



Microwave Makeover Response

A UX PUZZLE FOR THE BRAINY

Our Response

The challenge was to **improve the usability of a microwave**. Here is the original layout, and a layout we think is better. Your layout may be different. That's fine; there is no single "right answer". The important thing is to use good (user-centered) questions to generate and evaluate possibilities. This often yields multiple possibilities; we prototype and test with users to see which ones work best.

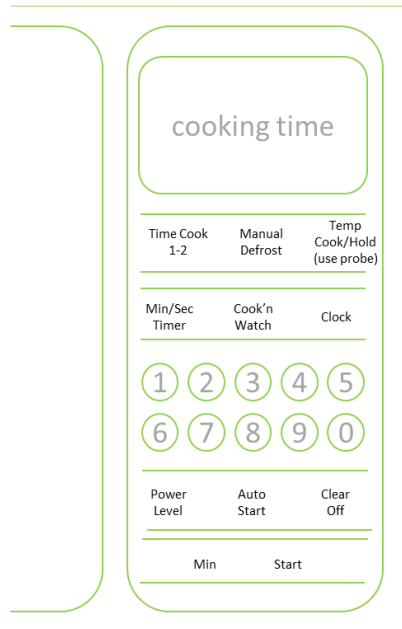


Figure 1: Original

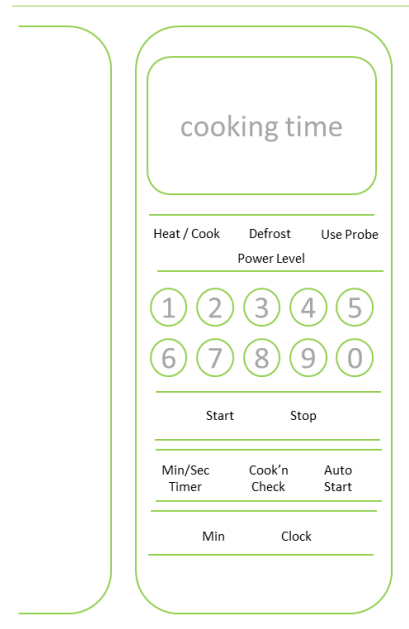


Figure 2: Improvement

Our Thought Process

We considered goal statements such as

John wants to heat his breakfast cereal
Mary wants to defrost a chicken.

The microwave supports both functions, but John and Mary's goal statements use different wording. That's why we changed the labels "Time Cook 1-2" to "Heat/Cook" (this also prevents it from being confused with "Min/Sec Timer"). And that's why we simplified "Manual Defrost" to "Defrost".

"Temp Cook/Hold (use probe)" is trickier. The functionality is "Cook something to a desired temperature and keep it at that temperature, using the probe". The label is trying to capture all aspects, maybe trying too hard. We considered

- Cook/Hold
- Cook with Probe
- Use Probe

We like "Use Probe"; it works whether we use the probe to cook, warm or roast. User testing will hopefully confirm our suggestion.



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We renamed the stop function from “Clear Off” to “Stop”. We suspect that the word “Stop” is easier to find than “Clear Off”, especially in high-stress situations such as where tinfoil is sparking inside the microwave. Also, the expression “Clear Off” means “Go Away” in a slightly impatient way.

The Clock functionality is not used every day, so we moved it to a less prominent position.

We considered user strategies, starting with John’s scenario for cooking his cereal.

John finds 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.

We ran our fingers over the diagram to simulate John’s interaction. The flow was awkward. The three parts of the process are close in the user’s mind, but the controls to execute them are not close on the control panel. To improve this, we placed the controls close together.

We also considered the edge case

John finds the appropriate function, specifies how long to heat his cereal, and starts the process. He changes his mind and stops the process.

Starting and stopping are closely related functions in the user’s mind, so we put the Stop button next to the Start button.

We moved the Power Level control under the main function choices, as this is an option for each function. We are not completely happy with our implementation; it looks as if Power Level applies only to Defrost but it can apply to all functions. Perhaps UX can give us a visual treatment to make this clear.

The term “Cook’n Watch” is not industry standard. We guess that it means something like this

Ashley wants to warm up her coffee. She puts her mug into the microwave and presses “Cook’n Watch”. The microwave starts to run. After a minute, she stops the microwave. The coffee looks the same. Ashley checks the temperature. The coffee needs a few seconds more so she repeats the process.

Maybe the function should be called “Cook’n Check” or “Heat’n Check”. Functionally, we question whether there is any difference between this and heating for a minute using “Heat/Cook”?

We wonder about safety in the edge case

Ashley wants to warm up her coffee using “Cook’n Watch”. The microwave starts to run. Her baby starts to cry loudly. Ashley rushes to the nursery. The microwave continues to run.

How could we handle this?

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