Localization in Korea of User Interface of the 3G Mobile Handset Built on Open OS

Sungmoo Hong

KTF, 7-18 Shinchondong, Songpagu, Seoul, Korea
sungmoo@ktf.com

Abstract. In order to minimize Korean users’ conflict as they use global brand 3G handsets which are built on open OS, Symbian of Nokia and Windows Mobile of Microsoft, the research was operated by KTF, Korean mobile telecommunication company. To figure out the difference between ordinary mobile handsets and 3G open OS handsets, major European handsets and major Korean handsets were observed. According to the result of research the requirements for the handsets were established including key pad layout and key functions, information architecture of native menu, labels and input method of Korean language, and other user scenarios for main services like messaging.

Keywords: Localization, Mobile User Interface, Open OS Mobile Handset.

1 Background

1.1 Mobile Telecommunication Industry

Telecommunication industry is known as a local industry particularly in Korea where the world first CDMA service was commercialized. The Korean operators have been supplied mobile handsets for their customers by native handset venders. Besides several foreign manufacturers have been participated in Korean market, their market share is very low; handset business of Nokia had been withdrawn in 2003 after their 1.5 year-effort. After recent launch of WCDMA service by 2 major operators in Korea, SKT and KTF in August 2006, the condition of Korean mobile handset market is gradually changing, especially to the global handset venders which already had globally launched many UMTS - WCDMA devices who hope to sell their products to Korean operators.

1.2 Smartphone Industry

There have been little opportunities in Korea for manufacturers of PDA and smart phone because Korean users did not prefer these devices. As the difference among normal handsets, smart phones and PDA devices is being obscure and their size is getting smaller, customers pay attention to the featured phones. Additionally regarding the entrance of Koran operators into global industry by launching WCDMA
service, both Korean operators and customers came to have global resources of mobile handsets.

1.3 User Interface

By communicating with customers for 20 years, Korean handset manufacturers set several tacit standards of user interface including key pad layout, access gate of wireless internet, etc. If KTF decided to commercialize global devices in Korea, it becomes necessary for KTF that make every effort to prevent the conflict between user experience from Korean tacit standards of UI and that from global devices.

2 Purposes and Process

The research was operated in order to minimize the Korean customers’ confusion as they use the smart phones of foreign manufacturers: The specific purpose of research was to establish the requirements of KTF for the 3G handsets built on open OS, especially NOKIA Symbian handsets and Microsoft Windows Mobile handsets supporting WCDMA network regarding world wide market share.

2.1 Finding Out Facts Below

- What are the tacit standards of mobile handset UIs in Korea?
- Whose properties are those standards? Operating system companies, handset vendors or operators?
- To whom KTF would require to implement these UIs?

2.2 Making Strategic Decision

- To maintain user experience in these tacit standards or to make users learn new interfaces
- If to maintain, what is the essential or mandatory requirements?
- If to make user learn, what is the essential or mandatory interfaces?

2.3 Making Documents of Requirement

- Requirement of UI for OEM vendors and requirement of UI for OS companies
- Requirement of UI for the main applications: messaging, browser, WIPI internet platform
- GUI guidelines and image files

2.4 Process

- Researching the cases of mixed UIs of OEM’s own UI and operator’s UI on the handsets built on open OS: especially 3G handsets in Europe and Japan – handsets for O2, NTT Doccomo, T-mobile and Orange