



Digital Microwave Interfaces

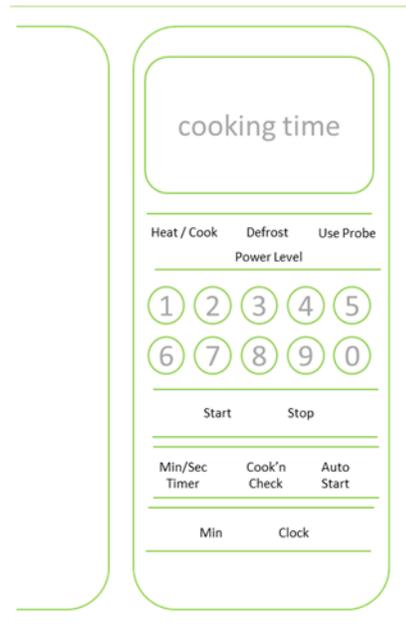
A UX PUZZLE FOR THE BRAINY

Theme

We often have to deliver functionality on multiple platforms having different UI capabilities. It is useful to look beyond UI elements to the nature of the conversation taking place between the user and the product. This will let you explore interactions appropriate to the channel, rather than forcing design from one platform into another.

Challenge

A technology innovator wants to provide a browser based interface to microwaves, replacing the classical analogue control panel shown below.



The implementation might be on a smartphone app or a central panel in the smart kitchen. It might or might not support touch screen. It does NOT support voice – we will discuss that in the next UX Puzzle.

What types of conversation (interaction) takes place between the user and the product? Think about how these are reflected in different device capabilities. Choose one implementation and sketch the user interaction.

Pointers

To get a handle on the nature of the communication, imagine you were a user approaching the above microwave for the first time. Watch and document your thought process. It might start like this.

I approach the microwave to see what it can do for me. I recognize the Heat/Cook function and Defrost programs. I have no idea what the Min button does, and wonder how I could find more. I want to warm up my cereal. I suspect that I press the Heat/Cook button. I wonder if I need to – some microwaves let you just enter the time. I will start try entering the time to see what happens. Ah, it assumes I am heating something.



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So from the user's point of view, the conversation has these elements

- What things can you (O, Microwave) do for me?
- How do I start a process? Continue a process?
- How do I know the status of my interaction
- How do I find out about things that are not clear?

The microwave is also a participant in the conversation. If it could talk, it might say.

Take a look at all the things I can do for you. Feel free to try a function; I won't let you do anything wrong. If there is anything you don't understand, please ask. And I will offer shortcuts and other tips if I feel they could help you use me better.

So from this conversation, we can abstract certain conversational elements such as Presenting Capabilities, Starting Processes, Getting Help, Offering Suggestions, etc. There are several more elements possible; take some time to create and dissect more conversations

We can implement each conversational element in various ways in the UI. For example, Presenting Capabilities is handled in the analogue microwave as labelled buttons. In browser based interfaces, we can use check boxes, static menus, drop down menus; we will choose the option based on form factor constraints and usability. Think about implementation possibilities for other elements.

Don't forget what we learnt in the previous lesson. There, we considered three aspects of usability: how well a user's goals are met, how well the product flow matches the user's mental strategy, and how well the product bridges any knowledge gaps. You can see these reflected in the above conversations.

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