### Report Title:

# **Service Design Challenge for Changing Nursing Care Communication in Japan**

#### 1.Overview

This project aims to create a new service that will solve problems for customers and service providers in the nursing care industry, which is an urgent issue for Japan, a country that is becoming an aging society.

Even from a global perspective, Japan is a super-aging society that has been experiencing a considerable increase in its aging population. Accordingly, medical-care insurance and nursing insurance fees, which make up the country's public finances, are increasing annually. Furthermore, despite the fact that nursing care is a hard job where many problems can arise, the service provisioning side also has its own share of problems, such as low wages and difficulty in gathering people. Legal and privacy issues also make it difficult for the introduction of IT into the field, which is in turn a cause behind performance not rising.

Concent, Inc.'s Service Design Team has been commissioned by the CASIO COMPUTER CO., LTD. Business Administration Planning Department's New Business Development Team to develop a service for the discovery of problems and their solving in the market. CASIO has a possibility of growth in the nursing care market, as well as an important social significance in the solving of problems relating to care. So while it is unexplored territory as a business, a project team composed of sympathizers within the company was organized and from 2013 a model was examined for this new business. It was April 2014 when Concent's service design team joined this project as an external partner.

Concent and CASIO started by first selecting problems from various stakeholders involved in nursing care and defining value provided. For this purpose, qualitative research of nursing care settings was done. Analyzed results of research data showed that the common issue between stakeholders was no understanding how far to mutually invade each other's space, communication not being easy, and as a result there was no developed mutual sense of trust or security. In response to this, a service concept was defined as making "teams" of people involved with nursing care that respects an adequate amount of distance.

Function definition and implementation of a service application was done along with this concept, along with measures to establish it as a continuous business model and plans for capital recovery. On July 2015, a closed SNS mobile application service named "DaisyCircle"

was released, which mirrored the voices of nursing care field. The service name comes from the Japanese Daisy's name *Choumeigiku* that means "long life chrysanthemum" and *Circle* as ideal state of nursing care team. At the same time, project team held a hypothetical study of a business sustainability and profitability.

This service intends to share visuals and text of the appearance of people regularly receiving care between any people concerned (family of the customer, helpers and other persons of responsibility, care managers, relatives, etc.) in a secure environment and create a more trusting mutual relationship, while also reducing the cost and time burden of mutual communication.

Concent has also planned promotions and advertisements for the final release on the market, as well as creating necessary tools. While this can be said to cover all processes up to the release of the service, Concent plans to continue with further support for improving the service and customer support.

#### 2.Process

- a. The design tools and methods and the process used
- · Creation of "Value map" by laddering stakeholder's interview results
- Creation of "Stakeholder Map" in order to organize stakeholder relations regarding nursing care market
- · Creation of "Target Personas" and "Work Models" of stakeholders
- Creation of "Customer Journey Map" of stakeholders
- Definition of application functions from "Story Mapping"
- b. The approaches for gathering customer insights
- · Group interview with nursing care service's customers (this interview was carried out by CASIO in advance)

Ethnographic research & contextual inquiry by visiting the homes and workplaces of separate types of stakeholders i.e. helpers, persons in charge of nursing care service, care managers, customers, and family of customers, in order to get a more detailed understanding of setting context

• A quantity survey by taking a sample of 200 of the test subjects from the 20,000 samples for service target inspection

- Concept inspection through cooperation with NPOs that support nursing care of parents that live long distance
- c. The approaches for testing product/service concept
- During a site interview, a presentation was held showing a mock-up put into professional and rough smartphones that introduced the service concept, and its value was inspected based on the amount of empathy.
- A service operation was held wherein an actual device was lent out to three carriers for half of a year. Feedback was then collected by splitting teams up, i.e by the supposed target team, the team that misses the target etc., and an interview was held with all stakeholders for around an hour each month.
- A presentation for major nursing care businesses in Japan with concept mockup.

#### 3.Benefits

### a. Benefits for customers

The UX design heavily stressed the preserving of the simpleness of the UI and its ease of use, while taking into consideration the facts that the total age-group of stakeholders in the nursing care industry who are customers of DaisyCircle is high, and that it will be used by busy personnel at care centers. Various ideas for additional functions were therefore looked into, with 90% of them being eliminated. Since there are also numerous stakeholders who are of different standings, the benefits of each stakeholder will be described below.

# Nursing Care Patients:

By team members exchanging requests and circumstances in detail between one another, there have been fewer incidents of small complaints and concerns from customers. Previously, conversation would often not be too lively when family that normally doesn't have time to visit would come by, or a new helper would come in. Prior sharing of various information, however, made it so discussion flourished and communication became smooth after the service was introduced.

## Family of Patients:

Demonstration testing showed that as expected, when a team was formed, the family of the nursing care service customer was aware of how their parent who was receiving care was doing without any restrictions on their time, which put them at ease. Since previously they were unaware of who would be providing the care, they had a peace of mind at being able to see the face of the servicer.

Furthermore, as the next step to trusting the nursing care service provider as a professional, an intimacy as a familiar face plus an atmosphere with a sense of security were created, making it easier to freely convey requests that previously would have been difficult, which in turn reduced dissatisfaction from the customer and any trouble. It was also observed that when good service was provided, there was a proactive sharing of good reputation within the team, raising the rating of the provider.

# • Providers of Nursing Care Services such as Home Visits or Day Services:

Site staff has not directly used the service as far as operating rules of the service providers are concerned, but they have been involved in the indirect use of applications by supplying photos. We saw a rise in motivation for providing good service through comments and gratitude expressed by family and praise received by supervisors. This is a huge benefit towards reducing trouble and improving service quality for supervisors of service providers. Regular provision of information from DaisyCircle would contribute to improved profitability by carrying it out as a service outside of nursing insurance.

\* Day Services: One of the nursing care services provided to patients. Nursing care patients visit specific institutions so that servicer can provide them with support for their everyday needs, in terms of meals, bathing, and the like, as well as providing them with day training services to help them improve their lifestyles.

# · Care Managers:

As they have functioned as a hub for information relating to nursing care, they have been overloaded with answering mails and taking phone calls when issues accumulate one after the other, becoming a bottleneck. The comprehensive sharing of information, however, has lowered the burden of communication. This has allowed more time for their original task of formulation of better care plan.

\*Care Manager: The person that creates a care plan by taking into account the wishes of the patient in care or their families. In addition, they also act as liaison and mediator with the nursing care service offices as required for the provision of care.

## b. Benefits for organization

CASIO has had no experience providing web or mobile service, instead having focused its business structure on the marketing of products. Currently, this is an inexperienced venture in obtaining profits from service, and is significant in its attempt to create a new profit structure. The process has also accumulated the cross organizational expertise of members from numerous fields, including planning, sales, and development.

### c. Impact on the competition/market

The introduction of IT in Japan's nursing care market is extremely late, with applications being mostly for BtoB business use. In contrast, our current service is groundbreaking in the fact that it directly involves a wider range of stakeholders than BtoBtoC. At present, there is no similar competing service on the market.

#### 4.Effects

#### a. Cause and effect related to the project

Through the project we have constantly held studies that focused on the "values" of numerous concerned stakeholders, and through the course of a year have upheld inquiries and communication with the customer. As a result, we were able to obtain the expected outcome concerning our target persona. Owing to this, sustainability and profitability of this business were recognized by the CASIO Board of Directors, and we were able to release the service to the market. We intend to go further with improvements and support while taking a positive approach in obtaining quantitative and qualitative feedback from our customers.

#### b. The scale of effect

As can be understood from the quantitative results of the demonstration test, this service has the potential to affect many stakeholders in the nursing care field, as well as surrounding people. It is expected to make a huge impact on the state of communication within the nursing care industry. Since it was only just released on July 7th, 2015, there still are no concrete results yet. However, we are receiving inquiries for the consideration of introducing the service from leading nursing companies that operate multiple offices which saw our present (July 15th, 2015) press release.