

Open Experience Journey Design. Developing an approach to the collaborative user-driven ideation for innovative services

Masanao Takeyama¹, Kahoru Tsukui¹, Hiroshi Yamaguchi², Goro Motai²

Corresponding author: takeyama@econ.keio.ac.jp

Keio University, 2-15-45 Mita, Minato-ku, Tokyo 108-8345 JAPAN

Dai Nippon Printing Co., Ltd., Media Technology Research Center, 1-1-1, Ichigaya Kagacho, Shinjuku-ku, Tokyo 162-8001, Japan

Abstract

Most of service design projects are usually executed for the sake of providers of these services, whether they are profit-seeking companies or are non-profit public organizations. Although such a provider oriented design approach is appropriate for reforming existing services or for transforming these into a new ones, the scope of innovation is inevitably biased toward the interest and competence of the provider. We introduce in this paper a user driven design approach for service innovation called Open Experience Journey Design, which allows users or consumers themselves to ideate desirable services in collaboration with each other without specifying any predetermined service provider. In particular, Open Experience Journey Design incorporates imaginative association techniques to assist and promote to generate innovative ideas beyond the boundary of conventional thinking. By testing the approach in a service design workshop, it is revealed that the ideation techniques indeed stimulate to create an idea for a service system, connecting two different utilities into a consistent user value chain. Based on these findings, we further developed an online platform called Experience Journey Laboratory to integrate the technique of crowdsourcing with Open Experience Journey Design.

KEYWORDS: open innovation, crowdsourcing, collaborative design, experience journey

Introduction

As the value of a service is realized by the participation of its users, it is critical for designers to understand behaviours and emotions of users in order to find out some insights for design. Sometimes service designers also have to reveal hidden needs and opportunities that even users or its provider do not recognize explicitly. Therefore service designers often organize co-design workshops inviting those users and the member of the service provider to let them collaborate to come up with ideas with consideration of each concern. Moreover, other stakeholders such as suppliers to the service providers may also be asked to participate in design projects. Such inclusions of multiple stakeholders into design processes are becoming more important for designing highly complex services of these days as values of these services are co-created within the ecology of service systems (Miettinen and Koivisto, 2009).

Recently some firms and organizations further started to apply so-called open innovation approach to their design projects using techniques such as crowdsourcing (Chesbrough, 2011; Sloane, 2011; Howe 2009). Resorting to some customized online social platforms, these firms and organizations provide a large number of people with opportunities to join in the projects to collect from them various insights and ideas for developing new products and services. In such settings, innovative ideas are expected to emerge from the interaction among these participants with different perspectives and unique opinions. Some of successful crowdsourcing projects are attracting highly motivated participants even without any monetary rewards because participation in such projects and their engaging experiences become intrinsic rewards for them (Malone et al., 2010; Benkler, 2007). As for a design consultancy, IDEO recently developed such an open design platform called OpenIDEO to crowdsource ideas solving current social issues. It simplifies their popularized design thinking method such that participants follow the steps of inspiration, concepting, and evaluation to generate in cooperation ideas solving a problem given by IDEO and its sponsor organization.

All the approaches to include users in the design process mentioned above are more and more adopted by both consultancies and service providers, and are indeed showing effective results in reforming an existing service or for transforming it into a new one. However they have certain limitations when applied to innovating new services. As long as these design projects are implemented for the sake of a predetermined service provider whether it is for a profit-seeking company or a non-profit public organization, its scope of innovation and the value of designed service are inevitably biased toward the interest and competence of the provider. In other words, in these projects the participants always presuppose

who is or are in charge of solving the problem. In addition, a usual crowdsourcing project such as OpenIDEO requires certain skills and knowledge of its participants in order for these to contribute to and engage in the experience of the collaborative design process. Indeed, the active participants in current crowdsourcing projects are inclined to be design-minded people, which may include professional designers, or lead users of the services i.e., those who have either creative thinking skills or advanced knowledge and experiences in the problem domain. Because these participants are not always the target users of the service to develop for, the validity of derived ideas become questionable.

To overcome such barriers of current provider-specific co-creative design approaches, we introduce an open and user driven design approach for service innovation called Open Experience Journey Design. In the following chapter, the characteristics of Open Experience Journey Design are explained to distinguish it from other related approaches. Then the ideation process model of Open Experience Journey Design is laid out with emphasis on the two imaginative association techniques. This ideation process model is actually applied to a service design workshop to observe a sequence of creative idea development for designing a cooking related service. Based on the evaluation of the benefits of Open Experience Journey Design, we further develop an online platform called Experience Journey Laboratory to integrate it with the approach of crowdsourcing.

Open Experience Journey Design

Emphases of the approach

Open Experience Journey Design, the proposed approach for a user-driven innovation of services, is distinguished from other related collaborative design methods in several aspects.

First, it does not presuppose any product, service, or provider for which the participants in the design project are asked to come up with ideas or solutions. They focus on a certain category of activity or a topic in their daily lives to find out problems and unmet needs as resources for inspiration and ideation. It neither sets any criterion to evaluate generated ideas from the standards of a certain provider. The emphasis is not on solving a given problem but on the opportunity for the participants to explore and extend their space of desires and imaginations without caring any provider's interest.

Secondly, it utilizes a service design oriented open innovation platform called the Experience Journey Laboratory. Using the platform, participants of a design project collaborate in developing ideas for a service as a system of multiple touch-points and interactions distributed over time and space in daily lives. Instead of asking the participants to explain an idea or a concept for service in texts and images as seen in OpenIDEO, it assists step-by-step ideation process through which an experience journey map of a new service is generated as result. Such a service design oriented crowdsourcing is currently very unique while there are many open innovation platforms and projects focused on product development.

Third, it provides the participants with techniques to empower their imagination and ideation. In particular, the forced association technique (Osborn 1963) and the value chain association technique are applied to the process of generating ideas for new services. By using these techniques, not only design minded persons but more casual participants are also welcomed and promoted to generate original ideas. In addition, such empowerment helps them extend their ideas far beyond simple solutions to a specific problem.

Forth, it integrates the strengths of online crowdsourcing platform with those of offline face-to-face workshops. Whereas problem finding, service ideation, and service concepting are executed on the online platform of Experience Journey Laboratory, journey mapping and storyboarding of new services are carried out in workshops as the latter phases of the project require of the participants more intensive commitments hardly attainable online.

The ideation process model

The ideation process model of Open Experience Journey Design consists of the four phases: finding needs and problems, ideating single touch-point services, ideating double touch-points services, mapping a journey of service experience. Each of these phases is explained below in order.

Phase 1: Finding problems and needs

The first phase of Open Experience Journey Design is to find problems or needs that people often come across in their daily lives. This process of problem/need finding is performed by collecting personal stories from the participants, in the forms of texts and images, of an unmet need or troublesome situation which they encounter in a scene of some daily activity such as cooking. As such a daily activity (e.g., cooking) usually consists of various consecutive scenes (e.g., menu planning, buying groceries, cooking, preparing a dining table, eating, washing dishes and so on), stories to be collected are expected to cover needs and situations in such various scenes.

Phase 2: Ideating single touch-point services

The second phase of Open Experience Journey Design is to generate ideas for meeting unsatisfied needs or solving the troublesome situations at a single touch-point. In this phase, a forced association technique is applied to the process such that the participants are asked to associate a story of need or problem with some stimulus word to come up with an idea of a product or service that gives a solution to the situation. Each pair of a story of unsatisfied or troublesome situation, which is picked up from the collection, and a stimulus word, which is usually a name of some object, person, place, is generated in a random manner and given to the participant. Using such a forced association technique (Osborn 1963) allowing people to shift their attentions and switch their points of views, the participants are promoted to generate non-trivial ideas beyond the boundary of their conventional thinking and imagination.

Phase 3: Ideating double-touch-points services

The third phase of Open Experience Journey Design is to integrate a pair of service ideas derived in the previous phase in order to produce a complex idea of double-touch-points service. Such a complex idea integrates the values of two service ideas for different scenes of the activity. In the case of cooking, for example, such a chained services may connect services to support menu planning and cooking or those to assist menu planning and buying groceries. The participants of the design project are allowed to pick up any pair of two service ideas generated in the phase 3. It is important to note here that an idea of double touch-points service is not just a simple addition or connection of two service ideas. Rather it aims at integrating two ideas to create a mutually complementary relationship between their values. We call such an association technique the value chain association whose deliverable is a core value concept of a new service to be developed into a full service system in the next phase.

Phase 4: Mapping an experience journey

The final phase of Open Experience Journey Design is to develop further the core value concept of a new service, which is derived in the previous phase, into a multiple touch-points service system. Such an extensional development is realized by adding new interactions or touch-points before, between, or after the scenes of double touch-points services such that its core value becomes more enriched and the proposed service system fits and penetrates well into the lifestyle of target users. The deliverable of this phase is an experience journey map of the created service idea.

The ideation method workshop

We tested the method and process of Open Experience Journey Design introduced in the previous section in a workshop to evaluate its strengths. This section explains how a creative idea for a new service is actually derived using the Open Experience Journey Design by demonstrating a sequence of ideation process observed in the workshop.

Figure 1 represents an ideation sequence corresponding to the phase 2 and the phase 3 of Open Experience Journey Design, observed in the workshop to ideate a new service for supporting cooking.

The four boxes at the top layer in this figure represent two randomly generated pairs of a need and a stimulus word. At the second layer, there are three boxes of which the left and the right boxes represent ideas for single touch-point service derived by the forced association between a need and a stimulus word. The box in the middle shows another stimulus word to promote the participants to generate an idea of double touch-points service that is shown in the box at the third layer as a short story of a person using the service. The box at the bottom layer represents a core service concept that captures the essential value found in the idea of double touch-points service and is used for developing an idea of multi-touch-points service in the next phase.

As the sequence tells, the needs for buying a recipe separately and learning table coordination, whose stories were collected in the phase 1, and also their corresponding ideas of single touch-point services, i.e., an online recipe shop and a projection dining table were all integrated into another complex idea of double-touch-points service, i.e., an interactive dining table which allows the user to plan a menu by simulating its table coordination image and also to buy its recipe by touching the image. Here the idea of double touch-points service is not a simple addition of two single touch-point services. The participant of this design project indeed modified the original idea of interactive table-top, which adapts its visual design to the design of physical plates put on the table, into the new idea of interactive table-top projecting an image of a menu of meal. Such an imaginative modification of original idea is necessary for the participant of Open Experience Journey Design to integrate two ideas of different touch-points or service scenes along with their utilities into an idea for a service system of consistent user value chain.

In addition, as shown at the bottom of the Figure 1, the extraction of core value concept from the short story depicting the usage scene of a double touch-points service brings significant benefits to develop the idea into an idea of more enriched service system. By expressing the core value proposition as a general statement, it becomes easier for the participants to consider possible target users and their value propositions and also explore the possibilities of additional touch-points and functions to be integrated with the service without diluting its core value.

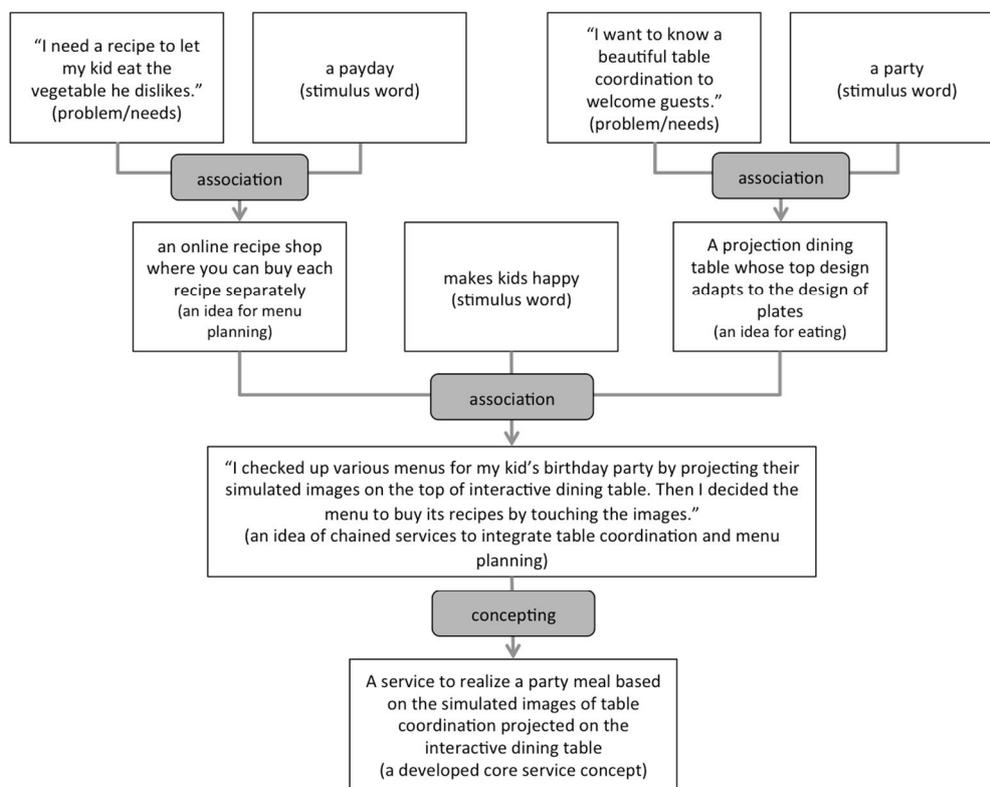


Figure 1 An ideation sequence for a new service

3. Experience Journey Lab.

To implement a design project of Open Experience Journey Design online and integrate it with the technique of crowdsourcing, we developed a website named Experience Journey Laboratory (EJL). This chapter provides an overview of the architecture of EJL.

EJL is an open online platform where anybody can access and join in the service design project. Every design project of EJL proceeds in a stepwise fashion following the four phases of Open Experience Journey Design explained in the previous chapter.

In principle, the

architecture and functions of EJL are designed such that the online ideation process does not require any facilitation or assistance of professional designers except that a blog component of the website of EJL is used for the project-related announcement from the organizer of EJL and also that the period of each phase is determined by the organizer in advance. All the ideas and comments are posted from the participants who are expected to collaborate on the project by posting comments on the ideas of others or associating ideas of others to generate ones own idea. In other words, these ideas and comments are used as common resources for ideation being open to every participant.

The interface of EJL consists of four main sections distinguished by different theme colours corresponding to the four phases of Open Experience Journey Design. The users move between sections by selecting the coloured tab for each section (Figure 2).

Each section is further divided into two subsections; the idea posting section (the need/problem posing section for the phase 1) and the comment posting section. As for the fourth section of mapping experience journeys, a face-to-face workshop is held for mapping journeys instead of asking the online participants to draw and post a map by themselves.

Therefore, the subsections here are used for the workshop announcement and posting comments on the journey maps derived from the workshop respectively.

In the second section, i.e., the section for ideating single touch-point services, EJL incorporates a program that generates in a random manner a pair of a story depicting a need or troublesome scene and a stimulus word in order to support the forced association. The participants are also able to switch either the episode or the stimulus word to some other episode or word, or renew both using the same program. They can repeat this process until they decide a pair to associate with. On the other hand, in the third section, i.e., the section for ideating double-touch-points services, the participants by themselves pick up any pair of two ideas of single touch-point services from the list of those ideas.

Note that as EJL was developed in Japan and is currently being tested with Japanese participants, all the language



Figure 2 Experience Journey Lab.

expressions used in EJL are written in Japanese.

Experimental design projects

To investigate the practical applicability of EJL, two experimental crowdsourcing design projects have been planned to implement during the period from October 19th to December 3rd of the year 2011. The two themes of the design projects are a service for cooking and a service for fashion. Both of the projects ask the participants to develop an idea for a service composed of multiple touch-points. For each of these experiments, we prepared some example postings on the website for the first three phases so that the participants of the projects figure out easily the process of ideation and expected tasks for each step. Before the launch of the experiment, a Twitter account of EJL was released to have followers to make announcements of the experiments. We are planning to develop some prototypes for the service ideas derived from the online experiments and their following workshops. After receiving comments on these prototypes from the project participants, the strength and effectiveness of EJL will be evaluated.

Conclusion

We introduced Open Experience Journey Design, a user driven design approach for service innovation in which users or consumers ideate desirable services without specifying any predetermined provider or product and service category. By testing the approach in a service design workshop, we observed and demonstrated the sequence of an actual process of such an idea development using an example case. It was revealed from the observation that the forced association technique applied to the process is quite effective for generating non-trivial ideas beyond the boundary of conventional thinking of the workshop participants. Moreover, it was also shown that the ideation technique of associating two single touch-point services stimulates them to generate an idea for a service system, integrating two different utilities into a consistent user value chain. Such a technique of generating a complex idea brings significant benefits to find insights for designing an innovative service as many of recent services are becoming complex systems of multiple touch-points and stakeholders.

Based on these findings, we further transplanted the approach and techniques of Open Experience Design into an online platform to develop Experience Journey Laboratory. By using EJM, a large number of consumers or users of services are able to explore their space of imaginations in collaboration with others to create ideas with no bias toward the interest and competence of a certain service provider. To prove its practical applicability and to advance its further development, EJM is being applied to actual crowdsourcing experiments for service design projects. Their analyses and evaluations are expected as continuing future research.

References

- Benkler, Y. (2006). *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven: The Yale University Press.
- Chesbrough, H. (2011). *Open Service Innovation*. San Francisco: Jossey-Bass.
- Howe J. (2009). *Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business*. New York: Crown Business.
- Malone, T. W., Laubacher, R. and Dellarocas C. (2009). *Harnessing Crowds: Mapping the Genome of Collective Intelligence*. Working Paper No. 2009-001, MIT Center for Collective Intelligence, Cambridge, MA.
- Miettinen, S. and Koivisto, M. (2009). *Designing Services with Innovative Methods: Perspectives on Service Design*. University of Art and Design Helsinki.
- Osborn, A. F. (1963). *Applied Imagination: Principles and Procedures of Creative Problem-Solving: Third Revised Edition*. New York: Charles Scribner's Sons.
- Sloane P. (2011). *A Guide to Open Innovation and Crowdsourcing: Advice from Leading Experts*. London: Kogan Page.