

# Strategies to Improve Digital Service of Newspaper Utilizing Service Design Methodology

Jinho Ahn, Hyunsoo Kim, Jeungsun Lee

Received: 16 April 2016 / Accepted: 16 September 2016 / Published: 31 December 2016

© The Society of Service Science and Springer 2016

## ABSTRACT

This study aims to establish the best strategy for digital media services for newspapers. For this purpose, we propose substantive service strategies, such as reorganization of various sections of the page to attract different segments of readers, and improvement of digital advertising products. Different methodologies were used in deriving the best strategy for digital media services for newspapers. First of all, literature related to service design and digital services for newspapers was reviewed, and analysis of digital services in the media, field research, and service modeling were conducted utilizing service design methodology. Consequently, the best service strategy for newspapers in the digital services was derived. It was found that for digital media services for newspapers, it is important to increase direct visits of customers, rather than enhancing loyalty of existing customers. This is because indirect visitors expect professional service that cannot be retrieved through websites. In addition, it is suggested that firms need to respond actively to external environment changes to increase revisit intentions for existing visitors because of the limited experiences provided in their current usages.

## KEYWORDS

Service Design, News Service, Service Design Methodology, Service Science, Digital Service.

---

Jinho Ahn

NF-Council, Seoul, Korea

e-mail: anjinho@nfcouncil.co.kr

Hyunsoo Kim (✉), corresponding author

College of Business Administration, Kookmin University, Seoul, Korea

e-mail: hskim@kookmin.ac.kr

Jeungsun Lee

College of Business Administration, Kookmin University, Seoul, Korea

e-mail: jslee321@gmail.com

## **1. INTRODUCTION**

### **1.1 Background and Purpose of the Study**

According to Lee (2013), newspaper companies were facing a crisis in management with the news distribution system focused on portals (Korean Press Foundation, 2010). Additionally, the watchdog function of the press and journalism is exposed to potential damage with higher share of profit of the enterprise from newspaper advertisement fees than the subscription fees. Therefore, newspaper companies around the world have been steadily proceeding through attempts to charge online news content to overcome this crisis.

Newspapers are in need to provide services encouraging offline loyal consumers also use online services for survival purposes. In addition, strategic planning is needed for preparing to launch new product content targeting a specific audience. It is also important to discover the optimum items through various experiments for a change in the digital advertising business structure.

The purpose of the study in this context is to establish the best strategy for the digital service division of the newspapers. To do so, usability through PC and Mobile were suggested to be improved, and a way to improve digital advertising products is proposed. Furthermore, reorganization was proposed for different page sections to provide a rich variety of information to the target readers. Additionally, the goal of the study was to derive a substantial improvement in service strategies to expand the internal and external writers for online content only.

### **1.2 Research Method and Scope**

This study aims to understand the features of the digital media services in providing newspaper content. The research concentrated on the immersion of several newspapers addressing optimum service strategies (Gerring 2004). First, we conducted a theoretical study on service design and service of digital newspapers. Next, service design methodology was conducted for analysis, field research, and service modeling of the media digital services. This approach derived a digital service strategy. Detailed progress for analysis is shown in Table 1.

Table 1. Service Design Process

Step	Activity
Status Analysis	Analysis of Inside Present Condition
	Interested Parties, Expert Interview
	Statistical Analysis
	VOC/WOM Analysis
Service Field Research	Issue Deduction
	Research planning, Recruiting
	Research Progress and Arrange
	Inside Review and Complement
Service Modeling	Key Finding
	Context analysis
	User Type Analysis, Persona defined
	Journey Map
Service Insight	Target User defined
	Service Value defined
	Service strategy defined
	To-Be Image, User Scenario
	Service Develop Ideation

## 2. THEORETICAL BACKGROUND

### 2.1 Service Design Research

#### 2.1.1 Summary of Service Design

In early days, the concept of service design was applied to public services industry; however, today its meaning and concept expanded beyond the realm of public service as a term that encompasses all design requirements in the service sector. Thus, service design is a multidisciplinary approach that combines various methods and tools used in numerous fields. The design of service can be considered as providing a design to the service, or turning intangible services into tangible products through service design, but there are no definite terms or generic definitions. In the current academic community in the United Kingdom Design Council (Design Council) and the design industry of the live work (Live Work) or the Peer.

Insight (Peer Insight) are phased in the formulation of such concepts and design services company specializing in the design and practice. According Pyo et al. (2008), service design

is a physical and concrete activity of creation of paths to all customers' contact. In this way, each customer can experience and assess tangible and intangible services. Integrating various definitions to service design, we redefined service design as whatever it is used to solve the problem through interdisciplinary, tangible, and intangible contact.

### **2.1.2 Elements of Service Design**

Service Design has a complexity that is contained through the characteristics of the interaction of the intangibility, inseparability, heterogeneity, and various factors including the environment. Engine Group to design a service (Engine Group) suggested a five factor elements in their model containing the system, values, itineraries, suggestions, and people. Looking at these elements, the system includes value to be passed to the provider. Second, the value element means that the key performance indicators must match a method for delivering the value desired by the user. Third, the journey should identify the service experienced over time. This journey should be implemented before and after the duration of the Service Design. Fourth, the proposal refers to the when, where, what, how, to whom, with whom the service was made. Moreover, the understanding of the subject matter about whether or not to have any prospect of change in the current form. Finally, in order to actively participate in service design, it is important to achieve the last element of people by any user or provider of services.

## **2.2 Newspaper Channel Digital Service**

### **2.2.1 Crisis of Newspaper Channel**

Currently, there are some countries experimenting with online paid news content and achieving visible results such as New York Times, Wall Street Journal, Financial Times, a British Newspapers, etc. However, despite of being widely shared, this method of delivering news content still in its early stages and needs more experimentation.

In the case of domestic newspaper companies, paid online news content has not developed different types of product with price points, paid news content development, or bundled products offline convergence specifically for smartphones and other mobile devices. News

content portals and news distribution system environments are distributed-online free of charge by the manufacturer. Second, there is a strong awareness of “free news content” in the national copyright environments (Lee et al. 2012). Third, if a newspaper company is now facing harsh business conditions due to uncertainty about profitability, paid online news content is hardly considered based on structural environment (Kim & Lee 2012).

### **2.2.2 Changes in News Production Process and Value**

Kim et al. (2007) had led to remarkable changes in the area of web-based journalism and digital journalism as is typified by the Internet. This has pulled down the boundaries between markets convergence and two types of media convergence. First of all, the ecosystem of journalism has been extended through introduction of new journalists such as bloggers, citizen journalists, and backpack journalists. Second, the variations in the media ecosystem to drive the changes in the media organization and production processes are another change to be noticed. The multiuse network with an on and offline newsroom was implemented in order to modify the media ecosystem and drive the changes in the media organization, and thus, allowing the integration of nonlinear news production process.

Next, the changes in the news production process has brought great innovations in coverage and reporting patterns. At the same time, these adjustments had opened an interactive configuration process providing benefits to the spot news text. The continuous application of these changes is expected to assist in providing a new direction to the social news and the opinion forming processes, including reverse flow agenda. Finally, the format of the news was also changed by the features provided by the introduction of digital technologies. The typical standardized news values in coexistence with citizen journalism provocation, local interests, and the latest newsworthy compete with each other with optimism.

After all, this contemporary journalism emerged as a new interpretation of traditional values and journalistic norms appropriate to the new environment and recent practices are being formed. The environment is clearly evident that online journalism has raised a variety of fundamental problems in terms of journalistic ethics. However, this does not mean the intrinsic value of journalism is destroyed. The answer to intrinsic value can only be made in the field if it stays as a continuous movement.

### 3. IMPLICATION OF SERVICE DESIGN METHODOLOGY

#### 3.1 Status Analysis

##### 3.1.1 Overview

Analysis stage is to identify the key information focusing on the objectives of the study and major issues related to the business. At this stage, we checked the internal status and business goals. Then we analyzed VOC (Voice of Customer)/WOM (Word of Mouth), derived an issue out through the research, setting the stage for Field Research.

Table 2. Summarize the Sage, Analysis of Current Condition.

Process	Summary
Inside current condition	Only identify the user's behavior and lack understanding of qualitative value
Statistical Analysis	Change in the main target, mobile centered, and rising importance of the SNS
WOM	Complaints and digital service usability issues for advertising
Interested Parties Interview	Understanding the customers and users also differ by department
Expert Interview	Consider the need for sophisticated and effective advertising method

##### 3.1.2 Field Research, Main Issue Deduction



Figure 1. Shadow Tracking Sample

The main issue of Field Research by current condition analysis was derived based on the following: First, the research revealed a need for the consideration of linkages between the

offline and online brand images. It was considered necessary to use the main digital device in conjunction with SNS for the channel in context and for research purposes. Finally, the research showed the need for grouping information to include: screen configuration, interaction, resolution, search function, and a user eXperience.

## 3.2 Service Field Research

### 3.2.1 Overview

The field research was conducted to derive qualitative values that are difficult to find from the user's experience with marketing. Selected users were expected to represent the target audience and identified by their in-depth news experience within a situation. The data analysis collected during this phase was classified by the type of users and their identity.

Table 3. Field Research Process

Step	Process
Issue Deduction	Issue Deduction analysis results by the target users based upon research conducted
Research Planning, Recruiting	Establish the overall work plan of the Field Research subjects' selection and recruiting, research application techniques, including how progress.
Research Progress, Arrange	News largely divided by reader into fixed (home, company), mobile (Bus, Subway etc.), progress in usability testing room and on-site
Inside Review and Complement	Research results are aggregated into a movie (usability testing room onsite recording), then collect behavior and context around a linguistic representation.

### 3.2.2 Shadow Tracking

The shadow tracking techniques were developed for the mobile users who may want to go around with their daily activities while watching the recorded news. This study uses the term fixed news users to refer to those customers who prefer to watch the news at home or place of work. These two settings were reproduced in UT room to reflect both scenarios.

### 3.2.3 In-Depth Interview

This phase describes the problems experienced by service users to drive after the shadow tracking subjects. The aim was to determine the users' thoughts, feelings, needs, motivation,

and attitude towards the field research.



Figure 2. In-Depth Interview Sample

### 3.2.4 Field Research Summary

Several changes were identified as needed in order to improve the limited experience of existing customers. A number of visitors suggested improvements regarding the changes to the external environment.

Table 4. Field Research Summary

Direct Visitor	Indirect Visitor
<ol style="list-style-type: none"> <li>1. Real Time News Focus</li> <li>2. Look to read the whole headlines at a glance rather than individual issues</li> <li>3. Avoid menu Investigation</li> <li>4. Request differentiated contents that cannot be seen in other newspaper</li> <li>5. Want an tacit classification, orderly flow, such as the eyes on the newspaper</li> </ol>	<ol style="list-style-type: none"> <li>1. Prefer portal because of the ease and diversity of the content of access</li> <li>2. Prefer interactions through SNS</li> <li>3. Tend to explore continuous news in case of having clear purpose of news consumption</li> <li>4. Values professional content and are very interested in opinions of others</li> <li>5. Habitually consume news to spend time</li> </ol>

## 3.3 Service Modeling

### 3.3.1 Overview

The users' journey maps were derived from the Service Modeling Key Findings included in the study and from the characteristics of the initial experience of the user.



### 3.3.2 Deriving the Main Experience Characteristics

Based on the survey results, eight variables were derived from this study to reflect the experience characteristics of each user. These variables are their motivation, instrument approach, newspaper experience, inflow characteristics, explore the range, media diversity, and attitude.

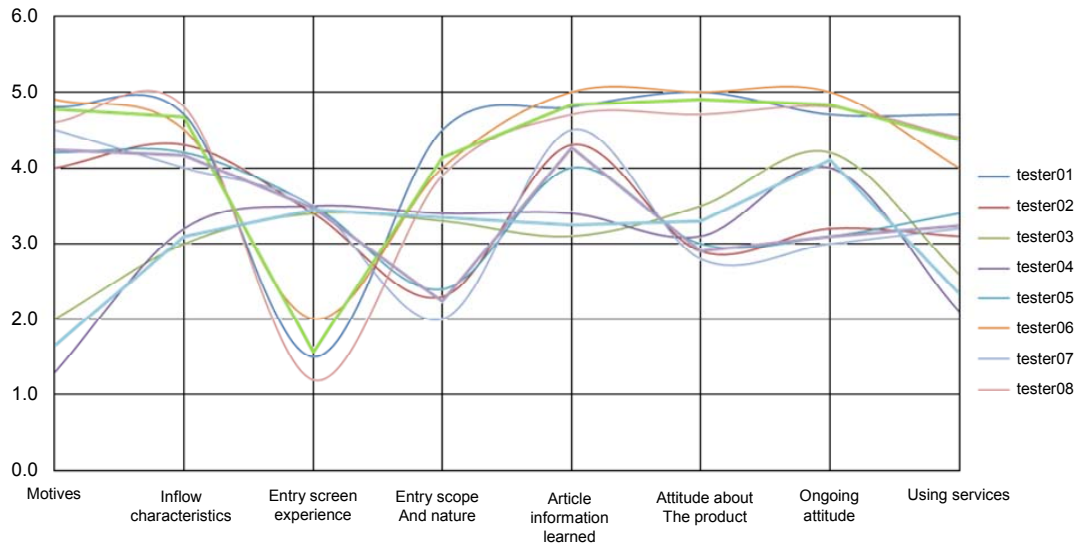


Figure 3. Deriving the Main Experience

### 3.3.3 Persona Definition

Based on the survey results each of the variables defines the type of users’ experience and their unique characteristics.

Table 5. Persona Summary

Persona	Nick name	Characteristic
01	To read the Issue **Ilbo	Prefer **Ilbo rather than portal service
02	Read newspaper and digital	Consume News alone on **Ilbo
03	Smart News Reader	Directly available when continuously articles, form prefers
04	My news is consequently order of number of lookup, and comments	Light news consumption to come up with the time
05	Habitually, Newsletter subscribers	News consumption patterns without clear purposes
06	Sit back news reader	**Ilbo favor, but they lack the use of news
07	Portal Life Style	Low conversion potential since familiar to portal services

### 3.3.4 Service Journey Map Definition

Each type of user was identified according to the difference between feelings and attitudes using any news flow. It was difficult to select the importance of intuition article and focusing on the experience of the four major persona maps. The objective was to define a list including navigation and the cognitive return path that was not provided but has been identified.

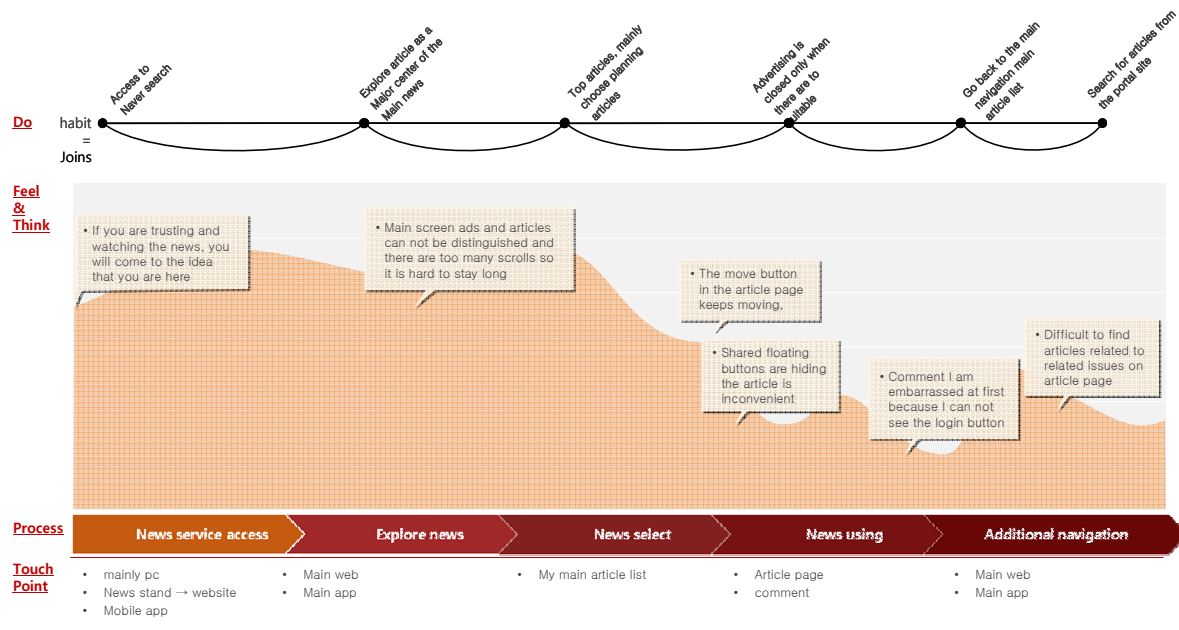


Figure 4. Journey Map’s Persona

## 3.4 Service Insight Defined

### 3.4.1 Overview

Insight deriving is the phase of presenting a To-Be image. This was performed by techniques such as target user defined, service value defined, service strategy defined, service future model defined, and service develop ideation.

### 3.4.2 Target User Defined

The findings for this research derived the type labeled as target the priority of the user. Table 5. Shows that “Smart News leaders” were derived to be the priority target for news-

paper companies. This is shown to be helpful in the UV (Unique Visitor) increased the key objectives of this study.

Table 6. Target User

Target	Nick Name	Defined
Targets for immediate increase in the Unique Visitor	Smart News leader	Consume and collect a lot of news through various channels, and can communicate fast and smart to consume more astute Want to Newsletter thus increasing PV, UV all.
Targets for increasing loyalty	Looking Issue on **newspaper	** Ilbo user based on the positive experience of the Newspaper. **Ilbo is window of the worldThe increase in PV-based loyalty
Targets for Future increasing future Unique Visitor	My news is consequently order of number of lookup, and comments	Prefer soft news centered fun photo of light weighted I would like to read fun news by seen lot of peopleGrowth in the future UV if adding interest and fun element to the news

### 3.4.3 Service Value Defined

Based on the user-defined Target, it derives the value of different types of user and user-defined type. It also used to organize the flow of news services noted a change in sentiment on the use of their news flow.

Table 7. Service Value Defined

Type Value	Defined
User type value	Easily find the news you want Enjoy your news on the paper in the way that digital experience on the ground Enjoy while being connected to a digital-specific manner Browse the news in a multi-platform Save preferred news convenient way to share and provide feedback
Experience changes in flow used	The overall improvement of the attention in the news selection Access news, advertising interference of the use Further search request for the path to confuse

### 3.4.4 Service Strategy Defined

Based on the results presented above, the service strategy of user-base expanded through the discovery of smart newsreader. Our detailed strategy described how to find innovative ways to service smart news readers. We presented a strategy to minimize the interference line and increase the concentration when reading the articles.

### 3.4.5 Future Model Defined

Based on the derived service strategy for each channel (e.g., PC web, mobile web, mobile app, and tablet), it has been determined that the future model provides a configured menu and content with the same purpose. The content in view aims to change the UI or the like, IA.

Table 8. Future Model Defined

	PC Web	Mobile Web	Mobile App	Tablet
Main Service	Articles page configuration considering the channel characteristics			
IA	Based on the same structure IA+ Trade-off characteristics for the channel			
UI	Article importance, improved navigation	Email improvement articles more, in a manner that shows effectively		Rreflecting paper experience
CMS	Flexible template structure considering the operating element			

### 3.4.6 Service Develop Ideation

The Service Develop Ideation aims to keep the direct visitors for a longer period of time while constantly keeping the indirect visitors involved, who could later on be dedicated exclusively for these guests.

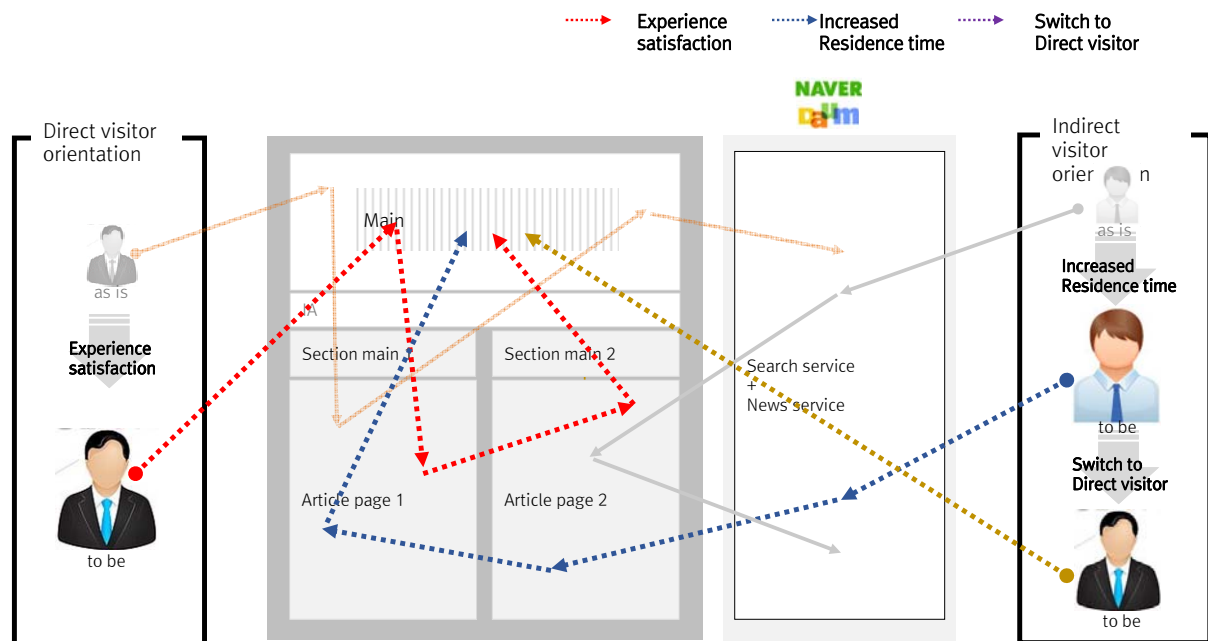


Figure 5. To-Be Ideation of UI/UX's Strategy

Figure 5 represents the interface and usage patterns of indirect visitors. It is recommended to keep indirect visitors interested in the articles' content and be proactive in suggesting other material with similar topics. Additionally, a customized menu was suggested to incorporate curating and mobile optimized news. These additional services will enhance the visitors' experience.

## **4. CONCLUSION**

### **4.1 Implication of Research Conclusion**

Currently, there are several attempts for industrial innovation based on social needs and service designs. This case study focused on digital services to design strategies for newspapers covering different viewpoints as related to science. The methodology paid special attention to the role and expected effect of digital services as the survival approach of a newspaper channel.

The research process included the analysis of digital offline services as related to industry and academia. Furthermore, strategic alternatives were derived to analyze the procedural aspects of the intangible value of the services provided by the newspaper.

As a result, it was determined that the level of professionalism was not getting achieved with the visitors using the portal site. The lack of satisfaction from these visitors was evident and became one of the motivations for the current study. Moreover, it gave the newspaper the opportunity to evaluate its services and enhance the experience of the users.

### **4.2 Proposal of Research**

The integrated services should provide new resources for digital newspapers and enhance future performance. However, future research is recommended to evaluate the continuous application of innovative services. Future users will provide evidence about the efficiency of digital services.

## **REFERENCES**

John G (2004) What Is a Case Study and What Is It Good for? *American Political Science*

Review 98(2):341-354.

Kim E, Yim K, Kim Y, & Yim Y (2008) Cultural Capital and News Consumption of Online News Users. *Korea Society Journalism and Communication Studies* 52(4):129-151.

Kim H (2015) A Roadmap for Service Economy, in *Proceedings of Service Korea Initiative Conference*, The Society of Service Science.

Lee J (2013) An Exploratory Study on a Korean-Style Model for Paid Online News Content (News Provider's Content Delivery Service): With a Focus on In-Depth Interviews with News Content Experts, *Korean Journal of Journalism and Communication Studies* 57(2):207-235.

Lee J, Choi M, & Park S (2012) A Study on College Students' Intention to Accept Paid Mobile News Content Provided by Daily Newspapers; Application of a Combined Model between TAM and Uses and Gratification *Journal of media economics and culture* 10(3):129-172.

Moon J & Kim J (2013) A Research on the Design Visualization Plan for Energy-savings: Focused on the Cases of Energy Service Design. *The Korean Society of Design Culture* 19(3):281-291

Pyo H, Lee W, & Choi M (2008) *Seoul Service Design Era*. Ahn graphics, Seoul Korea.

Yim S & Lee J (2012) *Smart Media Era and Direction of Media Policy*: Seoul National Assembly Research Service.

[www.enginegroup.co.uk](http://www.enginegroup.co.uk) (2013. 5. 13).

## AUTHOR BIOGRAPHIES



**Jinho Ahn** is an adjunct professor at Kookmin University and the president of the NF-Council, Co. Ltd. (<http://nfcouncil.co.kr>), a design consulting firm in Seoul, Korea. He obtained a Bachelor's in Industrial Design, a Master's degree and his Ph.D. degree in Business Administration at the University of Kookmin. His research interest focuses on Service Science, Service Design and Service System.



**Hyunsoo Kim** is a Professor of Service Management at Kookmin University in Seoul, Korea. He majored in nuclear engineering at Seoul National University and earned his Master's degree in management science from The Korea Advanced Institute of Science and Technology. He obtained his Ph.D. from the University of Florida with a concentration in business administration. Currently he serves as the chairman of the Society of Service Science, and the chairman of the Korea Research Institute of Service Industry as well as the Co-chairperson of Service Science National Forum. Based on those experiences and knowledge on Service Industry and academia, he devotes himself to the researches on Service Science and Service Innovation.



**Jeungsun Lee** is a Doctoral Candidate in Service Management at Kookmin University in Seoul, Korea. She holds a Master's and Bachelor's degree in Business Administration from Texas A&M University at San Antonio, Texas. Her research interests include areas in Service Science, Service Education, as well as Funeral Service Education and Mortuary Science.