

MINIMUM VIABLE PROTOTYPING AND PROTOTYPING TOOLS

After reading this factsheet you should:

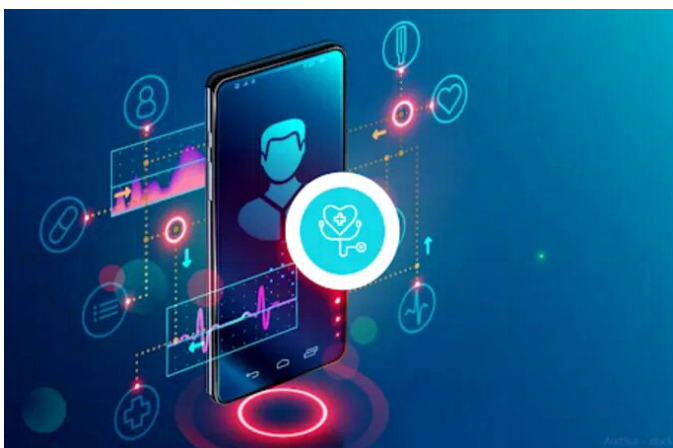
- Understand digital health product categories.
- Have a basic knowledge of the systems used to categorize digital health products.

What is minimum viable prototyping?

Minimum viable prototyping is a developmental approach used to create a version of the product with the minimum features necessary to verify the idea and its functionality. This process provides a minimum viable prototype (MVP) which enables a team to gather the most verified information about customers with the least amount of work.

What is the difference between a MVP and a prototype?

A prototype is a test version or model of a system, product, or idea that is made to test and validate various features before the final product is built. While MVPs are created after the design phase to test the main concept with real users and gain feedback for future enhancement, prototypes are used in the early stages of design to explore ideas, interactions, and user experience. While MVPs are functional products with key features, prototypes concentrate on visualising and testing components. Prototypes are used for ideation and validation, while MVPs are used to test the market and validate the entire product concept. Both are essential steps in the product development process. Read more [here](#).



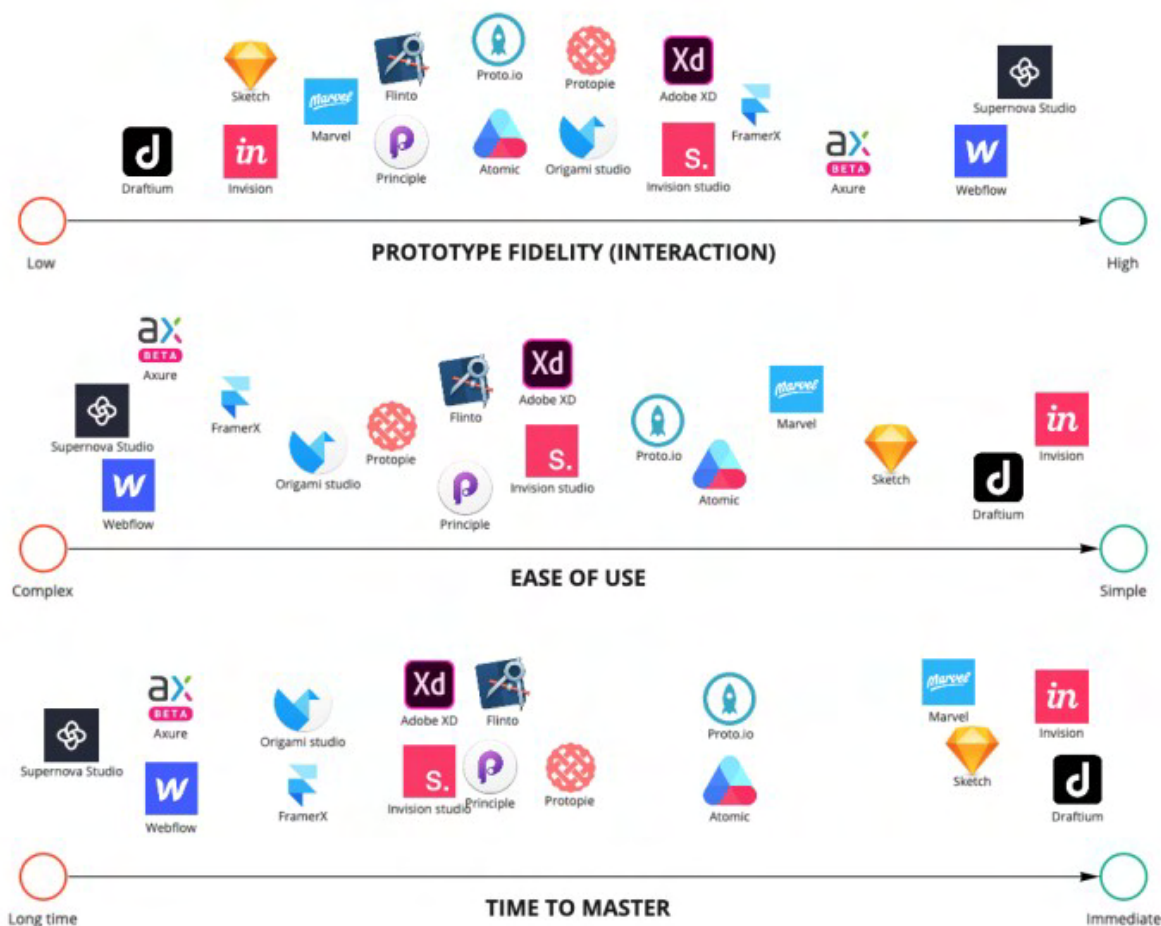
What are the advantages and disadvantages of minimum viable prototyping?

Advantages:

- **Rapid Validation:** MVP enables you to quickly test the central idea and obtain user feedback to spot any problems or enhancements.
- **Cost and Time Efficiency:** Reduced costs and development time can be achieved by developing only features that are necessary.
- **Iterative Enhancement:** User feedback assists with iteratively improving the product based on the needs and preferences of users.
- **Risk reduction:** Early idea validation reduces the chance of investing considerably in a product that may not satisfy market demands.
- **Early Market Entry:** An MVP can be made available to the public sooner, giving you a competitive advantage.

Disadvantages:

- **Limited Functionality and Features:** Users could get dissatisfied if the MVP lacks expected features.
- **User experience Concerns:** MVPs frequently lack some of a fully developed product's improvements and optimisations.
- **Risk of Misinterpretation:** Users may not understand an MVP and believe it to be an unfinished product.
- **Resource Constraints:** Creating an MVP takes a lot of time, effort, and money which could put a burden on the budget, particularly if it doesn't produce the desired outcomes or requires significant revisions at a later stage.
- **Data collection Issues:** If the product has a small user base or low user involvement, it might not offer enough information to guide future development decisions.



What are some of the prototyping tools available?

High Fidelity Prototyping Tools (prototypes are frequently categorised based on their fidelity, which is the degree of detail and realism they have):

- **Figma:** A web-based design and prototyping tool that supports high-fidelity interactive prototypes and has powerful collaborative tools. Watch tutorial [here](#).
- **Adobe XD:** High-fidelity interactive experiences can be created using XD's design and prototype tools. Watch tutorial [here](#).
- **InVision:** Makes it simple for designers to produce high-fidelity, interactive prototypes. Watch tutorial [here](#).
- **UXPin:** Gives designers the ability to produce intricate, interactive prototypes with an emphasis on providing a genuine user experience. Get a tour of UXPin editor [here](#).
- **3D modelling tools:** Tinkercad, Solidworks and AutoCAD are examples of software that provide tools to design and build 3D structures, products, and objects.

Code Based Prototyping Tools:

- **Framer:** Free website and app prototype tool ideal for quickly developing high-fidelity, realistic designs and animations. Watch tutorial [here](#).
- **Principle:** Primarily for macOS, enables designers to focus on micro-interactions when creating interactive designs.

No-Code/Low-Code Prototyping Tools:

- **Proto.io:** Browser-based prototype tool with hundreds of pre-made templates and components to make interactive prototypes for cutting-edge web and mobile applications.
- **Marvel:** designed for non-technical users and designers that can be used to build interactive prototypes with little to no code.

Mobile App Prototyping Tools:

- **Protio.io**
- **Sketch + Craft Plugin:** Craft plugin allows designers to produce interactive mobile app prototypes. Watch video [here](#).

Read more about some of the most popular prototyping tools, their strengths and weaknesses [here](#) and [here](#).