

# Nui for illiterate thesis example

Environment, Nature



## Literature review

Various research papers have been written in respect to integration of natural user interfaces for illiterate people. The most notable research done on illiterate mobile use is one by Chipcase (2009). Chipcase and Lalji on conducting ethnographic studies on illiterate's mobile users in Asian countries reported that while illiterates could successfully turn on their calls and receive incoming calls, dialling numbers to make outgoing calls remained a fundamental challenge. This applies also to sending text messages or using the contacts books in the mobile devices. Lalji et al (2008: 20-6 ) found that illiterates utilized call logs in lie of the address book and it becomes increasingly complex having to remember how many calls ago a person has made. . Most of this research concurs that the integration of audio and graphic features in UIs for illiterate people is beneficial but differs on recommendations in alignment with current design conventions.

Controversial user interface works included those of Wiedenbeck (1999: 68-82) in exception of Shakeel et al (2004: 37-44) and Medhi et al (2007: 37-50 ) text labels and use of drawings in place of icons. Medhi et al (2007 37-50) describes the use of common user interface concepts such as soft-keys, vertical scroll bars, and focus on lists and short text labels as complicated and hard to understand. These results contradict Chipcase and Laji et al results noting the surge in mobile phone users among the illiterates and semi-illiterate despite the use of UI concepts. It suggests that computer literate user's had to master these conventions too and that with time, illiterates will eventually understand.

Subsequent research by commercial phone vendors such as the Global

Handset Initiative to produce cheap and usable phones suitable for all classes of people have come up with contact list designs; however, not much has been achieved in meeting the needs of this special group of users. In his study, Medhi explored the use of graphical objects in mobile phone interfaces for illiterate people and the findings were astonishing. It found that one of the major detriments in using graphical objects was the absence of universally accepted picture codes for some particular activities. The meaning of graphical objects in different cultural contexts is different, and in most cases those meanings vary from individuals. Low literate people tend to misinterpret the meanings leading to conflicts. This further impinges upon user interface designs that would serve a greater community of illiterates. The research found that choosing the symbols and educating people on the same still remain a challenge in this age where mobile phones are finding newer functions in their use. Medhi found that using hand-written icons instead photos and moving icons instead of stationary pictures could prove helpful as users had low levels of rejecting them.

In his research, Jackson,( 2008: 107-116) came up with a colour based visual phonebook for illiterate population where colours is used to sort out and identify contacts with ease. This, however, is only applicable in a limited range.

Another notable work on natural user interfaces was done by Joshi (2008: 217-233) where audio commands were proposed for illiterate people. It found that shorter audio commands were sufficient since illiterate people often perform initial commands even when there are multiple commands for execution of a particular operation. Sherewani (2009) showed that a well-

designed speech interface is beneficial than a touch-tone equivalent for illiterate users.

## References

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