

# A Comparison of Information Architecture and Usability Between Korean and Chinese hospitals' mobile websites

QiSun<sup>\*1</sup>, Se HwaKim<sup>\*\*</sup>

<sup>\*,\*\*</sup>Graduate School of Design, Dongseo University, Korea

E-mail : sunqi20136@gmail.com<sup>\*</sup>, cvetlana@gdsu.dongseo.ac.kr<sup>\*\*</sup>

## 1. Introduction

This study was done in order to increase the usability of Chinese hospitals' mobile websites by finding areas for improvement through a comparison of the mobile web services of Chinese hospitals and Korean hospitals, which were created in an environment where smartphone use is normalized.

Five Chinese and five Korean general hospitals each were chosen and compared in the area of Information Architecture and GUI design. Information Architecture was evaluated using Lee Soojin's work, which divided Korean hospitals' website content into five different categories (introductory info, reservation info, hospital info, customer service, and other). GUI design was evaluated on four different components - color, typography, icons (buttons), and layout [1].



Figure1. Korean Hospitals' Mobile Web Screens



Figure2. Chinese Hospitals' Mobile Web Screens

## 2. Comparison of Contents

[Table 1] Comparison of Information Architecture between Korean and Chinese Hospitals' Mobile Sites

Category	Subcategory	no	0	1	2	3	4	5
Hospital introductory info	Hospital news, public announcements	11						
	Phone number info	12						
	Location info	13						
	Guide on hospital use, intake and discharge, hospital floor guide	14						
	Hospital PR	15						
Treatment info	Introduction and search function of faculty, specializations, and clinics	21						
	Reservation schedules	22						
	Patient records, payment records, hospital room schedules	23						
	Guide for medical treatment, guide on reserving an appointment	24						
	Information on health, health notebooks, doctors' blog	25						
Reservations	Health checks, health check appointment confirmation	26						
	Appointment reservations and confirmations, online registration	31						
	Counseling and reservation via phone	32						
Customer service & Additional info	Appointment confirmations, schedule	33						
	Customer service and online counseling, customer reviews	41						
	Guide for first-time visitors, quick reservations	42						
	SNS links	43						
	Additional services	44						

Content and services regarding basic information in each category were well established in both Korean and Chinese mobile sites. However, the Chinese mobile sites were not as satisfactory in regards to offering supplementary

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information, such as floors guides or appointment confirmations. In particular, personalized hospital services, such as guides on appointments and medical treatments, were mostly lacking on the Chinese mobile sites that were surveyed.

### 3. Evaluation of GUI Design

Five Koreans and ten Chinese students majoring in GUI design were asked to evaluate five Korean and five Chinese hospital mobile websites by answering 12 questions that pertained to four components of GUI design: color, typography, icons (buttons), and layout.

There was no significant difference in regards to the nationality of the evaluator regarding each of the four components, but there was a significant difference between the evaluations of the Korean and Chinese mobile web GUI design in all four categories.

[Table 2] Group mean (Dependent variable: Design evaluation)

	Hospitals' mobile sites		Sig
	Korea: Mean (SD)	China: Mean(SD)	
Color	3.57(1.0)	2.84(.81)	.000
Typography	3.93(2.2)	2.38(.79)	.000
<b>Icons (buttons)</b>	<b>3.84(.89)</b>	<b>1.84(.83)</b>	.000
Layout	3.78(.91)	2.28(.77)	.000

Overall, Chinese mobile web GUI design received lower scores than their Korean counterparts. In particular, questions regarding Chinese sites' icons or buttons received far lower scores. This seems to be due to the fact that Chinese mobile web GUI designs considered the user's access environment to be just like the PC version, so they used more text links than images. In contrast to this text-heavy form, the main images and banners are comparatively large and strongly emphasized. This would suggest that in China, the purpose of hospital mobile websites is focused on advertising the hospital, rather than its medical services.

### 4. References

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