Designing digital solutions for Haaga-Helia International Services

Katri Salmi

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Author
Katri Salmi

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The objective of this thesis is to create a concept for new, digital service solutions for the services offered for students going abroad on student exchange for the time period of one or two semesters. The commissioning party of this thesis is the International Services team at Haaga-Helia University of Applied Sciences (Haaga-Helia), located in Helsinki, Finland. Haaga-Helia offers education in the fields of business, hospitality and tourism, aviation, information technology, journalism, sales and sports and leisure.

This topic was chosen because of Haaga-Helia's strategic goals of growing internationally and using digital solutions in services and operations. The strategic goals highlight the importance of this topic. Additionally, the service sector has changed because of the growing usage of digital technologies. Services, which earlier were offered only face-to-face, are now increasingly offered digitally. People's desire for convenience has increased, which has made online shopping an interesting alternative.

Sometimes customers, in this case students, are unable to use the offered face-to-face services for various reasons. In order to be able to offer service equally for all customers, digital solutions must be designed. The main research question of this thesis is: How to serve students going abroad, when they are not on campus? And the followed research questions are: Which face-to-face services should be digitzed? How should the digitization be done?

Service design approach was used when finding solutions for this real life problem. Its customer-centric feature felt suitable for this design project, since involving students in co-design projects is increasingly done at Haaga-Helia. The managerial suggestions for International Services were concluded from the research, namely encouraging it to embrace digitization in all its operations, striving for paperless services and producing a set of videos to both replace and enhance the services already existing. The new digital solutions simplify the service blueprint and increase the customers' perception of the service convenience.

Keywords
Service design, digital services, digitization, student exchange

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1 Introduction

After reaching the end of industrial era, service revolution has embedded the way for the birth of service design as a new approach aiming for innovating and designing distinctive services, offering value to both customer and service provider (Moritz, 2005, Furrer et al., 2016). Service design focuses on understanding the customer, the firm and the market, coming up and developing ideas, and transforming them into sensible concepts and solutions, and implementing them. Service design is shaping desirable, effective, efficient, usable and useful services. (Moritz, 2005, 39.)

The growing usage of digital technologies means change in service sector (Reason, Løvlie & Flu, 2016, 2-4). The relationships between customers and service providers have changed, when the physical boundaries no longer exist (Moritz, 2005, 26). Services, which could earlier be offered only face-to-face, can now be offered digitally due to enabling technologies. The digital revolution will change the dynamics of whole service sector, when new start-up companies enter the market. (Reason, Løvlie & Flu, 2016, 2-4.)

While customers are allocating less time for shopping, and more time for other types of pastime important for them, has their desire for convenience in life also increased. Consequently, online shopping has become an attractive alternative for them. (Jiang, Yang & Jun, 2013, 192.) According to Andreassen et al. (2016, 26) customers have tendency to aim for managing their time intending for increasing their personal well-being. For describing this tendency they introduce the term “return-of-time”, ROT. Service designers can help the companies to design their value propositions to serve their custormers’ ROT efforts. (Andreassen et al., 2016, 26.)

The objective for this thesis, is to create a concept for new, digital service solutions for Haaga-Helia University of Applied Sciences (Haaga-Helia), for the International Services team. Haaga-Helia has more than 10 000 students studying in their bachelor and master programmes in the fields of business, hospitality and tourism, aviation business, information technology, journalism, sales and sports and leisure (Haaga-Helia, 2018a). International Services team strives for helping Haaga-Helia with its efforts in the field of internationalization. Haaga-Helia engages in various kinds of co-operations with partner universities worldwide, for example student exchanges (Haaga-Helia, 2018b). I work for the International Services, as an International Coordinator.

The new digital services were designed for the biggest customer segment of International Services, namely those Haaga-Helia students, who go to student exchange for the length of one or two academic semesters, within the Haaga-Helia partner university network. I made the delimitation that I would design new digital services for these “outgoing students”, and other customer segments of International Services will not be covered by this thesis.

The reason why I chose this topic for my thesis is two-fold. Haaga-Helia has two strategic goals, which highlight the importance of this topic. One of them is to “grow internationally together with partners”, which means for example the aim to open campuses and study programmes abroad. The other strategic goal is to “use digital solutions in services and operations”. (Haaga-Helia, 2016a.) Both of these strategic goals underline the need for digitizing our existing services. Furthermore, as the literature review in this thesis manifests, the digital revolution is already here (Pine II, Korn, 2011).

My main research question is: How to serve students going abroad, when they are not on campus? From the main research question, two follow-up questions become apparent: Which current face-to-face services should be digitized? How should the digitization be done?

I use service design approach in my thesis. Service design approach resembles constructive research, which utilizing researched data, reaches for producing a concrete outcome when solving a real life problem (Ojasalo, Moilanen & Ritalahti, 2015, 65). Service design thinking has foundations on the service-dominant logic (Vargo, Lusch, 2004), and understanding the customer and the user experience is essential in service design (Miettinen, 2011, 31). The customer-centric service design is appropriate choice for my thesis, since creating customer friendly and humane services together with our customers, is International Services’ objective.

The service design process for digitizing the services for outgoing students, follows Moritz’ (2005) model. In this thesis, I use RefWorks referencing tool, in which I am following the Harvard guidelines for referencing.

2 Customer experience in services

Services have been substantially researched and customer experience in services has gained a lot of researchers' attention. In this chapter, I discuss face-to-face services as well as digital services, value creation and theories on improving services. Special features of digital services are described, and how using multiple service channels is affecting customer experience.

2.1 Services and digital services

Services are activities and processes aiming for responding to the customer's needs. Production of services mostly occur at the same time than consuming them. At least to some extent, the customer participates the service production as a co-producer. Services, unlike products, are intangible, and they cannot be stored. (Grönroos, 2015, 47-52.) However, from a value creation and consumption perspective, no fundamental differences between services and goods can be found. Customers buy both goods and services for basically same purpose: for assisting them with a service that should create value for them. (Grönroos, 2008, 301.)

Service can be divided into two components: 1) the service delivery process and 2) the outcome of the service. The service delivery process is the actions and operations performed in order to solve the customer's problems or needs. The outcome of the service is the solution or solutions found to meet the customer need. The outcome should create additional value to the customers. (Grönroos, 2015, 52-54.)

Customer journey and touchpoints are important when designing experience-centric services (Zomerdijk, Voss, 2010, 74). Touchpoints, i.e. service encounters are the moments, when a customer interacts with the service provider via multiple channels (Bitner, Brown & Meuter, 2000, 139). Customer journey refers to the series of touchpoints, including all activities occurring in the process of service delivery, from the customer's viewpoint (Zomerdijk, Voss, 2010, 74). Customers should be able to move across the touchpoints during the customer journey smoothly, without any problems or obstacles, and enjoying the experience (Patrício, Gustafsson & Fisk, 2018, 10). Each encounter is a possibility for the firm to sell itself, satisfy the customer, or, however, also to disappoint a customer (Bitner, Brown & Meuter, 2000, 139). In service encounters, customers interact with a service interface, which intergrates the people, the process, the physical environment and technology solutions (Patrício et al., 2011, 182). In the light of the development when customers are increasingly interacting via different technologies, Larivière et al. (2017, 2) introduced a concept *service encounter 2.0*, referring to "any customer-company interaction that results from a service system that is comprised or interrelated technologies (either company- or customer-owned), human actors (employees and customers), physical/digital environments and company/customer processes".

2.2 Value creation

Vargo and Lusch (2004, 12-15) claimed in their service dominant logic of marketing and value creation, that companies and customers are always co-creators of value. Grönroos and Ravald (2011) argued that predominantly, the customer is the value creator. The service provider's role is to support the customer's value creation. The simultaneously occurring service production and consumption becomes a joint process, where the customer, operating inside the service provider's process, co-produces service, and the service provider, operating inside the customer's value creation process, has possibilities to co-create value with the customer. Hence, fundamentally the service provider is a value facilitator, but during customer interaction, the service provider may additionally become a co-creator of value. (Grönroos, Ravald, 2011.) Service providers facilitate the customer value creation by providing the required value foundation (Grönroos, 2008, 305).

Proposing that service design approach can enhance value creation for customers' well-being, Andreassen et al. (2016, 26) introduce the term "return on time". It relates to their claim that customers have a tendency to aim for managing their time for the purpose of increasing their personal well-being. In this respect people can acquire time by either saving time (e.g. prioritizing, multi-tasking) or buying time (e.g. buying services or technology), and use the freed-up time for activities they enjoy (e.g. spending time with their family, hobbies) and thus improve their personal well-being. Therefore, return-on-time (ROT) is meaningful for customers, and serves as a proxy for well-being. Service design can clarify this understanding to the customers, and the organizations can design their value propositions better to serve the customers' return-on-time efforts. (Andreassen et al., 2016, 26.)

Andreassen et al. (2016, 26) further suggest that ROT experiences of customers will differ according to which stage they are in their lives. They propose three stages in life: 1) Empty nest 1, "Young, free and simple", referring to individuals who need time in order to to get the most of their social life, 2) Full nest, "Chaos in my life", pertaining to people who strive to coping with every day life, wanting to be as effective as possible, and 3) Empty nest 2 "Got my life back", referring to people who seek quality rather than quantity in life. Service designers who best understand their customer segments and their needs for

ROT, will be the preferred providers of well-being for their customers. (Andreassen et al., 2016, 26.)

As a relatively new service research topic, transformative service research focuses on improving human well-being through service (Anderson et al., 2013, 3). The goals of transformative service research are reducing inequality and inequity. Applying service design for the common good of humanity is a growing area. In view of the fact that service design focus on creating new forms of value co-creation together with customers, organizations and social/public actors, it should evolve into a cornerstone for transformative service research. Developing service systems towards deeper humanity should be a fundamental goal of any service design effort. (Patrício, Gustafsson & Fisk, 2018, 11-12.)

2.3 Improving services

Early research (Shostack, 1982, Shostack, 1984, Parasuraman, Zeithaml & Berry, 1988) on service design regarded it as part of marketing or management disciplines. Parasuraman et al. (1988, 23) measured service quality by using an instrument called SERVQUAL, which consists of five dimensions: 1) Tangibles, such as personnel's appearance, location, equipment, 2) Reliability, meaning the personnel's ability to deliver the service accurately and dependably, 3) Responsiveness, which is the personnel's willingness to give service and help customers, 4) Assurance, indicating the employee's knowledge and courtesy, and ability to awaken confidence and trust among the customers and 5) Empathy, meaning the individualized attention and care the company provides its customers. The empathy and responsiveness in particular, are referring to the front-desk employees' interaction with customers. (Parasuraman, Zeithaml & Berry, 1988, 23.)

2.3.1 Service blueprinting

Shostack (1982) proposed that service process could be described and codified by using a service blueprint, which systematically and objectively maps all the events and functions the service process consists of. Consequently researchers, for example Bitner et al. (2008, 67-68) worked with service blueprinting using it for service quality improvement, customer experience design, service innovation and strategic change focused around customers. Service blueprint consists of five components: customer actions, onstage/visible contact employee actions, backstage/invisible contact employee actions, support processes and physical evidence (Bitner, Ostrom & Morgan, 2008, 72).

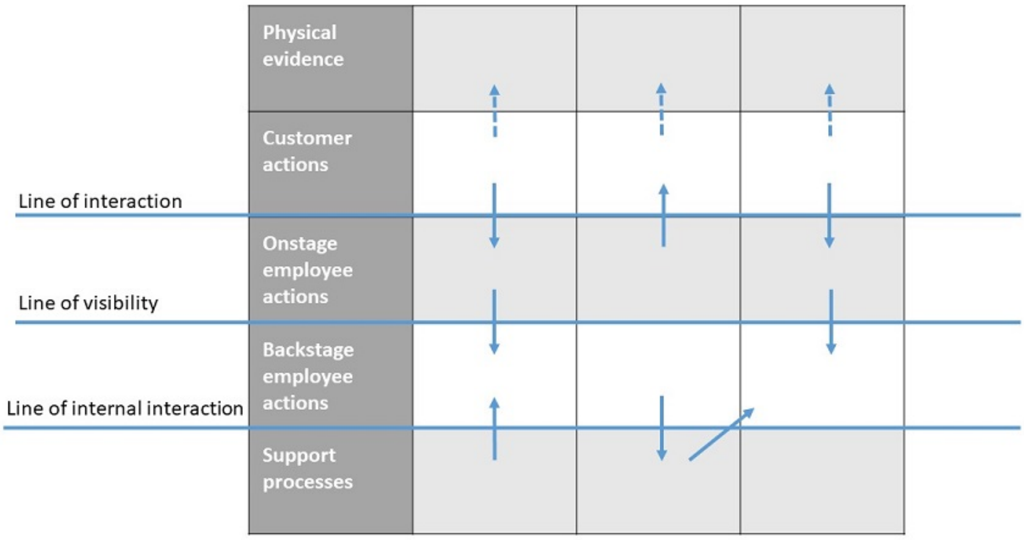

Figure 1. Service blueprint model adapted from (Bitner, Ostrom & Morgan, 2008)

In figure one, a simplistic example of a blueprint model is described (figure 1). The customer actions are all the steps the customers take in the service process. The actions are described at the top of the blueprint, in chronological order. Highlighting the customer-centric view, the customer actions are typically laid out first, and the other components only after, all aiming for supporting the value creation process of the customer. The next component, onstage/visible contact employee actions, are marked below the customer actions. Between the components, the line of interaction describes the communication in encounters between the front-desk employees (or technologies) and the customers. When the line of interaction is crossed by the customer, the “moment of truth” has occurred. The next component, the backstage/invisible contact employee actions, is separated from the onstage actions by the line of visibility. All actions described above the line of visibility, can be seen by the customers. Below the line of visibility, the actions are needed for the service delivery, but not seen by the customers. The fourth component, the support processes, is separated from the customer contact personnel by the internal line of interaction. Support processes are all the activities, carried out by other personnel that is not in direct customer contact, which need to happen in the organization in order to deliver the service. Finally, the last component, the physical evidence, is described at the very top of the blueprint. The physical evidence means all the tangibles the customers are exposed to during the service delivery. The physical evidence may have a critical effect to the quality of the customer experience. (Bitner, Ostrom & Morgan, 2008, 72-74.)

Identifying processes allows organizations to examine in detail all matters, both those visible to customers and those invisible, inherent in managing or creating a service. Having mapped the processes, the designer can now find the possible fail points, and come up with alternative solutions. The manager can analyse the profitability for example by looking into the service execution time or complexity. (Shostack, 1984.) Service can only be described in its potential state, by imagining how the process will go, when the actual service will be delivered. Hence, service blueprint is a hypothetical description, which will almost always deviate in some way from the actual rendering of the service. Until some level of tolerance, the deviations will not affect too much the satisfactory quality of the service. The service provider must have a method for defining the deviation tolerance of a service. (Shostack, 1982, 55-58.) The blueprinting method is consistent with the design thinking principles, claim Andreassen et al. (2016, 23). According to them, the design thinking covers aspects, such as identification all the actors involved in the service process, understanding the service context and users and their needs and having empathy for their situation and representation or visualisation of the service, including all service components (Andreassen et al., 2016, 23).

2.3.2 Convenience orientation

Convenience orientation is about people generally preferring convenient products and services (Berry, Seiders & Grewal, 2002, 3). In early marketing research, it is acknowledged that customers are willing to invest more money for convenience, or sacrifice convenience for getting a lower price. Customers perform a cost- benefit analysis when deciding whether or not to invest money, energy or time on a service or product. (Kotler, Zaltman, 1971, 9.) According to Morganosky (1986, 37), a convenience-oriented customer is someone who seeks to "accomplish a task in the shortest time with the least expenditure of human energy" and cost-oriented consumer on the other hand is someone who "based selection on maximizing the use of money". In her research, Morganosky (1986) found convenience-oriented and cost-oriented customers to be remarkably different. Consequently, Berry, Seiders & Grewal (2002, 3) state that convenience orientation has a significant impact on customers' buying decisions.

After an extensive literature review, Berry, Seiders & Grewal (2002) conclude that service convenience is customers' perceived time and effort related to buying and using services. They argue it is beneficial to make a distinction between products and service convenience, because of the distinctive nature of services. In order to use services, the customers often need to be present when and where the service is delivered. Moreover, they are required to make the purchase decisions without inspecting the intangible service. Customers may invest substantial time and effort in selecting a service, which may be personally important to them. Hence, the researchers propose a model of service convenience, presented in figure 2. (Berry, Seiders & Grewal, 2002.)

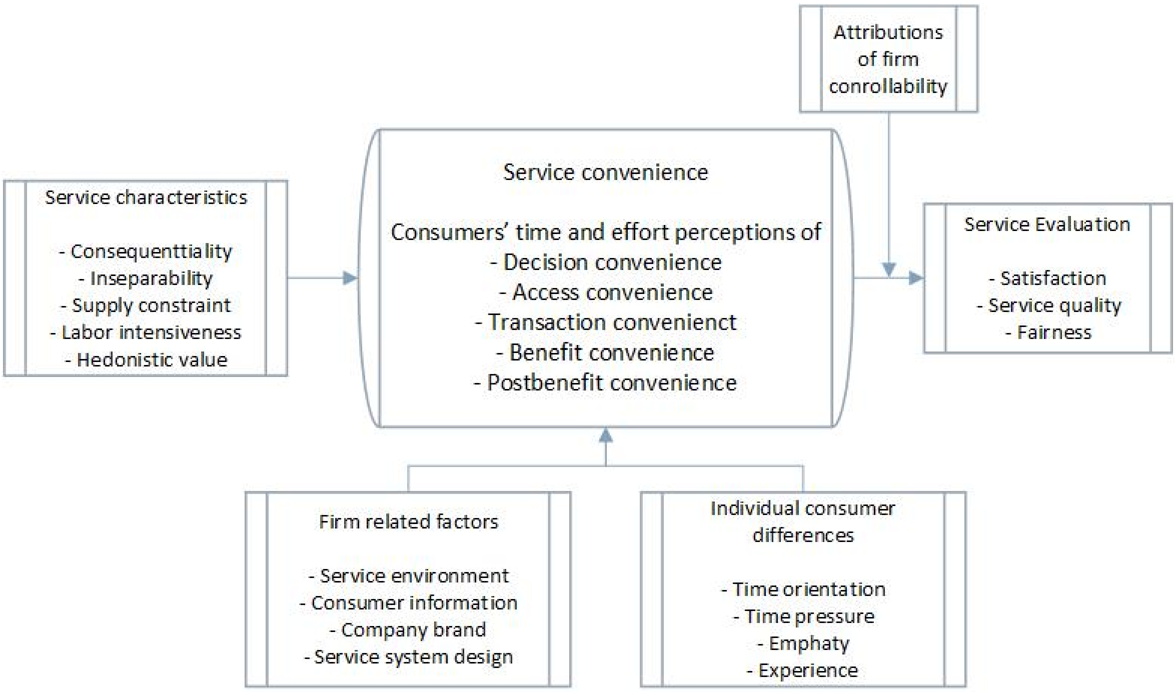

Figure 2. Service convenience model, adapted from (Berry, Seiders & Grewal, 2002)

Berry, Seiders & Grewal (2002) propose in their model of service convenience (figure 2) that service convenience is influenced by service characteristics, firm related factors and individual consumer differences. Service convenience, in turn, influences the customers' service evaluation, how satisfied they are, and how they perceive service quality and fairness. Berry, Seiders & Grewal (2002) argue that service convenience has two dimensions: time and effort. Hence, service convenience consists of the customers' time and effort perceptions of five different types of convenience, namely 1) decision convenience, 2) access convenience, 3) transaction convenience, 4) benefit convenience and 5) postbenefit convenience.

Decision convenience. Customers desiring a service invest time and effort in deciding wat is the best way obtaining it. First they have to decide if they are going to perform the service for themselves or alternatively purchase one. Should they choose to purchase the service, they will need to decide what service to buy and which service supplier to use. The decision convenience is considered more important when choosing a labour-intensive service, than a less labour-intensive service. **Access convenience** involves customers' required actions, time and effort used in requesting the service, and being available for receiving it. Factors such as service facility location, parking spots availability and opening hours affect access convenience. Services, where the customer is required to be present at the same time the service is delivered, are called inseparable services. Such services are e.g. doctor's appointments. Customers who use inseparable services perceive access convenience more important than those using separable services. **Transaction convenience** refers to the time and effort customers must use in order to securing the right to use the service. An exchange must occur at this stage. Usually money exchange confirms the right. The waiting time for paying the service is usually the fact influencing most to the transaction convenience. Customers tend to perceive transaction convenience more important than decision or access convenience. **Benefit convenience** is customers' actions needed to experience the service's core benefits. At this point of the service process can inconvenience experiences have especially strong negative effect, because it affects directly the customer's perception of benefit. Benefit inconvenience experiences influence negatively more to overall service convenience than decision, access or transaction inconvenience. **Postbenefit convenience** refers to the possible actions when re-contacting the firm after the actual service experience. It can be related to for example complaint handling. Customers' positive postbenefit convenience experiences are positively correlated with their perceptions of follow-up service benefits. (Berry, Seiders & Grewal, 2002.)

A service can be perceived convenient in some ways, but inconvenient in other ways. Inconvenience related to one of the convenience types may neutralize or negate the possible positive effects of other types of convenience. Consumers' service convenience perceptions influence their perception of the company's service quality and their service satisfaction. (Berry, Seiders & Grewal, 2002.)

2.4 Digital services

Customers may be purchasing and consuming goods, or using a service at the service provider's location, or using a self-service vendor. Regardless of the case, they are orchestrating a self-service process, for the purpose of providing value for them. Hence, all consumption can basically be regarded as a self-service process. (Grönroos, 2008, 301.) Furthermore, all domains of technology, such as communication, computing, manufacturing, entertainment and transportation are transforming as their foundations become digitized. Innovations increasingly are programmable, and for the not yet digitized products, the companies are digitizing information about them, so they can, often in co-operation with customers, virtually design, monitor and track them online. The information revolution that began with the computer is extending with no limit in sight. (Pine II, Korn, 2011, 8-9.)

For example, new technologies such as electric cars or smart home management systems are changing the way people manage and perceive their energy consumption. The Internet of things (IoT) is making it possible to collect enormous and continuous quantities of data, which is leading to the potential to influence businesses, consumers and societies in ways never predicted before. (Patrício, Gustafsson & Fisk, 2018, 9.)

From a corporate communication perspective, the online technologies and the development in new media, such as social media, can be seen both as an opportunity and a challenge. By engaging with the new media, the companies can benefit from opportunities in being able to reach the customers quicker and more directly, and to actively engage in discussion with the customers. The challenges become with trying to handle the media landscape which is more fragmented than before, and accepting and managing the fact that communication about the company is now not only in the hands of the corporate communication department, but in the hands of everyone. This way, the new media has a democratizing effect on communication. (Cornelissen, 2017, 36-40.) Interaction, i.e. communication, is the heart of service systems. A service experience extends to all potential touchpoints or service encounters, to all potential actors to performing a task, which can be searching, browsing, buying, or a combination of the mentioned. Therefore, the service experience is a process happening within one focal organization, over multiple channels. (Patrício, Gustafsson & Fisk, 2018, 10.)

Pine II and Korn (2011, 8-9) assert that digital technology boosts innovation. Consequently, Patrício, Gustafsson and Fisk (2018, 9-10) suggest that in the future, more and more efforts should be made in order to leveraging technology to envision new value co-creation by contributing and embedding service design approach in new technology developments and transforming them into value co-creating solutions. Further, Dalal and Sharma (2018), have developed a new service classification matrix particularly for the digital era, since according to them, digitization and e-services are the future of services.

2.5 Customer experience over multiple channels

Service touchpoints in companies using multiple service channels are such as a physical store a customer can walk in, telephone service, company website, online store, email, Facebook, Twitter or mobile application. The customer chooses, which channel s/he wants to use, but nevertheless, the quality of the perceived service experience should be equally good over each channel. (Filenius, 2015, 44-45.)

The quality of a customer encounter, both in online or physical environment, depends on how well the service channel's interface with the personnel delivering the service, is designed. Consequently, the design of the touchpoints between the front-office and support services personnel is important, as well as the interface between front- and back-office personnel and the company's internal IT procedures and systems. (Andreassen et al., 2016, 24.) Filenius (2015) gives an example of a regular customer checking in to a hotel where he had stayed for many times before, hearing the question at the reception: “Are you familiar with our hotel?” While the customer gives a positive answer, he wonders why the receptionist did not already know the answer to this question, since the information must be available in the check in software. The reason why this may happen, could be that the check in software has been created for giving out rooms, not for the purpose of customer encounter. The information of the previous stays exists in the software, but it does not come to the first screen when the receptionist checks in the customer. It is easier for the receptionist to ask from the customer than to find it in the system. (Filenius, 2015, 58.)

Koo, Kim & Lee (2008) posit that personal values are critical factor in the motives that lead people to shop online. They found that a personal value of “social affiliation” produces motivation customers to seek both hedonic and utilitarian benefits. Furthermore, they found that a personal value of “self-actualisation” enhances motivation to seek only utilitarian benefits. (Koo, Kim & Lee, 2008.) Since customers are allocating less time for shopping, and more to other types of pastime, their desire for convenience has increased, and online shopping has become an attractive alternative (Jiang, Yang & Jun, 2013, 192).

According to Statistics Finland (2017), the Finnish people use internet a lot. 88 per cent of Finnish people within age group 16 – 89, used internet in year 2017. In age group 16 – 34 the internet using individual's per centage is actually 100, and in age group 35 - 55 also as many as 99 per cent used internet. Hence, we can say that all people under 55 year old use internet. In most age groups, there was an increase from the previous year. In Finland, internet is mainly used for taking care of daily errands, communication, following the media and searching for information. 73 per cent of Finns used internet several times a day. For 77 per cent of Finnish people, a smart phone is the most popular device to go online. Smart phone usage is growing in popularity, but there is no longer growth in the usage of other portable devices, such as laptops or tablet computers. (Statistics Finland, 2017.) Also generally in Europe, the internet usage is high. In 2016, internet was used daily by 75 per cent of European individuals. Roughly 56 per cent of Europeans used smart phone for the internet use. By 2021, internet user penetration is forecast to reach approximately 95 per cent in United Kingdom, 89 per cent in Finland, 81 per cent in France and 83 per cent in Germany. (Statista, 2017.)

Digital services are no longer limited in using computers, tablet computers or mobile phones. Digital solutions can be found almost anywhere. For example dishwashers have digital control panels and programmes. The role of digital service might seem to be small in a product, but it often has crucial effect for customer experience. (Filenius, 2015, 76.) In their research, Jiang, Yang & Jun (2013) have identified five dimensions of online shopping convenience: 1) access convenience, 2) search convenience, 3) evaluation convenience, 4) transaction convenience and 5) possession/post-purchase convenience. In following, each convenience dimension, particularly related to online shopping, is presented.

Access convenience turned out to be the leading influencer of overall digital shopping convenience. Online customers benefit from being able to shop at any time and from any place, such as from home or office, instead of being obliged to visit the physical stores. The flexibility in time and place leads to psychological benefits, for example minimizing waiting time, avoiding crowds and reducing the effort used for travelling to the stores. Moreover, online customers enjoy having access to more brands and products they may have available in the physical stores at location where they live. (Jiang, Yang & Jun, 2013, 206.)

A quick data communication network is a condition for reaching access convenience. Companies have to make sure that their network services are offered in technical environment, which is professionally taken care of. This concerns both the network service provider and the company's own IT-department. Furthermore, companies have to consider in their product development, that some of their customers may not have access to the quick networks we are used to in Finland and Northern Europe. Growing use of smart phones for going online should encourage all companies to develop their websites and online shops as responsive solutions, which enable the website contents to transform responsively to the size of the screen used. (Filenius, 2015, 80-83.)

Search convenience refers to finding both the service site desired and the product searched for. Theoretically, online shoppers should have the access to easily comparing the products and prices without the effort of actually visiting the shops. However, the research indicated that customers find search inconvenience as a major obstacle in efficient and convenient online shopping. The potential issues can be grouped in four categories: download speed, web site design, search function and product classification. (Jiang, Yang & Jun, 2013, 206.)

Filenius (2015, 84-88) advices companies to invest in search engine optimization. It is important to make sure that your brand or products ends up as high as possible on the search lists provided by search engines. Companies need to find out what keywords the customers use when searching the products or services online. Google search engine is the default page opening for many internet users. If the online shop has its own, internal search engine on their site, they should ensure it works well. Otherwise, it may be better to remove it and let the customers use Google instead. (Filenius, 2015, 84-88.)

During the search stage of online shopping, intrinsic store attributes are important for customers. Intrinsic attributes refer to features such as visually attractive web site design and colour and well-organised web structure, opposed to extrinsic attributes, which refer to features like wide product assortment or competitive pricing. (Koo, Kim & Lee, 2008, 158-159.) According to the study of Jiang, Yang & Jun (2013, 202), the online customers' opinion was that the product classification was not always easy to follow. A common mistake is that product classification is made according to the company's internal logic, which remains unfamiliar to customers (Filenius, 2015, 87).

Evaluation convenience refers to the customers' decision making with the help of understandable and detailed product descriptions (Jiang, Yang & Jun, 2013, 206). Product information has to be harmonized, detailed and well integrated in online shops. All necessary facts must be clearly presented. (Filenius, 2015, 89.) Using photographs and videos is growing in importance (Jiang, Yang & Jun, 2013, 206). When making purchases, extrinsic attributes become important. Extrinsic attributes refer to such features as product selection, competitive pricing and easy access to accurate, complete, current and understandable information. (Koo, Kim & Lee, 2008, 158-159.)

Website design can be very helpful for making product comparison convenient for customers. This can be best done by presenting the products side by side in a table format. (Filenius, 2015, 95-96.) Furthermore, many shopping sites have implemented a customer review system, allowing customers write their experiences about the products, and new customers read their recommendations (Jiang, Yang & Jun, 2013, 206, Filenius, 2015, 97).

One might think that **transaction convenience** in online context should be easy to reach without having to worry about queuing, but often the online check-out process is not simple or easy to follow. Complicated payment methods often make online customers abandoning their shopping carts in the last minute. Therefore, convenient and simple check-out methods are essential. (Jiang, Yang & Jun, 2013, 206-207.)

The best solution to take care of the check-out process is with using only one web page, where all the relevant information is. Nevertheless, many companies choose to use a step-by-step process when the customer has to follow a path of web pages, such as: customer information > way of delivery > summary > payment > confirmation. Customer may face situations, where s/he is uncertain, what will happen after clicking the button “next” or “continue”. Fear of this process may result the customer leaving the service. Moreover, customer may have to fill in a number of different fields of information. Sometimes the instructions for inserting the information are unclear. For example, user’s phone number is asked, but it is not clear in which format it should be typed in. (Filenius, 2015, 99-103.)

Nowadays, multiple payment methods are often available in online shopping, and usually the selection includes one suitable option for everyone. Reliability for the method in use is extremely important to customers. Should the transaction be interrupted for an unknown reason, it causes uncertainty and inconvenience for customers, even though in most cases, the customer’s credit card or account has not yet been charged. (Filenius, 2015, 103-104.)

Possession/post-purchase convenience is a two-fold dimension. It refers on one hand to the time and effort used by the customers to possess or take in use the purchased item or service, for example a registration process for using an online service. On the other hand it refers to the actions happening after the purchasing has occurred, such as the easiness of returning unwanted products. (Jiang, Yang & Jun, 2013, 207.)

Often, after the purchasing has occurred, service provider does nothing. However, at this time it would be important to notice the customer, try to commit him/her to the brand or try to help him/her to use the product or service. As a result, the customer wants to buy again from the company, and recommends the company to his/her friends. Companies can, for example, ask feedback, wish the customer welcome to use the service again, encourage customers to write reviews on the purchase, give discounts on further shopping or encourage the customers to share their experiences with the product in social media. (Filenius, 2015, 110-115.) According to Koo, Kim & Lee’s (2008) study, utilitarian and hedonic benefits affect customers with certain motivations to evaluate the online shop features that are important to them. Hedonic benefits refer to the enjoyment and entertainment value arising from the shopping experience. Utilitarian benefits have stronger influence than hedonic benefits on evaluating the features and intention to returning to the online store. Utilitarian benefits are related to effective and timely purchasing, and include for example attributes like product design, visual design of the website, information quality or the after-sales service. (Koo, Kim & Lee, 2008, 169.)

2.6 Using videos to enhance marketing and customer service

According to Cisco's Visual Network Index Forecast (2017) video will continue to cover for the vast amount of data sent via internet during the following years. In 2021, video will represent as much as 82 per cent of all internet traffic. This includes also live video, which is estimated to grow by 15 times, and augmented reality (AR) and virtual reality (VR), which will increase 20-fold by 2021. Mobile video, i.e. video used via smartphones, is increasing especially in Western Europe and North America. (Cisco Systems Inc., 2017.)

Luke (2013) claims that video marketing is an affordable way for companies to increase profits in their businesses. A benefit to consider when using videos, is for example the easiness of presenting the personality of your company without arranging a face-to-face meeting with the prospective customer. Additionally, people in general are more likely to watch a short video than to read plain text sent by email or published on the company website. Furthermore, a video is easy to consume on smartphones' small screens. Moreover, video is content that can be searched on internet, and can help the company's website's listing on search engine rankings. (Luke, 2013, 18.) Meyers Martin (2012) studied informative videos used for other than marketing purposes, and found that use of videos allow an organization to send informative messages in more visually pleasing format, which is better appealing to customers, compared to traditional, text-only messages. The user survey results showed that the video users enjoyed the informative and helpful content delivered in visual, concise and brief format, yet in an amusing and engaging way. (Meyers Martin, 2012.)

Companies can use videos for a number of purposes. **Company overview videos** and **video bios** give customers a better and deeper understanding of what the firm does and who the key persons are. A professionally made overview or bio will give a good first impression. **Explanatory videos** can assist, if a company has a complex concept, which it needs to communicate to a prospective customer. The video explains a confusing concept with the help of a simple story and some graphics. **Training videos** are used in situations, when customer service employees find themselves telling the same things to the customers multiple times. These "how-to" videos save the staff hours, front office employees' frustration and company resources. With an **educational video**, a company can show-case its expertise over a matter. Customers often visit websites when they have a problem of some sort, and the company's video can give the customer a specific tip to take away on his/her issue. **Video press releases** are commonly replacing the traditional text format press releases, because of they enable the companies taking the advantage of telling a more engaging story. **Website FAQ-videos** can give a more engaging format if a company expert answers to the questions on video, rather than in text. **Email video** can replace for example a company newsletter, suffering from the problem that busy employees do not have time to engage in the newsletter. **Presentation video** give the company the possibility to highlight its expertise even to customers who are not able to attend their event. **Call-to-action videos** allow the company to explain the benefits a potential customer receives by taking action. Companies looking to get prospects to make a purchase, to download an e-book, to sign up for an event or schedule an appointment, should consider using call-to-action videos. **Trade show videos** can be visual overviews of the company or its services, or a demo of the company's new product or technology. Video can draw attention to the company's booth at expos or trade shows. **Lobby videos** are presented on TV screens in company lobby for customers or other visitors waiting for the appointment. Lobby videos usually run without sound in a loop, so using strong visuals is important in order to catch the audience's attention. (Luke, 2013, 18-19.)

2.7 Moving towards service revolution and service design

Researchers have pointed out a number of drivers or reasons why service design approach has emerged. According to Reason, Løvlie & Flu (2016, 1-4), service design, started in the early twenty-first century, has heritage from older communications or manufacturing design approaches, and is influenced by industrial design, branding and service marketing. Moritz (2005, 23-27) states that in the last 25 years we have noticed a remarkable change in many things, when reaching the end of the industrial era, and moving to the service revolution.

Moritz (2005, 23-27) lists four drivers for the service revolution: 1) The service economy is booming. In many developing countries and areas, such as USA, Japan and Europe, service economy has become the most important part of their economy. New, innovative service companies are established, and traditional product companies are adding services and solutions to accompany their products. 2) The product market is satisfied. Products increasingly resemble each other as a result from mass and serial production. Companies are using services in order to increase their competitiveness and added value. 3) Technology enables services. The internet, wireless technologies, computers, and other devices are examples of the wide range of technologies, which offer new possibilities for service production. The relationships between service providers and customers have changed, when the physical boundaries no longer exist. 4) Humans have individual needs. Each customer has individual needs and expectations, which are changing depending on situation and context. This is especially important in services, when the customers are directly involved with the service providing process. (Moritz, 2005, 23-27.)

Similarly, Reason, Løvlie & Flu (2016, 1-4) claim that service design is responding to three significant trends, namely 1) Economic: The trend toward value in services. In developed countries, services cover 70 – 80 per cent or the economies, and the share is growing. In maturing industries, the product differentiation has decreased, while services have the benefit of driving customer loyalty and helping customers to gain more from the products. 2) Social: The Increase in customer expectations. Today's consumers are expecting more from their commodities and services than previous generations. Rising expectations lead to organizations' need to develop their skills in understanding their customers' needs and wants. Service design brings the customer power into the development and design of services. 3) Technical: Growth of digital solutions means change in services. Digital technologies have a clear impact on service sector. Services, earlier offered face-to-face, can now be offered online by enabling technologies. The digital revolution can change the established dynamics of a whole sector, and enable new start-up companies enter the markets. Obvious examples of these are banking, and for example Amazon in retail. (Reason, Løvlie & Flu, 2016, 1-4.)

3 Service design

The future seems to lie in the service industry. The increasing use of new, digital technologies bring both opportunities and challenges for organizations. Customers and service users are more demanding than before and have human feelings and individual needs and expectations. Service design is an approach, which can be helpful in addressing the challenges organizations face in the changing environment. In this chapter, I define service design as an approach and describe different theories on service design process.

3.1 What is service design?

Service design can be defined as the overall design of service experience, as well as the strategy and the process design used in order to provide the service. It is about understanding the customer, market and organization, creating and developing ideas, and transferring them into feasible concepts and implementing them. It is shaping and planning efficient, effective, desirable, useful and usable services. (Moritz, 2005, 39.) According to Patrício, Gustafsson and Fisk (2018, 3) the concepts of new service development and service innovation are sometimes poorly understood and confused with service design. New service development focuses on the process of developing new service offering, while the focus of service innovation tends to be on the outcome. Service design, however, builds on multidisciplinary contributions from both design research and service research. (Patrício, Gustafsson & Fisk, 2018, 3-5.)

Furrer et al. (2016, 452) regard service design as a holistic and multidisciplinary field aiming for innovating effective and distinctive services, offering value to customer and efficiency for service provider. According to Moritz (2005, 19) and Mager (2009, 37-38) service design approach is holistic by nature, and the work of service designers often is multidisciplinary. Integrating multiple perspectives and research methods is an important step to reinforce and expand the foundations of service design and innovation (Patrício, Gustafsson & Fisk, 2018, 5).

Service design is a new approach for producing experiences and developing service environment. Organizations use service design for transforming the whole organization around user experience and user communication. Service designers focus on how the people are experiencing the services organization offers. (Miettinen, 2011, 29-30.)

Essential point in service design is human-centred design approach. Service designers pay a lot of attention in collecting and utilizing the information from users. They focus in customer behaviour. Service design process starts with understanding the customer and user experiences. (Miettinen, 2011, 27-32, Moritz, 2005, 43-44, Mager, 2009, 31-39.) It is fundamental to find out the customers' motivations, goals and needs. Sometimes the customers are not themselves aware of their needs, and thus those may be difficult to predict. (Moritz, 2005, 43.) The purpose of empathic design is to reveal the hidden customer needs. Customers generally are reluctant or even unable, since it is not possible to report about something one doesn't know, to tell about their feelings and latent needs regarding their experience. Hence, better than asking, observation of the customers in the service situation or environment enables us to recognize the unarticulated user needs, not yet known by the customers themselves. (Leonard, Rayport, 1997, 105-108.)

The process of service design is ongoing, involved in the whole life-cycle of services, which are continuously changing over time. Co-creation with customers is taking place through the iterative process of service design, using suitable methods in different phases. (Moritz, 2005, 39-40, Miettinen, 2011, 34-35.) Prototyping is a commonly used method in service design. Prototyping is moving from the world of abstract theories, ideas and plans to the world of tangible and concrete things. Prototypes are representations of design ideas, which are created before final fabrication exists. (Coughlan, Fulton Suri & Canales, 2007, 122-124.) Prototyping services requests different methods than prototyping products. For example narrative methods, such as storytelling, are useful when prototyping comprehensive services. (Vaahtojärvi, 2011, 132.) Experience prototyping emphasizes the experiential aspect of the representations needed to convey an experience for the user (Buchenau, Fulton Suri, 2000).

In their efforts on clarifying the inconclusive findings in previous research concerning the benefits of customer involvement in service design, current researchers argue that the value of designing together with customers is evident (Trischler et al., 2018, Storey, Larbig, 2018). According to the research conducted by Trischler et al. (2018) co-design is beneficial, because it allows the service design team to utilize and combine the knowledge of two important user groups, the customers, in order to finding out their latent needs, and the in-house experts for converting the new, promising ideas into feasible concepts. Their research completed in Australian university libraries, compared the results of service design teams consisting on one hand of in-house professionals only, and on the other hand of teams consisting of customer users only. Their comparison shows that co-design teams generate concepts scoring remarkably higher in novelty, innovation and user friendliness, but lower in feasibility. Therefore, it can be concluded that the best designing results occur in co-design teams. However, researchers also noted that the concept outcomes could be diminished by internal factors in teams, such as dominating individuals or conflicting communication styles, which may negatively affect the team's collective creativity. (Trischler et al., 2018.)

Consequently, Storey and Larbig (2018) studied the impact of customer involvement in customer knowledge assimilation and concept transformation. They conducted a survey among the leading European service companies comparing their findings to an extensive literature review. Their findings indicate that both processes of customer knowledge assimilation and transformation are important in the exploitation of customer knowledge, and customers have a leading role in it. However, their study reveals that there is a danger if companies involve customers too extensively. After a certain point the diversity of knowledge may make it difficult for the design team to effectively use it. Another danger is if firms no not allocate enough resources for the design process. Nevertheless, involving the customers will help the in-house professionals to unlearn their previous mindsets and knowledge, in order to be better able to assimilate and transform the customer knowledge. Hence, researchers suggest that the firm design team should, rather than conducting customer surveys, observe and work with the customers during the process. Researchers conclude that customer knowledge assimilation has a direct and strong influence on success. (Storey, Larbig, 2018.)

3.2 Service design process

Empathic design process, in its iterative nature, is very similar to service design process. It consists of five steps: 1) Observation. The individuals observed may be customers, potential customers or employees in organizations. The behaviour, which should be observed, is the normal routines of the persons involved in the process. 2) Capturing data. Finding out the reasons why the product is used, how the product fits the environment of the users and whether or not the users are modifying the product. 3) Reflection and analysis. At this point, the needs are identified. 4) Brainstorming for solutions. Transforming the observations into representations of possible ideas or solutions. 5) Developing prototypes of possible solutions. Prototypes are important, because they clarify the new solutions to the development team. They are concrete enough to stimulate reactions and foster discussion with the developers and the customers. (Leonard, Rayport, 1997, 108-113.)

In the following subchapters, three different theories of service design process are presented as an example for comparison. The list is not exhaustive.

3.2.1 Service design process according to Moritz

Moritz (2005, 123-147) claims that in service design, there are certain tasks which need to be undertaken during different stages. The tasks are grouped in six categories: 1) Understanding, 2) Thinking, 3) Generating, 4) Filtering, 5) Explaining and 6) Realising (figure 3).

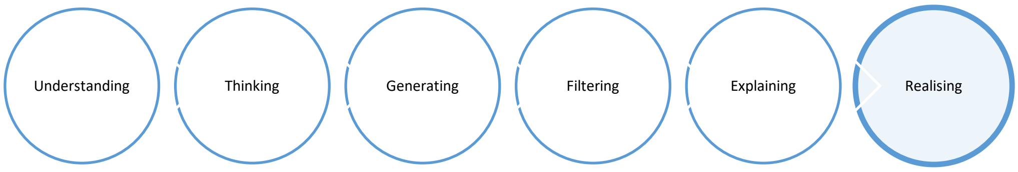

Figure 3. The six stages of service design, adapted from (Moritz, 2005)

According to Moritz (2005, 123-147), each category (figure 3) include different tasks to be performed, in order to achieving specific goals. A different set of methods can be used in each category, as well as a different mind-set may be required in different stages. Each stage is briefly described in following.

Understanding

Understanding category is about finding out and learning about customers' conscious and latent needs. It is about exploring what are the possibilities in the design process and learning about the customers, providers and resources and context. Understanding finds out what people desire and what are the things they don't like. Some examples of tools and methods, which can be used to gain understanding are: benchmarking, expert interviews, focus groups, mystery shoppers, observation and shadowing.

Thinking

Thinking category is about giving strategic direction. This category has a transitional role between other categories. It is about developing frameworks, identifying criteria and arranging details. It turns complex data acquired in the first understanding -stage, into strategic insights. Thinking category is always based on data. Possible tools and methods for thinking category, are affinity diagrams, LEGO serious play, mindmap, think tank and touchpoints.

Generating

In generating stage service designers are developing concepts. They come up with innovative, relevant and intelligent ideas and solutions. Different alternatives are created, details and consistency are crafted. The service experience has to be designed in detail. It is important to find the right people for working in this stage. Some methods to be used are for example bodystorming, brainstorming, randomiser and (group) sketching.

Filtering

After generating the ideas, it is time to select the best. Filtering is about evaluating the results and solutions, and choosing the most relevant of them. The ideas should be evaluated against specific criteria, and see, if they work against different measures. Possible tools and methods for filtering are card sorting, cognitive walkthrough, expert evaluation, focus groups, personas, and SWAT analysis.

Explaining

The goal for explaining category is to enable understanding. The ideas and concepts are sensualized, which means visualising for all senses. Processes are mapped and potential scenarios are illustrated. Explaining is important to be done in accordance with the previous stages. Examples of methods and tools used in explaining, are prototypes, mock-ups, scenarios and storyboarding.

Realising

In realising stage the service designers are making it happen. They are developing and implementing solutions and processes, conducting training and writing guidelines. Realising the service can either mean testing the prototype, or the actual service. Realising ensures the best possible service performance, but it is important to note that a service is never likely to be perfect, so it can be always improved. Tools and methods which can be used in realising, are for example blueprint, role script, scenario testing and simulation.

3.2.2 Service design process according to van Oosterom

Van Oosterom (2009, 165-166) emphasizes the holistic and iterative nature of service design. He claims that experimenting, sketching, making mistakes and designing failing prototypes will enable us to grow and learn. Oosterom (2009, 168) divides service design process in five different stages, namely 1) Discovering, 2) Concepting, 3) Designing, 4) Building and 5) Implementing, each described in brief in following.

Discovering

The first step, discovering, is two-fold. Firstly, we aim for understanding the business, what are the organization’s goals and characteristics, their mission, vision and culture.

Secondly, we discover the experience by discussing with the customers and the front office personnel. The desired outcomes, customer journeys and service touchpoints are mapped.

Concepting

During the second step, ideas are developed e.g. in workshops, brainstorms and interviews together with the end-users, customers and personnel, as well as experts from relevant fields of expertise. The ideas are visualised by using prototypes or moodboards.

Designing

Designing step is about working together with experts from different fields, putting everything together. A detailed service blueprint is developed. The whole system's look and feel is finalized.

Building

In building stage, we look into the service touchpoints. The touchpoints can be for example physical locations, media and communications platforms, or training the employees. In this stage, a marketing and communications strategy is developed.

Implementing

The final step of implementing, is the moment when the new operations start. The shop is opened and the customers are invited in. The newly designed service organization is ready to meet the customer needs.

3.2.3 Service design process according to Furrer et al.

The service design framework developed by Furrer et al. (2016, 463-466) explains not only the designing process, but also the roles of the marketer and the customer in the process. Their framework relies on the service logic which incorporates the customers as service co-producers and value creators (Grönroos, 2008, 301). According to Furrer et al. (2016, 463-466) the service design process includes seven steps, which are 1) Problem surfacing, 2) Problem structuring, 3) Solution imagining, 4) Innovation creating, 5) Innovation optimizing, 6) Value proposition developing and 7) Value delivering. Each step is described below.

Problem surfacing

In the first step, the marketer's role is to be a coach, who clarifies the problem the customer faces and brings it to the surface from the context in which it is hidden. The coach engages with the customer by conducting e.g. interviews, perceptual mapping or focus groups. The coach presents the problem in a way, that the customer feels that if it is solved, the new solution is bound to add value.

Problem structuring

During the problem structuring step, the marketer analyses the data received from the customers in order to defining and prioritizing the problem. Customer's role is of a usage expert. The problem is structured so, that it can direct the design of an effective service solution.

Solution imagining

In the third step of solution imagining, the marketer actively develops possible solution, and acts as an experimenter. Customer helps as a sounding board and tests out the possible solutions.

Innovation creating

In the innovation creating step the possible obstacles on the way to successful solutions are examined and the necessary solutions for the obstacles are found. This can be done for example by using a role play, where both marketer and the customers are participants.

Innovation optimizing

In this step the marketer works as an engineer and readjusts, calibrates and sets the service process elements to balance and make sure the added value both to the customer and to the organization.

Value proposition developing

During the value proposition developing stage the marketer posits the service value so that it is compelling to the customers. The value must be understandable to the customers. The marketer optimizes the systems by using e.g. blueprints, servicescapes and pricing. The customers are asked to give feedback, to help optimizing the value proposition.

Value delivering

In the last step the marketer provides value to both the customers and the organization. The delivered value is both the value proposition and the experienced value. The service should be designed so that value can be exchanged with maximum gain and minimal loss to the customer and to the organization.

3.2.4 Discussion

The empathic design process and the service design processes introduced by Leonard and Rayport (1997), Moritz (2005), van Oosterom (2009) and Furrer et al. (2016) have quite a lot in common. They all emphasize and start with understanding the customer. Finding out and clarifying the customer problems and needs, both latent and conscious, seems to be the starting point. It is not only important to understand the customer needs, but also the needs of the employees and the organization, its culture and goals, as well as the environment and the context where it operates. Once the understanding is reached, the service provider or the organization aims at, through assimilating and concepting of the newly gained knowledge, transforming itself around the customer experience.

The researchers list various ways and methods to develop the service concepts from the ideas and data gathered. Examples of the methods are brainstorm, storyboard, mood-board, interviews, focus groups, personas, sketching, prototypes etc. Using different methods enables us to go back and forth in the designing process, trying out various things and sometimes failing, and the researchers believe this iterative process is the way to learn and find out the best solutions.

Customer and end user involvement does not end in the understanding phase in the beginning. Implementation of the newly designed service, as well as the whole process of service design, is done together with the end users. The new models, blueprints, simulations or prototypes are tested by the customers and front-office employees. This way we can make sure to come up with the most user-friendly solutions, and the services providers are able to co-create extra value with the customers.

Following a service design process in detail step-by-step may not always be relevant. The process can be modified to better serve a project at hand. Co-creation with users, different methods for visualisation and the iterative planning define a service design process.

4 Designing Haaga-Helia digital student exchange services

The commissioning party of this thesis is Haaga-Helia University of Applied Sciences (Haaga-Helia). The objective of this thesis is to develop new, digital service solutions for Haaga-Helia, for the International Services team. In this chapter, I give an overall description of the thesis and discuss the reasons leading to this project. I define the scope of this thesis and present the research questions. I present the commissioning party, and the customer segments relevant to this project.

4.1 Haaga-Helia University of Applied Sciences

Haaga-Helia offers education in business, hospitality and tourism, aviation, information technology, journalism, sales and sports and leisure. More than 10 000 students study in Haaga-Helia's bachelor and master programmes. Our five campuses in Finland are located in towns of Helsinki, Porvoo and Vierumäki. (Haaga-Helia, 2018a). Haaga-Helia focuses on entrepreneurship, cooperation, innovation and internationality (Haaga-Helia, 2018b).

In the mission statement Haaga-Helia promises to "open doors for future careers". The vision of Haaga-Helia is: "We are the most attractive professionally oriented Finnish institution of higher education." Haaga-Helia has operated a little more than 10 years. It started operations in 2007 as a result of a merger of two already well-established educational institutions, Helsinki Business Polytechnic and Haaga Institute Polytechnic. (Haaga-Helia, 2016a.) Recently, new joint initiatives have been launched by Haaga-Helia, Laurea and Metropolia Universities of Applied Sciences in order to deepen their partnership in specific strategic co-operation areas (Haaga-Helia, 2018a).

Haaga-Helia engages in various kinds of co-operations with partners worldwide. The co-operation takes forms of student and staff exchanges, double degree programmes and research, development and innovation projects, for example. International Services facilitates internationalization opportunities for students and staff. (Haaga-Helia, 2018b.) International Services belongs to Higher Educational Services Unit in Haaga-Helia organization. Head of International Relations is in charge of the International Services team. Seven International Coordinators work for the team full time, and two part-time. (Haaga-Helia, 2018c.)

4.2 Digitizing the outgoing student exchange services

The new, developed services are going to be offered to those students, who are planning to go abroad to student exchange (outgoing students), for one or two semesters within Haaga-Helia's partner university network. International services offers exchange support services also for the students, who are arriving to Haaga-Helia from the foreign partner universities for an exchange semester (incoming students), as well as to staff members joining teacher or staff exchange programmes. Moreover, some students decide to go on exchange independently, to a university, which Haaga-Helia has no cooperation agreement with. International Services also gives service to those, so called free mover students. In addition, service is given also to students, who go on work placement in companies abroad, or short term exchanges for example in summer schools abroad. In this thesis, however, the delimitation was made to design the services for only one of the customer segments, the outgoing students. This customer segment was chosen because majority of the students going abroad are the outgoing students. The other above mentioned customer segments' services are not designed under the topic of this thesis.

Often the students using the outgoing services are not on campus, since they may be abroad, or otherwise not available to use the face-to-face services. Therefore, my goal is to develop digital services for ensuring the equal access to the services for all students, as well as develop the services to be more modern, easy and fast to use. Service design is used as the approach for the purpose of making sure the goals are met, and the customer-centric view ensured.

One of the strategic goals of Haaga-Helia is to grow internationally together with partners, which means for example the goal to open campuses and study programmes outside Finland. Haaga-Helia already has started to offer study programmes abroad. Haaga-Helia offers international business bachelor programme in University of Mondragón in Queretaro México and culinary management master programme in The Institute of Tourism Studies in Malta, and is starting to offer aviation business bachelor programme in Chongqing University of Science and Technology in China (Edu Excellence Ltd., 2018). Another strategic goal is to use digital solutions in services and operations. Both of these strategic goals are regarded as enablers of the Haaga-Helia mission and vision. (Haaga-Helia, 2016a.) As current research also emphasizes, the digital revolution is already at hand (Pine II, Korn, 2011), and service experiences extend to all potential touchpoints, over multiple, even digital channels (Patrício, Gustafsson & Fisk, 2018.) Hence, the thesis topic is current and very important.

The main research question is: How to serve students going abroad when they are not on campus? From the main research question can two follow-up questions be drawn: Which current face-to-face services should be digitized? How should the digitization be done?

The approach I use in my thesis is service design. As a new approach, service design is very near constructive research, which aims for producing a concrete outcome for solving a real life problem, by utilizing researched data (Ojasalo, Moilanen & Ritalahti, 2015, 65). Constructive research is suitable for my thesis, since I'm trying to solve a real life problem of Haaga-Helia International Services, the one my research question indicates. Service design thinking has foundations on the service-dominant logic (Vargo, Lusch, 2004) and aims for planning and designing efficient, desirable, useful and usable services (Moritz, 2005, 39). I chose service design approach for the new service development assignment at Haaga-Helia International Services due to the customer-centric feature of it. Creating customer friendly and humane services together with our customers, is our team's objective.

5 Haaga-Helia service design project as a process

In my service design project, I decided to follow Moritz' (2005) process model, because it has a logical flow and interconnection between the different stages. I believe this model suits well in the design project of Haaga-Helia International Services, since it is important to us to involve our customers (students) in our development projects, and customer involvement throughout the process is emphasized in this model. Moritz (2005, 123-147) has grouped the design tasks in six categories: 1) Understanding, 2) Thinking, 3) Generating, 4) Filtering, 5) Explaining and 6) Realising. I am following these stages in my service design project.

5.1 Stage 1: Understanding the customer, service provider and context

My goal was to find out and learn as much as possible about the customers, service providers and context, as Moritz (2005, 124-127) states for the first stage of service design. Understanding the customers' and other end user's needs is essential in my project. I started by making a brief context analysis, and by looking into the processes of the service provider, the Haaga-Helia International Services. I gathered customer knowledge by analysing user surveys, as well as arranging focus groups, where digitizing the outgoing services was discussed with users.

5.1.1 Context analysis

I started by making a small context analysis by looking into the variables that can possibly affect the service, the customer or the organization (Moritz, 2005). The organizational context with regard to internationalization and student exchange at Haaga-Helia, seems to have a solid ground. Having internationalizing goals stated in the strategy (Haaga-Helia, 2016a) indicates a strong support for internationalization efforts from the top management. The higher education field in Finland is also currently committed to promoting internationalization. Finnish Ministry of Ecucation and Culture (2017) has published in their Policies to promote internationalisation of Finnish higher education and research 2017–2025, that Finland is striving for genuinely international higher education communities, and that the success is built on quality. Furthermore, Minister of Education and Culture Grahn-Laasonen (2018) stated that Finland wants strongly to support European mobility and student exchange. According to Minister Grahn-Laasonen, student and teacher exchanges make European integration a real thing in everyday life, and continues that internationalization opportunities have to be open to all students, regardless of their family background or their level of income (Ministry of Education and Culture, 2018). Hence, Haaga-Helia International Service personnel can feel secure in the internationalization supporting context and environment they are working in.

I looked into the statistics on Haaga-Helia's student exchange volume, with regard to outgoing students who go on long-term exchanges (Haaga-Helia, 2017). An exchange period of a minimum of three months, is regarded as a long-term exchange. During the past five years, Haaga-Helia long-term outgoing student exchange numbers have been rather steadily around 400 students (table 1).

Year	Mobility out > 3 months
2017	383
2016	434
2015	415
2014	401
2013	387

Table 1. Long-term outgoing student exchanges at Haaga-Helia in 2013-2017

In 2016 application rounds, new grade point average (GPA) requirements for outgoing students were introduced in order to strive for the quality of exchanges and to make sure that students would be able to gain adequately credits during their exchange. Presumably, introducing the new requirements may be the reason for the slight decrease in student numbers, which has happened in 2017. Nevertheless, Haaga-Helia continues to send out many students on long term student exchanges. Compared to other universities of applied sciences in Finland, Haaga-Helia sends most students to long-term student exchanges (figure 4). In 2017 Haaga-Helia was the most active sender with 383 outgoing students, closely followed by Metropolia University of Applied Sciences with 369 students. Other universities of applied sciences do not reach as big numbers, the third one is Lahti University of Applied Sciences with 211 outgoing students. (Vipunen, 2018.)

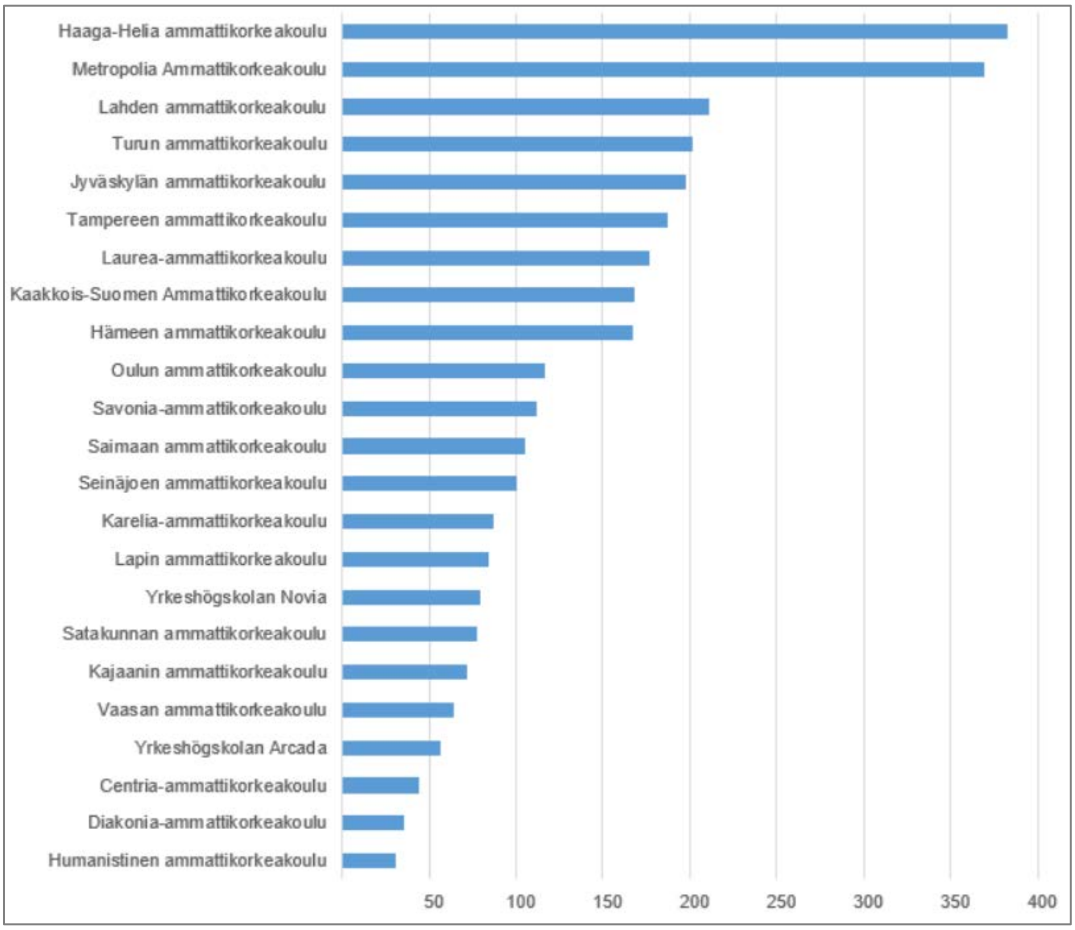

Figure 4. Outgoing long-term student exchanges 2017 in Finnish universities of applied sciences modified from (Vipunen, 2018)

Most of Haaga-Helia students are young, in their early twenties. According to Andreassen et al. (2016) who propose there are three stages in life, our customers belong to the first category: Empty nest 1, “Young, free and simple”. They are individuals who need time in order to spend time with their friends and hobbies, and their social life is very important for them. As service designers, we need to concentrate on our customers return-on-time (ROT) efforts, and make sure our services do not take too much of their valuable time.

5.1.2 Outgoing student exchange process description

For the reason of the fact that I work as International Coordinator at Haaga-Helia International Services, as a front-line employee, I already have quite good understanding of the service provider’s processes. However, I reviewed the process description chart of International Services’ outgoing student exchange process (appendix 1).

The process descriptions are integral part of Haaga-Helia’s way to develop and operate. Processes are tools we use for helping us to understand how our operations work, and what our roles are within them. They are a part of our quality policy. (Haaga-Helia, 2016b.) The outgoing student exchange process description maps how the process flows in chronological order, and describes what is done and who is doing the actions during the process. The process description indicates how the international coordinators have different roles in their work. Some of them are in charge of the outgoing process, or contacting a partner institution, or processing the grants. In addition, Head of International Relations has also responsibilities in this process. The process is described from the perspective of the organization.

The full outgoing student exchange process is a lengthy one. The duration covers several months, from the moment a student starts to look into the application materials and filling in an application form, continuing during the student spends one academic semester abroad, and ending to the moment when the International Coordinators are analysing the feedback from the student after s/he has come back from the exchange. Berry, Seiders & Grewal (2002) claim that generally, the bigger the time expenditure used for a service, the lower are customers' perceptions of service convenience. An exception for this rule would be time-investment services, for example services that have hedonistic value. Time-investment service's duration, to a degree, increases its value. However, most services are time-cost services, and not time-investment services. (Berry, Seiders & Grewal, 2002.) Student exchange as a service, can be regarded as a time-investment service, although it does not have hedonistic value. It is, however, very valuable experience for the students, offering them enjoyable experiences in form of travelling, possibilities in getting to know new cultures and growing into a more independent person, while gaining more professional knowledge in their field of study. Hence, the long process regarding student exchange service, can be at least regarding the time of the study abroad period, justified.

5.1.3 Seven steps of outgoing students

Currently, the outgoing student exchange process is visualized to the customers by seven steps each student has to take when going to student exchange (figure 5). The description is available for the students in the Haaga-Helia student intranet, called MyNet (Haaga-Helia, 2018d.)

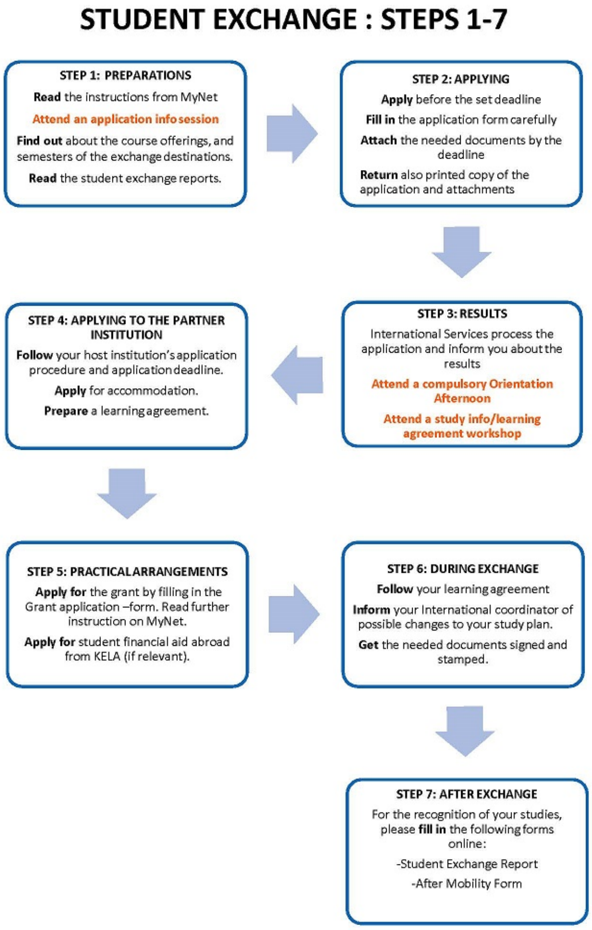

Figure 5. The seven steps of outgoing student exchange (modified).

In figure 5, the process in presented in more simple way than in the process description. The step-by-step list works as a rough to-do-list for the students, and the idea is to clarify to them all the actions they need to do before going on exchange. The currently offered face-to-face services for the students, the events they need to attend but are frequently not able to, are marked with red colour. The events are:

- Application info session
- Orientation afternoon
- Learning agreement workshop (LA workshop)

Application info sessions are arranged always before the application rounds begin. Info sessions are arranged on every Haaga-Helia campus, for each field of study. All students who are eligible for applying, are invited to the info sessions, but participation is not compulsory. In application info session, the students are encouraged to go on exchange, they are walked through the application process, and advised how they should select the destination universities.

Orientation afternoons are arranged twice a year, one specifically for the students going abroad for autumn semester, and other for students going abroad for spring semester. They take place on Pasila Campus auditorium. Outgoing students normally have a lot of questions concerning the practicalities about student exchange, such as the housing, immigration formalities, insurances, vaccinations, safety, financial issues, etc. These questions are answered in the orientation. Furthermore, at the end of the orientation, country specific groups are formed, where the outgoing students have the possibility to meet students, who already have been on exchange at their destination country, or incoming students coming from the destination universities, and currently studying at Haaga-Helia.

In learning agreement workshops (LA workshops) the goal is to finalize the outgoing students' study plans for the exchange period. Students are expected to make preliminary plans already before coming to the workshop. LA workshops are arranged for each study field separately, because different study programmes at Haaga-Helia may have different requirement for the exchange studies. In LA workshops, the students are helped in choosing the courses at the destination university, and advised on how to transfer the study credits for the Haaga-Helia degree.

5.1.4 Outgoing students user surveys

I utilized two different user surveys conducted at International Services for finding out more about our customers and services. Firstly, I studied the feedback gathered from our customers on a yearly basis. We use an online questionnaire, which is sent to all outgoing students, who have participated in the exchange programmes. I compared the findings from five latest semesters from academic years 2015-2016, 2016-2017, 2017-2018 (table 2).

During the five latest semesters, altogether 527 students responded to the questionnaire. In the questionnaire, there are a number of questions regarding Haaga-Helia International Services, as well as the host university services. In table 2, the results of two questions are analysed, firstly “How satisfied are you with the following: Orientation afternoon arranged by Haaga-Helia International Services?”, and secondly “How satisfied are you with the following: Learning Agreement Workshop/Study Info -session arranged by international coordinator of your degree programme?” The questionnaire does not include a question specifically about the application info session, because of the fact that it is not regarded as a compulsory event for the students, like the LA workshop and the orientation. However, the students are asked to give feedback on application process in general. In fact, based on the feedback, the application process has recently already been renewed for more simple, customer friendly direction.

	Average score	No of respondents	No of absent	Absent %
Student evaluation of orientation	4,31	527	61	12 %
Student evaluation of LA workshop	4,15	527	71	13 %

Table 2. Results of outgoing student exchange survey from years 2015 - 2018

The evaluation on the services is made using scale from 1 to 5. Value 1 stands for “very dissatisfied”, 2 “somewhat dissatisfied”, 3 “neither satisfied nor dissatisfied”, 4 “somewhat satisfied” and 5 “very satisfied”. Students also have the possibility to answer with value 6, which stands for “I didn't use/participate”, indicating the students who were absent. As table 2 shows, the evaluation from the students is on a very good level. The average value for the orientation afternoon is 4,31, and for the learning agreement workshop 4,15. According to the survey, in general the students, who participate in the events, are very happy about them. However, it must be noted that the number of students who are absent from the orientation afternoon and LA workshop, is rather high. 12 per cent from the respondents inform that they did not participate the orientation afternoon, and 13 per cent did not participate the LA workshops. Furthermore, it should be noted, that the per centages can be assumed to be even higher, taking into account that the reported per centage is calculated out of the questionnaire respondents, not out of all outgoing students. It can be presumed that among those students who do not fill in the feedback questionnaire, may be slightly more students who do not find the time or motivation neither to participate the events.

In the questionnaire, the students are also encouraged to leave open comments about the services. After reviewing the open comments from the five semesters, it can be noted that students wrote open comments particularly about orientation 18 times, and about LA workshops 6 times. The open comments about orientation afternoon are mostly positive. Especially students valued the possibility that in the country specific groups they could meet students intended to go to, and already been to their destination countries and universities (5 comments). On the other hand, the lack of this possibility also was the reason for the most negative comments, such as there were no students who had been in the student’s destination in country groups (4 comments). Other negative comments concerned the fact that the information offered in the orientation was “nothing new”, too basic information targeted to students who had never been abroad before, or the information was in too general level, and the same information could be found on MyNet (4 comments).

The open comments about the LA workshops, mostly stressed the importance on course selection and study planning, and the need to have more help with this regard (4 comments). There was also one comment about the application information session, concerning the fact that the timing of it was at a too late stage. One more comment about the timing of the orientation afternoon, and the learning agreement workshop, mentioning that the time of the event did not suit the students own schedule.

Secondly, I looked at the results of a bachelor thesis made about International Services' customer satisfaction with regard to service channels (Pelkonen, 2017). Pelkonen's questionnaire was sent to all students who had applied to student exchange in the 2017 main application round. She received 89 responses. According to the survey, all the respondents had used MyNet site as the service channel. Using email was also very popular, 94 per cent had used email as service channel. Face-to-face office hours had been used by 81 per cent of respondents. The students seem to use more the digital services, email and MyNet, and curiosly they also rate the digital service slightly better than face-to-face service. They also used digital services mostly for information searching, but in case of problem situations, they preferred a personal face-to-face meeting. (Pelkonen, 2017.)

According to Pelkonen's (2017) survey, 95 per cent of students think that the info sessions and orientation events offered are useful. 58 per cent of them rate that they are satisfied or very satisfied with the events. Twelve of the respondents said they did not participate the events. The most common reasons for absence listed were the unsuitable timing of the particular event and that the students felt that the information was already available somewhere else. (Pelkonen, 2017.)

92 per cent of respondents said they used MyNet with computer, seven per cent with mobile phone and one per cent with tablet computer (Pelkonen, 2017). According to Statistics Finland (2017), however, for 77 per cent of Finnish people mobile phone is the most popular device to go online. In the light of the statistics, the result that only seven per cent of the outgoing students used mobile phone for surfing MyNet, is very surprising. One reason for this may be the fact that students are searching information on MyNet at the same time they are completing their other study tasks with their laptops, rather than other times with their phones. Another reason may be that MyNet as a website does not adapt very well for the mobile use. (Pelkonen, 2017.) Haaga-Helia's marketing and communications department is currently renewing the MyNet, and making mobile use easier has been one of the reasons for the update.

Haaga-Helia International Services uses a closed group in Facebook for outgoing students. Pelkonen's (2017) survey revealed, that 56 per cent of respondents did not know that the group existed, and only 25 per cent of the students had asked for joining the group. However, 61 per cent of respondents felt that the Facebook group was useful for them. In addition to Facebook, some respondents asked for a WhatsApp or chat service for quicker responses to their questions. They also hoped for more reminders of the events International Services arranges. Many asked for more guidance in study planning, and the MyNet site was regarded to be difficult to navigate. (Pelkonen, 2017.)

5.1.5 Focus group workshops

A focus group involves a selected group of people having a guided discussion about a specific topic (Tomitsch et al., 2018, 64). Focus groups are used to learn from the customers, who are sharing their opinions, thoughts, attitudes and feelings about a topic (Moritz, 2005, 191). I arranged four focus groups in May 2018, in order to find out what our customers really think about the idea of digitizing the services, and what service features they perceive as important.

Three of the four focus groups were arranged at Pasila Campus, and one at Haaga Campus. I chose to arrange most of the focus groups at Pasila campus because it is the biggest campus, and it is the most easily reached location among Haaga-Helia campuses. Haaga Campus was chosen in order to cover at least two campuses, and having in mind that the mobility numbers at Haaga Campus are rather high. Some of the focus groups were offered in the morning, some afternoon, so that many students would find a suitable time to join. The students who I invited, were those who had been selected to go to student exchange in fall semester 2018. I wanted to invite these particular students, because I needed them to have an idea about the services, and they had used some of the services in question.

The focus groups were arranged as table 3 indicates. Two group discussions were conducted in English and two in Finnish. The language of the discussion was chosen according to the need of the participants. If students who were unable to speak Finnish were present, the language used was English. The total number of participants in the focus groups was 27.

Focus groups	**Language of discussion**	**Number of participants**
2.5.2018 at 15:00 – 17:00, Pasila	English	5
4.5.2018 at 13:00 – 15:00, Pasila	English	8
8.5.2018 at 16:30 – 18:30, Haaga	Finnish	7
9.5.2018 at 09:00 – 11:00, Pasila	Finnish	7
	In total	27

Table 3. Focus groups and the number of participants

Persons participating the focus groups were representing a comprehensive variety of service users. One of the participants was an employee of International Services, an International Coordinator, and 26 participants were students from different fields of study. Students from four of Haaga-Helia's five campuses were present in the focus groups. Seven of the students study on Haaga Campus, one on Malmi Campus, ten on Pasila Campus and seven students on Porvoo Campus. The roles of participants and/or the study fields covered are shown in table 4.

The role / study field	**Number of participants**
Business administration or international business	6
Sales management	2
Management Assistant education	2
Hospitality or Tourism Management	10
Aviation Business	4
Business Information Technology	1
International Coordinator	1
In total	27

Table 4. The roles and study fields of focus group participants

The setting in the focus groups was very informal. The nature of the focus groups resembled workshops, because the participants were asked to discuss certain topics, try to reach consensus over them, and write down their findings on post-it notes. In the beginning of each workshop all participants introduced themselves, telling their names, fields of study and exchange destinations. I worked as a moderator. At first, I explained the participants the facts about this service design project, our goals and the rules of the discussion.

I briefly presented the seven steps of outgoing student exchange (figure 5) and made sure, everyone understands the nature of the three events in question: application information session, orientation afternoon and learning agreement workshop. As the moderator, I guided the discussion through questions the participants had to address. The overall topic for the focus groups was “digital services for outgoing students”. The discussion topics were:

- How? What digital options/tools are there?
- Which one of the events (application info, orientation or LA workshops) is most important to digitize, and why?
- Choose the best tool. Why this tool is most helpful for you?
- Name 3-5 key questions the new digital solution has to answer.

The participants eagerly engaged in the discussion. As the moderator, I sometimes had to remind them about the requirement of documenting their ideas on post-it notes, and in couple of occasions, I had to encourage some more quiet students to express their opinions. In all the focus groups, there were certain participants who took the role to lead the conversation. In the first focus group, the student taking the leading role in the discussion, had very strong opinions. This may have influenced the other participants not feeling entirely free to express their differing opinions. Given the fact that focus group results may be biased by issues like group think or social desirability bias (Stickdorn et al., 2018, 123), the strong-opinionated student’s possible influence has to be noted when analysing the focus group’s outputs. The participants generated ideas on post-it notes, which were transcribed and analysed. Examples of focus group outcomes are presented in following, from focus group 3, outcomes concerning LA-workshop in figure 6, from focus group 4, outcomes concerning application info in figure 7 and from focus group 2, outcomes concerning orientation in figure 8.

Figure 6. Focus group 3

Figure 7. Focus group 4

Figure 8. Focus group 2

The first discussion topic “How? What digital options/tools are there?” was an introductory topic, aiming for directing the participants to think about digitization and all the possibilities, and simply listing all tools they could come up with. The lists of tools created were then utilized later when discussing over topic “Choose the best tool. Why this tool is most helpful for you?”. Therefore, the two topics are merged together for deciding upon what is the digital tool preferred by the users.

The question “Which one of the events (application info, orientation or LA workshops) is most important to digitize, and why?” turned out to be somewhat difficult for the participants to decide. Two of the focus groups just could not decide only one of them, and ended up choosing two events as the most important. Application info session was chosen to be the most important one in two of the focus groups. Orientation was chosen by three groups. However, the choice was made with a notion that the orientation should not be fully digitized, but some important parts of it like the country specific groups should be maintained as face-to-face events. LA-workshop was chosen by two groups. However, in the first focus group there was one student with very strong opinions, and her opinion about this may have affected this choice. Furthermore, the justifications whether to choose LA workshop, were contradictory. One reason for focus group 1 to choose LA workshop, was the individual nature of study planning for the students, such as each having their own interests and different study programmes have different requirements. The focus group 3, however stated this reason as the opposite, as the reason why not to digitize LA workshop, stating that the individual nature requires face-to-face guidance.

There was a lot of information gathered from the focus groups. The outcome is rather complicated, with a possibility of a bias. Therefore, I used an affinity diagram in order to make sure to explore all the justifications and opinions, and find the correct outcomes from this vast amount of data. I realized, in order to avoid biased results, I had to look into the opinions and thoughts of all participants very closely, rather than relying on the groups’ decisions. This way the participant with strong opinions, will not dominate the decision of the whole group, but everyone’s opinions are heard. I explain the results of my affinity diagramming in the following chapter 5.2.2.

5.2 Stage 2: Thinking

According to Moritz’ (2005, 128-131) model, my goal in thinking stage was to arrange the information gathered in the previous stage, and to turn it into insights. I needed to identify the problems and create parameters and set the guidelines for the upcoming stages. Firstly, I picked up the matters that emerged from the service provider knowledge, as well as from the two outgoing students user surveys. Secondly, I analysed the data from the focus groups by using affinity diagramming. Thirdly, as to conclude the thinking-stage, I established design drivers from the insights, to guide me in the next stages.

5.2.1 Insights from service provider knowledge and data from outgoing student user surveys

One problem stood up from the review of the outgoing process description (appendix 1). It has been created from the organization's viewpoint, mapping who does and what during the process. Student's tasks are listed too, but the customer perspective is clearly lacking in the process description. The seven steps of outgoing student exchange (figure 5), however, has been compiled from the customer's perspective, and it has been kept very simple in order to maintaining it clear and quick to read. However, the need for a customer-centric, detailed visualisation of service, such as a service blueprint can be seen.

The absence of the customer-centric view of the process description awakens questions like whether Haaga-Helia is actually a rather hierarchical organization, and whether the students are in fact seen as customers at Haaga-Helia. As an organization Haaga-Helia can be regarded belonging to, or at least having the same characteristics than organizations within non-profit and public sector. As a non-profit organization, there may be the danger of letting the missing profit motivation lead to the implementation of hierarchical structures and following decision making processes that hinders innovation (Damanpour, 1991). The environment is however changing due to the change in the Finnish legislation. Haaga-Helia is already allowed to collect tuition fees from non-European students, and the paying customers will require better service. Therefore, we need to make sure that our processes and organization will remain as flat as possible, giving room for quick decisions and excellent customer experiences.

Filenius (2015, 77) points out that usually, when talking about customer experience, customers are seen as consumers. In this case it may be tempting for those operating in business to business (B2B) environment, to think that customer experience issues do not concern them too much, since doing business with companies is so different than business with customers (B2C). Nevertheless, they should not think that way, since it is human individuals making the orders, comparing the products and making decisions also in B2B commerce. (Filenius, 2015, 77.) Similarly, in education organizations, students should be regarded as customers, as individuals looking for great customer experiences during their studies.

Even though the orientation afternoon and the learning agreement workshop are compulsory for the students, the number of students not using these services is rather high (table 2). The outgoing student user surveys reveal firstly, that orientation afternoon is not useful for more mature or proactive students, who are used to independently searching information and arranging their practicalities for moving abroad. Secondly, timing of the events is regarded difficult, being at a too late stage or otherwise not suitable for the students' personal schedules. Thirdly, the surveys also reveal, that students seem to need more help with course selection and study planning. All the above mentioned findings highlight the need to digitize the events, or parts of the events. If timing is wrong for the application info, or if a student is not able to participate the orientation, or feels s/he does not need it, we could offer the digital option to replace the face-to-face events. Despite the fact that learning agreement workshops and study guidance is offered, the students still apparently need more help with their course selections and study planning. Additional help could be certainly offered digitally.

5.2.2 Insights from the focus groups, affinity diagramming

I analysed the large amount of data gathered from the focus groups by using an affinity diagram. Affinity diagramming is a systematic method for organising ideas, insights and opinions (Moritz, 2005, 203). The idea is to collect opinions and ideas, and write them on post-it notes, so called affinity notes. The affinity notes are then arranged so that patterns and themes emerge. From the clusters formed this way, potential solutions can be identified. (Tomitsch et al., 2018, 22-23.) The data from each question, which my focus group participants discussed, is clustered in affinity diagrams shown in appendices 5, 6 and 7.

Question "Which one of the events (application info, orientation or LA workshops) is most important to digitize, and why?" raised a lot of discussion in the focus groups, and the decision turned out to be hard to make. The decision was also noticed to be open to be influenced by some strong-willed participants. This raised a concern about a possible bias in the results. However, each participant was able to write their opinions and justifications on the affinity notes. By using the justifications rather than the group decisions in my analysis, I am confident everyone's voice is heard. The affinity diagram (appendix 5) reveals, that application info session is the event, which should be digitized. The focus group participants in fact believe that it is the only event, which can be fully digitized. The users feel that a lot of the information given in application info, is actually already digitally available on MyNet. Furthermore, the information is of the kind which does not require face-to-face presence. A digital solution would also help in the timing challenges, since some students thought the info was too early before the application round.

Analyzing the affinity diagram (appendix 5) uncovers that both orientation and learning agreement workshop could only be partly digitized. Students want to keep the orientation as face-to-face service with regard to the country specific groups, for the reason that they value networking and learning from their peers. However, they think that the current general information part of the orientation could be digitized. The students' idea was to make several videos of different topics, and embed them for example on MyNet, so the students can return to the information when needed.

There were many affinity notes highlighting the fact, that the learning agreement workshops should remain as face-to-face events, because the course selection and credit transfer are so difficult for students, and it raises a lot of questions. In fact, students call for more LA workshops to be arranged and more help from the international coordinators. Moreover, the students' exchange destinations and their course offerings are different, and the students' study programmes and own interests also differ from each other. Hence, digitizing such a varied set of information may be impossible. The only part of the LA workshop the students think could be digitized, are the instructions about how to choose the courses and fill in the learning agreement. The idea is to make a short video with a to-do-list, which the students should watch before going to the LA workshop.

Question's "Choose the best tool. Why this tool is most helpful for you?" discussion concentrated, according to the affinity diagram (appendix 6), on two tools in particular, videos and webinars. Main reasons why we should use videos according to the students, are that videos are easy to watch and share and you can return to a video as many times as you want. Students also mentioned, that slides together with voice over are easy to make. Students' ideas were that videos could be tutorials about the applications, or short info packages, available on MyNet. Moreover, students hoped for videos about other students telling and giving tips about their exchange experiences.

Webinars, like videos, were also mentioned to be easy to use and access. If the webinars would be recorded, then they could be also returned to. Webinars would allow also a questions and answers section, but the participants were worried, that many students might be afraid to ask questions in the webinars. They also worried about technical problems. One idea was, that they would like the personnel from the destination university to participate in the webinars, but they soon noticed that it would be impossible, because there are time differences, and so many host universities, that it would not serve the idea.

Social media applications were thoroughly discussed. According to students, WhatsApp, Skype or SnapChat should be used because they allow quick answers to questions, automatic reminder messages from coordinators, possibility to make calls even from abroad, it would be easy to share videos, and you could make e.g. country specific groups there. Reminders about deadlines and all kinds of notifications were seen as something the students really want. They could be given either in an online calendar or application, or in social media. Facebook groups were "an ok idea" according to students, but criticized because the information there is maybe not reliable, and because the students who have already been on exchange no longer follow the groups, and also because the students are afraid to ask anything, since the group is not anonymous. Students would like to hear about the experiences of other students who already were on exchange, for example on Instagram. Their idea was to share videos and photos in Instagram with #hhexchange and @destinationuniversity.

E-mails were criticized to be too long, and important messages were said to be getting lost in the flood of emails. MyNet pages including the exchange destination portal were mentioned to be confusing, and require too many clicks before you can access the information. An idea from the students was that it would be great if MyNet would be able to suggest links that may interest or be relevant to the student, similarly as the online shops do. Another idea was that we could incorporate an anonymous discussion forum on MyNet pages.

Other tools that were mentioned by the students, were online streaming, Moodle and robot/chat bots. Chat bots were interesting to some students, but some of them mentioned they are already old fashioned!

Question "Name 3-5 key questions the new digital solution has to answer" was analysed in affinity diagram for each service separately (appendix 7). With regard to the application info session, the most important questions to be answered, are:

- Which destinations can I apply for?
- When do I have to apply?
- What are the requirements?
- How does the destination portal work?
- What kind of experiences did the previous students have?

With regard to the orientation afternoon, the most important questions to be answered, are:

- How do I apply for the exchange grant?
- Who is my contact person?
- What are the requirements for visa?

- Do I need vaccinations?
- How do I apply for the destination university?
- How do I get accommodation?
- What do I need to do next?
- What to do, if some problems occur when I'm abroad?

With regard to the learning agreement workshops, the most important questions to be answered, are:

- When are the school specific deadlines?
- Who signs my learning agreement?
- Where to start? How do I fill in my learning agreement?
- Where to find the course list?
- How many credits is sufficient?
- How do I match courses from destination university to HH?
- If my plans change, what should I do?

When thinking about the questions, the students already realized that many of them are actually not so easy to answer to digitally. Some questions are very specific, concerning only one student or one destination, so general answers cannot be given. Some other questions are very vague, such as "what do I do next?", which is impossible to answer if you do not know in what situation the person asking is.

5.2.3 Design drivers

The data from the understanding stage conducted in the beginning, gives legitimacy to this thesis project. A conclusion from the knowledge gained from customers, service provider and the context analysis, is that in the long run, we at Haaga-Helia International Services should digitize as many services as we can. Digital solutions can answer to our customers needs to have more time saving options in their busy lives. Offering digital, always available services will help them in their return-on-time efforts. Digitizing services is in accordance with the Haaga-Helia strategy, where the digital solutions are seen as the strategy enablers. We also need to meet the customers' needs more accurately. They may not always be able to come to the face-to-face events. Some students feel they don't need the service. Therefore, we should give them a digital option. On the other hand, the digital service can also support a student who is very unsure and needs more guidance.

Design drivers, which emerge from the knowledge gained from the customers, guide the service design planning process further, describing what exactly the new service should offer, and which customer need it should satisfy (Tuulaniemi, 2011). The knowledge from the service provider, International Services, points out the first two design drivers:

➔ Always regard the students as customers!

➔ Create a truly customer-centric service blueprint model of the outgoing services!

If we do not adopt an honest customer-centric view, it will not be possible to make the services more convenient and the customer experience better. Quality services can be reached by giving the students the respect any customer deserves, and ensuring we can meet their needs and save their time and effort when using our services. The blueprint model is needed in order to recognize the full customer journey, and the possible gaps in it. All forms of service touchpoints should be described, including different technology solutions.

The design drivers emerging from the customer data received from the focus groups and outgoing student feedback survey, are:

➔ Start by digitizing the application info session!
➔ Use video as your tool!
➔ Give students opportunities to learn from other students!

The above mentioned design drivers emerged from the information and knowledge gathered in the first stage of the service design process. These insights will guide the way to the next stages of the design process.

5.3 Stage 3: Generating ideas and concepts

According to Moritz (2005, 132-135) the third stage of generating, is about developing concepts and solutions, which are meeting the customers' and employees' needs. The developed concepts should be in accordance with the organization's strategy. Coming up with ideas and solutions randomly is not the objective, but working with the knowledge gained from the first service design stage, and the insights developed in the second stage. (Moritz, 2005, 132-135.)

In order to discuss the design drivers of digitizing the application info session, using video as digitizing tool, finding ways to giving the students opportunities to learn from other students, I conducted an idea interview for an in-house digital solutions specialist. Additionally, a service blueprint was created for changing the outgoing process chart into more customer-oriented direction. Furthermore, outgoing student personas were created for the purpose of testing the new blueprint from the perspective of the customer groups who especially need the digital services.

5.3.1 Idea interview

A developed idea or concept can be discussed with experts, for the purpose of developing the idea further and for gaining deeper understanding (Moritz, 2005, 212). I interviewed project manager Päivi Rajaorko, who works at Haaga-Helia with responsibilities on developing the online pedagogy and usage of digital solutions. The interview was conducted as an informal discussion, which was based on the design drivers, particularly the one of us wanting to digitize the application info session. The discussion was recorded and transcribed.

In the beginning of the interview, I introduced Rajaorko the project idea and goals, and explained the nature or the application info session. She suggested that video would be the best tool for digitizing the event. Webinar was also discussed as an option, but Rajaorko mentioned that videos would allow a more lively presentation, which might be more attractive to the students. She said, that at Haaga-Helia, there are self-service video making studios available, which we could use. She introduced different backgrounds the video could have, such as PowerPoint slides or another video, or still pictures. She suggested the video could be made so that one of the international coordinators would act on the video, or we could invite students to be the actors. The video could be shared on https://video.haaga-helia.fi/ platform, and the links could be embedded for example on our MyNet site.

I asked Rajaorko, what would solve the challenge of the absence of the possibility to ask questions, when watching a video. I think this is a disadvantage when using a video. She suggested the use of social media messaging services as one option. Another option would be an interactive questions and answers platform, such as padlet, embedded on our MyNet site. They don’t, however, match with the students’ wish of remaining anonymous.

We also discussed about another matter of the students’ wishing to receive reminders for the deadlines related to student exchange. Social media is supposedly the best option for this, according to Rajaorko. Currently, emails are in use, but they may not always work because the emails tend to get lost among so many other emails the students receive.

5.3.2 Outgoing student service blueprint

As noticed during the service provider analysis in the stage one, understanding, a detailed, customer-centric service description is lacking, when looking at the services offered for Haaga-Helia outgoing exchange students. The first step towards rational service design, is creating a model for visualising the service process, a blueprint (Shostack, 1982, 49). Service blueprint provides a visual map of service elements that is more accurate than verbal explanations, and less subject to misinterpretation. It allows a service to be diagnosed on trouble areas, and distributed to any number of sites and to new employers. (Shostack, 1982, 63.) Service blueprint documents both the visible, and the invisible components of a service. Revealing the service process complexity allows us to understand our service more detailed, which in turn can help us to make improvements. (Tomitsch et al., 2018, 112.) Hence, I created a new, customer-centric service blueprint for Haaga-Helia service for outgoing students (appendix 8).

Central feature of the service blueprint is the series of customer actions, the service touchpoints, during the service delivery process. Student's actions, such as attending the application info session, or filling in an application form, are listed in chronological order. Below, under the line of interaction, are the International Coordinator's corresponding frontstage actions, like delivering the application info session, or receiving the application form. Below them, under the line of visibility, are the employee actions conducted in back-office, for example preparing the application info session, or evaluating and checking the student's application form. The customers do not see these actions performed under the line of visibility, but they are needed for service delivery. The line of internal interaction separates the backstage actions from support processes. A support process is an action delivered by someone other than International Services, but essential for delivering the service. For example, in order to publish the online application form for students, the software service provider has to deliver an import file for systems integration of student portal and the back office interface. Finally, above customer actions the physical evidence is listed, for example the international office which student visits when returning the application form, or the class room or auditorium, where the application info session takes place. Physical evidence can also be a technology, such as the appearance and functionality of the online application form, or the website. (Appendix 8.)

Haaga-Helia International Coordinators have different roles, depending on the tasks they are performing. Different roles are marked with abbreviations in service blueprint. IC stands for International Coordinator, as all the coordinators who happen to be serving the customer. PC stands for two Process Coordinators, who are designated to be in charge of the outgoing students' service process as a whole. Coordinators, who are in charge of a certain cooperation university agreements within Haaga-Helia, are marked as HUC, Host University Coordinator. International Services is abbreviated as IS. (Appendix 8.)

The outgoing student service blueprint is very complex due to the complexity and the length of the outgoing service delivery process. I asked the process coordinators and the head of international services to check the blueprint I had created, and I made some amendments after I received some very useful comments from process coordinator Mirva Toivonen.

5.3.3 Outgoing student personas

Personas are profiles, or fictional characters representing a particular group of service users, for example customers (Tomitsch et al., 2018, 100). Personas are not stereotypes, but user archetypes, which help service designers make customer groups with similar needs more understandable (Stickdorn et al., 2018, 41). Creating personas is always based on research. Instead of grouping customers by demographics, it is more useful for service designers to use findings from relevant data, enabling a more individual and detailed understanding of a group of customers. (Moritz, 2005, 221.)

I wanted the International Services to dive in deeper in imagining what kind of customer groups most desperately need the new digital services. In the first understanding –stage of my service design process, I gathered a lot of information of our main customer group, Haaga-Helia outgoing students, using for example focus group discussions. It was impossible, however, to invite students to focus groups from such a distant place as e.g. Mexico, where we educate international business students. It was also not possible to invite students from other countries, where we are going to have study programmes in the future, because the students still do not exist. We can, however, try to understand our future customers' needs with the help of student personas. Therefore, I created three fictional personas, using the data from the outgoing students' feedback survey, the Haaga-Helia student statistics from recent years (2017), and the information where we either have, or are going to have students who study outside Finland (Edu Excellence Ltd., 2018). The names of the personas are Annie Aviator, Nicolás Negocio and Riina Reissaaja. The detailed persona sheets are presented in appendices 2 - 4.

The personas are representing examples of the most mobile and busy customer group of International Services, as well as Haaga-Helia students, who study abroad. The personas are studying in study fields representing both the fields with large number of students enrolled in general, and large number of mobilities taking place. The nationalities of the personas follow the most common ones in Haaga-Helia student statistics, and the locations where we have exported education. I gathered the personas' reasons for frustrations from the outgoing student feedback survey results from years 2015 – 2018. For example, persona Annie Aviator (appendix 2) gets frustrated about changes and uncertainty. According to the survey results the students gave a number of open comments related to the facts like the students did not receive enough support from their International Coordinator, or they complained about the changes occurring and about not knowing all matters before going abroad. Also Nicolás Negocio gets frustrated if he has to spend his time listening to matters he already knows. This feedback was also given on the open comments where the students said that the orientation did not give them anything new, and they already had read those matters on MyNet. However, many of the characteristics of the personas are also fictional. The fictional characteristics, such as hobbies, quotes and girlfriends, were invented for the purpose of increasing empathic way of relating by the employees, as well as to increase authenticity (Stickdorn et al., 2018, 41).

5.4 Stage 4: Filtering the best solutions in co-design workshop

In Moritz' (2005) service design process model, the fourth stage of filtering, is about evaluating the generated ideas and concepts, and selecting the best of them. The most relevant ideas or solutions are selected by experts or evaluated against particular criteria. When filtering ideas, for proceeding with the project, it is important to make decisions. That is why it is necessary to involve key decision makers in this stage. (Moritz, 2005, 136-137.)

Haaga-Helia International Services team meeting is the body authorized making decisions regarding student exchanges. In the monthly team meeting, the Head of International Relations together with all International Coordinators are present. They are experts capable of selecting the best ideas, since they all work in International Services. Most of them are also end users of the new digital solution, since they work in the front stage operations. One part of the International Services team meeting on the 4th of October 2018 was turned into a co-design workshop, with the intention to work with evaluating the ideas and selecting the best solutions. Tomitsch et al. (2018) state that co-design workshops allow the stakeholders to work together and rapidly review and iterate on designed concepts. Stakeholders have an active role, and the idea is to contribute hands-on to the design, rather than passively responding to project decisions. (Tomitsch et al., 2018, 40.)

5.4.1 Evaluating outgoing students service blueprint using personas

I took the role of a moderator, and I planned and prepared the co-design workshop beforehand. During the co-design workshop, at first we mainly looked into the design driver "Create a truly customer-centric service blueprint model of the outgoing services!" The idea was to iterate and evaluate the outgoing students customer-centric blueprint (appendix 8), at the same time keeping in mind the other design driver, that the students are our customers. I sent the blueprint to the participants beforehand, so that they could familiarize themselves with it already before the workshop. I divided the participants in three groups. The groups had to work with the blueprints, and identify the possible service gaps and fail points, and identify the actions which could be removed (without harming the quality of customer experience) for creating a simpler process and helping our customers in their return-on-time (ROT) efforts.

After working with the blueprints, we moved forward and I presented the outgoing student personas to the participants. I gave a different persona to each group. At first, I urged the participants to think how would their student persona feel about the customer journey. Then I asked them to imagine, what kind of path would the persona take on the customer journey, and to identify the points where we could offer a digital solution that could replace or enhance the service, with regard to this particular student persona on the chosen path. The groups documented their findings on the blueprint. After discussing, they presented their findings to the other groups.

The most important finding from the groups was realizing that we do not need any paper applications from the students. Both the student exchange application and the grant application can be handled digitally. This will remove two customer actions from the blueprint. The touchpoints will remain as digital touchpoints, but the students will no longer need to visit an office for returning the application. Furthermore, we are reducing the use of paper in Haaga-Helia, which is also an environmentally friendly solution. After checking for any legal questions, this paperless application round can be introduced in 2019 main application round. Furthermore, there was a lot of discussion of the paperless learning agreement, which was waited to be introduced by European Commission as part of their Erasmus+ funding instrument. We are hoping to implement the paperless Erasmus, as soon as all the parts are ready.

The groups identified several places on the blueprint, where videos would be useful. The videos could be used for sharing experiences and giving out facts about the application or the destinations. Groups also recognized the need for a step-by-step kind of instructions, which would work as a checklist for the outgoing students. The checklists could be published on MyNet.

Other insight from the groups was that we could extend the start of the outgoing process to as early as the first marketing efforts we make for the new students. The importance of the accuracy and amount of information in the exchange destination database also came up. Harmonizing the information and making sure there is enough information available for the students was regarded important, not only in the application stage but also after the student has already been selected to go to a certain destination.

Groups also recognized some possible service gaps. The availability of information is often dependable on the host university, not Haaga-Helia. Monitoring the accuracy and even making the information available may be difficult in these cases. Furthermore, a service gap in handling the students, who are conditionally selected, was noticed. Conditionally selected students are students, who do not quite meet the requirements for being selected, but are selected on the condition, that they'll meet the requirement before they leave for the exchange. Their actions should be more clearly marked on the blueprint. Students cancelling their exchange application online create yet another service gap. Currently the system does not give any notification on this, and there is a danger, that the cancellation remains unnoticed.

5.4.2 Using decision matrix to rate solutions for peer-to-peer learning

We continued working with solutions for the established design driver "give students opportunities to learn from other students". We used a method called decision matrix, which is an analytic way to evaluate your concepts or ideas against multiple criteria, but allows us to consider the criteria one at a time (Stickdorn et al., 2018, 185). The digital and other solutions available or suggested by the students during the focus groups, with regard to their need of networking and learning from peer students, were rated against criteria established based on attributes, which emerged from the understanding –stage of this design process, as well as from service research referred to in the literature review of this thesis (appendix 9).

The criteria was arranged on the matrix in order of priority, the most important criterion was put on first. We decided, that we would not use weightings on the criteria. We rated the solutions by giving each a value between -3 and +3, according to how successful it is in fulfilling the criterion in question. The rating process awakened a lively discussion among the participants, and there were many questions about the chosen solutions as well as the criteria. In this case, I believe the discussion that went on during the rating, was very useful. We decided to create some experience videos for the MyNet, and had a lengthy discussion on the possibility to introduce the students, who are enrolled on Intercultural Training courses, as creators of cultural videos, publishing them in Instagram under a certain hashtag. We also decided to keep the country specific groups in orientation and outgoing group in Facebook, as well as student exchange reports in MoveOn.

5.5 Stage 5: Explaining

Moritz (2005) asserts that the fifth stage of explaining aims at enabling understanding. In this stage the ideas and concepts created are sensualized, which can give the different stakeholders access to otherwise maybe abstract future concepts. Explaining –stage should also be seen as a platform for discussion for the team, enabling the what-if perspective. (Moritz, 2005, 140-141.)

After giving the outgoing student blueprint a digital dimension and rating the best solutions for the peer-to-peer learning in the co-design workshop, a clear set of ideas were emerging. We would need to strive for a paperless, digital set of application forms as soon as the Erasmus+ funding instrument will allow us. Furthermore, our customers can clearly benefit from a set of videos made both for the purpose of promotion, factual informing, and sharing students' experiences.

I decided to use storyboarding as the method to visualise the new digital customer journey. Storyboards are used to visually describe the interactions between customers and services (Tomitsch et al., 2018, 120). They are step-by-step illustrations of a service journey, which can help service designers to test how different touchpoints function and link to each other (Moritz, 2005, 230).

In figure 9, there is an example of a storyboard I created for describing the digital customer journey. Storyboard is not as detailed as the blueprint, but it makes the situations more alive. The digital blueprints, modified in co-creation workshops, give a more detailed approach to the new concept (appendix 8).

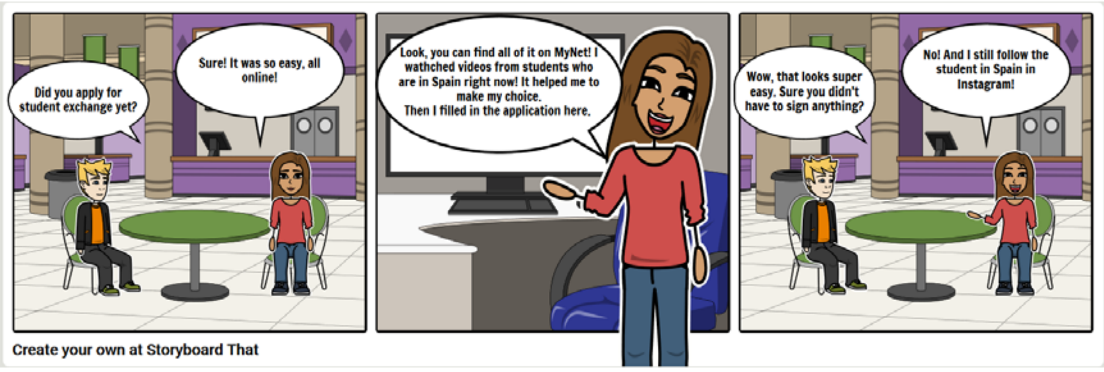

Figure 9. An example of story board work done

Storyboards could be used not only for visualizing the new customer journey, but also for planning the script for the videos created. In the sixth stage of realising, storyboards will be again used when actually planning for the contents of the videos.

5.6 Stage 6: Realising

Realising –stage is about making the service happen. Actual steps are taken for implementing the new solutions, establishing the details, making the final plans and checks and taking the service to the market. (Moritz, 2005, 144-145.)

The plan to implement the new digital solutions as part of our services is rather clear. We need to pursue a paperless application process as whole, and create videos for the purpose of promotion, sharing experiences and facts. The main objective of our videos is to give alternative, digital service to our customers, who are unable to participate in face-to-face services. The video-making working pair has been selected, and the budget in use is established. The working pair is going to produce one or maximum two videos per semester, since they have other, major areas of responsibility within their job engagement. The videos are going to be recorded in Haaga-Helia self-service video making studios, and shared on Haaga-Helia's video sharing platform, from which the links will be embedded on our MyNet site.

The realising –stage will continue over the scope of the time-frame of this thesis. The implementation will be done according to the plan created, and using the storyboarding method to plan the content of the videos.

6 Discussion

The objective of this thesis was to create a concept for new, digital service solutions for Haaga-Helia's International Services team, for the purpose of serving the students who are going abroad on student exchange for one or two semesters. These so called outgoing students are often, for various reasons, unable to use the face-to-face services currently offered. We needed to ensure the service for all students, regardless of the fact whether they are on campus or not. The current face-to-face services I looked into in this thesis were the following three events we offer for the outgoing students as support for their preparations before they go abroad:

- Application info session
- Orientation afternoon
- Learning agreement workshop (LA workshop)

The managerial suggestions for International Services, concluded from the research I conducted by using the method of service design, are two-fold:

1. International Services should embrace digitization in its operations
2. International Services should strive for paperless services and produce a set of videos to both replace and enhance the services already existing.

Embracing digitization can start immediately. The paperless application process will be introduced in 2019 main application round, when both the application form and grant application will be returned digitally. Furthermore, the paperless learning agreement will be implemented according to the paperless Erasmus project by European Commission, as soon as all the parts are ready.

The set of videos could be made according to the following plan:

- customer testimonial videos (for replacing application info, as well as for general promotion)
- "how-to" training videos
    - How to search for exchange destinations? (for replacing application info)
    - How to fill in the application form? (for replacing application info)
    - How to choose courses for my learning agreement? (for enhancing students' preparation for LA workshop)
- FAQ-videos where International Coordinator answers to customer's question (for enhancing orientation afternoon)
- students making videos about their cultural experiences and sharing them on Instagram (for enhancing orientation afternoon)

For the purpose of presenting the managerial suggestions, the research behind the decisions and the plan for the set of videos for the commissioning company, a design brief was created (Appendix 10).

These managerial suggestions can be made based on various aspects emerging from the research. When I started my thesis, my main research question was: How to serve students going abroad, when they are not on campus? The two follow-up questions raising from the main research question were: Which current face-to-face services should be digitized? How should the digitization be done?

The answer to the main question of "How to serve students going abroad, when they are not on campus?" is by providing them online service, and embracing digitization in Haaga-Helia International Services. This should not be any challenge for students, given the fact that according to Statistics Finland (2017), in age group 16 – 34, in which most of Haaga-Helia students also belong to, the interned usage is as much as 100 per cent.

The literature review in the beginning of this thesis was already leading towards the above mentioned conclusions, underlining the fact that digital revolution is changing the service industry (Reason, Løvlie & Flu, 2016, 4). The reasons why organizations are aiming for growing use of digital services, lie within customers' needs. Service companies are increasingly interested in their customers' well-being, and developing service systems towards the common good of humanity seems to be the goal for many organizations. (Andreassen et al., 2016, 26, Patrício, Gustafsson & Fisk, 2018, 12.) While people generally prefer convenient products and services (Berry, Seiders & Grewal, 2002, 3), companies are trying to help their customers to reduce the time and effort they have to use in buying and using the services, increasing their return-on-time, ROT, and consequently, their personal well-being (Andreassen et al., 2016, 26). Personal values are leading people to shop online (Koo, Kim & Lee, 2008), since when their desire for convenience has increased, they are allocating less time for shopping and more for other types of pastime, has online shopping become an attractive alternative (Jiang, Yang & Jun, 2013, 192).

Paperless application process, together with producing a set of videos that either replace or enhance the existing face-to-face services, are the answers to the research question of "How should the digitization be done?". How did I come to this conclusion, as well as the answer to the research question of "Which current face-to-face services should be digitized?", will be discussed in following.

From the affinity diagram (appendix 5) analysis of the focus group workshops, it could be concluded that the students' opinion is that application info is the face-to-face event, which can be fully digitized. This can be done by creating a set of how-to training videos, guiding the students through the application process. The videos could answer to questions like:

“How to search for exchange destinations?” or “How to fill in the application form?” In students’ opinion the orientation afternoon and LA workhops can, however, be only partly digitized.

Orientation afternoon could only be partly digitized, because of the fact that students value networking and learning from their peers, which is currently offered in the country specific groups during the orientation. Additionally, the analysis of outgoing student user surveys indicates that the students are in fact very happy with the face-to-face orientation events. In years 2015 – 2018 the average score of satisfaction with orientation event was 4,31 on a 1 to 5 scale in the outgoing student exchange survey (table 2), and 95 per cent of students thought the events are useful, and 58 per cent rated that they are satisfied or very satisfied with the events (Pelkonen, 2017). However, according to the affinity diagram (appendix 5) analysis of the focus group workshops, students feel that the general parts of the orientation can be digitized by creating some videos, which would answer to the most frequently asked questions from students. For this purpose, a set of FAQ-videos, with the format that the international coordinator answers the student’s questions on video, could be embedded on MyNet. The need for partial digitization is also supported by the fact that currently rather many students are unable to participate in the orientation afternoon, and therefore left without the service.

Learning Agreement workshops as current face-to-face events are very important to students. According to the outgoing student exchange survey (table 2) the average score of satisfaction with LA workshops was 4,15 on a 1 to 5 scale. In focus group workshops, students discussed how they needed more help with the course selections, and it came up also in the open comments of the outgoing student exchange survey (4 comments). In focus group workshops the students also discussed that the nature of questions is often very individual in nature, relating to the fact that students and their needs are different, students’ study programme and its requirements are different, and host universities and their course offerings are different. Hence, a full digitization is not possible. However, a how-to training video could be introduced, answering to the question “How to choose courses for my learning agreement?”. The students could watch this video before coming to the face-to-face LA workshop.

Video was chosen as the tool for enhancing the digitization for various reasons. According to Cisco’s Visual Network Index Forecast (2017), in 2021 video will represent 82 per cent of all internet traffic, and is expected growing. People are more likely to watch a short video than to read plain text on a website, videos can be searched on internet and are easy to consume on smartphones’ small screens (Luke, 2013, 18.) Video was chosen the most preferred tool by the students in focus group workshops. Video was also suggested by Project Manager Rajaorko during the idea interview, and she also pointed out that videos can easily be made in Haaga-Helia's self-service video studios and shared via our video platform. Furthermore, video was discussed as the tool in co-design workshops together with international coordinators, who identified the places on outgoing students service blueprint, where video could be introduced for enhancing or replacing our service.

Implementing paperless application process was the evident insight from the co-design workshops. Once the outgoing student service blueprint was studied and iterated by the front line employees, the overwhelming number of service touchpoints became visible. Thinking about the student personas, who could not visit an office in person, helped us in understanding that some of the touchpoints were not necessary, and that removing them would make the process simpler, but it would not affect negatively to the service quality.

By creating the set of videos and striving for paperless service, International Services can influence positively in customers' perception of the digital service convenience. Jiang, Yang & Jun (2013) identified five dimensions of online shopping convenience. Informative how-to videos can be helpful for the customers' perception of search convenience, advising about filling in the application form and searching for the exchange destinations. The student testimonials and experience videos on the other hand can help our customers in their perception of evaluation convenience, making it perhaps easier for them to choose, which destinations they should apply for. Pursuing paperless service and starting the paperless application round can help our customers in their perception of transaction convenience. Transaction convenience usually refers to the check-out process in online shopping, but in our case it can be understood as the process for returning the applications. Once they can be returned digitally, this might increase the customers return-on-time (ROT) and perception of transaction convenience.

I think this thesis is important for the commissioning company, because it supports two of Haaga-Helia's strategic goals. The goal of growing internationally together with partners, and the goal of using digital solutions in services and operations (Haaga-Helia, 2016a). By creating more modern and convenient services for the outgoing students, we can contribute to Haaga-Helia's current status as being the university of applied sciences, which sends out most students for long-term student exchanges in Finland, as the situation was in 2017 (Vipunen, 2018). This may influence positively in Haaga-Helia's public image and brand.

Consequently, by promoting internationalisation and student exchanges, and making the opportunities available for all students, we are implementing the internationalization policies of Finnish Ministry of Education and Culture, which outlines that as a phenomenon, student exchange and European mobility concretizes European integration (Ministry of Education and Culture, 2017, Ministry of Education and Culture, 2018). Making internationalisation opportunities more easily available for all students strengthens equality in the educational institutions, such as Haaga-Helia. Supporting student mobility gives the students opportunities to grow both professionally and personally. I believe the more people spend time abroad and get to know new cultures, the more will tolerance and acceptance of difference increase in the world.

6.1 Trustworthiness of the research

The definitions of reliability and validity are based on the idea, that the researcher has access to the objective reality and truth. The terms reliability and validity are usually used when talking about measuring things. Using them in qualitative context has some constraints. Understanding reliability as receiving the same result in two separate research times, can be accepted, if we at the same time understand, that the results may depend on the context and be different according to the time and place. (Hirsjärvi, Hurme, 2015, 185 - 190.)

In qualitative context, we can get close to the concept of reliability in the areas that relate to the quality of the research material. For example, transcribing the interview as soon as possible after the interview took place, makes the interview quality better. (Hirsjärvi, Hurme, 2015, 189.) In my research, this was especially important, since I functioned both as the interviewer and the transcriber. In order to make the quality better, I transcribed all the discussions during the same day than the interview, focus group workshop or co-creation workshop took place.

The idea interview of Project Manager Rajaorko was recorded and then transcribed. During the focus group workshops, I made sure that the documentation took place at all times, and the results were photographed at the end and further transcribed for the final analysis to be made with the tool of affinity diagramming. Affinity diagramming was a very helpful method to arrange a vast amount of data under different themes or clusters, from which I could identify the potential solutions. Using this kind of methods I tried to make sure that all available information was taken into account, and transcribing the data was made correctly.

I paid attention to the method of how I chose the persons who were involved in my interviews and workshops. The students who participated in the focus group workshops were chosen randomly from the group of students, who were already selected to student exchange. They had to be selected from this group, because it was essential to my project that they knew the services what we are digitizing. The number of students was adequate, 26 students, both Finnish and foreign, representing four different campuses and six different study programmes. International coordinators and the Head of International Relations was an obvious choice for the co-creation workshops, since I needed the International Services body who is legitimate in making decisions, as well as working as front line employees and thus experts of the service. Technical legitimacy was brought by Project Manager Rajaorko in the idea interview, ensuring that the insights from earlier research were correct ones.

Triangulation is a way to evaluate the research's reliability. It refers to using multiple research strategies. The researcher could conduct his/her research by using multiple methods, multiple researchers, multiple materials, or multiple theories. (Hirsjärvi, Hurme, 2015, 39.) In my research, there was only one researcher, but I used multiple theories, presented in chapters 2, 3 and 4, to support my research. I also used multiple research materials, since I analysed both existing data from the service provider's surveys and new data acquired during my own research in interviews and workshops. Using service design as my method was requiring me to use multiple kinds of methods. All of them may not have been the most traditional ones, but very suitable for this kind of applied research.

Validity relates to the question, whether the research has focused on the matter it was intended to focus. Has the researcher researched the phenomenon s/he intended to research? The answer is, naturally, a question of interpretation. (Hirsjärvi, Hurme, 2015, 187.) As described in the chapter nine, discussion, I have found the answers to my research questions, which supports the validity of my research. Moreover, there is a certain general requirement, which supports the research validity, and it is the requirement of the persons involved to be interviewed in their natural surroundings (Hirsjärvi, Hurme, 2015, 187). I conducted my focus group workshops with students, my idea interview with Project Manager Rajaorko, and my co-design workshops with my colleagues in a natural surrounding for the interviewees, in the premises of Haaga-Helia. Those premises are either the work place or the study place for the interviewees, and for that reason very familiar to them.

Furthermore, the atmosphere during the discussions both in the interview and the workshops was very relaxed, and I have no reason to doubt that the participants would not have spoken the truth in the situations. However, I noticed in the first focus group workshop, that one of the students had very strong opinions. Keeping in mind that focus group results may be biased because of social desirability bias or group think (Stickdorn et al., 2018, 123), I eliminated the possibility for bias in this case by letting go of my initial requirement of reaching consensus in the results. Instead I made sure to include all the opinions and justifications in the affinity notes, and to be analysed. This way I made sure that everyone's voice was heard.

6.2 Evaluation of the thesis process and my own learning

I chose to use service design as the method in my thesis, and decided to follow Moritz' (2005) model. Service design as an approach is rather similar to constructive research, trying to solve a real life problem by using researched data (Ojasalo, Moilanen & Ritalahti, 2015, 65.) In this regard, it is very suitable for my thesis, since my objective was to solve the digitization problem of the outgoing services for Haaga-Helia's International Services team. Service design was an appropriate choice for my thesis also because of its feature being a human-centred approach, involving customers in the design process, and us in International Services we try to co-design our services together with our students, focusing on their needs. Hence, I believe service design was a good choice for an approach.

Service design was one of the things I learned about most during the thesis project. The iterative nature of the approach encouraged me, if not even required me to use various tools in the different stages of the process. I noticed how each stage took the research forward, how from the data gathered in the beginning, the design drivers emerged and guided me along the way to the next stages of the design process. I spent most time in the first stage of understanding. I realized that if I did not gather as much information as possible about the customers, the service provider and context, it would bias all the rest of the research. So I focused on this part very carefully.

I started the thesis process by writing the literature review. It was a good way to start, even though I was already eager, and time pressured to start the focus group workshops, before the semester ended and my customers disappeared. Due to the time constraints, I ended up having the focus groups and writing the literature review at the same time. In autumn 2018 I was on study leave from work for two months. That was great for my writing, which advanced a lot during that time and at the end of the leave I thought the literature review was ready. However, I had to come back to it later. After I had established from the data from my workshops and idea interview, that video was the tool I was going to use, I added a chapter about using videos for enhancing marketing and customer service.

Time management during the thesis process worked almost as planned. I planned to have the thesis ready three weeks before I actually did. All in all, thesis writing has been very educational and fruitful process for me.

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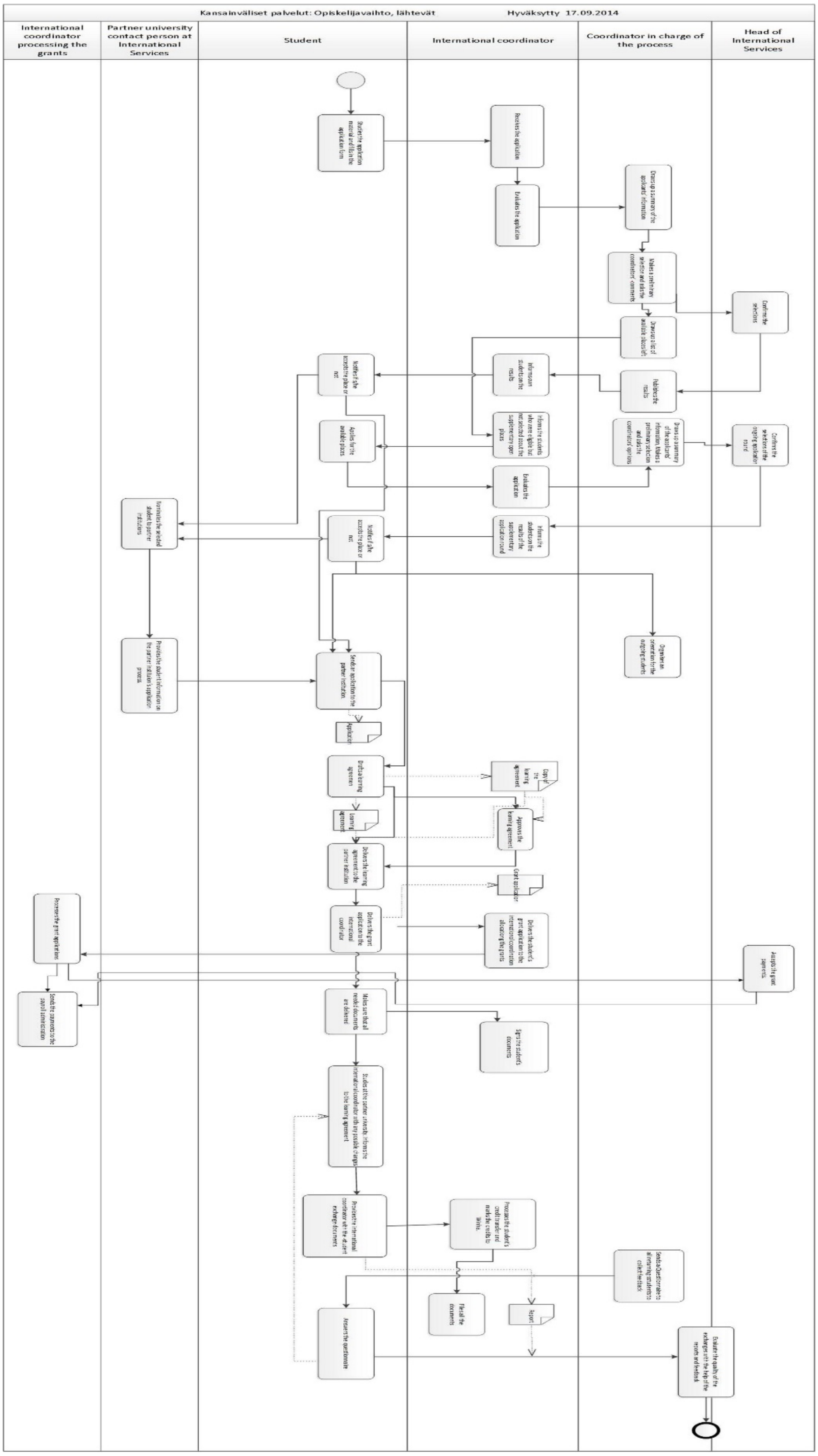
Appendices

Appendix 1. Haaga-Helia outgoing student exchange process chart



Appendix 2. Persona Annie Aviator

Annie Aviator

Age: 20

Nationality: Chinese

From: Chongqing, China

Occupation: Haaga-Helia student, studies Aviation Business in Chongqing University of Science and Technology

Hobbies:

- reading
- hanging out with friends
- singing, likes to sing Karaoke

Description:

Annie likes to read and spend time with her friends, either having coffee at home or shopping in town. She started studying aviation directly after high school. Annie loves singing Karaoke. She believes that internationalization is important. She thinks that in student exchange in UK, she can learn to speak English more fluently and make new friends, and she looks forward to learn about new cultures.

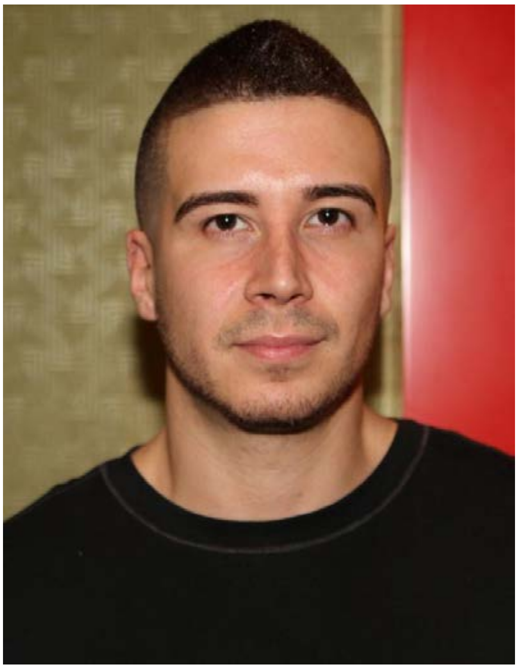
The reason why she chose to study aviation in an international programme with Haaga-Helia, was the good reputation of Finnish education system. She takes studying quite seriously, and likes to plan everything ahead. Annie is good in organizing things. She gets frustrated if there is a lot of uncertainty and changes in studies or life in general.

Quote:

"Keep calm and carry on"

Appendix 3. Persona Nicolás Mateo Negocio López

Nicolás Negocio



Age: 22

Nationality: Mexican

From: Queretaro México

Occupation: Haaga-Helia student, studies international Business University of Mondragón in México

Hobbies:

- playing soccer
- spending time with girlfriend
- cooking for friends and family
- working part-time

Description:

Nicolás is an ambitious guy, but he also knows how to relax. He enjoys cooking for his friends and family, and also just stay at home with his girlfriend. His girlfriend, María, is also a student. Nicolás likes playing soccer, and winning the games!

Nicolás has a part-time job at the department store's sports section. He sees student exchange in Germany as a gateway for his career plans, through networking and learning more about business. His plan is to become an entrepreneur, he wants to establish a sports clothing and equipment shop, and he wants to import German brands to his store. He gets frustrated when obstacles for reaching his goals come up. He wants to use his time effectively, and gets frustrated if he has to spend time listening on matters he already knows or could find out faster himself.

Quote:

"Keep your eyes on the prize"

Appendix 4. Persona Riina Reissaaja

Riina Reissaaja

Age: 23

Nationality: Finnish

From: Espoo

Occupation: Haaga-Helia student, studies in the Degree Programme of Hotel and Restaurant Management (in Finnish)

Hobbies:

- travelling, hiking and trekking in the nature
- hanging out with her friends, partying
- active in the student union
- working part-time with two jobs

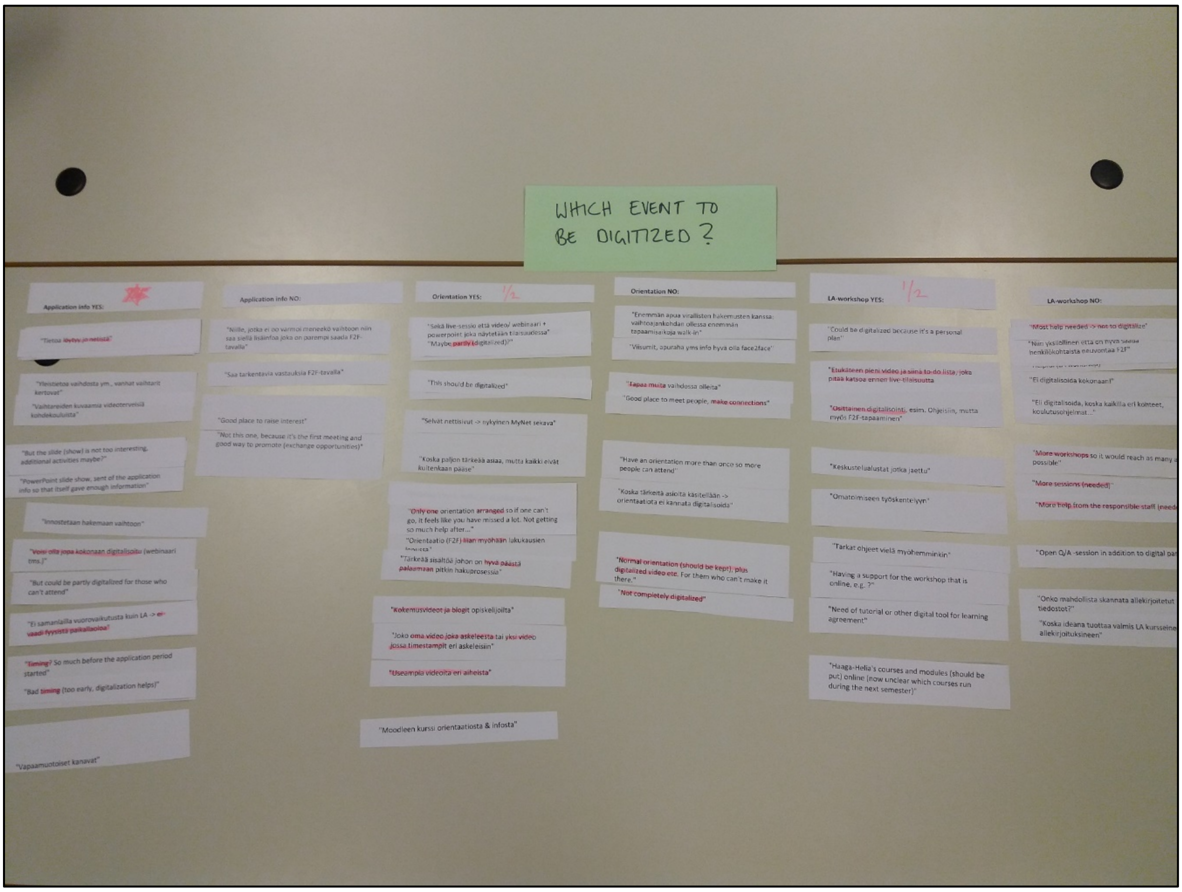
Description:

Riina loves to travel and meet new people. She takes long hiking tours in the Alps, Lapland, Nepal, you name it. She enjoys both the exercise and the peacefulness of the nature. Riina never misses a student party, in fact she arranges them, because it's fun! She likes to dance in clubs until the sunrise! She has two jobs aside studying, one in a pub and one in a hotel reception. She doesn't know yet, what she wants to be as a grown up. She wants to travel the world, and student exchange in Korea is another step to take on that journey. She gets frustrated when there is not enough time for her to do everything she wants.

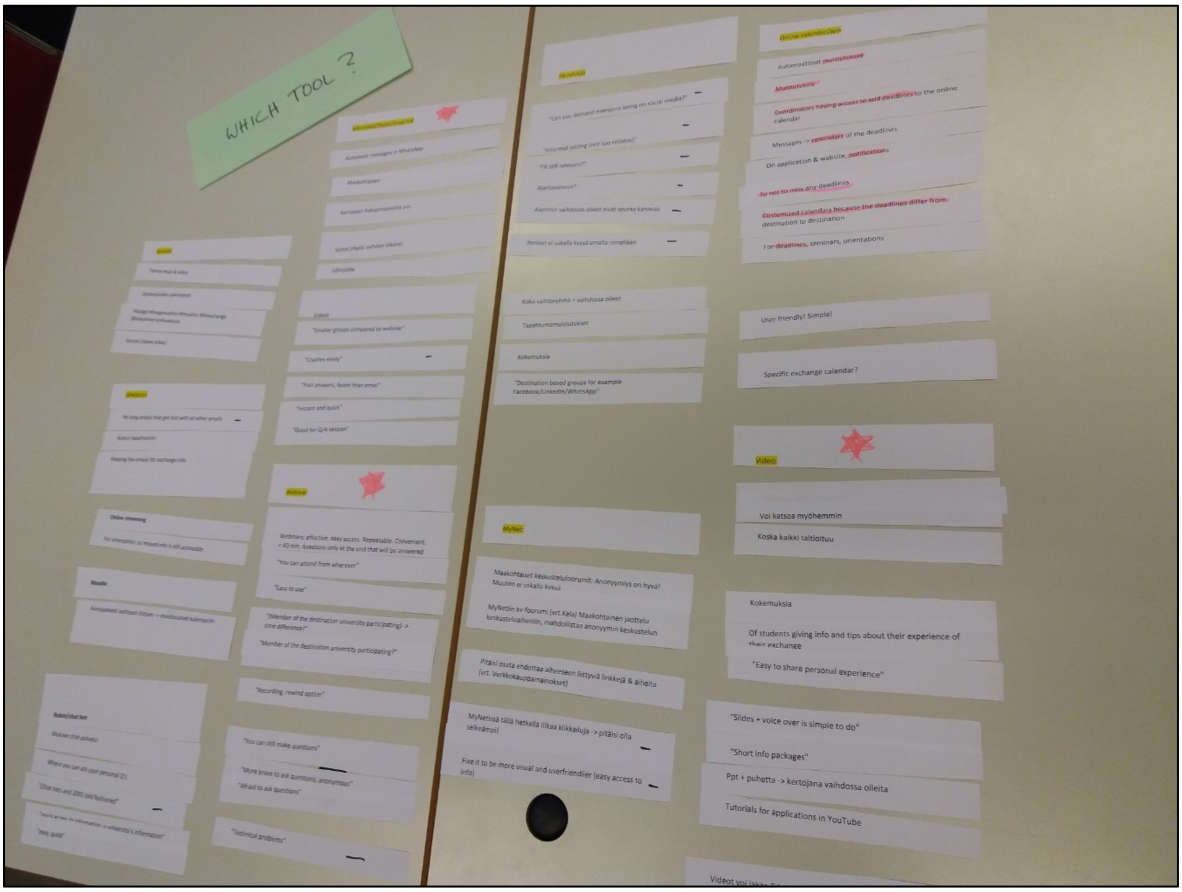
Quote:

"Be yourself. Everyone else is already taken."

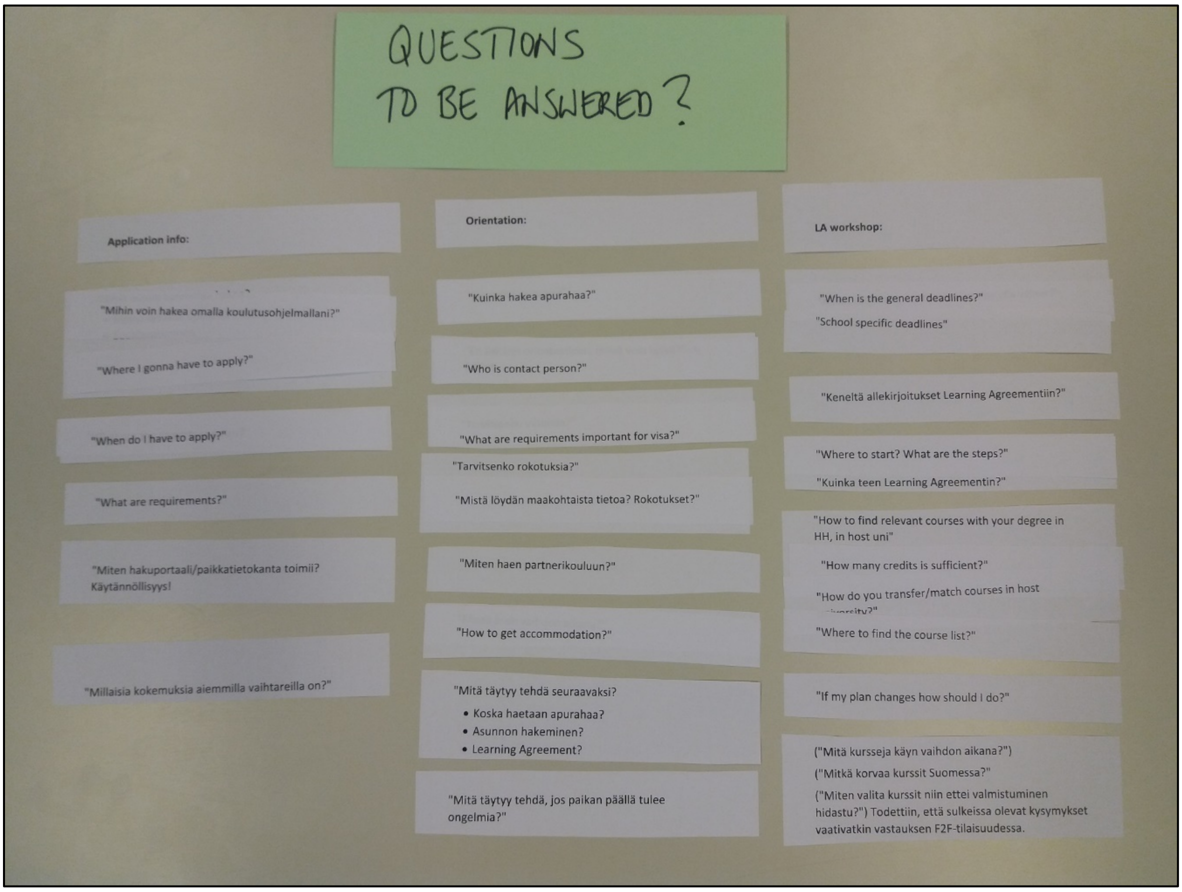
Appendix 5. Affinity diagram “Which one of the events is most important to digitize and why?”



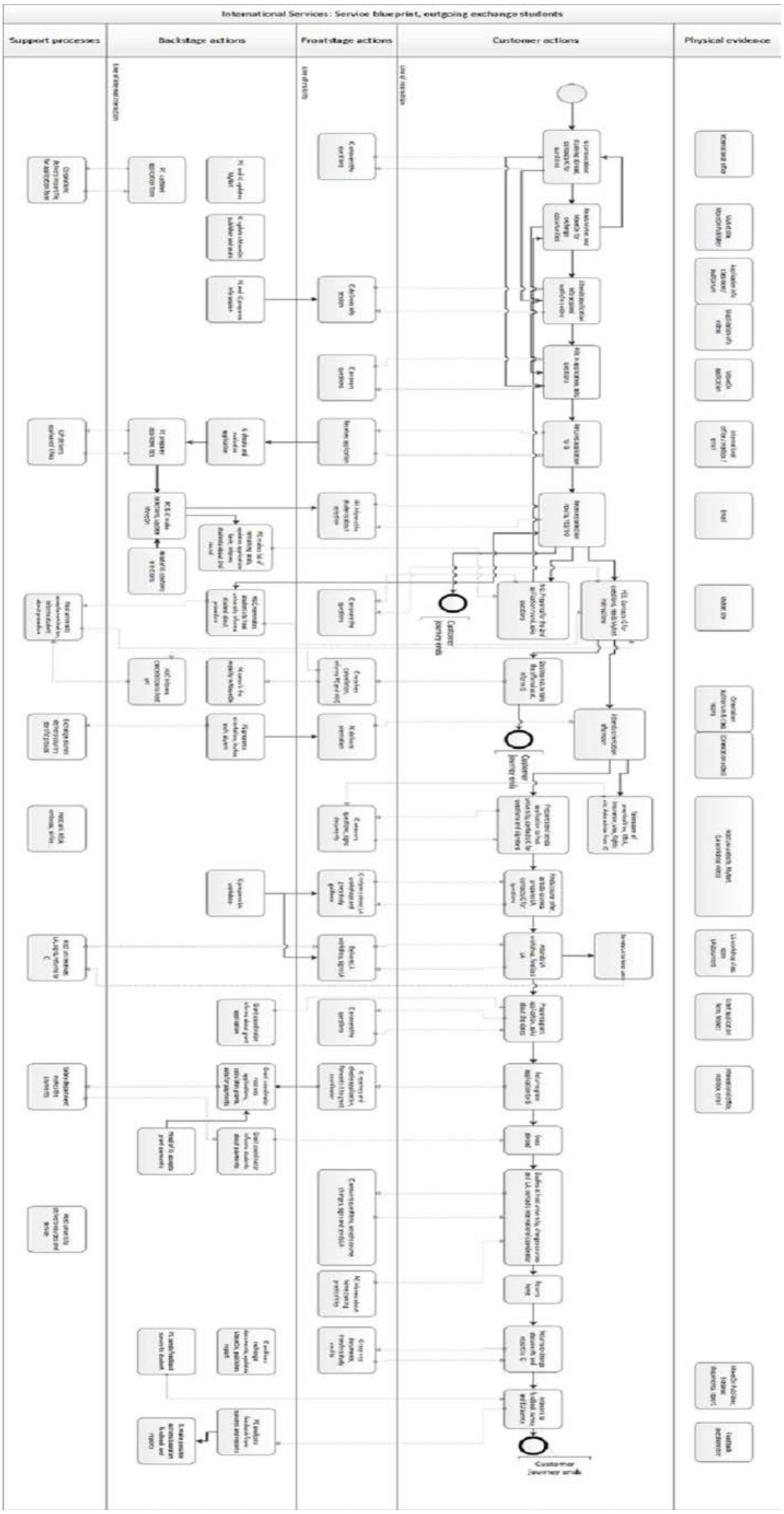
Appendix 6. Affinity diagram "Choose the best tool. Why this tool is most helpful to you?"



Appendix 7. Affinity diagram “Name 3-5 key questions the new digital solution has to answer.”



Appendix 8. Outgoing students customer-centric service blueprint



Appendix 9. Decision matrix "How to give the students opportunities for learning from other students

Criteria	Country specific groups in orien-tation	Ex-change reports in MoveOn	Face Book group for out-going students	Experi-ence videos in MyNet	Exp. vid-eos & photos in Insta-gram	Exp. vid-eos & photos in Whats App / Snap Chat
Appeals to customer, hip & trendy						
Easy for customer to use for searching information (before)						
Easy for customer to share own experiences (during/after)						
Encourages peer-to-peer dis-cussion						
Reaches all customers						
Saves customer's time						
Easily available for customers, saves customer's effort						
University-specific information easily found						
Easy for IC to establish						
Easy for IC to deliver						
Total						

Appendix 10. Design brief