

Module 3. Minimum viable product

Unit 3.1 Minimum viable product (MVP) concept

Until now, we have worked to identify our customer's problem and its solution, combining methodologies that need an iterative process to know the customer through validation of hypothesis and experiment, to present them with the best responses to their needs. It is now time to get into the creation of prototypes that are useful to improve your proposition. We are talking about what is known as the minimum viable product (MVP), which is a strategy used by entrepreneurs in the way to understand the market needs since it offers the possibility of incorporating changes or improvements while we get to know the consumer.

We have already seen that Ries (2013) defines the minimum viable product as a preliminary version, a prototype that allows for completing a lap in the build-measure-learn loop, with the least possible effort, resources, and development of time. That is, this first version may have few features since its main function is to measure the customer's reaction when having contact with it (Ries,2013). Therefore, the crucial point about MVP is that it is a source of information about what we need to improve or change.

In line with Ries (2013), Blank and Dorf (2013) claim that the minimum viable product should be as simple as it can be and it should have the right characteristics to acquire the greatest possible amount of learning and to sell your idea to customers, be able to contact them and start obtaining information from them. This product should solve the smallest customer's problem, that difficulty for which customers would be willing to pay (Blank and Dorf, 2013). It is a minimum because time, money, and more entrepreneurs' resources are also minimum. Blank and Dorf (2013) also claim that the MVP is targeted to its early adopters, who are visionary.

After repeated iterations, the MVP improves and gets robust, but its goal will always be to maximize learning.

It is critical to understand that MVP can go through different iteration stages, starting with something very simple until getting to a more elaborated design. This means that



after repeated iterations, it improves and gets more robust, although its goal is always to maximize learning.

Steps for building an MVP are the following:

- Define: which are the things you want to validate or learn from your customer and which is your most critical hypothesis?
- In relation to this, select an MVP model that would allow you to reach this goal.
- Build it.
- Define criteria for maximums and minimums for measuring results when experimenting.

Although later we will see MVP types and some examples, you must set a goal first and learn about what you want to learn through this MVP; which is the hypothesis you want to validate? which are the criteria you will consider to know if the result will be valid or invalid?

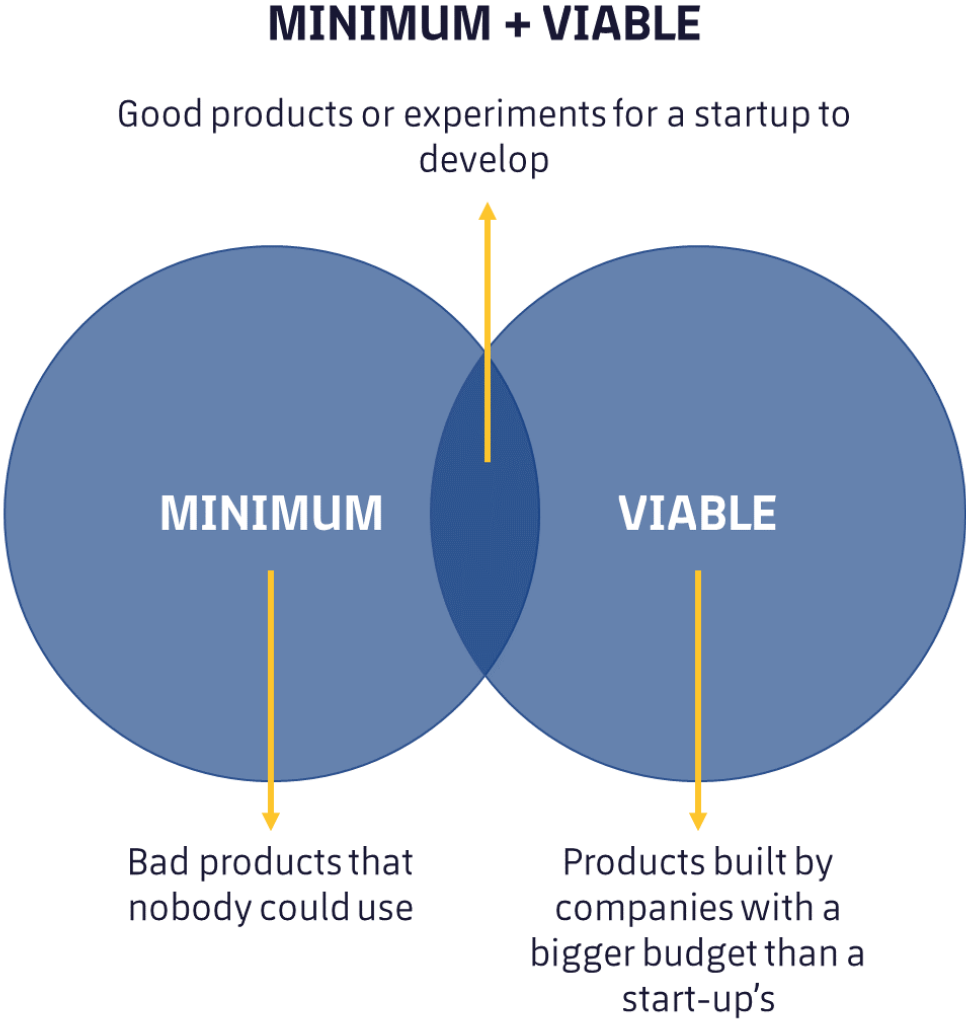
Blank and Dorf (2013) say that if you have a hypothesis to validate when building your MVP, you are just building a product, not a minimum viable product. You should bear in mind that you should eliminate a variable each time, starting with the riskiest.

Therefore, and as a summary, it is important to know the following:

- An MVP is not focused on the product itself but on learning. The goal is not to create an almost finished product, but to create a minimum version of the product to learn what works and what does not.
- The MVP is an experiment to help you and your team to gain validated learning. In some cases, it can be a product, in other cases, not necessarily. We will see examples later.
- You need a hypothesis to validate for building an MVP.



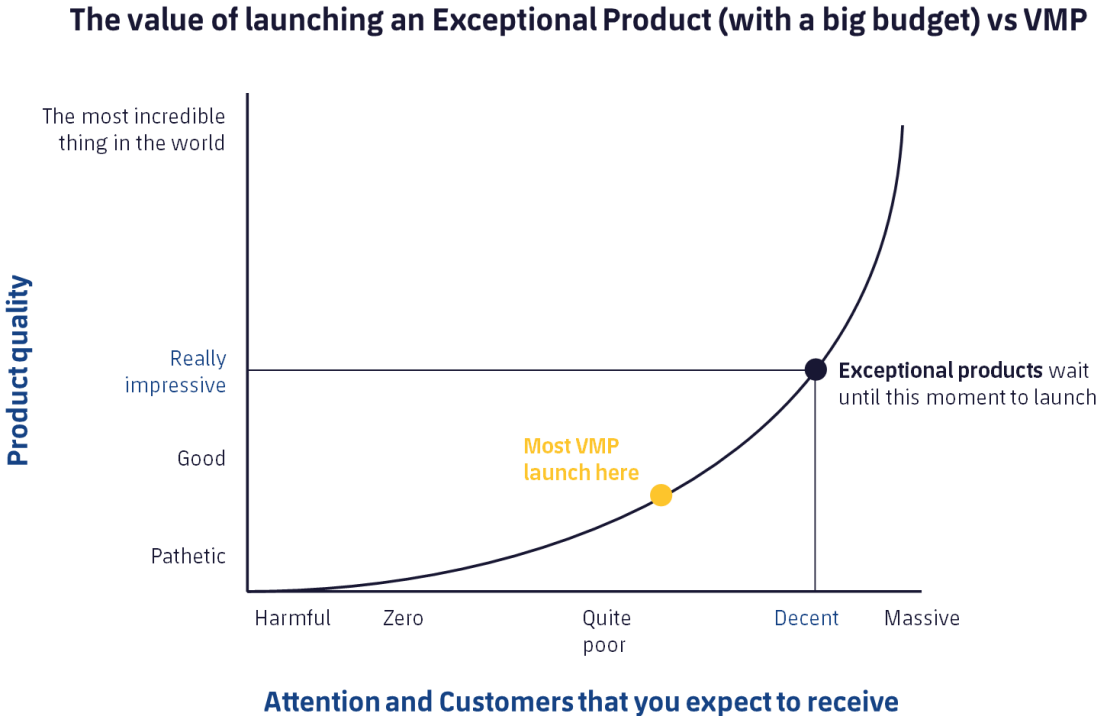
Figure 1: Minimum viable product



Source: own creation



Figure 2: The value of launching an exceptional product with a budget against launching an MVP



Source: own creation

First MVP versions are for a few customers, for true, early, and visionary customers.

In the beginning, the MVP is only tested with a few initial users and with good or low quality, that is, a very preliminary version. Instead, as hypotheses get validated and learning is acquired due to interaction with users, that MVP advances, getting more complex; more people try it and use it and that means that the product quality raises until getting to its improved version.



Table 1: The minimum viable product

MVP type	MVP mock-up: Explanatory video	MVP concierge: unique use case	MVP concierge: little by little	MVP landing page: blog	MVP product: starter engine
Example	Dropbox launched with a video (https://www.youtube.com/watch?v=JWot760x2pA , Bada, 2011, https://goo.gl/6pfj7q) in which they explained their idea’s main concept. Besides, they built a web site, so that people get subscribed once the product is ready. That way, they collected hundreds of early adopters, eager for a solution to their data storage problems.	Virgin Airlines, on a different scale, validated its low-cost airline idea without a fleet of planes, with only one plane and only one flight route, to prove the concept of low-cost flights.	Groupon started as a group shopping for 20 people.	Yahoo started with two students who shared a list of their favorite links and web sites.	Facebook started as a platform for comparing people at a university.

Source: own creation

3.1.1 MVP Advantages and disadvantages

Before building your MVP, you should take its benefits as well as complexities or disadvantages into account.

MVP positive aspects

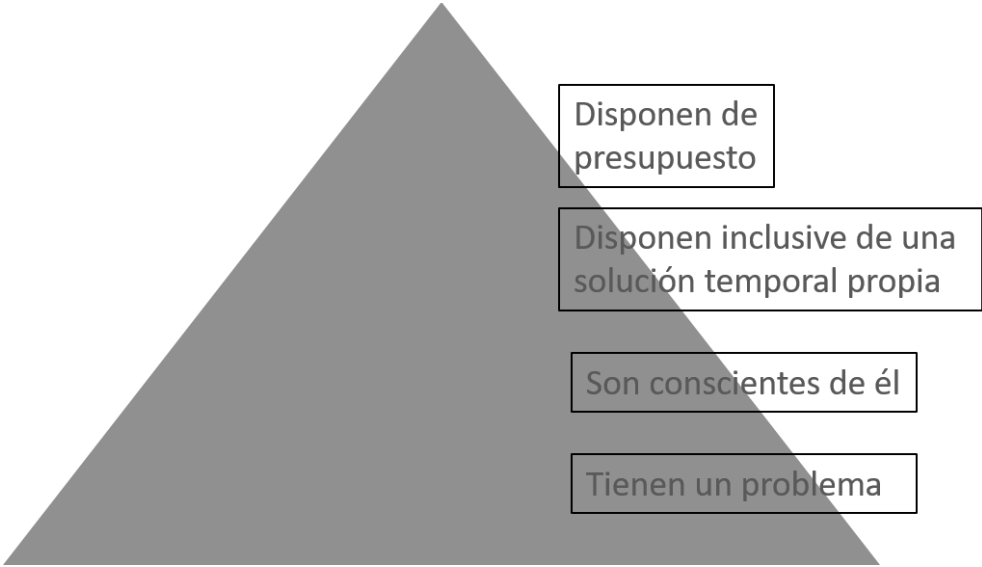
- 1) **It facilitates learning about customers** We have already quite dealt with this topic, but it is highlighted that MVP is used to do a quick test on how the market responds to a product proposition or a market functionality, quantitatively and qualitatively. Its goal is to obtain valuable information to avoid creating products that are not useful nor interesting to customers.



2) It is focused on early adopters and visionary customers. The product is focused on visionary and early customers, due to their predisposition to facilitate information and because they are more open to understanding the expectation that creates a product, since it is a prototype or basic development, and they do not demand the best responses in this stage. These customers' idiosyncrasy promotes the generation of products whose functionalities could be minimal.

In the next graphic, you will be able to see how these characteristics are represented in each of the steps. You should look for customers that meet most of the requirements.

Figure 3: Selling: success lies here



Source: Hernández de Rojas, n.d., <https://bit.ly/31HgyCL>

Translation of the figure

Disponen de presupuesto	They have a budget
Disponen inclusive de una solución temporal propia	They even have their own temporary solution
Son conscientes de él	They are conscious of it
Tienen un problema	They have a problem

3) It is pure creativity There are no recipes to define an MVP since it depends on the product, the context, and the entrepreneur's work. There are cases in which MVPs take months (even years) in consolidating as a final proposition and others do it faster. It is suggested that the MVP is already a solution to a problem for which the first customers are willing to pay. Therefore, the startup can have incomes as quickly as possible.

4) It allows for learning and changing direction if necessary. No doubts, creating a product that nobody wants is not an option. So, the MVP potential is that it allows you to test if you are solving a customer real need or not, without spending too



many resources for its elaboration. In case the product does not solve a customer's problem, it is possible to change the direction and construct new hypotheses, learn quickly and react by iterations that imply small changes, or pivots in the most drastic cases. The key will be in making a decision before it is too late.

It is a good tool to mitigate risk. As more attention is devoted to testing (MVP or prototype creation), more hypotheses get solved on the way to finding the adequate version to build the definite product and be able to escalate it. Build a product on non-validated assumptions is too risky since it does not guarantee that the product will be well developed or that it will be interesting for customers.

The MVP can answer many questions like the following: Do your customers like an application with these characteristics? Does the design function as you imagine? Would users pay for these functionalities? Does this product solve their needs or wishes?

All these characteristics show the benefits of investing in an MVP. Nevertheless, Ries (2013) describes a series of critical aspects and risks that the MVP generates. They are described below:

- 1) **Product's quality:** as MVP's logic is to invest the minimum possible resources, this goes against its quality. However, Ries' answer to this issue is the following:

Even a low quality «MVP» can be useful to create a high-quality product. MVPs are sometimes perceived as low-quality products by consumers. If that's the case, we should use this as an opportunity to learn about which are the attributes customers care about. (2013, pp. 91-92).

- 2) **Wasting time in conversations with customers, without developing the MVP:** another inconvenience that is necessary to consider is the risk when a lot of time is devoted to conversations with customers, instead of developing an MVP, which can paralyze the team in the analysis or can cause lack of action on the product until finding perfection. It is important to achieve a balance between the desire to start a business and see immediate results, and the analysis and research that is needed. In this matter, it is also necessary to work the internal frustration that a change of direction can cause, as a consequence of MVP learnings that might be taken as failures of the initial idea. Remember the lean start-up is a learning process: the wronger your assumptions, the more you will take advantage of the learning, and this will allow you to transform those hypotheses into facts and reduce the risk of being wrong again.



- 3) Fear of copies or competitors:** commonly, the entrepreneur is afraid of competitors stealing his/her idea. Although this is a risk to take into account, it is not a situation that can be avoided, since competitors can copy not only the MVP idea but also the final version. The important thing is not stopping that fear, since what is valuable in this process, more than the idea is the entrepreneur's ability to learn and the development of his/her ability to escalate. The only way to generate an initial advantage, Ries (2013) would say, is by learning quicker than the others. Besides, something that we always claim about sharing ideas is that it is riskier not to get valuable feedback than someone stealing your idea, since applying it successfully would imply a lot of effort for your competitor.
- 4) Risks in branding:** this risk has to do with either a brand development that is linked to a low-quality MVP, or to a product launched in an already established company whose product inferiority is linked to an already established brand. Nevertheless, a simple solution would be to launch the MVP with an alternative brand. The truth is that a start-up, in the beginning, does not have much exposition as to have its image damaged. That is why this risk becomes irrelevant (Ries, 2013).



Unit 3.2 MVP classification into generative or evaluative

In relation to MVP classification, we can differentiate two big groups explained below:

- **Generative:** research techniques that do not necessarily start with a specific hypothesis and generate many new ideas; that is the reason why they are different from the ones done to identify customers' needs. For example interviews for discovering new ideas. This MVP type is named after opening opportunities, generating options, ideas, etc.
- **Evaluative:** it consists of testing a specific hypothesis to get a clear result for yes or no (for example a web page with a button for people to get subscribed), in seeing what functions better, if the button to «**get** subscribed now» or the one for «I want to register».

Each MVP option requires an adaptation specific to the project and to the hypothesis to be validated. You can even build a new MVP version to the ones that already exist or a hybrid version of them.

Also, inside these two groups, there are different MVP types, each one of them with its corresponding options. These options require an adaptation specific to the project and to the hypothesis to be validated. You can even take different options from the chart and group them to build a new MVP version, different from the existing ones or a hybrid version of them.



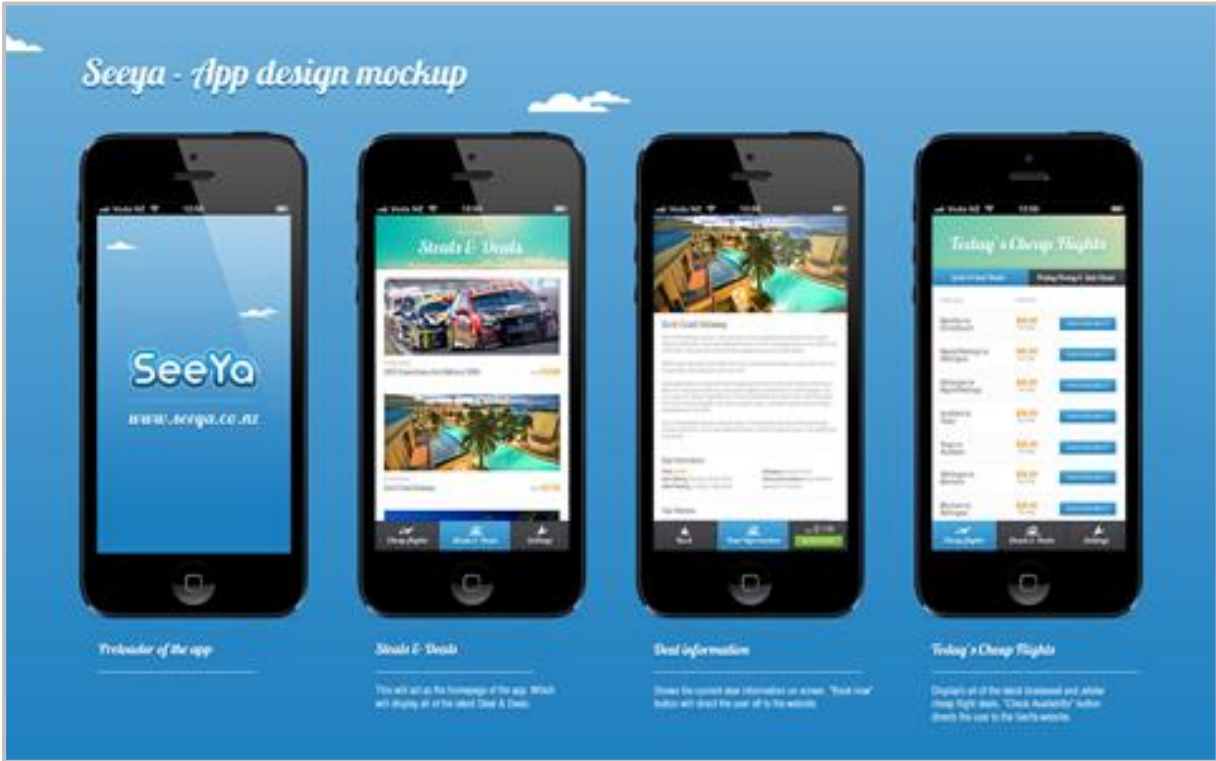
Table 2: MVP types and definition

MVP types + definition	Options	Generic type	Goal/ application
<p>Mock-up: visual example of the product.</p>	Discount	Evaluative	<p>With a mock-up, you can collect money from customers and find out if price or money is a true barrier or if they are simply not interested in your idea. If your customers are no interested in buying your product or service, you can offer them a discount until they accept; you can even end up giving them the product for free. If even for free, they are not interested, then you should learn about the failure in your proposition.</p>
	Prototype	Generative	<p>Take a non-functional prototype of your product that you can show and present in a tangible way to your customers, to get feedback.</p>
	<i>Landing page</i>	Evaluative	<p>Make a simple web page to validate interest, with a call to action so that customers leave their data.</p>
	Explanatory video	Evaluative	<p>Through a video, which could be embedded on a landing page or could be on a link, present your value proposition and show it to customers, with a call to action.</p>
	Innovative	Generative	<p>Some people are already solving the problem on which you are focused. Find them and see if you can design a product based on your techniques.</p>
	<i>Crowdfunding</i>	Evaluative	<p>Start a crowdfunding campaign with a mock-up or prototype to validate through pre-sales.</p>

Source: own creation



Figure 5: Product mock-up example



Source: [Untitled image about product mock-up], n.d., <https://bit.ly/2XQUoNd>



Table 3: Other MVP types and their definition

MVP types + definition	Options	Generic type	Goal/ application
Concierge: do a hand delivery of the product or service.	Unique use case.	Evaluative	Eliminate 95% of the development and make your product as simple as possible, so that it is used in a unique case, with unique functionality.
	Real-life simulation. True MVP	Generative	Provide the same benefits, as if the product would be finished, but do it manually. This allows for direct interaction with customers, opens opportunities and it facilitates the generation of ideas. It is very useful when there is no clear solution. It is often used in software projects cases.
	Goal	Generative	Make your customers design the first version of your product.
	Little by little	Evaluative	Provide a service or emulate the product manually but using existing tools. For example, you can use Excel, e-mail, WhatsApp, and emulate a solution that you would like to design, but a one you do not have yet. It is often used in software projects.
	Behind the scenes	Evaluative	From the customer's point of view, everything is in its place and an automatic product or service is being used. Behind the scenes, the work is manual. This is useful for validating specific hypotheses, without instant feedback. It is useful for testing solutions. It is also special for software.
Product: working code or functional prototype	Menu	Generative	Make a list of false characteristics and monitor where people click (when you are not sure about what to produce). You can also give them a paper with options for products or services characteristics your solution may have, and customers should mark the ones they like the most.
	Starter engine	Generative	Any trick or action that may attract customers' attention and activate their imagination to stimulate their feedback. For example: make your customers have an experience related to your idea or solution that would allow them to activate the imagination.

Source: own creation



Finally, we share some more examples of multiple MVPs that exist. Ries (2013) explains very popular cases like the following:

- Zappos: they created a basic web page with sneakers pictures to see if people would buy shoes on the internet. What Zappo's founder did was to sign an agreement with shoe shops; he took pictures of their shoes and published them on a web page. When the client bought them on the Internet, the entrepreneur went to the shoe shop, bought the shoes, and sent them to customers. Today, that company was bought by eBay and it is one of the biggest shoe selling platforms in the world.
- Dropbox: they developed a video to show service functionalities to investors to check if they were attractive. At that moment, they did not have the product developed. That video worked as the project MVP.

Video 1. Drop box. Source: **Logan Bada [Logan Bada]**. (April 27th, 2011). Drop Box in Spanish [YouTube]. Retrieved from <https://www.youtube.com/watch?v=JWot760x2pA>



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