Relationship between Service Design Tools and Service Innovation - Focused on Korean Healthcare Cases

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Abstract

In this paper, we have determined the strategic service design tools and methods by examining the associations among different size of health and medical service industry and investigate if service design tools and methods are positively related to service innovation. The categorized service design tools and methods in the service design will be used to examine the associations among two different types of health and medical service providers which are classified according to the operational regulations and sizes in Korea: clinics and general hospitals as a case study. Findings support that health and medical service industry may improve their performance winning the challenges associated with using the most appropriate strategic service design tools and methods in the service design.

Keywords: service design, service design tools, health and medical services, service innovation, case study

1. INTRODUCTION

Companies of all sizes and industries need to innovate to survive, which also applies to health and medical service industry today. According to “Industry Analysis: Medical Services”[1], US domestic population demographics are working to the favor of health and medical service industry with the aging of their 75 million Baby Boom generation which is about 27% of the total population. Likewise, the Baby Boom generation totals some 7.3 million in Korea which is more than 15% of the total population and is aging[2]. Boomers from all around the world are now entering a time in their lives when they require more medical services. Additional factors are technological advances which allow people to extend their lives and people afflicted with chronic or terminal diseases live longer with better care. With the various favored factors, the industry has become even more competitive than the past and ensuring strategic advantage in service innovation

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is more essential than ever.

Due to the characteristics of service product, customers are usually involved in the service process taking their parts which makes the service consumption more difficult to manage and hard to control the service delivery from its failure. It is critical to improve the quality of service and the interaction between service provider and customers, because unhappy customers can consequently result in lost revenue and profits in any business. As an innovative approach, many organizations have put effort on development of service design and practicing in their service process to deal with the challenges. The importance of positive customer experiences for both in terms of service and design are often considered and understood as key business drivers in order to full fill and meet the needs and expectations of customers especially in service industry[3]. In this study, three cases of the health and medical service providers which have practiced service design are analyzed to determine the kinds of service design tools and methods they practically used and applied.

2. BACKGROUND

Service design is a quite new and young phenomenon and the practices of service design tools and methods are also vary and different[4]. The activity of design service was considered as part of the domain of marketing and management disciplines by Shostack, “How to Design a Service,” who invented Service Blueprinting focusing on service design in service delivery process and its visualization[5][6]. On the other hand, service design has seen where it starts with the new service development process linking it to service concept, design of operational details and to the design of service delivery process and system[7]. Later, service design was introduced for the first time as a design discipline by Erlihoff at Kohn International School of Design in 1991[8]. Many previous studies have tried to give definition of service design, but it seems to be very difficult to sort differences in approach and define any accurate and all-encompassing model[9]. This study rather looks at service design as business strategy focusing on its contribution which brought success to many companies and industries as they are found from many well-known cases, for manufacturers like Apple and Nike, and service providers like Google, Disney, and Starbucks.

Most studies have agreed that service design is a still young, an emerging, and an interdisciplinary approach[10][11]. Although with the limitation, many studies have collected and tried to sort them, for instance, more than 50 descriptions of service design methods and tools are collected according to “This is service design thinking”[12]. Each study also suggests different ways to group those service design toolkits. For example, Liedtka and Ogilvie (2011) draw the design process into the four stages by asking the following questions: What is? What if? What wows? and What works?, and suggest ten tools and assign proper ones to each stage[13].

In this study, the ‘Double Diamond’ design process model by UK Service Design Council (2005) is used to
draw the service process of health and medical service industry[14]. The double diamond diagram is a simple graphical way of describing the design process which is divided into four distinct phases; Discover, Define, Develop, and Deliver. Firstly, discovery phase is the starting point where the project begins with an initial idea or inspiration. In second stage, problems are defined and interpreted. Then, different ways of tackling the problems are explored by designing and testing potential solutions in the development phase. Lastly, it represents the delivery stage where the resulting product or service is finalized and launched. Under the double diamond diagram, applied service design tools and methods from the cases can be identified. Therefore, after examining the successful cases of health and medical service industry in Korea, the result will be analyzed based on the Double Diamond Model and service design tools and methods will be determined.

3. RESEARCH METHODOLOGY

The objective of this research is to determine the strategic service design tools and methods by identifying the applied service design tools and methods for the clinics and general hospitals in Korea using the four steps of the ‘Double Diamond’ design process model on three cases[15]: General Doctor, Sun Hospitals and Samsung Hospitals in Seoul. In order to stay closer to the data and any observation to be made for the chosen cases, the qualitative approach is used. One sample of clinic (General Doctor) and two different sizes of hospitals, one on a medium-sized general hospital (Sun Hospitals) and the other on a high level general hospital (Samsung Hospitals), are analyzed. The process of the research is conducted going through multiple phases based on the topic from collecting data from the websites from the clinic and hospitals and other articles and magazines, analyzing, and concluding interviews. In the analysis, we looked at their service vision, service strategy, and service deployment and what was learned from each case is included as lessons learned following the analytical method used in Findnode.

4. SERVICE ANALYSIS ON THREE CASES OF HEALTH AND MEDICAL SERVICES

4.1 General Doctor : a clinic

The practice what Dr. Seongbum Kim wants is based on humane approach. His vision is to establish a clinic environment where the both patients and the practitioners always enjoy and want to come back[16]. The service strategies the clinic focuses are 1) every medical treatment has to be humane, 2) service providers of health and medical services will do their best to support and help the patients to live their life on their own, 3) practitioners will make medical decisions based on the agreements and mutual understandings, 4) practitioners and patients should be like friends who understands each other with respect, 5) medical treatment must be usual and ethical, and 6) they shall try on innovation in order to keep the essence.
To practice the vision and service strategies, Dr. Kim has created the clinic area like a very cozy café. Visitors can experience the café like clinic filled with the aroma of coffee as walking into the doctor’s office. What they see next is, instead of a doctor with white gown and skeleton, a low table with a very comfortable sofa and a stool which does not come with a back support. The low table is to create easy contact for both parties, the comfortable sofa is for a visitor, and of course the stool is for a practitioner. The practitioner takes a note making eye contact with the patient sometimes drawing a part to explain things for better understanding rather than typing on a keyboard facing the computer. A 30 minute visit to the clinic offers visitor consolation and relief from the anxiety he or she might have. The practitioners at the clinic know what the atmosphere for medical treatment requires to have and they try to improve it every day. They have established a café like clinic and created the atmosphere to have better communication between practitioners and visitors even caring for a small thing like using a depressor with candy on the tip. Not only to design something pretty in the eyes, but to practice humane approach in every way in contact with visitors and to prove that such enjoyable medical treatments can be actually possible.

4.2 Sun Hospitals : a Middle-Sized Hospital

Sun Hospitals with four hospitals have about 900 sickbeds and take about 2,500 outpatients every day. Their vision is based on the belief that they exist because of the customers, therefore, they want to make the place where people can rely on and may return during their lives[17]. Four service strategies they focus are 1) work
with good attitude under the slogan “Expand Kindness DNA,” 2) practice effective communication, 3) give empowerment to nurses and service providers to raise the satisfaction level of customers, and 4) improve service by handling the complaints and identifying the possible unsatisfying factors having Chief Client Officer to monitor.

Based on the view of health and medical service industry as a part of hospitality sectors, Sun Hospitals have focused on development in a bond of sympathy by bench marking hospitals with reputations, well-known hotels and restaurants offering ‘bench marking tour’ to a group of people selected as a ‘king pin,’ who can lead the hospitals positively as change-agents. To overcome the conflict and opposition of doctors on service education and training, they have recorded the medical treatment process, borrowed a role-playing form, and shared with the doctors to recognize the need of service in their practices. By implementing on the communication channel, adapting to visualization on communication process, they have accomplished a mutual understanding between members on the vision of the hospitals. To satisfy the patients, who are customers to them, the hospitals give the empowerment on their nurses who have more contact with patients; to make direct calls to the specialists whenever needed, to have head nurses to have the rounds like doctors do, and etc. Having a Chief Client Officer shadowing the patients has helped identifying the problems and difficulties customers encounter to in everyday practice, for instance, a loud music sound from the headset provided to the patients who were taken into MRI, the loud sound of the wall clocks in the patient’s rooms, and etc. As an outcome of these efforts on the establishment of customer-centered service, Sun Hospitals is now recognized as an A class from the patients satisfaction in the area of Daejun, Chungnam.

4.3 Samsung General Hospitals, Seoul : a high level general hospital - a department of pediatric

Under the mission statement, “To give best way for medical treatment, to obtain advanced medical research, and to foster excellent practitioners,” Samsung General Hospitals have established in Seoul since 1994. They have a total of 1,983 sickbeds and 40 departments, 8 special centers, and 110 special clinics where 1,200 doctors, 2,300 nurses, and 7,500 staff providing health and medical services. They have a service vision focusing on the happiness of patients by realization of medical innovation[18]. Their service strategies are 1) to improve the system of medical treatment truly to be patient-centered, 2) to improve the IT system easy for customers to enhance their positive experience, 3) to improve the place, and 4) to improve the attitude of practitioners and staff.

As an effort to establish patient-centered system and to help the families from the outside Seoul staying motels and hotels, Samsung General Hospitals provide a lodging service for the parents of children with cancers to stay on site. In 2006, they opened a children’s school on site which is supported by the Gangnam Independent School District, so children who is hospitalized for a long term may continue with their education.
By adapting to the use of active and passive RFID system, they have reduced on a queue for the services by speed up the communication process. In order to cut down on the waiting time for making payments, they have operated the open card system for automatic payments. The service includes the texting service, sending invoice by e-mail, and credit card payment. For the young patients, they have renovated the place to give more friendly and comfortable feeling by having the cartoon characters on the wall, showing the TV show or videos for kids, offering art exhibition in their museum for the guardians. To create positive experiences for customers, they even use organic cotton material for the uniform and linens. For the practitioners and staff, they provide child care services for the employees and other benefits. Samsung General Hospitals focus on the true happiness of patients not only providing general services.

5. Findings / Conclusion

According to the analysis, the service design tools and methods used in all three cases are co-creation, observation, brainstorming, interview, shadowing, ethnography, and questionnaire. For a clinic which focuses more on handling close personal contact with visitors, a tool deals mostly with touch-points between service providers and customers, a customer journey map, is used. As a result, most of the tools and methods used in the clinic are identified in the process of discovery and definition. In the second case, Sun Hospital which needs to focus on both touch-points and improvement of systematic process, a customer journey map, service blueprint, and role playing are practiced. This shows that a medium-sized hospital takes first three steps of the double diamond process model, discover, define, and develop. The last case of this study, Samsung General Hospitals applied the above methods which the medium-sized hospital has practiced. In addition to that, they have adapted more tools and methods for total improvement by performing the prototyping of each project, a heuristic evaluation, a usability test, and task analysis in the last process, delivery.
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