

A Design Process for New Concept Development

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Abstract. A rise in service industry has allowed the service provider to realize the importance of service innovation. However, there are different sequences of design method which can generate a different result. Service innovation approaching from having the “least” complains within a service, may still result in customers’ dissatisfaction. This research developed a new service design method approaching from satisfying the customers’ “wish” instead of complains. This design method can generate an innovative solution that can be beyond customers’ expectation, which create a higher impact on overall value that the customer may perceive. This service design method will be named as “wish-guided” service design method. It will transform the information gathered from service process, from complains to wishes. By knowing customers’ wishes, the “value” of the design problem can be increased greatly.

Keywords: wish, expectation, service innovation, design method, value.

1 Introduction

Over the last century, the service industry has been a boom to the economy around the world. Industrial countries have begun to shift their focus of profit from manufacturing oriented to service dominated (Ostrom et al., 2010). From tangible products to intangible service, scholar Moritz (2005) describes the current marketing as “the service provider cannot no longer generate profit just from the physical product itself but the service it comes along.” Even though service providers have noticed the importance of service innovation, the service providers have a difficult time using the current service design method available. Current service innovation tends to focus on the current service process to find the “least complains” from the customers as a solution, instead of focusing on the innovative fixation of the service. An ideal service innovation should be satisfying the customers’ “wishes”, to create a value that are beyond the customers’ expectation; becoming the “highest satisfying” solution.

“Services, we maintain, are produced by means of a process” (Edvardsson& Olsson, 1996). It can be recognized as how the service provider “delivers” the service to the service receiver and how the service receiver “receives” the service. Even though there are different characteristics of service: intangibility, heterogeneity,

inseparability, and perishability, service itself by any means is still delivering the “quality” to the customer.

Scholar Lovelock & Yip (1996) described the range of service sector may be broken down into three sections: People process service, possession process service, and Information based Service. The service sector may be different, but it is still about the process of receiving service. The research from scholar Matthing & BodilSandén & Edvardsson (2004) mentioned the services today are interactive, technology intensive, and embedded in relationships. Even though service providers have noticed the importance of service innovation, the service providers have a difficult time using the current service design method available. If the service providers were able to apply a service process concept development for different types of service, the success rate would greatly be increased.

Even though there are different categories and characteristic within services, service itself by any means is still delivering the “quality” to the customer. Scholar Edvardsson and Gustavsson(1990) proposed a service system framework; the service system has four components: customer, staff, physical/technical environment, and organization and control. These four components will need to co-exist in order to deliver a proper service.

New Service Development (NSD) refers to “the overall process of developing new service offerings (Johnson et al., 2000), from idea generation to launch or implementation (Cooper et al., 1994).” The reason why there are so many types of NSD for the service provider to choose from is because the result of the current service design method is not able to achieve what the customers need, wish, and expect. Needs are basic, different customers look to satisfy their needs in different ways (Edvardsson & Olsson, 1996). Wishes refer to the way in which the customer wants to satisfy a specific need (Edvardsson & Olsson, 1996). Expectations are linked with a phenomenon or object, a specific service or a certain company. Expectation is based on the customer's needs and wishes but it is also influenced, often to a considerable extent, by the company's image or reputation on the market, the customer's previous experience of the service company, the service company's marketing, and so on (Edvardsson & Olsson, 1996).

The concept behind NSD is build upon service development, service operation, and service improvement. Service development: the service development phase develops a new service concept (what to deliver) and service delivery system (how to deliver it) (Kim & Meiren, 2012). Service Operation: the developed service is delivered and evaluated (Kim & Meiren, 2012). Service improvement: if a service failure occurs, service recovery is pursued. In case immediate service recovery is insufficient and fundamental improvement in the service is necessary, the service improvement phase is activated. It is in this phase that the problem is defined and the root causes are identified (Kim & Meiren, 2012).

The most important reasoning to create a new service is to create value. Therefore, the design process tempts to identify the value of service and to seek for an opportunity to gain advantages in the competitive field. Value itself can be defined differently on the goal or the subject, as well as being perceived differently. In this research, value will be defined as, “value is the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given (Zeithaml 1988, p. 14).”

Scholar Woodruff (1997) described the desired customer value as, “a maximum value can be generated if the service full-fill what the customer want.” The service will tend to seek to achieve what the customers really want from the customer’s perspective, which will be related to customer’s process and activity within a service.

Current service providers tend to lean towards solving the issues with the current service instead of satisfying the need, wish, or expectation for the service receiver, which may result in a less innovative solution, as the result is not what the service receiver fully-wanted. The ultimate goal is to allow different background participants to use this design method in different industry, as well as having a proactive thought in mind while using this design method.

2 Process

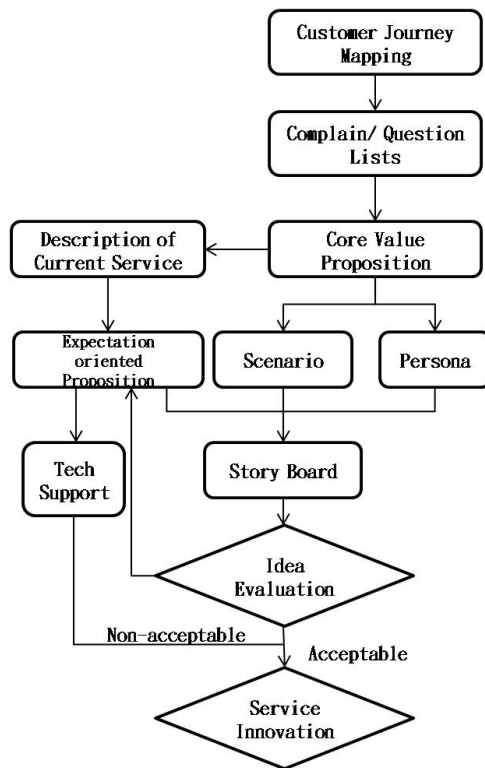


Fig. 1. Process of Wish-Guided Design Method

2.1 Customer Journey Mapping

The first step for Wish-Guided service design method is customer journey mapping. By listing out customer journey mapping, the subjects will be able to gather the information on processes that the customer will have to go through within the service. The motivation and purpose for each of the activities will be found.

2.2 Complain/Question Lists

After the listing out the customer journey mapping, the subjects will be able to analyze the questions and problems the customer may encounter within that step of process. Urgency and importance will be used to evaluate which questions and problems are the first priority, using urgency as the first priority at all time.

2.3 Binary Customer Journey

Once complains have been identified, these information can be transformed from complains to wishes. The ideal customer journey mapping can be express as a character, time, place, object, and an incident, in a binary sequence. For example, may and may not, need and do not need, or can and cannot etc.

2.4 Proposed Wish Model

When the ideal customer journey mapping is being identified, motivation and connection between each of the service process can be observed. If there is an identical motivation or purpose, this information can be combined and rephrased, which can help to simply the ideal customer journey mapping.

2.5 Value Proposition and Strategic Intent

Value proposition will be the key wishes from the wish model. Strategic Intent is to conceptualize the value proposition. From another perspective, value proposition is the customers' wishes while the strategic intent is how the service provider fulfills customers' wishes.

2.6 Technical Support

Based on the value proposition, current technology will be proposed to fulfill the proposed wish model. Current technology will be evaluated by cost and effectiveness, to judge whether or not to implement the technology. Effectiveness will be the priority, as the service scale is reached upon a certain degree, the cost will be reduced. Last, if one technology can fulfill another, integrate the technology to increase the chances of execution.

2.7 New Ideal Customer Journey Mapping

Synthesizing previous steps, a new ideal customer journey mapping will be constructed including the following: supporting technology, service interface, and customers' activity. The new customer journey mapping will be used towards later on for scenarios.

2.8 Persona, Scenario, and Storyboard

A persona will be chosen based on second most challenging customer for the service provider. The reason why choosing the second most challenging customer instead of the most extreme is because it will be able to represent majority of the customers' within the current service while having the most complains. If these customers' can be satisfied, it will be sufficient enough to meet the customers' wish. A scenario will be chosen upon where customers' activity will happen. A storyboard may be written or drawn, to describe the new customer journey mapping.

2.9 Concept Evaluation

Based on the result of the storyboard, the result will be evaluated to determine if the wish model will need to be revised. It will still be evaluated based on the cost and effectiveness, to judge if it idea is reasonable or not; keeping the ideas that has a higher effectiveness. Once the wish model has been adjusted, the steps will need to be reviewed and re-evaluate, as it will create a different innovation result.

2.10 Qualitative Interview

Qualitative interview will be used to gather the subjects' past experience on service design method. The interview questions will involve with their experience and problem the subject have encountered when using Wish-Guided service design method, as well as the subjects' opinion and perspective on the overall value proposition of the design method. These information and data will be use towards on revision of the Wish-Guided service design method in the future.

3 Verification

This research will host workshops with 20 subjects on their experience and opinion on the Wish-Guided service design method. 20 subjects will be divided into three different groups. Within these three groups of subject, there will be one experienced facilitator in each of the group as an interpreter and analysis. The facilitator will be recording all the process, questions, and problems etc. that the team has faced. The workshop process will follow the process of Wish-Guided design method based on figure 1.

Using one of the design topics from the workshop as an example, one of the team worked on the topic "postcard".

The subjects first listed out the customers' journey mapping: looking for a shop → looking for a postcard → looking for a shop that sells stamps → asking for the costs to mail the postcard → writing the content on the postcard → looking for a place to mail the postcard → mail the postcard → make sure the postcard arrive.

The intention of these steps are: to share travel experience, to pick a style that they like, it requires stamps to mail the postcard, to share the experience and send

messages, to mail the postcard, and to make sure the person gets the postcard and the sharing experience.

The questions the customers may ask themselves within these steps are: where can they purchase the postcard and stamps? Is there a postcard that I like? Can it be a private content? When will it arrive? Is the address correct? Etc.

The complains the customers may have are: language barrier, dislike the style of the postcard, does not know where to purchase or to mail the postcard, does not know the mailing address, does not know when the postcard arrives etc.

Then integrating the questions and complains to identify the main question and complains that the customers may face within the service process. The main questions the customers will ask are is the mailing address correct? Does it have a commemorate value? While the main complains for the customer are: there is not a style of a postcard that the customers like and does not know the mailing process (postage, stamps, location). If the customer does not know the mailing address, then the whole mailing process cannot be completed within the current mailing service system.

The binary steps of the service process is first by listing out the worst case scenario of the current service: I do not know where to purchase the postcard, may not like the style, may not have the commemorate value, I do not know the mailing process, I need to go to different location, I need to know the mailing address, content may be restricted, public content, does not have information of the postcard after mailing. Then switching these service process as a binary sequence: I know where to purchase the postcard, will like the style, have the commemorate value, I know the mailing process, I do not need to go to different location, I do not need to know the mailing address, content will not be restricted, content may be private, have update on the mailing postcard. This new sequence will be proposed wish model for the postcard services.

After knowing the proposed wish model, the subjects will need to consider the value proposition of the service from a customers' perspective. The quote for the value proposition is "Will like the style, guaranteed arrival". Then strategic intent is how the service provider will need to achieve the value proposition. The strategy is "Persona and exclusion gift to the door".

The technical support is the technology will be able to achieve the proposed with model. Different technology will be looked into and then integrating a similar technology into one. The technology that is required to achieve this postcard service may be postage calculation, digital information, packaging, tracking system, text messages, email etc. After the team integrate all the technology, it came to a conclusion that these three current technologies will be able to satisfy all the needs of the postcard service: digital work station, customization and packaging, and electronic tracking system.

The new ideal customer journey mapping for the service process for the postcard will be: go to service location, pick a personal photo, the postcard can be physical or digital, it can be private or not, purchase stamps and mailing it at the store, provide tracking information, complete mailing.

After choosing an ideal persona and scenario for the service, the team tried the new postcard service system with the following storyboard: Alex went to a gift shop to use the digital work station → Alex chooses a language that he is familiar with → choose a photo from his camera during his vacation → the postcard has a serial number of #0004392 (meaning this is the 4392th postcard that is being made from this service), Alex chooses to print physical postcard instead of a digital version → Alex also chooses to upload a video clip on his vacation to the server so his grandchild can download it off when they receive the postcard → because Alex remembers the mailing address so he does not require to do a second time mailing from the post office in his country → the system calculated prices of postage → Alex pays the postage and mail the postcard at the gift shop → Alex receives a tracking number for his postcard where he can receive the status of the postcard in mobile application or email.

Last, the team review and evaluate the concept to examine if there may be a problem for the new postcard service system. The team believes that the postcard service is achievable in the real-world.

Throughout the workshop, the subjects followed the Wish-Guided handbook to record down their data. The subjects may have trouble at some part of the process. For example, the subjects may forget that they should be in the customers' shoe at this point. If the subjects are not in the customers' shoe while gathering complains, questions, and motivation, new possibilities may be annulated. The reason to this may be due to the subjects' background, experience, and domain knowledge on the design problem.

However, the domain knowledge will be a key asset when integrating the support technology to the service. If the subjects do not have a lot of knowledge on the current technology, the overall result may be affected as the solution may be out dated.

This study gathered the subjects' opinion and experience after the Wish-Guided design method workshop. Overall, the subjects agreed upon that a transition from a problem-driven solution to a wish-driven solution will have greater chances of producing innovation results. The amount of time required to discover the value proposition is shorten as well. However, subjects had difficulties on identifying what are the customers' intention and purpose in the journey mapping, as well as supporting technology. The reason may due to the subjects' original background, knowledge, and domain etc, which may restrict the subjects' to view the problem from a customer perspective.

4 Conclusion and Suggestion

This research aims to develop a design method that is suitable for NSD by approaching the design problem from customers' wish perspective. The Wish-Guided design method is capable of discover innovation results, which leads to the following three conclusions:

1. Wish-Guided design method is capable of transforming customers' complains into wishes, which can be a short route to identifying the core value of the design problem. However, the detail of the information may be decided upon the team members within the team, as this can impact the overall process and result of Wish-Guided method.
2. The value proposition will be approach from the customers' perspective, while strategic intent is from the service providers' perspective. It is a matter of "What" and "How", this area may require some skills and experience to integrating the information into a quote.
3. There are areas that still can be improved, such as team formation. Team members may not have the correct information on what the customers' actually wish for; they may rely on their own personal experience and interaction with the customer. Therefore, having what kind of person in the team will help benefiting on customer understanding.
4. The Wish-Guided design model is straight forward and easy to understand. The participants will not only look at "outer" part of the problem, but also the "inner" part of it such as "why" and what is the motivation behind it. This can be beneficial, as these "whys" can dig out a possibility that the customer themselves do not even know.

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