

VISUAL PHOTOTYPE

A prototype is a rudimentary working sample, model, mock-up or just a simulation of the actual product based on which the other forms (MVP), final product, and variations) are developed.

The main motive behind prototyping is to validate the design of the actual product. Sometimes, creating a prototype is called materialization as it is the first step of transforming the virtual or conceptualized design into the real physical form.

It is the preliminary version of the actual product developed for:

- Validating the design of the product,
- Presenting to investors or licensees,
- Intellectual property protection,
- Removing kinks in manufacturing,
- Testing and refining the product.

Qualities Of A Good Prototype Representation

A prototype is a rudimentary representation of the actual product. It represents how the product will look and/or work like.

Precision

More precise the prototype, better the response and feedback.

Functional

A good prototype performs the basic functions of the actual product (if possible).

Improvisation

A good prototype is one which can be improvised on with minimum effort. This one of the most important aspect of prototyping as a prototype is subject to many improvisations.

Types of Prototypes **Basis On What They Represent**

While a prototype can be in the form of paper, digital, miniature or a partial product, all of these can be categorized into three categories on the basis of what they represent.

Functional Prototypes

Functional prototypes are designed to imitate the functions of the actual product as closely as possible no matter how different they look from the actual product. These types of prototypes are produced for the products which are dependent on the function rather than the display.

For example: creating a backend prototype without working on the frontend of the website.

Display Prototypes

Display prototypes are designed with more focus on the look and feel of the product rather than the functions. These prototypes may or may not function but represent the look of the actual product very well.

Display prototypes are usually used in the fashion industry and in other industries where looks are more important.

Miniatures

Miniatures are smaller versions or the basic versions of the product focused on both the functional aspect as well as the display aspect. Nevertheless, these aren't the actual products and lack many qualities of the actual product like not working at full capacity, etc.

Miniatures are usually developed by the 3D printing of the product.

Basis On How They Are Used

From a usability perspective, the prototypes can be categorized into:

Throwaway prototype

Throwaway prototype refers to the models which are eventually discarded or thrown away rather than becoming a part of the actual product. These products are only used to represent what an actual product can do.

Throwaway prototypes are also called close ended prototypes

Evolutionary Prototype

Evolutionary prototyping uses a different approach than throwaway prototyping and involves building a basic but robust prototype in a manner which can further be improved and built upon to form an actual saleable product. This avoids wastage of resources.

Prototype Examples

Prototypes come in many types and shapes. It all depends on the reason for what a prototype is created. While some prototypes are developed just to represent or mimic the functioning or the look of the product (paper prototypes, HTML prototypes, etc.) to investors, some include showing a miniature version (3D print, single version of the lot, etc.) of the product with full or partial functionality.