6. PROTOTYPE NEW PRODUCTS & SERVICES

PROTOTYPING TECHNIQUES.

“Developing a prototype early is the number one goal for our designers. We don’t trust it until we can see it and feel it.”

WIN NG

This tool sets out eight techniques we can use to prototype a new product, service or process.

PROTOTYPING TECHNIQUES.

"Developing a prototype early is the number one goal for our designers. We don't trust it until we can see it and feel it."

WIN NG

Physical stuff (eg. products, rooms, components)

SCALE MODELLING.
We create a small-scale model of anything that is too large to be able to replicate at full scale. This is useful for spaces or entire buildings when we want to think through the effectiveness of a new layout.

SIMULATION WITH MATERIALS TO HAND.
We use commonly available materials as substitutes for physical elements we want to explore. We work quickly, not worrying too much about how things look on the surface.

Information (eg. apps, signage or leaflets)

BECOME THE ROBOT.
Use this technique if your idea will require a user to interact with any kind of machine (e.g. ticket machine, vending machine, computer, phone). One person is the machine, a colleague the user and we act out the service, taking it in turns either improvising or using prepared scripts.

After each round the robot actor then takes notes about the interaction:

- What do users expect from me?
- What do they do that surprises me?
- What questions do they ask me?
- What frustrates them or makes them happy?

Noting such reactions helps decide how we might modify our prototype.

PAPER PROTOTYPING.
Paper prototyping simulates what happens when you click on keyboards or interact with screens. The goal of paper prototyping is to make problems visible early on and identify any 'bugs' before they are programmed in. It is useful to get input from a programmer although people with no technical knowledge can develop screen-based information (like websites or processes) using paper, pens, scissors and sticky notes.

Encounters with people (eg. meetings, calls)

EXPERIENCE PROTOTYPING.
Experience prototyping (also known as bodystorming) involves mocking up the physical aspects of a new product, service or process in order to experience how physical aspects will interact with people.

We then act out the experience noting down any interesting aspects along the following lines:

- What did we do that was surprising?
- What frustrated us or made us happy?
- How did we improvise our way around problems?

ROLE PLAY.
We use each other as amateur actors in a drama that portrays our new product, service or process. We form into teams and decide what roles to need to be played. We give the user a scenario (e.g. make a booking, get opening times) and then role play the interaction we are focusing on, noting down what works and what needs to be improved. This can easily be done within our project team or we can use actors to help.

Encounters with people (eg. meetings, calls)

RAPID PROPOSITION TESTING.
We create alternative versions of a product or service and offer it for sale or trial on a bespoke web site. Visitors either make a choice between different offers or they are randomly directed to them. Click-through, dwell time or active selection determines which alternatives of a prototype are the most attractive or whether a new prototype has more appeal than an existing product. We can also vary elements of the marketing mix other than product at the same time such as price, place or promotion.

CUSTOMER CO-CREATION.
We use an existing or new crowd community in the target group to evaluate and improve digital versions of our prototype. These may be in the form of storyboards, sketches or concepts and the crowd is encouraged to vote, select and otherwise prioritise the most attractive versions.

NAME: DATE: TEAM:

PROTOTYPING EVALUATOR.

"From cardboard and duct tape to ABS polycarbonate, it took 5,127 prototypes and 15 years to get it [cyclone technology] right."

SIR JAMES DYSON

1 What idea did we prototype?

2 What are we going to change?

3 What remains the same?

4 Mark the Stop / Go / Reivent box.

S G R

NAME: DATE: TEAM:

PROTOTYPING EVALUATOR - EXAMPLE.

"From cardboard and duct tape to ABS polycarbonate, it took 5,127 prototypes and 15 years to get it [cyclone technology] right."

SIR JAMES DYSON

1 What idea did we prototype?

On The Glow - a mobile cashflow management app where the icon glows a different colour depending on whether my bank balance is + or - 10% of the same day in an average month.
(based on the last 12 months)

2 What are we going to change?

Merge step 2 and 3 of the sign-up process.

Change the colours to:
- red
- amber
- green

3 What remains the same?

Primary user interface
Back end integration with existing InterBank systems

4 Mark the Stop / Go / Reivent box.

NAME: Frank Bank

DATE: 1st March

TEAM: Open Innovation