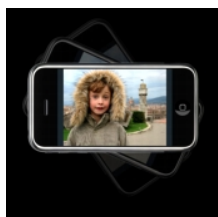


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Usability Studies for iPhone Reveal Problem Areas

Multi-touch gestures take getting used to...

It is clear that the multi-touch interface is the most important feature of the iPhone, the one that makes everything else come together, but this is a new User Interface and as such there are bound to be problems with it. Most reports say that the interface is brilliant, intuitive and very easy to use. Despite this, studies have shown that there are some issues with it. Chicago-based usability consultancy User Centric conducted a usability test with iPhone customers who purchased their iPhones on the first day of its US release. The goal of this study was to identify overall ease-of-use factors and general usability issues among motivated early adopters who had limited experience with the iPhone. Not surprisingly, the results mirror the overall ease of use that nearly all users describe, but show problems with the very specific multi-touch interactions that have never been seen in a device before.

Major strengths of the iPhone's user interface

- Participants found the Visual Voicemail feature to be intuitive and useful*
- Participants compared text entry using their iPhone and their previous phones (which used multi-tap for text entry). Overall, participants found that text entry was much easier on the touchscreen soft-keyboard of the iPhone compared to standard multi-tap text entry.*
- Most participants used the landscape (horizontal) view while searching for a website (The New York Times.) The horizontal soft keyboard was definitely preferred over the vertical keyboard orientation.*
- Selecting and playing a song using both the vertical and horizontal views was easy for participants. Participants also commented that the 'Cover Flow' navigation feature was a very engaging feature.*
- Making an outgoing call with the iPhone was easy for all participants.*
- Participants also found that receiving a phone call on an iPhone while listening to music was seamless. They found the interruption of the music and transition to a call to be very smooth.*
- Saving a number as a contact and recalling that contact for a phone call was straightforward.*
- Answering a phone call while in SMS mode was also straightforward. Participants found it helpful to be taken immediately to their message after the call had concluded.*
- Most participants found it easy to take a picture and email it from the iPhone.*

Primary difficulties with the iPhone interface

- Participants uniformly found text entry SMS and email to be difficult. They were frustrated by the forced use the vertical keyboard and the lack of visibility for editing the middle of a word or sentence.*
- Many participants found Google Maps difficult to use on the iPhone. They experienced issues with the fine-motor control required to pan accurately in different dimensions in Google Maps and predictably zoom in and out. It was unclear to participants how much they needed to adjust the size of their "pinch" gesture to zoom in and out with the control that they wanted.*
- Participants were often frustrated with their Web browsing experience and hoped that this would improve dramatically with an upgrade in network capability. The lack of Flash and Java capabilities during Web browsing was considered a detriment to basic Web use.*
- Finally, participants were surprised (and somewhat annoyed) to discover that horizontal text entry was available only in the Safari browser.*

No doubt, as time passes and the gestures of the multi-touch interface become ingrained manipulating maps will become much easier, while software updates can easily offer universal availability of the horizontal keyboard. The iPhone interface is not perfect, but through software updates Apple can take it closer one step at a time.