

CS-GY 6543 Human Computer Interaction

Usability Evaluation

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Usability Evaluation of Siri

As a human computer interaction product, Siri offers a range of usability features designed to facilitate easy access to information and task completion through simple voice commands. Analyzing key aspects including affordances, constraints and design features can shape the usability evaluation of Siri.

What are the common affordances users will find with your product/experience?

Siri's main affordance is its ability to complete tasks through voice commands, which means that users don't need to interact with complicated buttons or input boxes but use voice directly to complete their tasks. Siri uses voice interaction and users perceive that they can interact with the system by simply speaking. For example, users can activate Siri by saying "Hey Siri", which help them to communicate their needs to Siri without having to learn complex operation steps and menus. When users see the icon on the device or hear the prompt sound, they will know that Siri has been activated.

What are the signifiers of those affordances?

The signifiers for the affordances of Siri are clear and intuitive. When users activate Siri, there will be a visual prompt on the screen, which means that Siri is listening and ready to respond. Users can understand what to do next because the visual and auditory feedback indicates that their voice input has been received and processed.

**How is the user constrained by the design of the product/experience?
Why? Are there other constraints that are needed?**

As a voice-based assistant, Siri has several constraints that will affect users to interact with the product. Typically, Siri is bound to iOS, and is limited in interacting with the apps which aren't in the Apple ecosystem. The function of third-party applications is often limited because of security. By limiting Siri's connection with non-Apple apps, iOS ensures higher security but imposes great restrictions on users.

Actually, there are other potential constraints that should be needed to improve the usability of Siri. Firstly, if Siri can't have the capacity to handle multi-step tasks accurately, it will be limited to finish this complex task because when a command is too complicated, Siri should prompt users to clarify their instructions instead of guess the users' intention which will cause unpredictable consequences. What's more, Siri needs to make some user-specific constraints for privacy concerns, which would let users feel that their privacy is protected, especially in sensitive environments such as shared devices.

**What about the design of the product/experience do you like?
What don't you like?**

I like the simplicity and of Siri, because Siri is good at performing routine tasks efficiently. However, when Siri is handling some complex tasks, it will get confused and require users to speak again or simplify their commands, making us annoying and frustrating.

Can you understand what the designers "were thinking" when they put the product/experience together?

The designers of Siri think of it as a tool to enhance routine convenience for users. The voice-based feature reflects an intent to minimize physical inter-

action with the device. For example, the design of Siri reflects the intention to make tasks as effortless as possible, such as sending messages, checking the weather and setting reminders, in order to reduce the need for physical interaction with devices. By making Siri a natural part of the device, designers hoped to provide convenience and enhance daily productivity for users.

How did that influence the user experience and how they envision their users?

Siri help users perform core tasks more efficiently. By focusing on simplicity, the designers created an experience which is easy for a wide range of users, from experts to those less familiar with technology. Siri's voice-based interaction model allows users to complete tasks without having to learn complex steps, making it highly accessible. The designers envision their users as those who want to complete common routine tasks with less effort. These users include businessmen, students and perhaps elderly users who aren't familiar with complex tasks. Siri's simple and limited interaction indicates that they want users to complete tasks more efficiently, regardless of their skills.

If your product/experience demonstrates human-centered design, how so? How may it fail to?

Feasibility: Siri is based on natural language processing technologies and it can understand what users said and respond to their needs. This allows Siri to work effectively in the working environment. Siri allows users to complete many practical tasks through voice commands, which can demonstrate feasibility.

Desirability: Siri provides users with an intuitive interactive experience, which allows people to complete tasks more quickly and improve the convenience in daily life. This feature make Siri more desirable.

Viability: Siri doesn't only meet our needs but also achieves integration with Apple ecosystem, which increases users' dependence on Apple products, which can create commercial value.

However, although Siri performs well on simple tasks, it is not good at more complex or multi-step tasks.