



# PROTOTYPING

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Producing an early, inexpensive, and scaled down version of the product in order to reveal any problems with the current design.



What is a prototype?

A simple, scaled down version of a product normally not in the medium of the finished product.

It is used to:

observe, record, judge, and measure user performance levels based on specific elements,  
or the users' general behaviour, interactions, and reactions to the overall design



Prototypes are often used in the final, testing phase in a Design Thinking process in order to

- ✗ determine how users behave with the prototype
- ✗ to reveal new solutions to problems
- ✗ to find out whether or not the implemented solutions have been successful



Results generated from the testing of prototypes are used to

- ✕ redefine one or more of the problems established in the earlier phases of the project
- ✕ to build a more robust understanding of the problems users may face when interacting with the product in the intended environment.



Prototypes are built so that designers can think about their solutions in a different way (tangible product rather than abstract ideas), as well as to fail quickly and cheaply, so that less time and money is invested in an idea that turns out to be a bad one

*“They slow us down to speed us up. By taking the time to prototype our ideas, we avoid costly mistakes such as becoming too complex too early and sticking with a weak idea for too long.”*

*– Tim Brown*





# TYPE OF PROTOTYPES

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Low-fi vs High-fi



## LOW FIDELITY PROTOTYPES

Low-fidelity prototyping involves the use of basic models or examples of the product being tested.

The model might be incomplete and utilise just a few of the features that will be available in the final design, or it might be constructed using materials not intended for the finished product, such as wood, paper, or metal for a plastic product.

Low-fidelity prototypes can either be models that are cheaply and easily made, or simply visualisations of them.



## ADVANTAGES OF LOW FIDELITY PROTOTYPES

- ✗ Quick and inexpensive
- ✗ Possible to make instant changes and test new iterations.
- ✗ Disposable/throw-away.
- ✗ Gain an overall view of the product using minimal time and effort
- ✗ Available to all;
- ✗ Encourages and fosters design thinking.





## DISADVANTAGES OF LOW FIDELITY PROTOTYPES

- ✗ Especially with users with disability, a low-fi prototype may not be appropriate.
- ✗ Users have to try and imagine how the final product will look like and interaction may not be as elaborate



# EXAMPLES OF LOW-FI PROTOTYPES

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Storyboarding, sketching, models

## Storyboard

Title Meet Paulita



### What's Happening

Paulita has two children, Roberta and Felipe.

Her house was destroyed in the typhoon. She

is a beneficiary of Mercy Corps and she needs

a loan to rebuild her cleaning business. She's

heard that Pabilink is easy to get and that it

will help her get back on her feet.

Title Paulita Signs Up



### What's Happening

Paulita travels to the local market and stops

by the Pabilink stall. She gives her Barangay

papers and ID to the agent, and just like that

he can sign her up for her first loan. Paulita

receives a text confirming that she's officially a

Pabilink customer!

## Storyboard

Title She Cashes Out



### What's Happening

Paulita goes to the nearest BankKO Partner

Outlet (BPO), which is conveniently located in

the same market. With her phone number and

ID, she "cashes out" and takes her money

with her.

Title She Makes a Payment



### What's Happening

Back in the village, Paulita goes to an agent to

pay her weekly installments. This is great for

her because the nearest BPO is 10 kilometers

away, and she cannot visit often. Paulita pays,

and the agent sends that money to BankKO.

Paulita receives a text confirming that this

installment was paid.

## Storyboard

Title 11 Weeks Later...



### What's Happening

Paulita makes her final loan payment. She's proud to have built up her cleaning business with the help of BanKO. She receives a congratulatory text that tells her the pabalin fund is now hers and it comes with 100P to get started. Because Paulita successfully paid her first PabalinKO loan, she has the option of taking a second, larger one.

Title Paulita Grows Her Fund



### What's Happening

Paulita can continue to grow her pabalin fund anytime she has some extra cash. For example, at the sale of her pig, after a great week of business, or when her daughter sends her remittances from Manila.

PAN FARM

# PASTORALIST ALTERNATIVE NUTRITION (P.A.N.)

EGGS

BORU-HARO

50KM

CHICKS

JALDESA - MBT ROAD

MBT TOWN

HARARA SHOP

P.A.N DIPOT/STORE

## FREE TRANSPORT

i) BUY IN BULK

(20-30 CARTONS)

ii) SHORT DISTANCE - 7-10KM FROM THE STORE







'Bridging the Gap' innovators with their improved fodder warehouse prototype during the National Demo Day Preparation Bootcamp

## LANDING PAGE

LOGO

— —

LOOKING FOR  
ADVISE?

UNIQUE VALUE  
PROP. FOR

YES  
✓

PICK A TOPIC YOU NEED  
HELP IN

DON'T SEE WHAT YOU'RE LOOKING  
FOR?

Enter a topic...

SUGGEST TOPIC

## PICK A TOPIC

LOGO

BRANDING IMAGE

PERSONAL BRANDING

UNLEASHING YOUR SUPER POWER TELLING  
YOUR STORY

TIPS

IF YOU NEED PERSONALISED ADVISE ON HOW  
TO APPLY THIS TOPIC IN YOUR LIFE.

ASK A PRO



# HIGH-FI PROTOTYPES

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High-fidelity prototypes are prototypes that look and operate closer to the finished product.



## ADVANTAGES OF HIGH FIDELITY PROTOTYPES

High-fidelity prototypes are prototypes that look and operate closer to the finished product.

- Engaging: you can instantly see the product and how well it brings out the vision of expectations, wants and needs
- The closer the prototype is to the finished product, the more confidence the design team will have in how people will respond to, interact with and perceive the design.





## DISADVANTAGES OF HIGH FIDELITY PROTOTYPES

- They generally take much longer to produce than low-fi prototypes.
- When testing prototypes, test users are more inclined to focus and comment on superficial characteristics, as opposed to the content (Rogers, Preece, and Sharp, 2011).
- After devoting hours and hours of time producing an accurate model of how a product will appear and behave, designers are often loathed to make changes.
- Software prototypes may give test users a false impression of how good the finished article may be.
- Making changes to high-fi prototypes can take a long time, thus delaying the entire project in the process. However, low-fi prototypes can usually be changed within hours, if not minutes, for example when sketching or paper prototyping methods are utilised.





## GUIDELINES FOR PROTOTYPING

- Just start building: if you have any uncertainties about what you are trying to achieve, your best bet is to just make something.
- Don't spend too much time: it's about speed, also avoiding emotional attachments to a design
- Remember what you're testing for: do not lose sight of what we are testing for but keep your mind open for other lessons
- Build with your user in mind: Test the prototype against your expected user behaviours and user needs, learn what's missing and improve (iterate)



LIVE DEMO