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Service design as a tool for developing library services. Case: feedback system created for customers, with customers

(Projektowanie usług jako narzędzie wspierające rozwój oferty bibliotecznej. Studium przypadku kreowania systemu informacji zwrotnej dla użytkowników zaprojektowanego przy ich udziale)

Słowa kluczowe: projektowanie usług w bibliotece, biblioteki fińskie, system informacji zwrotnej

Abstrakt: Informacja zwrotna pochodząca od użytkownika jest istotnym czynnikiem funkcjonowania bibliotek, które nieustannie rozwijają swoje usługi, podążając za potrzebami czytelników. Lahti University of Applied Sciences Information wykorzystuje proces projektowania usług jako metodę oceny i rozwoju usług oraz pozyskania informacji zwrotnej od użytkownika. W wyniku tego procesu została dostrzeżona potrzeba zaprojektowania nowego systemu, który pozwoli kontynuować zbieranie informacji zwrotnej od użytkowników biblioteki. System ten powstał w ramach multidyscyplinarnego projektu przy pomocy studentów i wydziału uczelni.

Key words: service design in libraries, Finnish libraries, feedback system

Abstract: Customer feedback is an important asset for libraries willing to develop constantly their functions according to customer needs. Lahti University of Applied Sciences Information and library services use service design as a method for evaluating and developing services and collecting customer feedback. As a result of this process a need for new feedback system emerged to ensure continuous feedback collection. Feedback system was developed as a multidisciplinary project along with students and faculty.

Introduction

Information and library services, as part of learning center environment, must constantly be able to follow the transitions of students' working cultures and need to be able to serve their customers most effectively. The needs of higher education library customers are shifting from printed to digital material and the significance of library offer studying facilities is increasing. To be able to follow customer needs means that library services must have a reliable way to chart the usage of library collections and facilities, and to get the students to participate in developing library functions.

Customer feedback is a valuable asset for the libraries in developing their functions according to user's needs. Information and library services of Lahti University of Applied Sciences have traditionally collected the feedback as part of Finnish national library survey.

National survey is conducted regularly to provide information about trends in library usage and customer satisfaction. So far the surveys have been conducted in their current form in 2008, 2010 and 2013, and the next questionnaire is scheduled for 2016 [4]. In addition, the traditional feedback channels like feedback boxes, web forms and e-mail together with face-to-face feedback to personnel are still used. However, last 5 years was a time of big changes for Lahti University of Applied Sciences information and library services. The most significant of them was the opening of learning center Fellmannia in August 2011. This new working environment has shown that more customer input is needed to create guidelines for developing services.

Learning center Fellmannia is one of the Lahti University of Applied Sciences campuses areas which consists of classrooms and learning spaces, information and library services, student services, conference services and a restaurant and a café[7]. Fellmannia´s different functions are defined as need-based, interactive, innovative and proactive. For this to come true, service concept need to be systematically developed, taking into account the feedback collected from the users of the services [18].

Information and library services in Fellmannia are functioning in three storeys, occupying an area of 2500 m^2. Services are open to everyone, but the collections and expertise are focused on the field of studies in Lahti University of Applied Sciences and Lahti University Consortium, who are the main funders of the services. The collections consist of approximately 80 000 monographs and journals both digital and printed. In addition, Information and library services provide yearly information literacy teaching for a total of 1000 student credits.

The Finnish higher education system consists of two complementary sectors, universities and polytechnics (called Universities of Applied Sciences). The mission of universities is to conduct scientific research and to provide undergraduate and postgraduate education based on this, while the polytechnics train professionals in response to labor market needs and conduct R&D especially supporting regional development [12]. Despite the dual model of higher education, universities and polytechnics have been encouraged to cooperate on regional basis, and the collaboration has mainly targeted services and administration. This has led to the development of joint libraries to serve both universities and polytechnics, such as information and library services in Fellmannia [13, p. 225].

Background

Service design is described as a human-centered approach where the design methodology and principles are used in designing services [eg. 16, p. 1-2; 19, p. 14; 2, p. 1-2]. Service design can be used in both developing new services and assessing and improving the existing ones, taking into consideration both customers and service providers' viewpoints [19, p. 14].

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[7] For more information, visit: http://www.fellmannia.fi/?page_id=6026.

Service Design in Finnish libraries

In libraries, service design has concentrated mostly on developing of existing services by making them more visible, approachable and united. Library services have been designed as a result of customer's viewpoint to find ways to make customer sevices even better. One of the most important issue to resolve library design process is to discover the needs and experiences of the customer using the library. Library processes should always be designed from customer's point of view. Customer's expectations towards library services are being defined by surrounding information society's fluent services, so library services should be simple and easy to use [20, p. 1]. Service design has been used in developing projects like Helsinki University Library new main building, Kaisa House and Aalto University Library's forthcoming Learning Center.

In case of Kaisa House project, the aim was to create a library which attracts and stimulates both students and researchers [17, p. 4-6]. Student needs were explored through service design methodologies such as interviews, mystery shopping, scope research and focus group discussions [20, p. 2]. The collected material was analysed by service design specialists and the following conclusions were drawn. The library must respect different styles of learning and personal approaches by offering appropriate facilities to different learners and researchers. Also quiet areas are needed for reading and working. The library should offer facilities also for discussion and group study. User support for digital resources is crucial and the library must have rooms for teaching information literacy. Break rooms for relaxing as well as pleasant cafés are also needed [17, p. 4-6]. These customer needs are now basis of developing library functions, and have already influenced on everyday function of the library: the different areas of the building are color coded according to the noise level permitted and customer service uses common service gestures to ensure coherent service. Developing is an ongoing process [20, p. 2].

The Learning Center project for Aalto University Library aimed to create a new service concept and to involve users in its design. Creating new service concepts was initiated by distinguishing the different user groups of the library and their needs by recruiting three service design teams. These teams interviewed widely university students and staff under the supervision of the designers. During the interviews working and studying habits and daily life on campus was charted, using them to identify concrete user needs [14, p. 19-20].

User needs collected during interviews were formed into service concepts and the best ideas were prototyped and tested by its users. These interviews were done by service design teams simultaneously with partnership interviews which were carried out with the other university service units to find their needs regarding to the activities at the Learning Center. The project took also into account the impact of the new services on staff working routine. To bring the new services into practice some plan was created. During this process it has became evident that using library services by its consumers has changed; the library space appears to be more and more important in contrast to the need for traditional services, like borrowing and reference which is declining [14, p. 19-22].

Case study: Learning Center Fellmannia

Fellmannia launched a service evaluation process in the beginning of 2012, as part of the World Design Capital 2012 project. Objective of the process was to identify different service paths based on customer's needs and to define important contact point where service interaction occurs. Every user's service path is formed via contact points and service interactions and they can be formed individually. Customers are heterogeneous groups with different backgrounds, expectations and experiences, so service paths are formed individually. Customers can, for example, prefer self-service or expect personal service encounters [3].

The goal of the service evaluation process was to show how Fellmannia's functions and services meet the objectives of being need-based, interactive, innovative and proactive in all Fellmannia's services and to find out what are the needs for further development [18]. The objective was to create a feedback system enabling continuous development of services [21]. Service evaluation was targeted to higher education and vocational students and teachers of Päijät-Häme region and other users of Fellmannia's services. The students were pointed out as the most important group in the process [18].

Developmental evaluation

Developmental evaluation is a data collection process for supporting organisational development, particularly emphasising innovation and learning. Developmental evaluation is particularly well suited for five purposes; ongoing development, adaptation, rapid response, performative development and systems change [1, p. 645]. Use of the method is often justified by the complex nature of the interventions being evaluated and the need to produce useful results in real time [15, p. 45-46].

In Fellmannia, the developmental evaluation process had an emphasis on the viewpoints of the stakeholders and users of the house. Fellmannia's functions have been designed in close co-operation with the users, so their input in evaluation process was essential. The other key point during the evaluation process was to make the evaluation as reflective and constructive as possible, and to focus on the current situation: the objective was to find out whether the services work the way they were planned to. For continuing development it's crucial to find the possible gaps between the goals and the implementation of the services so the conditions for evolvement are created.

The service evaluation process consists of five workshops, two case-study afternoons and two customer surveys.

Workshops

Five workshops were organised under the themes of customer service and Fellmannia's business idea, information and library services, eLearning services, sustainable development and sense of community. For every workshop, a host was invited from the outside of Fellmannia to lead the conversation and to sum up findings of the workshops. Results were presented from an outsider's point of view, which made easier to question the way things have been done before.

Through workshops, many interesting ideas surfaced. Fellmannia was primarily seen as a place for students, and services for them were seen as free or affordable [7]. Information and library services were appraised for good customer service, but a need for more guidance, both in signs and in person, are needed. Locating library material was also seen as a challenge, numeral guidance appears to be not clear enough [5]. In eLearning workshop, Fellmannia was seen as a versatile and inspiring studying environment. However, all the technological possibilities were not well known, so students and personnel working in the building should be properly introduced to various opportunities available [8]. Sustainable development in Fellmannia was seen as a part of everyday functions, but new ideas were also introduced especially to restaurant services, like thermal mugs, fair trade coffee and take-away food [6]. Finally, the community themed workshop tested the facilities and their functions from both communal and independent point of view. New ideas of working are well facilitated in Fellmannia, and it was the traditional classroom which were seen communal and supporting of the hierarchy between students and teacher [9].

Case-study afternoons

During case-study afternoons, the ideas gathered from workshops were refined to a more practical level. Case-study afternoons were organised for information and library services and for elearning services and worked as a channel for distributing experiences and good practices throughout the different services of the building.

Customer surveys

Two customer surveys were conducted; both as a part of theses process for students of University of Applied Sciences, one about meeting services and the other about information and library services.

Meeting services survey

A customer survey was conducted among the costumers of meeting services to find out their opinions on Fellmannia's services. Survey was created by a student of Lahti University of Applied sciences working together with the staff of Fellmannia's meeting services. Using quantitative methods, the questionnaire used Likert scale to evaluate Fellmannia's facilities, equipment, furnishing and catering, services and customer service. The data was collected from 114 customers visiting Fellmannia [10, p. 18-21].

Survey done by Kukkonen [10, p. 21-27] indicated that customers of the Learning Center Fellmannia's are mostly satisfied with all the aspects covered in the survey. The facilities were seen as cosy and well-functioning, and the devices available were easy to use. Also the catering and the lobby services worked excellently. Customer survey also showed that co-operation between the different services of the building requires some attention. According to the feedback, also signage and soundproofing at the building could be improved. Kukkonen [10, p. 28] states in his thesis that service design is a good method for developing meeting services in Fellmannia.

Information and library services survey

Information and library service's service design was also evaluated in another thesis, done by Laaksonen in 2013. The aim of the theses was to produce information and knowledge that could be used in developing Fellmannia Information and Library services and to help integrate service design according to Fellmannia's everyday functions. A survey was conducted to research customer service, services in general, printed and e-resources and other environments. The quantitative, Likert scale survey was answered by 121 customers [11, p. 32–35].

The result showed that service design of Fellmannia Information and Library services was generally successfully accomplished. Especially personnel and they good service attitude as well as professionalism were seen as an integral part of Fellmannia's services. Some answers still indicated that some areas need to be developed, for example, study rooms reservation, web sites, the use of e-resources and availability of printed materials [11, p. 35–47].

Results in Laaksonen (2013) thesis suggest that service design, information and library services can further improve their services by getting to know the customers needs more profoundly and using the information gathered together with customers [11, p. 48-50].

Feedback system emerges

To meet all the goals of the service evaluation process, a feedback system for continuous development of the Learning Center Fellmannia was needed. The objective for the new feedback system was to create a system able to collect feedback easily all year around and to offer an easy to use and transparent feedback platform to promote communication and interaction. It was clear from the beginning that the feedback system should be created with students because working with them is an excellent way to engage them to a new system and get to know what kind of feedback system would appeal to users whose feedback is the most important. Making students genuine partners in Fellmannia's everyday actions and development is an integral part of supporting interactional functions[8].

The feedback system planning started as a multidisciplinary project with Information and Library services, Design Foundation Finland and students from the Institute of Design and Fine Arts and the Faculty of Technology. The technology behind the system was built by the Lahti University of Applied Sciences Faculty of Technology students. Student's contribution was remarkable for the user-oriented development process of the feedback pool.

First phase was to define the needs and expectations towards feedback system. Because the service evaluation process stated that there was a need for simple feedback system, these facts were furtherly divided into elements, creating four basic principles. Firstly, system was defined as easily approachable and compatible with different platforms and touch screen. Secondly, the system needs to be both visually tempting and informative. Thirdly, feedback must be easy to give, using different devices, such as smartphones, tablets and computers.

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[8] This has been a working principle in Fellmannia for several years now, and the skills of students have been widely utilised in many functions, including technical visualisation, interior planning, promotional photography, development of student and personnel welfare services and organising events.

And finally, giving feedback must be quick and immediate, also should provide a chance for response.

Designers and technical experts have formed the feedback system as well as the idea of round ball in a pool. It was developed onwards with colors, so that positive, negative and neutral feedback have different colors. This way the mood of the feedback pool is easy to see at a glance. The bubbles are interactive, so other users can like or dislike them, causing the bubble to increase or decrease in size. Bubbles are also movable to offer game-like feeling to the system, which was seen as an important part of making the channel tempting to students. The feedback system was named as Feedback pool© and it was registered to Finnish patent and registration office[9]. Feedback pool© is available online, through Fellmannia's web pages and with mobile using QR-codes posted around the building.

The goal of the Feedback pool© is to provide a simple, game-like channel for feedback with no complicated menus or multiphase processes. This is also a practical communication channel between Fellmannia's users and staff, every feedback is posted openly to the system without moderation. By both positive and negative user input, valuable insight and tools for improving services are given.

Feedback pool© launched in December 2013 and it has been actively used ever since. Ideas and feedback posted using the pool have already improved the services of the house in many ways. Book baskets for collecting materials, more coat racks to reading areas and adding power sockets to studying areas are all improvements made based on customer feedback received through Feedback pool©. So far the feedback system has fulfilled the goal of gathering the feedback needed for continuous development and encouraging especially the students to give feedback.

Discussion

Fellmannia's service evaluation process created guidelines for developing different functions of Fellmannia together with customers and users of the facilities by using developmental evaluation. Workshops and surveys have made students, teachers, meeting guests and other customers an integral part of developing services, working together with process coordinator and Fellmannia personnel.

The objective of the process was to find out how Fellmannia's functions and services meet the objectives of being need-based, interactive, innovative and proactive and to find out what are the needs for further development. According to the feedback gathered, multiple improvements were made for example in signage, web pages, placement of furniture and customer service. However, to achieve continuous development of services, feedback for everyday functions should be collected throughout the year, not just as a part of the project. For that purpose, a new feedback system was needed.

With the launch of new feedback system, the everyday feedback from customers will get noted openly. This will help to identify and fix service flaws and contribute to improve Fellmannia in general. Service design is a process, which enables to develop some functions

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[9] Feedback pool is available online: www.fellmannia.fi/palautepallomeri.

from customer's point of view, using Feedback pool©. The development achieved during the process can continue even after the service design project will end. Working together with students gave them a significant input in developing services and their feedback and initiatives are and will still be essential.

So far the Feedback pool© has also been used as a feedback system for Lahti Science Day, an annual research seminar[10] and the SmartBus LINKKU, a service bus in which learning center Fellmannia is one of the operating partners. In future, the game-like Feedback pool© may also be used as an online environment in information literacy teaching and learning provided by Lahti University of Applied Sciences.

References

1. FAGEN M. C., REDMAN S. D., STACKS J., BARRETT V., THULLEN B., ALTENOR S., NEIGER B. L. Developmental evaluation: Building innovations in complex environments. *Health Promotion Practice.* 2011, vol. 12, nr 5, s. 645-650. ISSN 1552-6372.

2. HOLMLID Stefan. Interaction design and service design: expanding a comparison of design disciplines. *Design Inquiries*. 2007, nr 2, s. 1-8. ISSN 1604-9705.

3. IHALAINEN Niina. Palautepallomeri – avoin ja yhteisöllinen keino saada asiakkaiden ääni kuuluviin. *Verkkolehti Lahtinen* [Dokument elektroniczny]. 2014. Tryb dostępu: http://lahtinen.lamk.fi/?p=399. Stan z dnia 13.01.2015.

4. *Kansalliskirjasto. Kirjastojen kansallinen käyttäjäkysely* [Dokument elektroniczny]. 2013. Tryb dostępu: http://www.kansalliskirjasto.fi/kirjastoala/kayttajakyselyt.html. Stan z dnia 13.01.2015.

5. KIVILUOTO Johanna. *Fellmannian tieto- ja kirjastopalvelut puntarissa* [Dokument elektroniczny]. 2012. Tryb dostępu: http://www.fellmannia.fi/?p=3645. Stan z dnia 20.01.2015.

6. KIVILUOTO Johanna. *Kestävää kehitystä Fellmanniassa* [Dokument elektroniczny]. 2012. Tryb dostępu: http://www.fellmannia.fi/?p=4700. Stan z dnia 20.01.2015.

7. KIVILUOTO Johanna. *Mistä on hyvä palvelukokemus tehty?* [Dokument elektroniczny]. 2012. Tryb dostępu: http://www.fellmannia.fi/?p=3399. Stan z dnia 20.01.2015.

8. KIVILUOTO Johanna. *Uuden ajan oppimista ja opetusta Fellmanniassa* [Dokument elektroniczny]. 2012. Tryb dostępu: http://www.fellmannia.fi/?p=3868. Stan z dnia 20.01.2015.

9. KIVILUOTO Johanna. *Yhteisöllinen ja yksilöllinen Fellmannia* [Dokument elektroniczny]. 2012. Tryb dostępu: http://www.fellmannia.fi/?p=4860. Stan z dnia 20.01.2015.

10. KUKKONEN Petri. *Oppimiskeskus Fellmannian kokouspalvelujen palautekysely. Bachelor's thesis, Lahti University of Applied Sciences* [Dokument elektroniczny]. 2014. Tryb dostępu: http://urn.fi/URN:NBN:fi:amk-201405157991. Stan z dnia 20.01.2015.

11. LAAKSONEN Ritva. *Kohtaamisia kirjastossa: palvelumuotoilua asiakkaan näkökulmasta Oppimiskeskus Fellmannian Tieto- ja kirjastopalvelussa WDC -vuonna 2012* [Dokument elektroniczny]. 2013. Tryb dostępu: http://urn.fi/URN:NBN:fi:amk-201303073031. Stan z dnia 21.01.2015.

12. Ministry of Education and Culture. *Polytechnic education in Finland* [Dokument elektroniczny]. 2014. Tryb dostępu: http://www.minedu.fi/OPM/Koulutus/ammattikorkeakoulutus/?lang=en. Stan z dnia 12.02.2015.

13. PALONEN Vuokko, BLINNIKKA Sirkku, OHVO Ulla, PARIKKA Susanna. Joint academic libraries in Finland: different models of integration. In WOODSWORTH Anne, PENNIMAN David (red.). *Mergers and alliances: the operational view and cases.* Bingley: Emerald, 2013, s. 223-242. ISBN 978-1-78350-054-3.

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[10] For more information, visit: http://www.lahdenyliopistokampus.fi/en/research/lahti_science_day.

14. RAATIKAINEN Matti. Oppimiskeskusta luomassa – asiakkaat mukana. *Signum.* 2014, nr 6, s. 19-22. ISSN 2242-9468.

15. REY Lynda, TREMBLAY Marei-Claude, BROUSSELLE Astrid. Managing Tensions Between Evaluation and Research: Illustrative Cases of Developmental Evaluation in the Context of Research. *American Journal of Evaluation.* 2014, vol. 35, nr 1, s. 45-60. ISSN 1557-0878.

16. SEGELSTRÖM Fabian. *Stakeholder Engagement for Service Design: How Service Designers Identify and Communicate Insights.* Linköping: Linköping University Electronic Press, 2013. ISBN 978-91-7519-554-4.

17. SINIKARA Kaisa. Service, design and collaboration. *Scandinavian Library Quarterly.* 2013, vol. 46, nr 2, s. 4-6. ISSN 2001-2268.

18. SINISALO Riikka. A Feedback System created with students on display on World Library and Information Congress. *AMK-lehti//Journal of Universities of Applied Sciences* [Dokument elektroniczny]. 2014, nr 3. Tryb dostępu: http://uasjournal.fi/index.php/uasj/article/view/1612/1536. Stan z dnia 13.01.2015.

19. TUULANIEMI Juha. *Palvelumuotoilu.* Helsinki: Talentum, 2011. ISBN 978-952-14-1688-0.

20. VIRRANKOSKI Antti. Palvelumuotoilu toi uuden toimintakulttuurin. *Signum* [Dokument elektroniczny]. 2013, nr 3. Tryb dostępu: http://ojs.tsv.fi/index.php/signum/article/view/8669/6388. Stan z dnia 14.01.2015.

21. VUORIVIRTA Kaisa. *Fellmannian WDC-hanke päättyi – mitä saatiin aikaiseksi?* [Dokument elektroniczny]. 2012. Tryb dostępu: http://www.fellmannia.fi/?p=5066. Stan z dnia 27.01.2015.