NORTH KARELIA UNIVERSITY OF APPLIED SCIENCES
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DEVELOPMENT OF SERVICE QUALITY RATING THROUGH DESIGN THINKING AND INNOVATION METRICS

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Development of Service Quality Rating Through Design Thinking and Innovation Metrics

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The topic of the present research was the development of a rating template that would serve as a quantitative tool by evaluating the depth of user-oriented thinking within organizations operating as service providers. Services are an intangible part of the economy and have a rising share of the global Gross Domestic Product. Services offer value to products, corporations and consumers but are complex entities due to their multidisciplinary approach. As a field, service design has become a new trending skill which ensures a user-centered approach and an increase in productivity of the service itself.

The project was carried out in accordance to the needs of a service design agency (SEROI) established by the author. The need was directed towards the manifestation of a competitive tool to use for various design cases in the future. The implementation of the thesis demanded an in-depth understanding of service design followed by a problem definition relevant to the measurability of user-oriented service quality. Due to the innovative nature of the service design framework, innovation metrics was used as a point of reference in solving the problem,.

The outcome of the project was a rating system that was tested through a real service design case for a virtual bartering platform. After testing, the final draft of the tool, abbreviated as the User-Centered Service Quality (USEQ) -rating, was delivered to SEROI. For confidential reasons, some of the appendices have not been published.

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Tekijä
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Nimeke
Development of Service Quality Rating Through Design Thinking and Innovation Metrics

Toimeksiantaja
SEROI

Opinnäytetyön aiheena oli kehittää luokituspohja, jonka avulla voi arvioida kvantitatiivisesti käyttäjälähtöistä palvelusuunnittelua palvelutuotanto-organisaatioissa. Palvelut ovat aineetonta hyödykettä, joiden osa bruttokansantuotteesta on kasvussa. Palvelut tuovat tuotteille, yrityksille ja kuluttajille lisäarvoa, mutta niiden erilaiset lähestymistavat tekevät niistä monimutkaisia kokonaisuuksia. Palvelumuotoilusta on tullut suosittu ala, joka takaa käyttäjälähtöisen lähestymistavan ja palvelun produktiivisen kasvun.

Työ suunniteltiin ja toteutetiin palvelumuotoiluyritys SEROI:n tarpeiden mukaan. Tavoitteena oli luoda kilpailukykyinen työkalu, jota hyödynnettäisiin tulevaisuuden muotoilutilanteissa. Opinnäytetyön toteutus vaati ymmärrystä palvelumuotoilusta ja siihen liittyvästä ongelmanmäärittelystä, jolla taas on oleellinen osa käyttäjälähtöisen muotoilun laadun arvioinnissa. Ongelmia selvitettiin innovaation mittausmenetelmiä hyödyntämällä, koska palvelumuotoilulla on innovatiivinen luonne.

Opinnäytetyön tuloksena syntyi luokitusjärjestelmä, jota testattiin oikeassa palvelumuotoilutilanteessa virtuaalisessa vaihtokauppaohjelmassa. Kokeilun jälkeen työvälineen lopullinen vedos nimeltään USEQ–luokittelu (User-Centered Service Quality) toimitettiin SEROI:lle. Joitakin liitteitä ei ole voitu julkistaa luottamuksellisista syistä.

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CONTENTS

1 INTRODUCTION

The shift from a product-based economy to a service revolution has already begun. Organizations, companies and unions of many kinds are now offering solutions to their customers instead of products, and products are turning into physical manifestations that serve only as platforms for service provision. 306,000 companies, 1,343,000 people and 68% of Finland's Gross Domestic Product (GDP) provide a clear picture of what the service industry in Finland is, numerically speaking (Statistics Finland 2009). It is obvious that the service industry is huge in just about any country; it comprises 63% of the global GDP (Central Intelligence Agency 2012).

As the market share of services and solutions continues its rapid increase, it is safe to assume that while companies try to keep up with the demands of their markets, bad decisions are being made. The hastiness of company executives in decision making and the focus of firms on the wrong aspects of their services have resulted in the vast availability of badly-designed solutions. Research by the University of Westminster has shown that a substantial number of companies do not even conduct proper research prior to developing new services (Moritz 2005, 85-86). Remarks about service delivery in both the private and public sectors are made on a daily basis; the commonness of complaints has made service providers unable to understand the true severity of the problems being faced. Fortunately, due to the rising popularity of service design thinking – to be analyzed within the following chapters – we are experiencing a revolution where better services are offered and developed.

Designing and creating services in principle is not something new, as services are a detachable part of the economy. Service design as a professional field is an approach that appeared in the 1980's, aiming for the improvement of existing services or the development of new and better ones. The first mention of the field was made in 1984 by G. Lynn Shostack in the Harvard Business Review, in her paper titled "Designing services that deliver". (Moritz 2005, 66.)

Within the past approximately 20 years much has happened in the field of service design, ranging from the establishment of service design education in Germany to the initiation of the Service Design Network (SDN) (Moritz 2005, 66-67). Despite the immense efforts being made, the field is still on the lookout for more awareness, and there are still many internal issues to be dealt with. Tools and methods using principles of various disciplines are constantly being developed; these areas include business, design, and engineering, to name a few.

This thesis paper implements tools and methods from the field of innovation (specifically innovation metrics) as there is still a need for new approaches to be ensued and more awareness to be raised within the field of service design. The service design process is also an innovative process, so it is only natural to combine the two disciplines to create something that would become a substantial offer to the field. After thorough research on the history and methodology behind service design, it was obvious that the measurability of service quality has become the starting point of strong dispute. By combining design thinking and innovation metrics, the dissertation process aspired to offer a solution by conducting a rating system.

Simultaneously, the establishment of a service design agency (SEROI Ltd.) has been a working process in the background. SEROI is due to begin its operations in July 2012 and it is about to offer solutions to service providers aiming to improve existing services or create new and better ones. As it is essential to have a working model of the cooperation between an agency and its clients, the solution offered by measuring service quality will become a working tool in order to ensure a common understanding of the needs of the clients by using concrete measurable units. It is worth mentioning that this thesis will not serve as an advertisement of the agency itself. A short reference is available, however, on how the tool will become something of concrete value to the firm in question.

An in-depth theoretical understanding of the field of service design was necessary in order to observe the strong and weak points of the discipline and eventually to obtain results. After concluding that service quality is still perceived as an abstract entity, it was apparent that concretizing it in order to make it more understandable and reachable, was the real problem at hand. By once again referring to the theory to analyze the existing tools in service design, various assumptions were made in regards to the measurability and ratability of service quality by using innovation metrics as a guideline. Metrics has been used as a principle due to the fact that without measurability it is extremely challenging to manage something as abstract as quality.

The rating system, hereby referred to as the User-Centered Service Quality (USEQ) rating, aims exclusively at how a service places the user in its considerations for service provision. Quality as a term on its own is extremely vague and abstract, and it is impossible with only one rating system to measure all the aspects of quality within a service. Quality can mean the customer satisfaction quality, quality of planning, delivery or even quality of hygiene within a physical space, amongst many other forms. The dissertation process involved a deeper understanding of how the final user should be perceived within a service environment, after which the rating principle was born by applying innovative thinking. Initially, various assumptions were made in regards to how the rating system in particular would work. The process was finalized by verifying the assumptions made.

Assumptions were verified through a pilot case under the name “Local Communities”, after which conclusions were drawn to finalize the numerical rating system of service quality from the perspective of user interaction. The tool that was finally developed, initially named as USEQ (User-centered Service Quality), was to become a useful tool for SEROI Ltd. In order to increase the usability value of the tool, USEQ certification became the last step towards converting the tool into something with concrete business value.

2 THESIS FRAMEWORK

2.1 The relevance of services in industrial design

When industrial design is mentioned, there is immediately a connection to the design process of products, i.e. physical objects with a specific form and function. As industries evolve, though, globally the role of an industrial designer becomes correlated with the act of designing services as well. The Industrial Design Society of America (2010) defines the line as "…a professional service of creating and developing concepts and specifications that optimize the function, value and appearance of products and systems for the mutual benefit of both user and manufacturer." The responsibility that comes with designing products no longer exclusively involves the form, function, material(s) and production but also deals with the interaction of people and technology as a whole, whereas products serve as experience platforms (Stickdorn & Schneider 2011, 56). Services have slowly become an inseparable part of products, and the various experiences and emotions derived by users is all a part of service design.

As the field itself is defined as a service, and as the needs of people extend beyond the physical because of socioeconomic alternations, it becomes clear how essential, eventually, it is for an industrial designer to have knowledge of the cycle of service design. Nowadays, we live in an era where product-service hybrids are a part of everyday consumerism, where products become part of a service proposition. A business culture is constantly being developed around service development, pricing and maintenance through products in order to increase profitability and customer relations. (Stickdorn & Schneider 2011, 56-57, 62.) Industrial designers constantly need to remain up to date; therefore, the correlation of the two fields is more than obvious.

Finally, the application of design thinking in services ensures a successful provision. Design, as a discipline, is known about its orientation towards

converting any problem into a concrete solution. Having an orientation towards actualizing all the necessary elements for the service environment demands design thinking, and that is where the creation of the field of service design is rooted.

2.2 Disciplines applied for the framework

The thesis work operates within the cross-section of three fields and/or disciplines, which make up for the framework under which the results belong. The primary field, being service design, offered essential knowledge needed for the realization of the scope of the thesis through its methodology and tools. For the exploration of new opportunities within the field, innovation as a form of conduct has provided a greater scope on how designing services is truly innovative and what we can get out of it.

As elaborated in Section 5.3 the frameworks of, both, innovation and service design have similar tasks. Due to the similarity of the frameworks and the tasks involved, referring to innovation is evident. It was innovation metrics in particular that provided the foundations needed for the resolvability of the problem that was defined (see Section 4.2). Finally, as the result will be used by SEROI Ltd., certification principles have been used as a quintessential reference in order to transform the results into concrete business value.

Figure 1 displays a visual representation of the framework. As seen, service design is indeed the field that strongly is being depicted within the thesis, and the application of the rest of the principles comes naturally due to the multidisciplinary nature of the primary field itself. Services operate within complicated environments; therefore, the combination of bailiwicks only comes naturally.

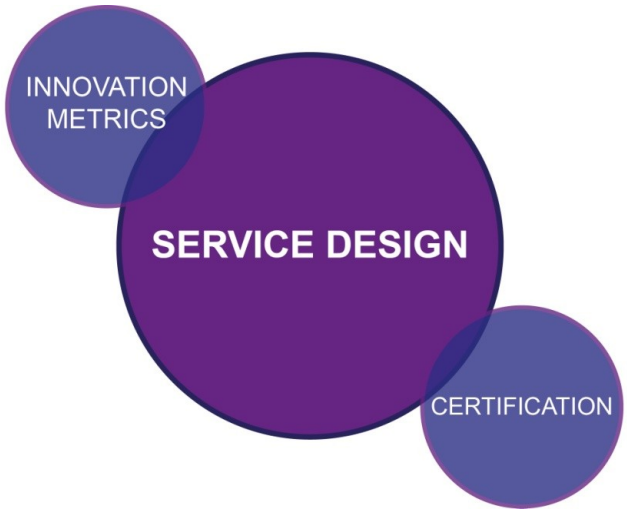

Figure 1. Thesis framework.

2.3 Process timeline

Figure 2 depicts in a visual manner the process model on how the thesis work chronologically advanced in order to reach to the final step of publishing the USEQ certificate and presenting the results in public. The work behind this timeline proceeded in accordance to the scheduling made for the establishment of SEROI, which started off in November 2011. By December, a specific plan was conducted. The beginning of the process itself in January 2012 was based on this plan.

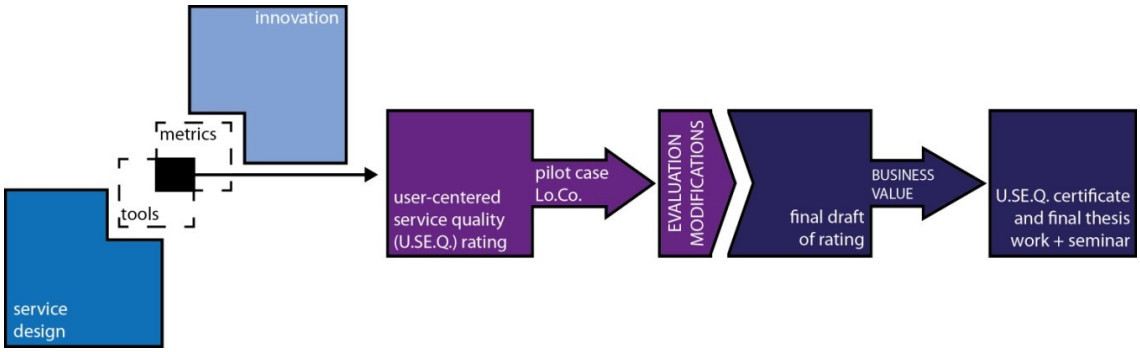

Figure 2. Process model.

At the very beginning of the agenda, it was essential to gain a clear and thorough understanding about service design and innovation after which

specifics derived from both branches of knowledge. The tools on one side and the metrics on the other resulted in the development of USEQ, which was finalized after verifying it through the “Local Communities” (LoCo) pilot case. The final result includes a final draft of the rating along with the creation of a certificate, both of which serve as tools and as excogitates of brand value for the company.

3 SERVICE DESIGN

3.1 What is a service?

The act of design, and specifically industrial design, induces a complicated cycle aiming for the optimization of function and value for products and systems (IDSA 2010). In order to be successful in designing something, it should be clear beforehand WHAT it is we are designing. It is impossible for someone to design a chair without knowing the function of the chair and under what circumstances it is being used. It is, therefore, clear that the definition of what is a service needs to be first analyzed before any reference to the task of designing one is made.

The service industry of Finland, just like in most financially developed countries, includes activities that range from administrative and support services to entertainment, transportation and information (Statistics Finland 2011). The nature of services varies in terms of how they are provided and what is the reasoning behind them, but there are still specific elements that are, or should be, common to all services and the environments in which they operate.

Services are intangible and cannot be physically experienced. This always brings about the challenge of finding ways to create concrete manifestations and representations for clear communication of the service value. It is also essential to notice that consumption is not separate from production like in the

case of physical products. Therefore, both activities take place simultaneously. (Moritz 2005, 29.) Without a user being involved with the service provision, there is no service to deliver in the first place as the consumption is so closely attached to the consignment itself (Stickdorn & Schneider 2011, 36).

Accessibility is a key word as it deals with more than one issue. It is about considering special requirements of users, who might need simpler interactions or adaptability to their inability to see or talk (Gube 2010). Accessibility, however, is also about the importance on how the user has access to an interaction most – if not all – of the times. As services themselves are intangible and do not take up any physical space, it creates the subconscious assumption that the reception can easily be made available for extended periods of time during the day (eg. e-banking). (Moritz 2005, 29.) Having an easily accessible service also improves the visibility to potential clients, an essential attribute in a competitive market.

The imperceptible nature of services also results from the fact that they cannot be, in any way, owned. One cannot take a service home for storage, nor can one export or transport it to a specific location, but it is rather only possible to use when needed. During the interaction(s) complex experiences and emotions occur. As each person is different and perceives his/her participation in a certain activity differently, no service experience and flow can ever be the same. Individual needs, expectations and demands vary greatly and accordingly so will the results of the provision itself. (Moritz 2005, 29-30.)

Finally, due to the abstract nature of a service, its quality is difficult to measure, as there are more qualitative than quantitative measures available. The measurability of quality is a problem service design still has to face and needs to find a solution to. (Moritz 2005, 30.)

By keeping in mind how essential the user is, the thesis process, as well as the ideology behind SEROI, are targeted towards the importance of the user in the process. The above traits that were found, assisted in creating an

understanding on how orientation towards the pleasure of the end user is achieved and how it can, or should be, reached.

3.2 The structure of a service

A service interaction consists of various intangible and tangible elements that when put together form an activity where the user gets a need covered by what a certain organization has to offer. Even though all services employ the same elements, the real question is how these elements are prioritized, resource- and time-wise, within the interaction. Figure 3 demonstrates these elements and their placement throughout a reciprocal action during service provision.

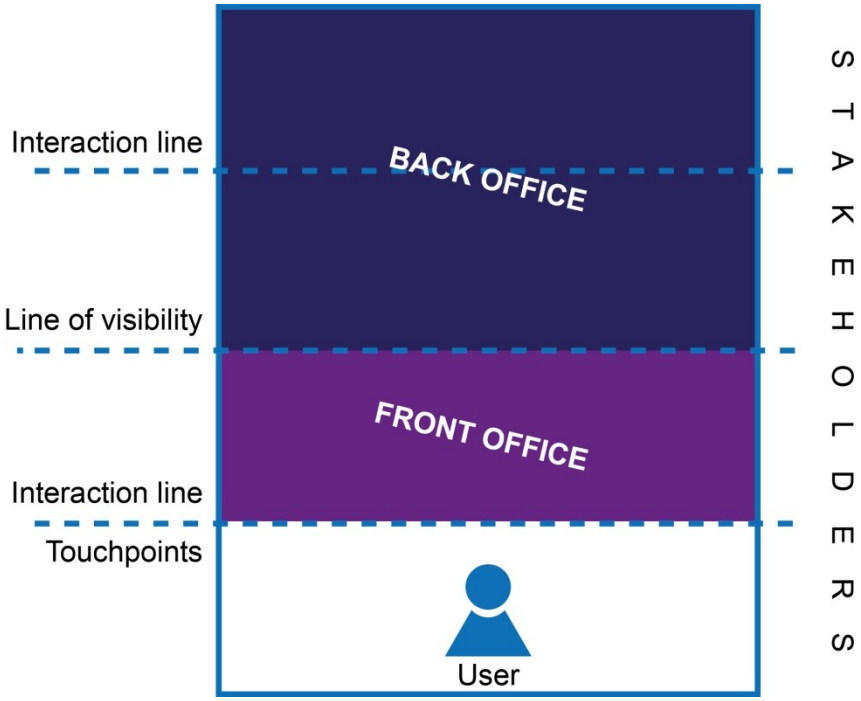

Figure 3. User-oriented structure of a service.

The two main parts of a service are the front and the back office. The front office represents the part of the service that takes place in front of the user him/herself and demands his/her presence. This is when the user appears with a certain need and initiates the service cycle. The interaction between the user and the front office service provider is depicted by the interaction line, where various

touchpoints are of use. Touchpoints are all tangible elements that derive from the interaction, such as a contract, receipts, etc. Interaction lines also occur throughout the entire lifecycle of the service. This is included in the back office. (Morelli 2010.)

The back office is the sum of all activities needed for the service to occur but take place without the user necessarily being aware of what is happening; that is why the interactive line between the front and the back office is called the “line of visibility”. All the participants within the service provision, both internal and external individuals and/or organizations, are the stakeholders. (Morelli 2010.) All of the above belong to a wide network of services, and many times the same users may activate various service cycles that overlap with each other. This network of services is what comprises the service market both in a national and an international context.

3.3 What is service design?

One of the challenges of the field of service design also happens to be the lack of a common definition for it. Services, being such complex entities, do not allow for a common language as many other fields do. The main reasoning behind that is that in designing a service various tools and methods from a broad network of disciplines are needed. As each discipline applies its own articulations for the elements it deals with, from their perspective, the challenge of commonality within the field becomes even greater. (Stickdrorn & Schneider 2011, 29.) A simple example is how design refers to the group of people who use a product or a system as “users”, whereas business refers to them as “customers” or “clients”.

Service design is an interdisciplinary area of expertise where user-oriented strategies and concepts are designed to make services better for an organization and its clients. According to the UK Treasury, the service sector is a third *less* productive than the manufacturing sector. This is an issue that

needs to be dealt with, as it is a common problem in many service industries globally. (Moritz 2005, 13.)

When the Industrial Revolution created a boom of cheaper and better products in developed countries, it paradigmatically transformed societies and economies. Now, as the product market is satisfied with what is being offered, the service revolution has begun. Service industries have increased their share of the global economy, and the appearance of plain service companies are expected in surprising places with original intentions. Product companies are transforming into companies providing solutions, by adding services to their products. Jan Carlson, from Scandinavian Airlines, has once stated that SAS does not just fly planes but it accommodates the traveling needs of their clients. (Moritz 2005, 23-25.) The world renowned IT company, IBM, has also had a substantial revenue shift from 68% products / 32% services in 1994 to 48% products / 52% services in 2003 (see Figure 4) (Rae & Ogilvie, 2004).

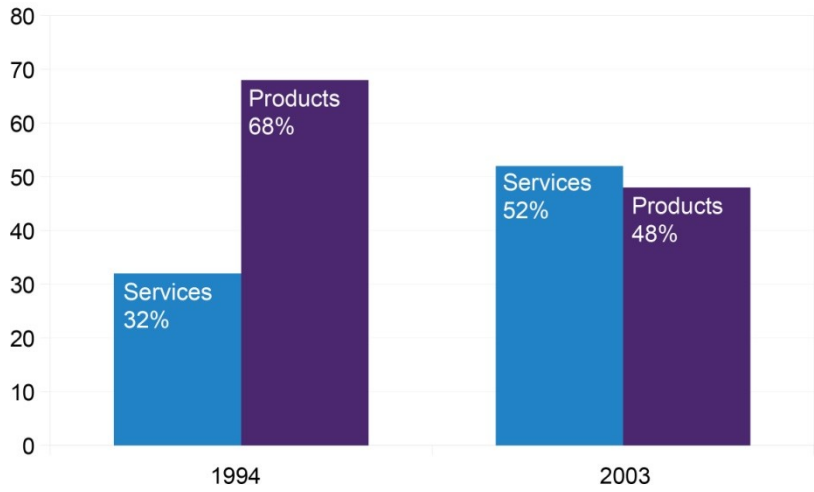

Figure 4. IBM's revenue shift.

With the availability of products available by the millions daily, their similarities have also become a given. This would explain why customers assume that all available options fulfill the same purpose. Standing in front of a shelf with 15 different brands of soap, the customer usually does assume that they all have the same effect. This is where branding and marketing appeared to work on positioning in order to get a customer to buy one brand's product instead of the

other. However, as pushing against competition and advertising eventually became excessive, services appeared to support a product's competitiveness and value by using different technologies (e.g. the internet, telecommunications, etc.), known as the 'service enablers'. (Moritz 2005, 25-27.)

Finally, the need of designing services appears to result from the complexity of users, as mentioned earlier. Services appear to provide a solution to the clash that manifests between standardized features of products and non-standardized needs and demands of consumers. No machine or robot can contend with the specific needs of clients efficiently. Designing user-oriented services provides a new dimension of value for the product resulting in a fresh, stronger relationship between the organization and the users. (Moritz 2005, 27.)

3.4 Principles of service design

In defining service design, a separate reference must be made for the basic principles behind the task of designing a service. What is to be analyzed should not be considered as a guide into what makes a good service, as the process itself is extremely circuitous. It is good though to keep in mind certain basic standards in order to ensure a clear understanding of the primary field of the framework in which the dissertation is placed.

As observed in Figure 5, service design is the result of five specific guiding axioms: User-centered, Co-creative, Sequencing, Evidencing, Holistic. The order in which they are placed do not instigate any order of priority, as all rules are of equal importance within the process.

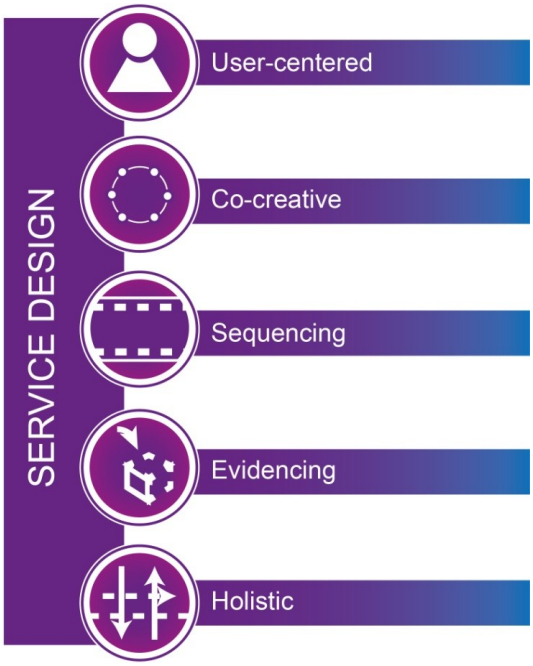

Figure 5. Axioms of service design.

1. User-centered: This is the experience as viewed through the customer's perspective.

Without a user we do not have a service, and without a service we do not have the necessary probability needed to design one. Therefore, the importance of having a true understanding of habits, culture, social context and the motivations of the users is essential. The language used for a service design project should always be the one of the user, and it should be common amongst stakeholders. By having a user-centered approach, and when a common goal is ensured, we can ensure the control of order within the havoc of various alloyed disciplines. (Stickdorn & Schneider 2011, 36-37.)

2. Co-creative: All stakeholders are included.

Stakeholders are the people involved with the service provision as a whole, e.g. the staff, managers, providers, caretakers, users etc. When designing a service, all stakeholders must be considered, and in the case of the customer it must be kept in mind that the service would potentially deal with more than just one certain type of a paying customer. The more customers

are involved in the design process, the more likely the service will result in increased customer loyalty. (Stickdorn & Schneider 2011, 38-39.)

3. Sequencing: The service is viewed as a movie.

When a service is being delivered a specific timeline should be followed from the moment of marketing to the delivery of the service. Services are like movies, where there should always be a sense of expectation without, though, causing any strain on the customer. The customer might otherwise get bored in an excessively long process (e.g. waiting at the airport check-in line) or too stressed in a hasty one (eg. the security check at the airport). The sequence of the service must start all the way from the realization of a need to how it is being fulfilled and attended to. Finally, just like in a performance where many rehearsals should be made to ensure perfection, the same goes for services. Through continuous testing and evaluation of the service process, we can guarantee a successful provision. (Stickdorn & Schneider 2011, 40-41.)

4. Evidencing: The intangible needs a tangible meaning.

As mentioned earlier, all service experiences are intangible, but in order to communicate the service value to the consumer, tangible manifestations are needed throughout the process (Moritz 2005, 29). Most of the services are taking place unnoticed in the background (back office), thus creating the need to make customers more aware of the actions taking place. We do not wish for the customer to be surprised when it is time to pay the bill. The customer must know what he/she is paying for. The challenge in evidencing; however, a service must be designed in such a way that it does not interfere with the customer. For instance spam e-mails are a typical example of evidencing gone wrong; this must be avoided. The tangible manifestations provided must be small but must also have the ability to prolong the positive experience from a service to enhance word of mouth. (Stickdorn & Schneider 2011, 42-43.)

5. Holistic: The entire service environment.

   The holistic approach needed is probably the most important element for both the design process and the service itself. Even though interactions are intangible, they usually take place in physical or virtual environments where all stakeholders and their needs must be considered. When a physical space is being used, it is good to take advantage of the senses and influence the subconscious. By being holistic, we ensure that the corporate identity embodied by the management and the staff is the same image perceived by the customers. (Stickdorn & Schneider 2011, 44-45.)

By combining the principles mentioned and the core requirements of what makes a service (see Chapters 3.1 and 3.2), we are able to have a better range of views on why service design is necessary. The process is quite complex and generic, and it needs better facilitation, which is what the dissertation process tries to pertain to in the long run.

3.5 Framework of service design

Moritz (2005, 115-117) discusses that along with the absence of a common language within the discipline, there is also misrule into the sort of framework to apply for the service design process. A number of models, developed by researchers, experts and consultancies of various fields, are already available. These demonstrate the process within three to seven stages accordingly. Birgit Mager, Bill Hollins, the design agency IDEO, the Design Council and others have created numerous guiding paths for a design case. However, the same principle of consequently applying research, idea development, selection and implementation as crucial stepping stones for the holistic process is apparent. The same ideology is applied to most design processes, as demonstrated in the 'double diamond' process model, explained in Chapter 4.1.

Grouping into four segments, even though sufficiently directive, does not provide enough specifics for the multidimensional nature of service design. A

six-step framework, developed by Stefan Moritz (2005), has been found to be the perfectly balanced one. Moritz (2005, 123-146) developed the framework by approaching all the essential probes needed without overbearing the facilitator(s) with complicated divisions. The suggested framework includes the tasks displayed in Table 1.

Title of task	Description of activity
Understanding	Discovering the wants, needs, motivations and contexts of what are peoples' desires and their possibilities. This phase involves the use of quantitative and qualitative methods and tools, observing the possible users and benchmarking. Initial assumptions and interpretations must be verified at this phase.
Thinking	Setting the direction and scope of the project and mapping out the problem space.
Generating	The creative process of coming up with ideas using an innovative approach, implementing visionary workshop sessions and applying knowledge sustained from the phase of Understanding. Generating is a bonding process between design and the other principles used during the project, which finally results in the creation of strong concepts from various points of view.
Filtering	Choosing the best and most relevant solutions after placing them against certain criteria and asking for feedback from experts. Performance is tested through the use of prototypes and mock-ups, among others.
Explaining	The visualization of concepts and mapping out the touchpoints of the service(s) in order to create a common understanding of the service delivery process for all people involved, despite the mix-up of disciplines applied.
Realizing	Bringing the service to the market, writing the business plan and dealing with the substantial details. Possible training sessions for actors within a service takes place. Continuous evaluation, testing and improving of service even after launch is necessary.

Table 1. The service design framework.

It must be noted that the timeline followed within a case does not necessarily abide by the order suggested above. In many occasions two or even more tasks may take place at the same time without a specific order, whereas, on occasion certain steps may have to be repeated if something seems to fail or does not

function as it was expected to. Finally, as previously briefly mentioned, after 'Realizing' the service sustains a life on its own throughout its provision to the customers; therefore, the framework should be perceived more so as a cycle aiming at non-exhausting improvements of the performance. (Stickdorn & Schneider 2011, 124-126.)

When analyzing each step of the framework, a number of tools and methods have been developed by applying expertise from the disciplines of design, business and engineering. The availability of the tools numbers in the hundreds, which verifies that fact that the need for new tools and methods for the framework itself is not extremely necessary (Mycoted, 2011). The real challenge is to decide which tool should be used under what circumstances. It depends on the nature of the project. Tassi (2009) has already approached this issue by creating a virtual tool (www.servicedesigntools.org) that suggests certain combinations of apparatuses through a framework divided in four tasks.

Finally, it should be mentioned, that the above framework is a working model already used and tested in the working environment. Therefore, referring to it and using it extensively throughout the thesis process is essential for achieving the best result possible. By having a common model, such as the one depicted here, the usability of the final results in an external environment (ie. SEROI Ltd.) can be ensued.

4 THE SERVICE MARKET VERSUS SERVICE DESIGN

The field of service design first appeared as a line of education in Köln, Germany in 1991 at the Köln International School of Design; the profession itself has existed only for 20 years or so (Moritz 2005, 66). The short life of this discipline has resulted in the lack of broader awareness. Managers still live with the belief that developing perfect services is impossible; they therefore accept that mistakes and failures can happen, but this is not the case. The service

production system of an airport, for instance, despite its complicated structure is a nearly perfect one. Otherwise accidents would happen daily; this is proof that aiming near perfection in service provision is possible. Unfortunately, many organizations still use their resources conducting specific programs or projects within a limited amount of time on quality improvement. The reality of service design is that the process is on-going. When the hierarchy of a firm applies a project-based mindset for the management of quality, there is a high risk of failure. (Grönroos 2000, 97-98.)

Research has shown that most enterprises are not really aware of what design and innovation is. Managers operate at a very basic level and are not in full control of their organizations. The absence of documentation on strategy and delivery processes for new services complicates the task of management greatly. Many service providers do not even research their services prior to their development nor do they refer to any development specifications; several just go ahead with copying off their competition. The few companies participating in the research who were effective in applying service design thinking in their operations had generated a turnover of over 30% within 36 months. (Moritz 2005, 86.) Service design can solve many issues regarding management, but there is still a substantial need for cognizance of design sensing in services.

Despite the fact that the service market is so dominant, there are still many inadequate services out there. The reasoning given for that is the nature of strategic management principles. From a broad perspective services are considered to be a small fracture of a number of value-adding activities, resulting in limited investments made in this specific area (Stickdorn & Schneider 2011, 95-96). According to Porter's generic strategies, there are three tactics for achieving ample performance in any industry, based on the focus points: cost leadership strategy, differentiation strategy and focus strategy. In “cost leadership”, the firm focuses on becoming the low cost producer; in “differentiation”, the firm focuses on being unique and in “focus” an enterprise coordinates its strategy based on the narrowness of its target segment (Porter 1985, 11-15). From the aforementioned generic approaches, only one form of

conduct can be exclusively adopted by an organization; otherwise there would be flaws. Services in this case are considered to be only a part of the “differentiation” strategy, which results in a lack of well-developed services provided by companies who follow other operational principles. (Stickdorn & Schneider 2011, 96.)

When the conveyance of an enterprise is analyzed, it usually includes a value chain depicted by research and development (R&D), product design, manufacturing, marketing, human resources (HRM), customer service, etc. When deductions need to be made, the first ones to be at a disadvantage are the ones at the end of the value chain. As long as customer service is considered to be part of that entity, there will not be enough investments made, which of course results in non-effective interactions. In order to escape the perception of service delivery being exclusive to a specific part of the value chain, it is up to the design field itself to make corporations aware of the opportunities created by design thinking and how essential it is to apply this throughout the whole process. (Stickdorn & Schneider 2011, 98-99.)

Unfortunately, the problem does not only appear with the corporations themselves but also with the consumers. Due to the hierarchical structure employed by most services, there is a feeling of superiority mirrored upon the final users, who, despite their significant role in service production do not realize it themselves and accept any fault within interactions followed by minor, if any, reactions. It is essential for service design to work on the involvement of various stakeholders, especially the users, through various means of technology. Additionally, there are still issues to be dealt with concerning the quantitative measurability of service quality and the challenge of a common language within the discipline itself.

As observed in the service market, where services are created constantly, service design thinking itself is not accepted or used as it should be. The comprehension of the restrictions pertained in the environment where a service design operates, is essential for the conclusion to a problem that needs solving.

By narrowing down to a specific path, driven by the problem definition (explained in Section 4.2), the goal of the final work becomes clearer.

4.1 Problems of the discipline

In principle, the focus of the thesis framework is to analyze and observe the field of service design in order to pick out certain issues that can be solved through the application of innovation methodology. Eventually, the result aimed at the creation of a certain tool and/or method that would be of use to the service design agency SEROI, and therefore be of concrete use within the industry.

In order to reach the desired result, it was essential to define the problem itself as a fundamental starting point for the goal to be successfully reached. According to the British Design Council (2005, 6-7), the design process can be depicted in a model, also known as the “double diamond” model. The modus operandi of a design process is divided in four phases: Discover, Define, Develop and Deliver. These are all applicable in any design task, including the one dealt with throughout this paper. 'Discover' deals with identifying the issue at hand by allowing ideas and influences to act as a starting point for the task as a whole. Ideas can take root through market and user research, analyzing users, fact-finding etc. When a well-justified understanding is achieved, the transition to 'Define' takes place. 'Define' refers to the alignment of needs and results of discovery as well as to specific objectives through certain criteria in order to filter and discard ideas and refine the real problem at hand. After a cycle of pitching and prototyping various suggested solutions, the 'Develop' phase gives the final go for the development of one or more specific solutions that were sought to be the best concept(s). The ultimate goal is to reach 'Deliver' as the final phase where testing, production and launching are dealt with, prior to the availability for the certain target segment.

As a thorough understanding of service design is already a given at this point, specifying the problem, and thus ascending accordingly to the next fragment of the design process, is at stake. The course of action initiated was to create a brief of the discovered fundamental problems, based on the background research and past references. The issues found were:

1. To raise awareness of service design as a field,
2. To increase and manage the involvement of stakeholders,
3. To measure quantitatively the quality of a service, opposed to the qualitative identity of service design, and
4. To create a common language and framework for the discipline.

The reasoning behind these conclusions has been analyzed within the past sections.

It must be noted that the reference to the double diamond model has been used as a justification for the problem definition at hand. The model has not been used as a basis for defining the solution; the service design framework is the one on which this thesis operates.

4.2 Problem definition

Most of the concerns mentioned in Section 4.1 will be attended to by the operation of SEROI itself through the various company cases that would arise. The establishment of the agency would be a concrete and vital effort in raising awareness of the field, initially in Finland. The creation of a partner network is part of the efforts made for managing the involvement of both internal and external stakeholders, whereas some research has already been done on this issue by the School of Design at the University of Dundee, under the supervision of Qin Han (2009) in his paper: “Managing stakeholder involvement in Service Design: Insights from British service designers”. The application of a specific language, terminology and framework within the operational core of the company is an endeavor in promoting commonality within the discipline.

The measurability and management of service quality has been an object of intense research throughout the years. We see star-ratings at hotels and 'Michelin' certifications for restaurants among the many other quality-related certifications and ratings, but all of these are directed towards certain industries. Additionally, the research that was found to be relevant in quality management did not offer something as concrete as a measuring unit. The axiological principle of service design is that it is directed towards any service-related industry. By creating a measurability principle that would focus on how the service puts the user at the very centre of its operations, there would also be a substantially concrete unit to display. Managers employed within disciplines who do not have a clear understanding of the mindset needed in service design, would be assisted by this measuring principle as quantitative data are easily comprehended compared to something as abstract as user-centred quality. One of the greatest issues of the field of service design is its awareness, and the reasoning for it is that simply the task seems to be complicated and contemporary and therefore not easily approachable.

It is obvious that the problem that needs to be defined is to create a tool that would measure the quality of any service, always keeping in mind how essential the user is for the process and without forgetting the importance of the productivity of the back office. Innovation is a skill that would assist in creating this tool. This will be analyzed later on in this paper. The goal would be to create a contrivance for SEROI Ltd. as a way to evaluate and ensure quality for any case as well as to help with the instigation of a common language between various stakeholders.

It is essential, though, to note that as quality is ambiguous, there can only be a specific focus. Therefore, as the user is the most universal yet the most essential stakeholder of any service, creating a rating system based on how the user interacts with the provider was the specific issue defined. The final rating would not try to solve all aspects of quality, as that is merely possible, and there are other certifications and ratings for specific aspects already available.

5 INNOVATION METRICS

5.1 What is innovation?

Innovation is all about creating business value. Value can come in the form of products, services, reduction of costs, increase of sales, and so on. Ultimately, we wish to create value in order to survive and grow within a market that is alternating almost on a day-to-day basis. It has been proved that innovation has throughout history helped companies persevere, and those that have not appreciated it have slowly faded away. (Morris 2008, 2.)

We hear about innovation everyday; companies often use it as a marketing term, yet in reality not many are aware of its possibilities. In theory, innovation is all about coming up with ideas, ameliorating them to something of real use and launching them to a market segment hoping for the idea to be transformed into efficient financial value. (Morris 2008, 2.) DeSai (2008, 2) provides the definition that innovation is about ”harvesting the deep insights of an organization's human spirit and knowledge, generating a pipeline of ideas that are evaluated, selected, and ventured using disciplined tools, methods and processes that advances growth objectives for an organization.”

Studies have shown that 75% of CEOs of companies with a vast growth rate believe in innovation being to their advantage and resulting in the production of unique products and services for the market. 90% of organizations stress the importance of innovation, turning it into a priority within their actions and thus making it grow as a principle in all sectors. (Smith 2005, 1.)

Despite the discernment around innovation, it still has its challenges and misunderstandings due to its transcendent nature. Many firms lack a clear purpose of innovation in their strategies and are not precise in the form of value they wish to receive from innovation investment. Perfection within deviation demands a choice between three sources of value creation. (DeSai 2008, 3.)

Innovation does not relate to degree of investment but rather the how and why of investing in resources. In Figure 6 three individual targets are displayed in regards to what is the strategic intent of an organization, through the viewpoint of innovation as a stable function. “Top-Line growth” refers to innovative activities and actions that primarily generate revenue; “Bottom-Line Optimization growth” refers to the activities that generate profit specifically, and “Shareholder Value growth” aims for an increase in the overall value of the company. (DeSai 2008, 3.) The difference between revenue and profit is that revenue refers to the overall income from goods and services sold, whereas profit is the excess money that is left after costs are paid for.

Figure 6. Innovation strategic intent.

Whatever the strategic intent of innovation being applied, a user-centered approach, just like in Service design, is essential. It is a fact that Return On Investment (ROI) has the best outcome when the innovation framework, pushed out towards the strategy, is enabled through the Voice of the Customer (VoC). (DeSai 2008, 4.) VoC refers to the user of the product and/or system which is adding value to the organization. It is therefore easy to conclude how service design is, at its core, just another innovative process. Therefore, referring to it to solve the problem defined comes naturally.

5.2 The innovation funnel

The innovation framework itself can be visualized as a “funnel” (see Figure 7), where many ideas go through one end and only the best ones are filtered through the other. What exactly happens within the funnel itself is essential.

(Morris 2008, 2-3.) The process can be divided in three primary parts and nine secondary divisions. The first part, Exploration, is about achieving a clear understanding of the situation at hand and is followed by Creation and Reflection, which refer to the prospect of possibilities and willingness to make mistakes prior to testing them in a realistic environment. Implementation is the stage where investments should turn into profit after launching the product/system. (Stickdorn & Schneider 2011, 128-135.)

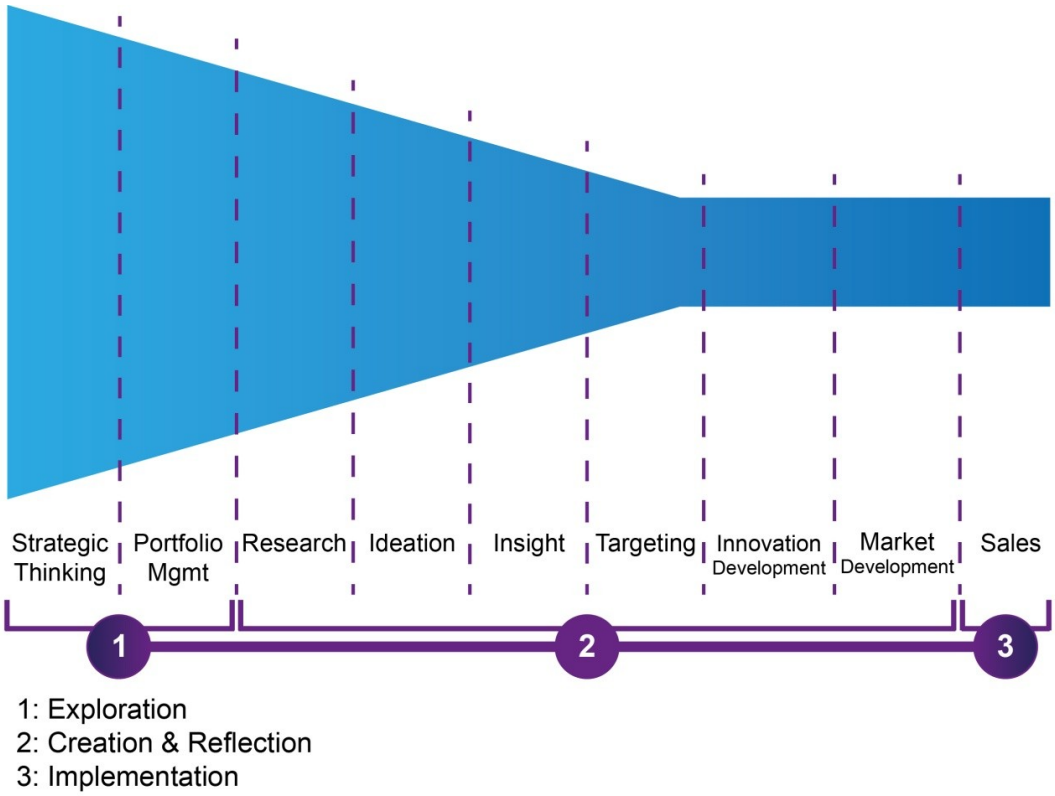

Figure 7. The innovation ”funnel”.

The divisions are as follows:

1. Exploration:
   a. Strategic Thinking: Thinking what is wanted from the innovative process.
   b. Portfolio Management: Managing a portfolio of various innovation projects to increase chances of successful results.
2. Creation and Reflection:

a. Research: Accumulating knowledge about the technological possibilities, user needs and the evolution of the society.

b. Ideation: Applying knowledge from research to what it could mean for existing or future products and systems.

c. Insight: The transformation of ideas to concrete innovation opportunities.

d. Targeting: Bundling the activities and processes needed after satisfyingly reaching to the necessary insights.

e. Innovation development: The engagement with actions needed to convert the final ideas to finished products through testing, prototypes, etc.

f. Market development: Answering the questions of what customers want and how to get it to them in a comprehensible way.

3. Implementation:

a. Selling: The final act of selling the products and/or services being developed and receiving financial revenue and/or profit to the organization. (Morris 2008, 4-15.)

5.3 Service design as an innovative process

Innovation and service design walk hand in hand, and references to that fact have been made already numerous times throughout this paper. Another justification to appear is the simple comparison of the frameworks. By corresponding the frameworks of the two, there is an obvious similarity occurring at the second and most vital part of the innovation process with the service design framework. Both entities are divided into six tasks, which, despite their alternations in titles, refer to the same nature of activity (refer to Figure 8).

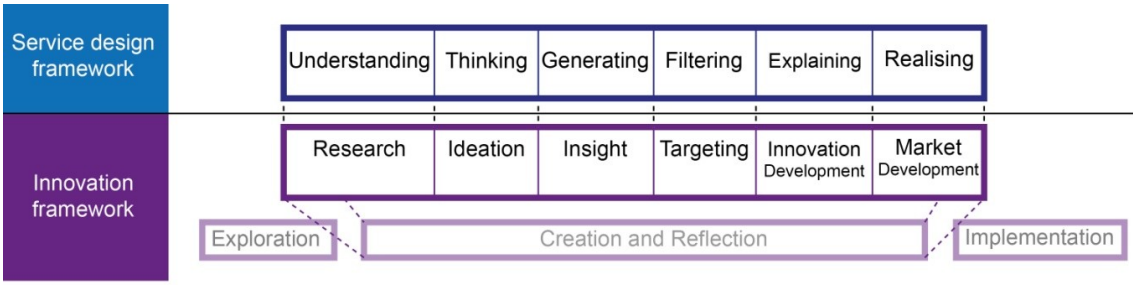

Figure 8. Comparison of frameworks.

As the issue at hand was to provide a feasible solution regarding the user-oriented evaluation of a service provision, the association of innovation is justifiable. Innovation metrics, which assists in measuring – and managing – the innovative process behind service design, has been found to be the discipline based on which the process advanced to the final result. Innovation metrics has existed in the industry for some time already; therefore, it is safe enough to use it as a point of innuendo for the conclusions needed. For the purposes of the thesis process, specifically the publication by Langdon Morris (2008) was referred to. His activities as an innovation expert in InnovationLabs (an innovation consulting agency) make his publication a trustworthy reference for the needs of the thesis work.

5.4 Innovation metrics as a guideline

In the United States, studies have shown that technology innovation provides for almost half of the nation's productivity and growth. It is therefore unavoidable for governments and business leaders not to pay proper attention to the opportunities presented by innovation. As there is still a transition from traditionalistic to contemporary attitudes, metrics assist in describing the various ecosystems and the relationships between attributes. Current metrics mostly reflect on productivity instead of ideas and systems. Innovation, however, is a complicated entity and cannot be measured with only one indicator, but with the application of relevant quantitative data, innovation metrics can be achieved to

assist in a better understanding of the possibilities presented by the discipline. (Milbergs & Vonortas 2008, 2-3.)

In business, ROI is a standard measuring tool which describes what is the total revenue and/or profit deriving from certain investments. ROI-based assessments are usually short-termed and do not support the development of anything long term. Innovation should not be limited within a certain time fragment. Therefore, ROI cannot be used as a measuring tool, even if measurability for innovation is essential in order to manage it accordingly. (Morris 2005, 1.)

Each task has both qualitative and quantitative metrics. For purposes of narrowing down to a specific goal, only the metrics relevant to service design itself have been considered and approached. This means that the metrics that refer to generic innovation as a value-adding principle have not been targeted during this process. The metrics suggested by Morris (2008, 4-16) for the tasks of the innovation funnel that are relevant to the service design process are analyzed in Appendix 1.

6 USER-CENTERED SERVICE QUALITY (USEQ) RATING

The result of the process that has been entailed, aimed towards a numerical rating system, has been given the name User-Centered Service Quality (USEQ). By referring to the principles brought by innovation metrics, and transforming that information to a format appropriate for use within service design itself, made it possible to give a tangible solution. The naming of USEQ has been developed by SEROI itself to emphasize user-oriented design thinking. The abbreviation itself was provided to ease out future marketing activities of the rating system and has not been met in any other relevant literature at time of writing.

In order to perceive the appropriate format needed, the qualitative and quantitative metrics suggested for each task of the innovation framework were mirrored upon the corresponding tasks of the service design framework. As observed in Appendix 1, the metrics aim towards making the right *questions*, which is the constitutional idea deriving from the principle. Part of the USEQ rating, however, is to provide the correct answers in order to establish a concrete measurable unit for user-oriented service quality. The ideology behind the user-centered identity of the rating lies in the fact that the user him/herself is the most generic, yet the most vital, part of a service. By having a clear user-oriented point of view, the universal use of the tool to be developed is assured. This is a feature that is also essential for SEROI.

In order to develop the rating, questions set by the innovation metrics were picked out to be used as a starting point for the acquirement of the correct answers. The answers themselves were developed by exploring the possible quantitative features of the most vital tools and methods within the discipline of service design itself. The availability of tools are in the hundreds, but some tools are of greater importance than others, which in turn became the solution in acquiring the numbers needed for the development of the rating, i.e. answering the questions set by the metrics.

Four tools essential to any service design process have been used as the providers of the data required. The “service blueprint”, “customer journey map”, “service inventory” and “stakeholder maps” were combined and analyzed to see what numerical information can be acquired from them. At this phase the cardinal questions along with a numerical rating scale based on the aforementioned tools, were combined, providing a concrete document as means of evaluation. The results of the aforementioned phase can be seen in Appendix 2 (not published). Additionally, the tools themselves are briefly explained later on in the text.

It must be mentioned that even though each task of the service design framework includes specific metrics, for rating purposes only the tools used at

the beginning (Understanding) and end of the framework (Explaining, Realizing) were referred to. The main purpose of USEQ is to evaluate the *existing* user-oriented quality of a service, which means that the metrics concerning the generation process of a service flow are irrelevant. We do not wish to measure data deriving from the whole process of creating a service, as re-designing the service appears only after the rating itself has concluded. The comparison shown in section 5.3 is only to demonstrate the commonality of the innovation and service design frameworks to justify the use of innovation metrics within the thesis process.

After analyzing and reaching a conclusion on how the rating itself would possibly work, it was essential to make justifications to the various assumptions made (as seen in Appendix 2). By pilot testing the results of the current phase, it would become easier to finalize the rating using concrete and verifiable assertions. Sections 6.2 and 6.3 refer to the pilot case itself and the conclusions that derived from it.

6.1 Service design tools used

Four essential tools specifically used in the field of service design have been referred to, in one way or another, for the creation of the rating. All these tools were provided to entail a clear understanding of any service provision process. Sections 6.1.1 to 6.1.4 refer briefly to the nature of each tool.

6.1.1 Service blueprint

Service blueprints are visual specifications of the actions of the user, the service provider and any other stakeholders involved in the process. Blueprints are viewed chronologically and are always divided to the front office and the back office. Finally, any possible touchpoints that are manifested throughout the service provision are shown and justified. Support systems needed for a

specific process to operate, but not necessarily in sight, must also be depicted. (Stickdorn & Schneider 2011, 204.) Figure 9 provides an example.

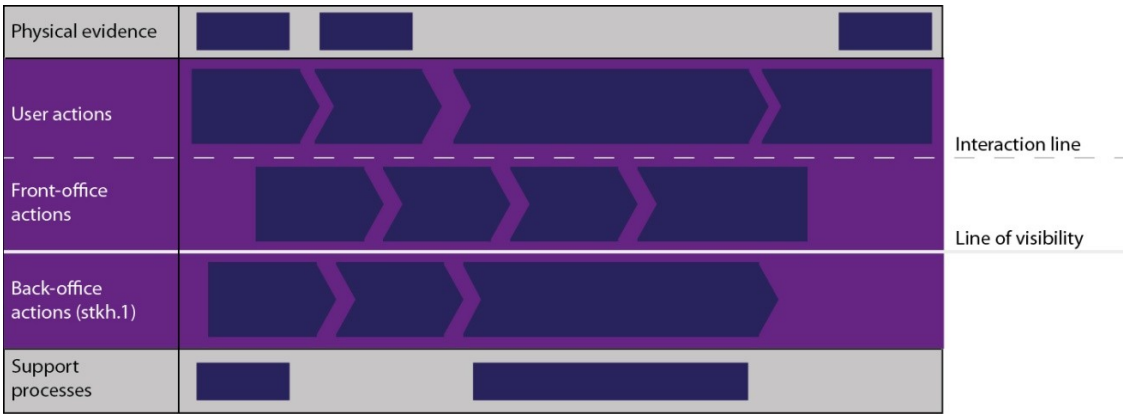

Figure 9. Example of a service blueprint.

6.1.2 Customer journey map

A customer journey map is the visual manifestation of the user experience starting from the pre-service period (that represents the expectations by the users), to the service period (the experience itself) and ending with the post-service period (how customer relationships are maintained and whether expectations were justified or exceeded or not). The maps are used to tell a story about the user's emotions and actions and how the touchpoints and various stakeholders are used throughout the process. (Stickdorn & Schneider 2011, 158.) Figure 10 provides an example.

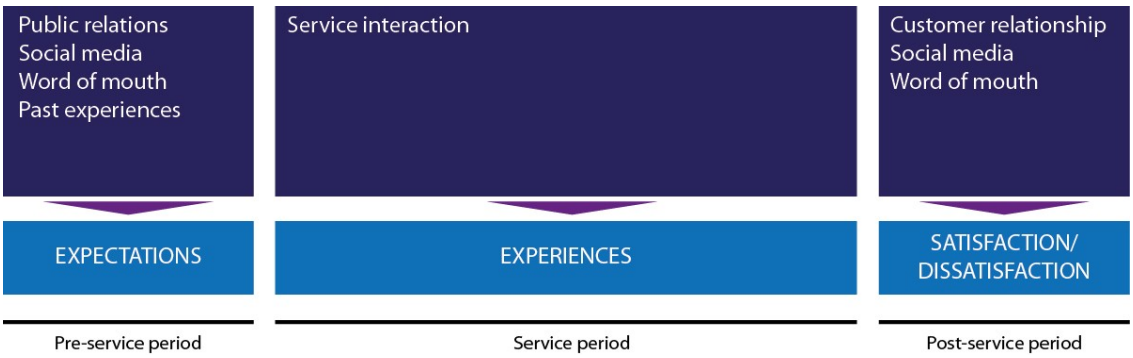

Figure 10. Example of a customer journey map.

6.1.3 Service inventory

The service inventory identifies all the touchpoints of user interaction with a service or a product and enlists all the possible services/solutions that are provided. The visual frame displays a grid of both elements with all the necessary details and problems found. (Fritillaria 2010.) Figure 11 illustrates an example of this.

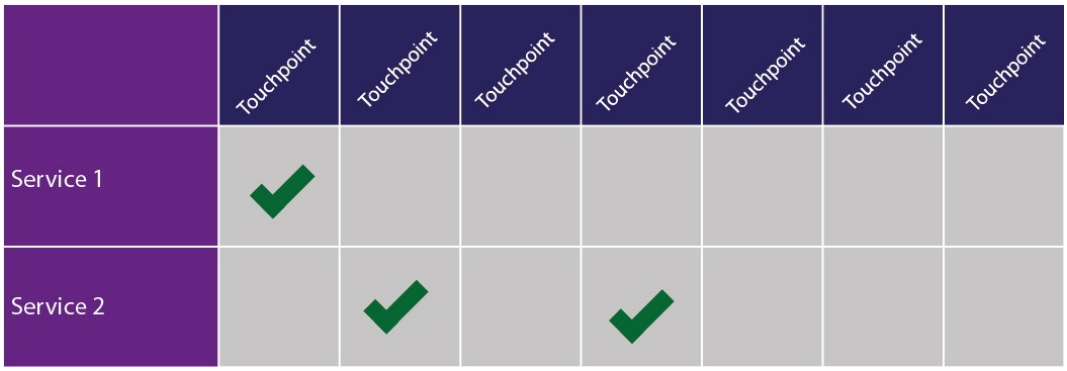

Figure 11. Example of a service inventory.

6.1.4 Stakeholder maps

The stakeholder map is a visualization of all the groups of people involved within the service environment, both internally and externally. Mapping out these stakeholders makes it easier to chart the relationships between them in order to track down any possible faults or misunderstandings that might affect the final service. (Stickdorn & Schneider 2011, 150.) Figure 12 illustrates an example.

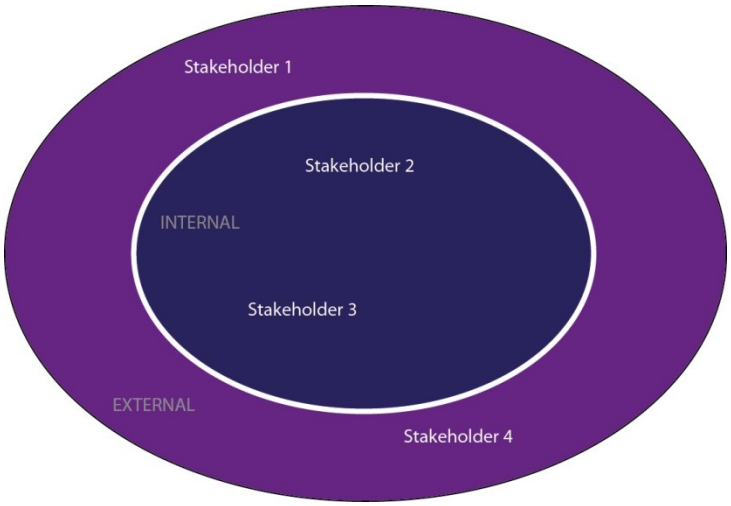

Figure 12. Example of a stakeholder map.

6.2 Pilot case: Local Communities (LoCo)

Local Communities (LoCo), is a bartering platform used as the pilot case for the development of the USEQ rating. Bartering is a function in which volunteers assist people with various tasks, but instead of the trade of money there is a different kind of trade in the form of credits. The main idea is the establishment of a non-profit organization that enhances well-being and cooperation within local communities. The Spanish equivalent of the word “crazy” (loco) is intentional to emphasize the unusual nature of the service in an entertaining way for the user (the visual branding will also aim for that).

The project was initiated during the activities of an intensive four-week course aimed towards the acquisition of an innovative business idea. By January 2012 the concept was finalized, and between March and May it became the first service design case of SEROI as well as the pilot scheme needed for the rating. A group of nine students from the disciplines of Design and Information Technology was formed in order to take the project forward. The goal given was to design the service flow of a virtual platform for the provision of bartering within North Karelia. The initial target segment was students, who, due to their low monthly budgets, would be the most probable group for a service of this sort. The main issues that had to be dealt with was the format of the service

interaction, the categorization – and display – of the various skills that registered users would have and how the accreditation system itself would work, keeping in mind the vast complexity of any given task that the registered user of the platform would attend to.

The involvement of students was made possible after the realization of a seminar in mid-March on service design. By offering students an understanding on the main ideology that comprises the user-centered approach behind the field, it was made easier to organize the intensive working period for the pilot case. As seen in Figure 13, after the seminar, four individually themed workshops were held, in order to guide the students towards the desired result (explained earlier). By applying the service design framework to this case, the ultimate goal was to conduct a final service flow in order to test the rating and reach to the specific conclusions needed to finalize the rating template.

Figure 13. Timeline of pilot case.

Despite the six-task service design framework suggested earlier in this text, due to the limited amount of time, some of the tasks had to be merged within the workshops. It is, nevertheless, a possible route that a design case can take. In the first workshop (Picture 1), students dealt with understanding the user by conducting a user research and two surveys. Both of the surveys reached a total of 185 correspondents from Finland, the United Kingdom, Brazil, Cyprus and Greece. The international approach was favourable as, eventually, LoCo would expand to other regions. Based on the results of the research, four personas – hypothetical profiles that manifest target groups through their common interests, beliefs, habits, etc. – were created which assisted later on in defining the interactions (Stickdorn & Schneider 2011, 178).

Picture 1. Students working during the first workshop.

During the second and the third workshops, the students were divided into a number of teams to deal with the analysis of existing bartering virtual platforms, as well as other virtual services (e.g. Yahoo, Spotify, eBay, etc.) that would be useful as a source of inspiration. When creating something new, such as this pilot case, it is essential to provide a sense of familiarity to the user so he/she can feel more secure in the service environment; this is prone to a user-oriented approach. By gathering a substantial amount of inspirational material, the multidisciplinary group ascended to dealing with the three critical parts of the service: the service flow as a whole, the accreditation system (i.e. the credits used replacing the use of monetary units in bartering) and the categorization of skills (e.g. drawing, cooking, photography, etc.). This is where a deeper understanding of the final service was feasible.

The final workshop involved merging the results of previous workshops into a service prototype. A service prototype is a facsimile of the holistic service interaction by conducting role-play conversations, or mock-ups, of the different touchpoints (Stickdorn & Schneider 2011, 192). The service prototype was only used as a stimulant provided to the students and the facilitators to force thinking towards an aggregated direction for finalizing the concept of the service provision from a holistic point of view. The final result was a draft of the service blueprint, based on which conclusions were finally drawn in regards to the rating system.

6.3 Concluding the rating

The three main questions that had to be dealt with (service flow, accreditation, skill categorization) were eventually answered by using service blueprints as a visualization tool, to assure that all the people involved fathom the service environment. All four tools – service blueprint, customer journey map, service inventory, stakeholder map – were used to explain the interaction as a basis to conduct the rating. This allowed for the realization of applicability. Results of this phase can be seen in Appendix 3. Appendix 4 (not published) elaborates on the results of the rating itself.

Evaluating the pilot case also had the positive outcome of USEQ becoming a tool that can be used during the service design process to clarify what issues should still be dealt with prior to launching a service. The initial purpose of the rating was for it to be used exclusively at the beginning of a case to evaluate the current situation, but the format of the tool allows also usage during the process as a checklist. As LoCo had not been released yet at time of writing, USEQ served as a very useful tool to ensure how user-centered the service concept really is. The dual role that USEQ ultimately serves makes it of substantially greater value for SEROI as it deals with more company cases in the future.

Conclusions related directly to the structure of the template rating system were quite minor yet important in order to finalize the rating. Support systems – shown at service blueprints – were not referred to in the first draft, as they are processes that take place in the background and are always somehow left out despite their important role in the long run. Additionally, metrics regarding to the availability of touchpoints turned out to be quite irrelevant in some cases, as the low availability of touchpoints for some services does not affect the service provision greatly. LoCo for instance, a virtual platform, has mainly virtual touchpoints; that does not mean that it is not user-friendly, as the real purpose of the platform is for it to be virtual. In other cases, of course, the availability of more touchpoints is essential for services that are directed towards wider target

segments of various ethnographic backgrounds. The above points were considered in re-structuring the rating system.

Finally, layering between the questions entailed had to be corrected. As the evaluation of LoCo took place it was realized that some secondary questions had a bigger role in determining the user-oriented structure of a service flow. The questions remained the same, but their importance in arbitrating the final rating had to be modified.

By reaching to the specific conclusions needed to finalize the rating, the adjustments needed were made. The final draft of the USEQ rating can be seen in Appendix 5 (not published).

After having a concrete result within reach, the task of transforming this tool into a product of business value for SEROI was an easily made task. SEROI's business plan refers to the use of USEQ as a tool of competitive value to the agency as well as to its significance when dealing with any initiating company case. Additionally, the possibility of using USEQ in the form of a checklist when finalizing a company case would enhance the competitive value of the tool.

6.4 Certification

In order to add even more business value to USEQ as a vital tool for SEROI, a certification will also be made and provided to all the organizations and companies who operate as clients to the agency. The main purpose of the certification is to concretize the benefit that clients would receive within a written document that also gives them the right to publicly use it as means of marketing and branding to their users/customers.

Additionally, by providing this certification, in the long term a USEQ-certified network of companies will be manifested. The network will be of great use for SEROI in terms of popularity and customer relationship management, and it

would also enhance word-of-mouth, even between consumers, as to how the certification of a service provider has improved their user experience. The document itself will be created after SEROI's image and branding will be finalized during the summer of 2012.

7 DISCUSSION

After a very intensive thesis working process, the benefits manifested by the development manner had a number of positive outcomes from various perspectives. The establishment of the service design agency SEROI, which was a process that followed along the development of the work behind the thesis, had and will have a substantial role in bringing out the results to the living working environment. The solutions offered by the agency alongside with USEQ will offer the Finnish service market positive experiences for its users.

The USEQ-rating will operate as a working tool and will provide substantial marketing benefits. The networking opportunities manifested by the application of the tool as well as the provision of the authority to SEROI to certify its clients for their user-oriented design thinking makes it a win-win situation for all involved. SEROI creates an exclusive network that it can benefit from in the future, and the clients are able to display to their customers the assiduity that is necessary for them to even be willing to provide their resources to a specific provider amongst intense competition.

Additionally, the understanding of service design in a holistic way had benefited SEROI substantially in increasing the know-how needed for such a multidisciplinary field that is constantly evolving and building upon other regimens. Despite the limited amount of information available within the field and the resulting challenge of tracking down any research material, it was easier to provide more concrete benefits to such a field. USEQ should be perceived as an offering of the author – and SEROI – towards the service-

based market that is undergoing a revolution, as described in the introductory chapters.

It has already been mentioned how the design task of a service is, or should be, a never-ending cycle. A project-based mindset in improving or developing a service should be avoided; therefore, the continuity of the work manifested within the thesis process is evident. After finalizing the USEQ rating template by having a real design case work as a pilot scheme, it by no means entails that the work is done. USEQ is used within a discipline that constantly changes along with the developments of technology and society; services are provided to people who live in the present and react accordingly to what is provided around them. The necessity of developing the results of this dissertation in the short- and long-term future is apparent and left to the hands of SEROI to deal with.

LoCo as a pilot case had served as a necessary scheme to reach towards the final draft and reduce the error margin of the rating system. Being involved with the development of the service itself from the very beginning, and facilitating the whole working process with a team of students, was extremely beneficial. LoCo can also be seen as a prototype of the working process that SEROI will employ in future cases, and the fact that the service will be developed even after publishing USEQ means that it will become of use to pilot any alternations to the rating system. The only element that lacked from LoCo for it to be considered as the perfect pilot case is the fact that, at time of writing, LoCo had not been launched to its market segment. The reliability of USEQ is, at the moment, sufficient to begin operating under it for the initial activities of SEROI. With the pass of time and extensive use of the developed tool, its reliability will be enhanced and the error margin will be eliminated. Considerations of involving the SDN within the development of the tool have also been made.

As SEROI acquires more and more cases in the future, thus increasing the know-how on current service provisions and the specifics of services in various fields, USEQ will be continually developed and improved. In the current state USEQ looks at the users from a universal point of view, as it was meant to be

from the very beginning. The possibility of developing specific USEQ ratings or certifications for various service fields and their specific users as the information base of the agency grows is possible. The learning process behind understanding users and their behaviors, attitudes and beliefs is never-ending and alternating with the passage of time. One of SEROI's ultimate goals is to follow the users' paths and accordingly create what is best for them through the service providers that belong in the client network of the agency.

The work resulting from the thesis process should only be perceived as a solid starting point for various efforts made by the author as the establisher of the agency. The awareness needed in the field and the necessity of service design thinking will be evident in the future thanks to USEQ and the work behind it.

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SERVICE INNOVATION METRICS

The following index is a listing of both qualitative and quantitative metrics suggested for each task within the stages of Exploration, Creation and Reflection and Implementation. This approach has been suggested by Langon Morris (2008) on behalf of InnovationLabs. The metrics enlisted here are the ones which were considered to be somewhat relevant to a service design process. For a full listing of generic innovation metrics, please refer to the original white paper: ”Innovation Metrics: The innovation process and how to measure it” by Landon Morris, InnovationLabs LLC, Nov 2008.

1. Exploration

a. Strategic thinking

i. Qualitative metrics

1. Are we targeting the right parts of our business for innovation?
2. Can we change as fast as our markets do?
3. Are we flexible enough?
4. Is our strategy clear enough that we can translate it into innovation initiatives?

b. Portfolio management

i. Qualitative metrics

1. Are we introducing breakthroughs at a sufficient rate to keep up with or be ahead of change?
2. Are we developing new brands at an adequate rate?

2. Creation and Reflection

a. Research

i. Qualitative metrics

1. How well do we understand the tacit dimensions of our customers' experiences?
2. How well do we understand the implication and applications of new technologies?
3. Is our research helping to target the right innovation opportunities?

ii. Quantitative metrics

1. Number of customer groups we have examined.
2. Applications of research results in new products, services, and processes.
3. The breadth of participation throughout our organization in the research process (broader is generally better).

b. Ideation

i. Qualitative metrics

1. Do we have a broad enough range of models of technology possibilities, tacit knowledge models, and societal trends?

2. How good are we at creating an open sandbox that can accommodate a tremendous range of possible concepts and ideas?
3. Are we encouraging people sufficiently to share their ideas?

ii. Quantitative metrics

1. The number of ideas contributed by our staff
2. The percentage of ideas from outside
3. The number of people inside the organization who are participating in the ideation process
4. The number of people from outside the organization who are participating in the ideation process

c. Insight

i. Qualitative metrics

1. Are we getting enough solid insight/concepts?
2. Are the insights we are developing across a broad enough range of business ideas?

d. Targeting

i. Qualitative metrics

1. Are we using the right management processes for the different types of innovations that we are working on?

ii. Quantitative metrics

1. The percentage of investment in non-core innovation projects.
2. The total funds invested in non-core innovation projects.

e. Innovation development

i. Qualitative metrics

1. Are the right people involved in the innovation process?

ii. Quantitative metrics

1. The percent of ideas that are funded for development.
2. The percent of ideas that are killed.
3. The number of customers contacted for feedback on new concepts.

f. Market development

i. Qualitative metrics

1. How well are we balancing our attempts to reach existing versus new customers?
2. How well do we really understand our customers?
3. Are we positioned properly for changes in the attitudes, beliefs, ideals, etc. of our customers?

3. Implementation

a. Selling

i. Qualitative metrics

1. How well do our sales processes match our customers' needs?

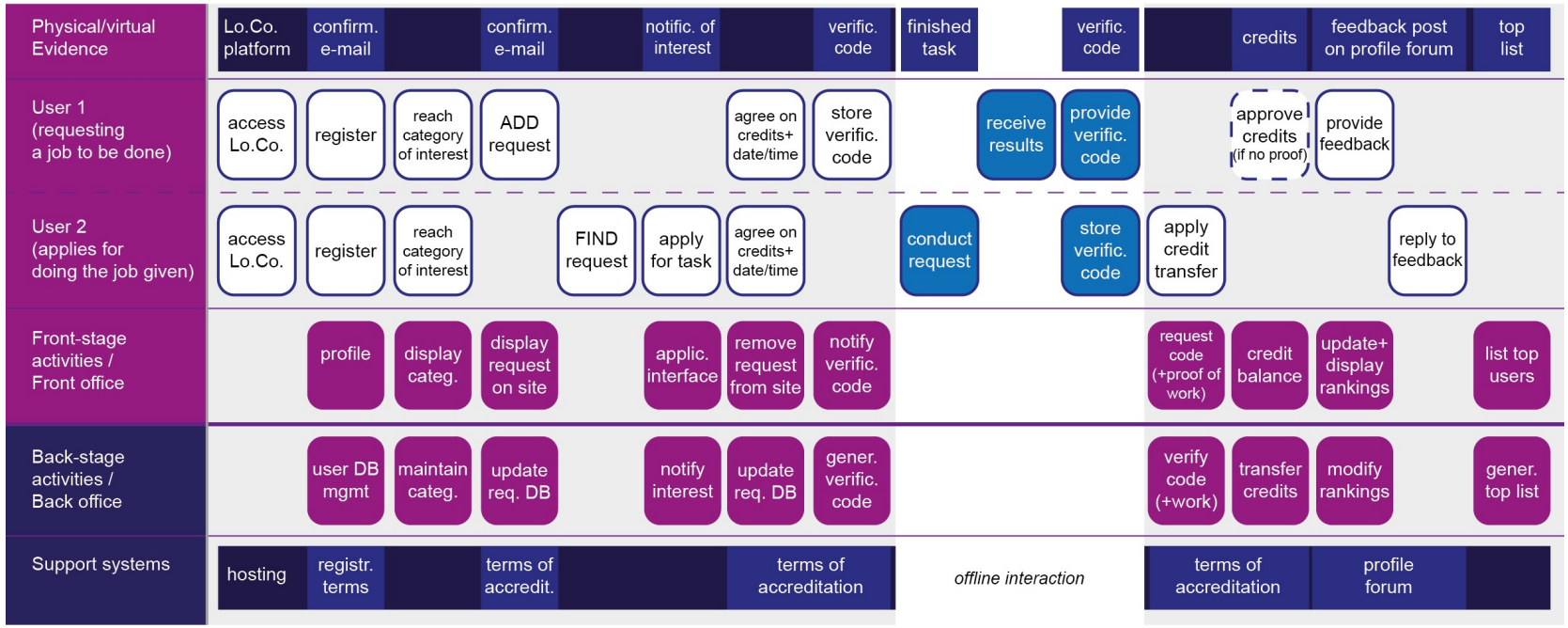
ii. Quantitative metrics

1. Gross sales revenue.
2. Gross sales margin.
3. Expected versus actual results.
4. The number of new customers.
5. The percentage of sales from new products/serices.
6. The average age of products/service.

7. The number of new products/services launched.
8. The percentage of revenue in core categories from new products/services.
9. The percentage of revenue in new categories from new products/services.
10. The percentage of profits from new products/services.
11. The percentage of new customers from new products/services.
12. Customer satisfaction with new products/services.

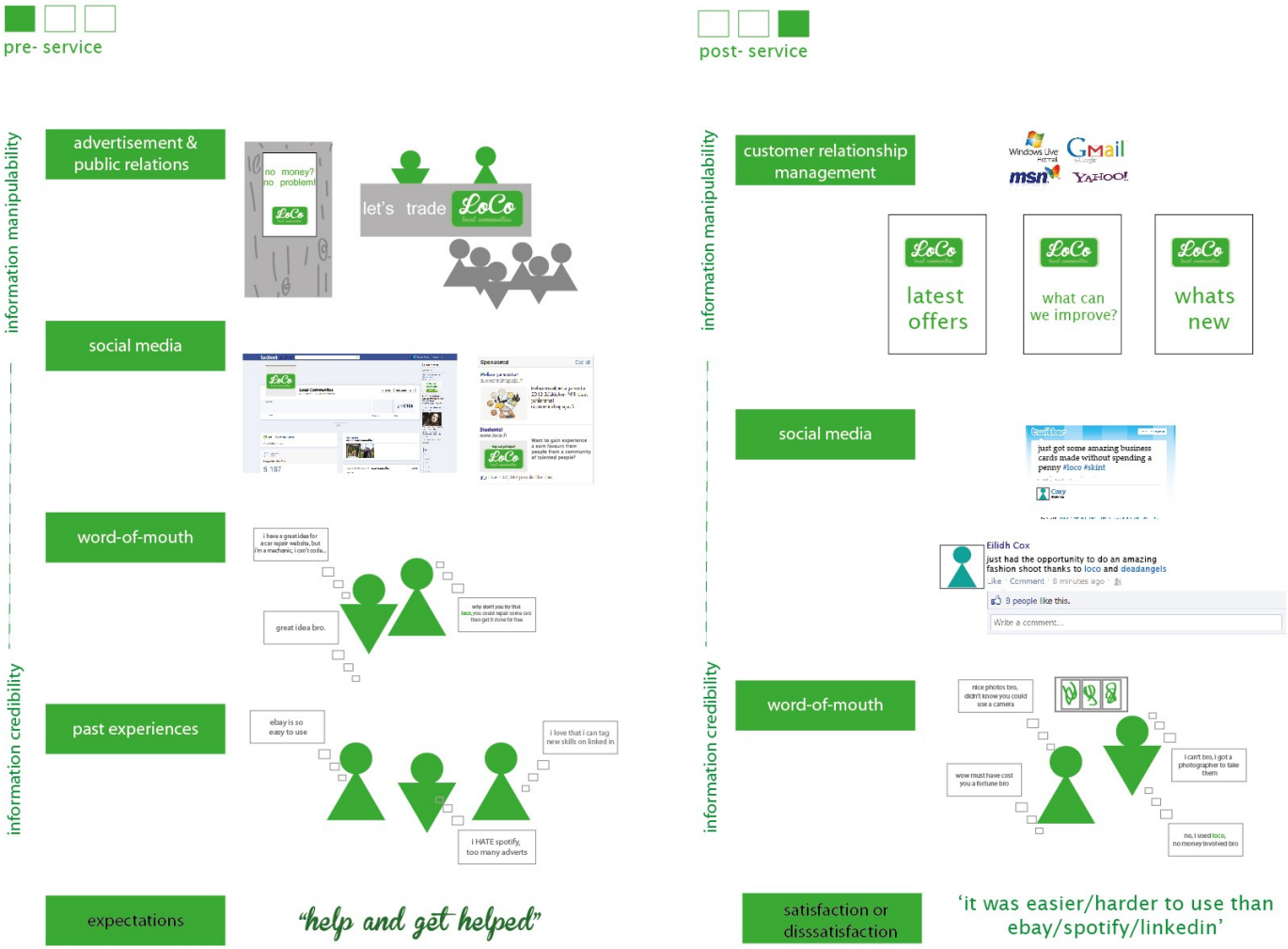
LoCo SERVICE ANALYSIS

1. SERVICE BLUEPRINT



Created by Andreas Pattichis, SEROI.

2. CUSTOMER JOURNEY MAP (PRE- AND POST-SERVICE PERIODS)



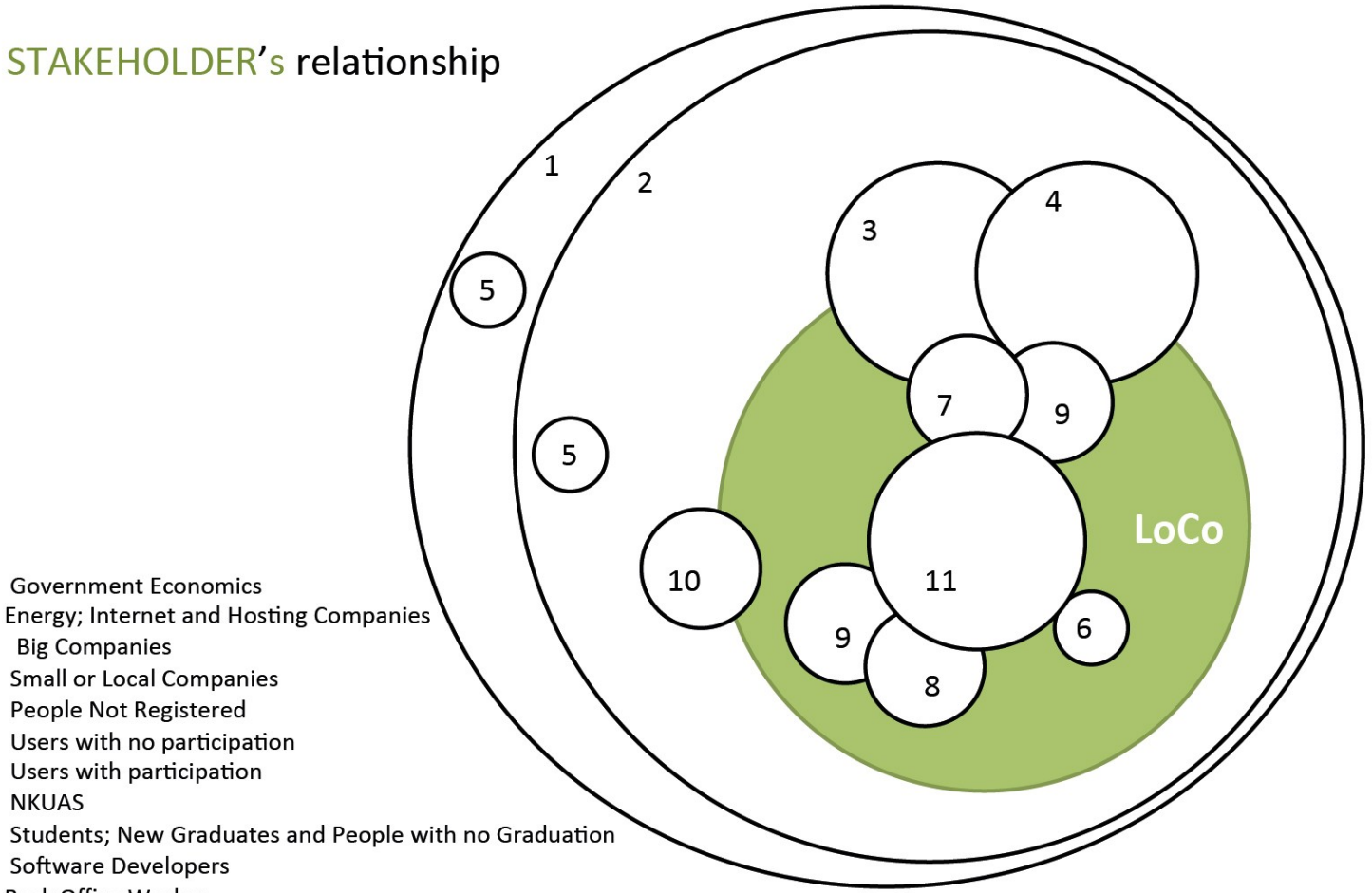
Created by Zsara McEwan under the supervision of Andreas Pattichis, SEROI.

3. SERVICE INVENTORY

Touchpoint						LoCo
Business						
Accounting		✓		✓		✓
Entrepenureship	✓	✓				✓
marketing			✓			✓
Engineering & technology						
Computer Science		✓	✓			✓
Electrical Engineering		✓				✓
Mechanical Engineering		✓				✓
Civil Engineering		✓				✓
Design						
Graphics	✓	✓	✓	✓	✓	✓
Industrial Design	✓	✓	✓		✓	✓
3D modelling			✓			✓
Photography		✓	✓	✓	✓	✓
Health & beauty						
Body treatments		✓			✓	✓
Tanning		✓			✓	✓
Hair		✓			✓	✓
Travel & entertainment						
Comedian		✓				✓
DJ		✓				✓
Delivery	✓			✓	✓	✓
Chauffure		✓				✓
Home & garden						
Decorating		✓			✓	✓
Cleaning		✓			✓	✓
Gardening		✓			✓	✓
Babysitter		✓			✓	✓

Created by Hollie Peters under the supervision of Andreas Pattichis, SEROI.

4. STAKEHOLDER MAP



1) Government Economics
2) Energy; Internet and Hosting Companies
3) Big Companies
4) Small or Local Companies
5) People Not Registered
6) Users with no participation
7) Users with participation
8) NKUAS
9) Students; New Graduates and People with no Graduation
10) Software Developers
11) Back Office Worker

Created by Tais Lima and Frazer Timpson under the supervision of Andreas Pattichis, SEROI.