# Microwave Makeover
A UX PUZZLE FOR THE BRAINY

Theme

We often run into usability situations that feel wrong, but don't have a systematic way to explore the problem. The better we can say what's wrong, the better we can discuss improvements. And of course, the better we present ourselves as professionals.

Challenge

Take a look at these microwave controls. *Don't worry that it's analogue; we will look at app and IoT versions later.*
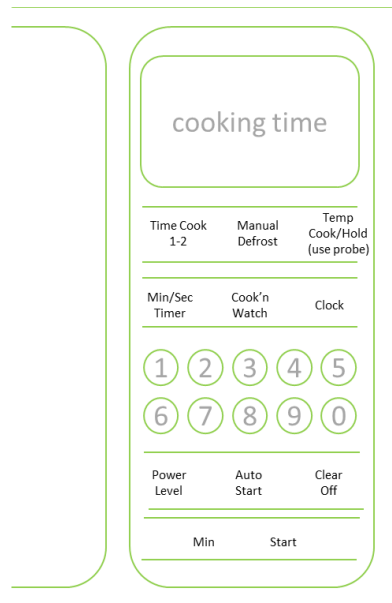
You have been asked to give your expert opinion on how usable this is, and to make recommendations for improvement. Try it now, or read on.

Pointers

To talk sensibly about usability, you have to understand your users. Here are three simple but insightful considerations.

- What do they want (their goals)?
- How do they expect to achieve it (their strategies)?
- What do they know or don't know (their knowledge)?

Once you have this information, use it to explore three corresponding aspects of usability.

- Are we providing the right functionality (meeting user goals)?
- Does the interaction flow feel natural (aligned with user strategies)?
- How well do we bridge knowledge gaps (respect use knowledge)?

This is a highly reusable approach. Try it now for the microwave challenge, or read on.

More pointers

To understand your users, get realistic examples of their goals, strategies and knowledge.

- For goals, write down a few statements about what a real microwave user would want to do

  John wants to heat his breakfast cereal

  Write a few more yourself; the wording helps us assess usability.

- For each goal statement, write a scenario about how the user expects to meet the goal. Don't use the name of controls that you see in the mock-up (*do you see why?*)

  John finds and starts the appropriate function, specifies how long to heat his cereal, and starts the process. He is free to do whatever he wants until the microwave stops heating.

- Constantly ask questions such about users' knowledge and understanding:

  Would John know what "Min" means?

This will give you a good idea of your users.

Now you can explore the solution usability. Make sure you explore functionality, flow, and knowledge.

Here are a few questions to get started.

- Can your users see how their goals can be met?

- Does the terminology on the controls match that in the goal statements? Could it be made better?

- How well does the user flow reflect the user's strategy? Make it real – imagine you were John heating a cereal, and the diagram is a low-fidelity prototype. Could the flow be improved?

- What controls might be unfamiliar to the user? How could you bridge the knowledge gap?

- What do you think "Cook'n Watch" means? Is it a good term? Is it a good idea? Create an end-to-end scenario to help answer these questions.

Sketch out some ideas of an improved layout, and be prepared to justify it.

We will give you our own idea of an improved layout shortly.

Good designing!

About the Puzzles

These puzzles show how, by taking the user's point of view, we can generate ideas and select the best ones, innovate, avoid pitfalls, and generally make better thought-out user experiences. They are a fun way of presenting serious ideas about designing information rich solutions. For a more serious and systematic way, see "Experiencing + Architecting Information" at www.theinformationartichoke.com.

To bring this type of training into your organization or educational institution, contact Martin at theinformationartichoke@gmail.com