "minimum" version to validate your idea. Every engineering decision should be weighed against team velocity and the MVP's core value proposition.

◉ **Stay Agile, Take Care of Your Documentation**
Keep your documentation, like the Architectural Decision Record (ADR), up to date. It helps everyone stay on the same page and makes future decisions easier. Similarly, keep your value map fresh. It should evolve as you learn more about your users and product.

◉ **Creating the Right Environment**
Making MVP development successful is all about mindset. It's about embracing simplicity, focusing on core features, and being ready to learn and iterate.

With the right approach, the process becomes less about overcoming obstacles and more about exploring possibilities. A supportive team environment, clear communication, and a focus on learning over perfection are key. By breaking down the process into manageable steps and maintaining a clear vision of what you're trying to achieve, MVP development can be straightforward and enjoyable.

◉ **Measure, analyze, learn, and make decisions**
Once your MVP is in users' hands, closely monitor your key metrics. This stage is about gathering data that validates or refutes your hypotheses. Pay special attention to user feedback, as it can provide direct insight into your product's strengths and weaknesses.

Armed with this feedback, you can make informed decisions about your next steps. If your hypotheses were validated, you might choose to persevere and expand your product based on user feedback. If the data suggests your hypotheses were off, it's time to pivot—this could mean making significant changes to your product based on what you've learned.

By centering validated learning in your MVP development process, you ensure your product development is data-driven and closely aligned with user needs. This approach reduces the risk of investing heavily in features or products that don't resonate with your target market, thereby increasing the chances of your project's success.

Start Building the Future

Ultimately, an MVP is not just a product; it's a learning tool, a stepping stone towards building something great. By demystifying the process and focusing on the core principles outlined above, anyone with an idea and the right mindset can turn their vision into a tangible, testable product.
What follows your MVP? With valuable insight and readiness to expand beyond the MVP's boundaries, let's explore the next steps in our upcoming chapter.

5. Evolving Beyond: From MVP to MAP

Your MVP's success is just the beginning; it proves a demand for your solution. However, it is necessary to continue refining the product so customers can fully embrace it. Reaching the Market-Adjusted Product (MAP) stage means your product has been adjusted based on extensive market feedback and testing to fit a market need. It is the natural next step in your product development journey. However, moving from an MVP to a fully fleshed-out MAP is no easy task; it is filled with experimentation, iterations, and strategic pivots. The upcoming chapter will offer guidance on how to navigate this challenge effectively.

MVP to MMP: Perfecting Market Fit

The transition from MVP to a Minimum Marketable Product (MMP) is the stage where your product is not just viable but also desirable in the market. It should fulfill the core needs of your target audience while being feature-complete enough to be sold. An MMP is essentially your product's version that has evolved after real-world tests, incorporating essential features that address user feedback and industry demands.

Strategies for Transition

○ **Feedback Integration:** Continue to actively gather and analyze customer feedback. Prioritize features that address common pain points or enhance user satisfaction.

○ **Performance Metrics:** Establish clear metrics to gauge your product's performance. Use these insights to make informed decisions about which aspects to improve or iterate upon.

○ **Scalability:** Ensure your product can handle increased demand. This could mean optimizing your backend infrastructure or ensuring your user interface remains intuitive at scale.

○ **Market Research:** Delve deeper into market research to understand your audience's evolving needs. This step should also include competitor analysis and identifying your unique selling propositions (USPs).

○ **Feature Prioritization:** Use tools like the Kano Model to classify and prioritize features that increase customer satisfaction and differentiate your product.

○ **Marketing Strategies:** Begin laying the groundwork for broader marketing efforts. This could include content marketing, social media campaigns, or beta testing with a wider audience.

11

MMP to MAP: Aligning with Market Demands

Reaching the Market-Adjusted Product (MAP) stage means your product has been refined based on extensive market feedback and testing. It's where your product meets the market's current needs and expectations, aligning perfectly with what your target customers are willing to pay for.

Strategies for Transition

⦾ **Continuous Feedback Loop:** Establish a system for continuous user feedback even beyond the MMP stage. This ensures that your product evolves in line with market demands.

⦾ **Adaptation and Flexibility:** Agility remains the key to staying relevant and maintaining a competitive edge. Be ready to pivot or make significant changes based on new market trends or feedback.

⦾ **Market Positioning:** Fine-tune your product's market positioning. Ensure that your messaging, branding, and marketing efforts communicate the unique value your MAP offers.

Successfully navigating from MVP to MAP is a significant achievement. However, the journey does not end there. The tech landscape and market demands are ever evolving. So, staying ahead requires continuous innovation, iteration, and a deep understanding of your customer base.

6. Realizing the Potential of MVP Transformation

The journey of product development from a MVP to a a MAP may seem distinct and layered. Still, it is indeed a refined process of discovery and evolution. This path is not just about creating a product to solve a problem but sculpting a tool that anticipates users' needs, delivers value, and continually aligns with the trends and demands of a dynamic market. With the continued agility to iterate, learn, and innovate, your product evolves from a simple solution to an indispensable asset for your target audience.

The MVP approach we've outlined is not merely a tech industry phenomenon but a pathway for businesses in diverse sectors to develop solutions and create customer value. By starting small and focusing on the core, MVP methodology allows enterprises to test the waters, validate concepts, and align with market needs. Looking at Airbnb, the transformation from MVP to MAP demonstrates that every multi-billion-dollar business idea begins as a humble response to a market need.

In a constantly changing world, we need product development strategies that adapt and anticipate these shifts. The focus is on maintaining a balance between learning and execution, innovation and practicality, and risk-taking and astute decision-making. Navigating this balance requires an agile mindset, a customer-oriented focus, and a fearless appetite for success.

In conclusion, starting with an MVP paves the way for an agile, flexible, and lean approach. It enables businesses to launch products that can shape and adapt according to customer needs and market trends. It is a stepping stone towards the creation of a product designed not just to meet expectations but to exceed them. Embarking on this journey of MVP to MAP might seem daunting, but it's a voyage worth taking. Because iterating, adapting, and constantly evolving in line with your users' needs and desires is the essence of successful product development in today's dynamic world.

Let's embrace the MVP philosophy and build the future, one MVP at a time.

The Authors:

Twan Kruiswijk
Front-End & User
Experience Consultant

Sean Tijmons
Software Consultant

Dennis Meelis
Software Consultant

Albert Brand
CTO Software
Development

About Xebia

Xebia is an IT Consultancy and Software Development Company that has been creating digital leaders across the globe since 2001. With offices on every continent, we help the top 250 companies worldwide embrace innovation, adopt the latest technologies, and implement the most successful business models.

To meet every digital demand, Xebia is organized into chapters. These are teams with tremendous knowledge and experience in Agile, DevOps, Data and AI, Cloud, Software Development, Security, Quality Assurance, Low Code, and Microsoft Services. In addition to high-quality consulting and state-of-the-art software, Xebia Academy offers the training that modern companies need to work better, smarter, and faster.

Today, Xebia continues to expand through a buy and build strategy. We partner with leading IT companies to gain a greater foothold in the digital space.

Find more information on how Xebia is driving innovation at xebia.com.

Creating Digital Leaders.