Service Design for Architect Clients: Turning Architect Daily Challenges Into a New Service

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Into a New Service

In memory of architect Matti Salminen 1943-2012.

Tuomas Suominen
Degree programme in Service Innovation and Design
Masters Degree Thesis
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My research concentrated on gathering insight from architect clients and turning the data to a
new service idea for architects. I used in-depth interviews to gather the data. I included ar-
chitects in the co-creation process of the new service. The result from this study was a new
service path with three designed touchpoints.

The thesis starts by examining how service-dominant logic can guide me in the new service
development process. After this, I continue by describing service design as a way of executing
service-dominant thought in practice. After the literature review, a service design methods
chapter opens up the design methods used in the upcoming case.

The data of this thesis is useful to all companies providing service to architects and similar
customer groups because it describes in detail their daily challenges and what they value.
This thesis is also a cry-out to improve their work. After all, they are responsible for the
spaces where we all live and work.

The service design process described in this thesis is applicable to all companies from B-to-C
and B-to-B and public sector to third sector associations and foundations. From service user
challenges companies and other social groups can develop new services and improve existing
ones. The process is designed to understand user’s needs and latent needs through their fre-
quent problems and downsides in their profession.

Keywords: architects, value co-creation, service-dominant logic, new service development,
service design
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Case company

Kaakelikeskus imports and sells ceramic tiles and accessories in Finland. The company has over 40 years experience in importing and selling ceramic products. The company offers thousands of tiles for interior, facade and outdoor use. It has three business areas; wholesale, project and shops. The fastest growing sector is the project sector, which specializes in providing service to architects, constructors, interior designers and housing cooperatives.

Kaakelikeskus has two advantages that are the core of it’s success. These are a large collection of tiles (over 3000 in stock, 50 000 to order) and high quality customer service. Different customers need different attention and services. Architect services include "My Consult", "Tile trends", "Sample-to-office", "Technical phone" and a free 24-hour "Pro’s Only Tile Library" shop at the heart of Helsinki City. "My consult" service provides a sales person, who will take care of all services. “Sample-to-office” service means the architect can get free tiles delivered to his office. “Technical phone” means a telephone number he can call if he has technical questions about tiles and accessories. Pro’s Only Tile Library is open 24 hours to all professionals with a keycard.

Why study architects?

Architects do not buy construction products. Construction companies do. Still Kaakelikeskus sees architects as an important customer group. This is because architects make decisions what products are used in large construction projects. They are the main decision makers, which tiles to use. I assume that architects select products from companies that provide valuable service to them. This may mean accurate information about the company´s products or reliable sales people or other things that help the architect do his job. Because of this assumption Kaakelikeskus wants to invest in services that are valuable to architects. The aim is to get competitive edge compared to other service providers, mainly tile selling companies.

Architects are responsible for all buildings we see and experience. There are over 2000 active SAFA-architects in Finland and most of them operate in the Helsinki metropolitan area. Buildings are combinations of simple and complex products. One building alone can withhold thousands of items the architect has to choose in order to bring his vision to life.
Architects are key influencers in construction and design. They have profound influence in culture. They dictate how we operate the spaces we live in and how we see and use spaces daily. Think about the pyramids or the floating town of Venice. Think about our national monuments such as the White Church in Helsinki. The things architects design can influence our lives more than we would first assume. Because architects have such a big influence in our lives, shouldn’t we try to help them create these marvelous buildings that can be seen as also functional spaces and also as pieces of art? I thought they deserved great service, which could ensure that they use the best materials out there. This way services for architects could lead to improve the quality of our own lives.

Architects are a great focus group because they are presumably very busy and need assistance from hundreds of product and service providers. I am interested how they manage the overwhelming information that is generated every day and what are the challenges in their work.

This thesis can be invaluable to other researchers. It will undoubtedly create general awareness of the mind processes and decision-making logic of this service user group. They are highly trained to make decisions based on complex information. After public awareness, other researchers can pose new research questions. They can go deeper into more specific subject areas.

From this thesis, other service provider companies can learn how they should mold their existing services to better meet architect needs. I am sure that this research could be beneficial to firms who deal with architects. For example organizations those rely mainly on architect’s decisions, such as KONE. The research process applied in this thesis can be applied to any kind of service user group.

The research question

Investigating customer challenges is not a new subject. For example Lou Gerstner (2002, IBM Corporate Archives) turned IBM around from near extinction by concentrating on solving customer challenges with technology. He sent his sales people out to interview client’s challenges and decided they would specialize in custom-made services that provide solutions to customer’s problems. Inspired by Lou Gerstner’s IBM turnaround in the 1990s, I also wanted to look into clients challenges because they could provide useful data about customer needs, latent needs and frequent problems to be used in new service development.

The aim of this thesis was to develop an idea of a new service for Kaakelikeskus architect customers. The new service had to be co-created to be valuable for both parties, for archi-
tects who design large buildings and for service provider Kaakelikeskus. The research question therefore was “What would a new service for architect clients look like, if it was developed together with architect clients and Kaakelikeskus sales staff?”

Thesis structure

The thesis starts by examining how service-dominant logic could guide my way in this service development case. After this, I present service design as a way of executing this logic in practice. Service design literature provides good background information and tools and methods to develop the new service. After the literature review, a brief chapter describes the service design methods used in the upcoming development case.

Image 1: thesis structure

2 New service development

Before jumping to how services can be developed, it is useful to describe what service is all about, mainly value co-creation. Service-dominant logic can provide some guidelines what is meant with services and what you should take into consideration when designing new services. In the following sections, we will have a look at how service-dominant logic was realized by Vargo & Lusch (2004b, 1). We will also see key features of the service-centered logic. And what are the managerial implications it can offer to service developers.

2.1 Service seen from service-dominant logic perspective

Stephen L. Vargo and Robert F. Lusch (2004b, 1) introduced a framework for a new service-centered logic for marketing in the Journal of Marketing 2004. The two professors have continued to evolve the theory further with other scholars. In their initial article, they proposed that marketing had inherited a false model for exchange from economics, which had historically been characterized as goods-dominant logic, based on exchange of manufactured output. Goods-dominant logic has always been focused on tangible resources, embedded value
and transactions. The authors suggested a new dominant logic for marketing, which focuses on intangible resources, co-creation of value and relationships. They propose that service provision rather than goods are fundamental to economic exchange. (Vargo & Lusch 2004b, 1)

Vargo & Lusch (2004b, 12) view the new service centered model as a general change in perspective. There have been many service marketers who tried to make services more like goods, but the qualities are often nor valid or desirable. Standardized tangible goods are often produced without the consumer interacting in the process. They require distribution and inventory. This way they add costs and are often perishable and nonresponsive to ever-changing consumer needs. The new service-dominant view implies that the goal is to customize offering to whatever the consumer needs by involving them in the co-production of value.

In service-dominant logic, tangible goods are vehicles for service provision rather than valuable on their own (Vargo & Lusch 2004b, 14). The focus is slowly but inevitably shifting away from goods towards intangibles, skills, information and knowledge. We are going towards interactivity and connectivity and relationships, which are ongoing. We are orienting towards the consumer and away from the producer. The unit of exchange is no longer static and discrete concrete product. (Vargo & Lusch 2004b, 14)

Service-dominant logic is an effort to explain how people create value together. From service-dominant perspective, there are no services or goods, just value that is created and distributed through an intermediary product or without one. The theory is logical in the sense that people exchange only knowledge and skills. It is also logical that without these two qualities, there would not be any products to buy. The theory is user-centric in the sense that it implies that one party cannot create value on its own. Value is co-created.

History of service-dominant logic

If you think about early service scholars, you should think of people who have tried to define value. Vargo, Maglio and Akaka (2008, 146-147) describe how Aristotle divided value into categories, use-value and exchange value. Aristotle recognized, that “need” stuck the process of exchange together, although need was immeasurable.

The end of the nineteenth century scholars tried their best to describe economic activity and the first perspectives were service-centric. Adam Smith integrated the economic views of the time into a model of normative economics that served as the foundation for modern economics. He has been mistakenly quoted to say that services are not valuable. He believed national well-being was generated through tangible surplus. He also thought some services were unproductive in terms of the national wealth idea, but they could still be “useful” and “respectful”. Some services (labor) he thought were necessary to make things, thus they were valua-
ble. The paradox of two standards of value forced him to make a decision on one model. The other one was based on production - value in exchange. The other one was based on consumption - value-in-use. Smith thought the first one suited people’s minds better because they could more easily think in quantities of goods rather than quantities of things. (Vargo & Lusch 2005, 43). Jean Baptist Say (1821) did not settle on Smith’s opinions on services. For him, services were processes that were “consumed in the time of production”. They were immaterial products. After him, John Stuart Mill (1806-1863) said matter only presented the potential to be reorganized. For Mill the value of objects was (like Say) in their usefulness, the value they provide. He argued that value could be found also in intangible services, in utility that is not embodied in matter. (Vargo & Lusch 2005, 44)

Walras tried to catch up with a Newtonian model of a deterministic and rational world. For him, economics was to be a legitimate science. He saw economics as mathematical derivation of demand, supply and price. He divided services into two categories, consumer services and producer’s services. Pure economics for Walras was “a physio-mathematical science like mechanics and hydraulics and its practitioners should not fear to employ the methods and language of mathematics”. (Vargo & Lusch 2005, 45)

For Vargo & Lusch (2005, 46), the predominant goods-centered model was ”intimated By Say, implied by Mill, explicated by Bastiat and acknowledged by Walras”. It described economics as abstract relationships among consumers and tangible products and relationships among producers and tangible products. According to goods-dominant model, consumers and producers were interested about goods; thus goods were embedded with value. The good brought the demand curve from the consumer and the supply curve from the producer together. The model was consistent with the naturalistic Newtonian view and the predominant political economist’s views of materialistic virtue. It had the assumption of maximizing profit, perfect information and rationality, stable supply and stable demand functions and mathematical prerequisite for a scientific theory. Because the goods-dominant view provided scientific respectability, it survived. The work of first service scholars such as Bastiat became as Vargo & Lusch (2005, 46) say, ”a footnote to economic science”

The rise of services

Vargo, Lusch & Morgan (2006c, 29) say that a ”perverted view of services” as ”immaterial goods” has been under debate for more than 150 years.

According to Vargo & Lusch, services were first described as ”aids to production and marketing of goods”. There were other definitions that questioned the traditional definition. For example, Converse defined service as ”all those nonphysical things for which we spend mon-
Breyer defined some services, such as electric and telephone services as "intangible goods". Macklin defined production and marketing as "rendering of essential services" and said production can’t be completed until all of these services are completed. (Vargo & Lusch 2004b, 5),

Services were "crawling out" before the 1980s as Bitner, Fisk & Brown (Maglio, Kieliszewski, Spohrer 2010, 647) called the period. The first articles and books were published in the 1960s. At this period, there were efforts to find out differences (lists of attributes) of goods and services. The most notable and generally accepted differences were characterized by Rathmel (1966, 33-34). The differences were intangibility, heterogeneity, inseparability of production and consumption and perishability. Shostack (1977, 73) noted that the economic literature "marketing mix" and marketing language are all originated from the industrial manufacturing of goods. Shostacks goal was to "break free" from product marketing.

During the first half of the 1980s service marketing literature boomed. Lovelock (1983, 11) provided useful matrixes to describe services. These lists could be used in management strategies. Zeithaml, Parasuraman and Berry (1985, 41) published the SERVQUAL model for perception of service quality. Solomon (Czepiel, Solomon and Surprenant 1985, 6) explained the critical components of the service encounter. Services marketing had made a breakthrough, but the goods-dominant view still dominates marketing thought today.

Operand and operant resources

Vargo & Lusch (2004b, 2-3) say that we should step a little backwards and see the extant marketing literature in a different light. They explain what happens when we rethink our orientation to resources. We used to think about resources as "stuff" that was static and that could be captured for human advantage. Over the past 50 years, people have started to view resources also as intangible human ingenuity and that resources are not necessarily static, but changing.

Vargo & Lusch define (2004b, 2) operand resources as resources that can be used to produce an effect. In goods-dominant view operand resources are secondary. A firm has production factors, which have value because these factors can be turned into products at a low cost. Operant resources mean intangible resources that produce effect. The most important operant resources are skills and knowledge. Operant resources are usually core competences that are ever-changing. They enable us to multiply the value of physical resources (natural resources). Service-dominant logic sees operant resources as primary because they enable us to produce effect to operand resources. (Vargo & Lusch 2004b, 2-3)

Goods-dominant logic versus Service-dominant logic
In the past marketing has focused on goods as the unit of exchange. According to Vargo & Lusch (2004b, 5) goods-dominant logic is characterized by these assumptions:

- The purpose of economic activity is to manufacture and sell things.
- To be sold, these things must be embedded with value and utility during the manufacturing and distribution processes.
- The value and utility should be better than the competitor’s offerings.
- All decision variables should be based on maximizing profit from the sale of output.
- The goods should be standardized and produced away from the market for maximum production control and efficiency.
- The good can be stocked until the customer demands and gets it at a profitable price.

Opposed to G-D logic, S-D logic views marketing as a continuous series of economic and social processes. These processes are focused on operant resources that the firm is constantly striving to make better value propositions than other firms. The service-centered view states, that it is important to identify and develop core competences, knowledge and skills. They represent the potential for competitive advantage. A firm must identify potential customers (entities) that can benefit from these core competences and create relationships, where the customer is a co-developer in customized and compelling value propositions to meet customer needs. A firm should focus on search of marketplace feedback by analyzing financial exchange data to learn how to improve customer offering and firm overall performance. (Vargo & Lusch 2004b, 6)

Now that we have covered the goods and service dominant views of marketing we can focus on the things the views are different. Vargo and Lusch (2004b, 7; 2008a, 8) have described six attributes and ten premises to describe the main differences of these views.

Vargo & Lusch (2004b, 7) distinguish Service-dominant logic from goods-dominant logic in six dimensions.

<table>
<thead>
<tr>
<th>Primary unit of exchange</th>
<th>In goods-dominant logic, people exchange for goods. Goods serve as operand resources. In S-D logic, people exchange to acquire benefits or services. Main benefits are knowledge and skills, which are operand resources.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of goods</td>
<td>In goods-dominant logic, goods are end products, operand resources. Marketers change</td>
</tr>
<tr>
<td>Role of customer</td>
<td>In goods-dominant logic, the customer receives the good. Marketers try to do things to customers, such as segment or penetrate them and distribute and promote to them. The customer is an operand resource. In S-D logic, the customer is involved in the production of the service. Marketing is seen as a process of doing things with the customer to create value. The customer is primarily an operant resource, only sometimes acting as an operand resource.</td>
</tr>
<tr>
<td>Determination and meaning of value</td>
<td>According to goods-dominant logic the producer determines the value by embedding it into goods (operand resources). Value is defined in &quot;exchange-value&quot;. In S-D logic, value is determined and perceived in value-in-use by the customer. Sometimes operand resources are transmitters for operant resources. Companies can only make value propositions.</td>
</tr>
<tr>
<td>Firm-customer interaction</td>
<td>Goods-dominant view sees customers as operand resources. Customers are acted upon in order to create resource transactions. S-D logic sees customers as primarily operant resources. Customers participate in co-production and relational exchange.</td>
</tr>
<tr>
<td>Source of economic growth</td>
<td>According to goods-dominant logic, wealth is obtained from overage tangible resources and goods. Wealth is to own, control and produce operand resources. In S-D logic, wealth is obtained by exchanging and applying specialized knowledge and skills. Operant resources can be used in the future.</td>
</tr>
<tr>
<td>Determination and meaning of value</td>
<td>the form, time, place and possession of the good. In S-D view goods are merely transmitters of embedded knowledge, operant resources. The customer uses the product as an intermediary in the value creation process.</td>
</tr>
</tbody>
</table>
10 foundational premises

Vargo & Lusch (2004b, 6) have made a comprehensive list of foundational premises, which describe the economic and social environment we live in. These premises are in no specific order and do not controvert with each other.

FP 1 - The application of specialized skills and knowledge is the fundamental unit of exchange

Since the Stone Age, people have usually not possessed the optimal skills for each person’s survival, so they have specialized to be more efficient. People have specialized in different skills and achieved scale effects. When this specialization has happened, exchange has been needed. People have two operant resource they can exchange; mental and physical skills. (Vargo & Lusch 2004b, 6)

As late as 1977 Shostack (Shostack 1977, 73) noted, ”The classical ‘marketing mix’, the seminal literature and the language of marketing all derive from the manufacture of physical goods”. Shostack suggested that marketing scholars should ”break free” from product marketing; thus the dominant logic is inadequate for describing services marketing (Vargo & Lusch 2004b, 1). Shostack (Shostack 1977, 74) argued for a new conceptual framework as follows:

"One unorthodox possibility can be drawn from direct observation of the nature of market ‘satisfiers’ available to it... How should the automobile be defined? Is General Motors marketing a service, a service that happens to include a by-product called a car? Levitt’s classic ”Marketing Myopia” exhorts businessmen to think exactly this generic way about what they market. Are automobiles ‘tangible services’?"

Shostack (1977, 74) believed that if ”products” and ”services” terms do not adequately describe marketed things, we should consider a new structural definition.

Vargo & Lusch (2004b, 8) believe, as Shostack (1977, 74) and Alderson that people exchange application of knowledge and skill (services). Sometimes there are products that are intermediaries in this exchange process.

FP 2 - Indirect exchange masks the fundamental unit of exchange
Because humans have largely monetized their exchange processes, industrial society’s increasing division of labor and large bureaucratic and hierarchical organizations, most employees have stopped interacting with customers. The exchange of services to services (skills-for-skills) has become masked. The former skills such as making sharp sticks have been broken down to narrower skills, e.g. sharpening one side of the stick. This is called micro-specialization. This progress has concluded in people who do not see the end product or interact with the customer. As the Industrial Revolution passed, companies saw their workers losing their sense of both the customer and the purpose of their own service provision. Many people saw their internal customers, other workers as their clients. Because their internal clients did not pay anything for their service and did not usually meet the end customers, the workers could ignore quality. To this problem the correction was “total quality management” including various management techniques. Also, many pure service provider organizations fell into this trap; thus non-goods-producing organizations are also subject to masking effect of indirect exchange. (Vargo & Lusch 2004b, 8)

For Vargo & Lusch (2004b, 8), the fundamental process never changes. People still exchange their specialized skills (services), in today’s monetized world. Money, goods, firms and vertical marketing systems are only vehicles for exchange.

FP 3 - Goods are distribution mechanisms for service provision

When the primary interest in the Industrial Revolution was manufacturing, the view of goods as the fundamental components of economic exchange served reasonably well for western societies. Today the situation is different, thus the common denominators are applications of specialized knowledge, mental skills and to some extent, physical skills. (Vargo & Lusch 2004a, 8)

Knowledge can be transferred directly, through education and training or indirectly by embedding them to objects. Thus, goods can be viewed as embodied activities or knowledge. People desire goods because they provide services. For example, a wheel and a pulley can lower the needed for physical strength, a razor replaces barbering services and dozens of household appliances help us in our daily chores. A computer can replace numerous services such as attorneys, teachers and accountants. (Vargo & Lusch 2004b, 9). Kotler (1977, 8) implied that it is not a matter of owning physical items, but gaining access to the services they provide that is important.

In addition to goods providing services, they can also fulfill higher-order needs such as happiness, security and accomplishment. People often buy products because showing them, owning them and experiencing them (for example a nice sports car) can fulfill our satisfaction, self-
fulfillment and esteem needs as well as our basic functions. Therefore, goods should be viewed as distributors for services or the satisfiers for higher-order needs. (Vargo & Lusch 2004b, 9)

FP 4 - Knowledge is the fundamental source of competitive advantage

According to Vargo & Lusch (2004b, 9) operant resources are "the foundation of competitive advantage and economic growth and the key source of wealth". This means that mental skills are vital for a marketer’s success in competitive market. Competition enhances knowledge and learning in a society.

The only true source of competitive advantage comes from deeply understanding the entire value creating system. The company should be able to make it work for the company’s advantage. Vargo & Lusch imply that the primary flow of supply chains is not physical product, but information. Service is seen as a provision of the information to a consumer who desires it, may it contain a device or not. In moving to a service-dominant logic, the focus will be on operant resources and especially process management. (Vargo & Lusch 2004b, 9)

FP5 - All economies are service economies

Vargo and Lusch (2004b, 10) note, that "Economic science, as well as most classifications of economic exchange that are based on it, is grounded on Smith’s narrowed concern with manufactured output.”. Services have in the past been defined as being anything other than physical output.

It is not easy to classify what is considered to be service and what is not, because of micro-specialization or "complification" as Vargo & Lusch (2004b, 10) call it. For example, the U.S government has difficulties in defining painting as goods or service. Almost all of today’s activities have always been performed in some manner, although they have been increasingly separated to special knowledge, which is exchanged in the marketplace. Now, that we are microspecialized, services stand out because they are harder to classify than in the agricultural era, when there was less microspecialization. Vargo & Lusch (2004b, 10) conclude: "Services and the operant resources they represent have always characterized the essence of economic activity.”.

FP6 - The customer is always a co-producer

Goods-dominant logic has viewed the producer and the consumer as separate to maximize manufacturing efficiency. If the goal of marketing is consumer responsiveness, this efficiency lessens the impact of marketing effectiveness. In service centered logic, the consumer is al-
ways involved in value creation. In goods-dominant logic, value creation ends with the exchange of the good. This view is limited because goods are intermediaries for services. The consumer must still learn how to use, maintain, repair and alter the product to his or her needs. The consumer continues the marketing, consumption and value-creation and delivery processes after purchase. (Vargo & Lusch 2004b, 11). To conclude, the customer becomes a co-producer (operant resource) and not a target (operand resource) and hence can be included in the value and service chain in acting on operand resources.

FP 7 - The enterprise can only make value propositions

Gummeson (1998, 247) has stated "if the consumer is the focal point of marketing, value creation is only possible when a good or service is consumed. An unsold good has no value, and the service provider without customers cannot produce anything.". Grönroos (2000, 24-25) also implies that the focus should be on investigating the value creation process for the customer. He says that the focus of marketing should be value creation, not just value distribution and facilitation and support of a value-creation process. It´s function isn´t just distribution of ready-made value to people.

Vargo & Lusch (2004b, 11) extend Gummesons and Grönrooses logic by stating that the firm can only offer value propositions to consumers and strive to be better or more appealing than competitors value proposals. The consumer has to determine what is valuable for him or her and be involved in creating value through co-creation.

FP 8 - A service-centered view is customer oriented and relational

Service-dominant view embraces four hallmarks that enable us to focus on the customer and the customer-firm relationship. These are (1) interactivity, (2) integration, (3) customization and (4) co-production.

Davis and Manrodt (1996, 6) said: "(It) begins with the interactive definition of the individual customer´s problem, the development of a customized solution, and delivery of that customized solution to the customer. The solution may consist of a tangible product, an intangible service, or some combination of both. It is not the mix of the solution (be it product or service) that is important. It is important that the organization interacts with each customer to define the specific need and then develops a solution to meet the need.". Vargo & Lusch (2004b, 11) reply "The service-centered view emerges from not just doing things for the customer, but also with the customer.". This is the model of inseparability between the offerer and the consumer.
All activities in the firm should be integrated in market responsiveness and the idea that the company can prosper only by having high customer satisfaction (not from units of goods sold).

It used to be that the same individuals provided all service activities. This was in the pre-industrial era. An example: "If a knight wanted armor, he talked directly to the armorer, who translated the knights desires into a product, the two might discuss the material-plate rather than chain armor-and details like fluted surface for greater bending strength. Then the armorer would design the production process." Marketing, engineering and manufacturing were all integrated and provided by the same person responsible also for sales. (Vargo & Lusch 2004b, 12)

Over the course of 50 years we have transitioned from a product and production focus to consumer focus and recently from transaction to relationship focus. According to Vargo & Lusch (2004b, 12) we do not need goods. We either must perform mental or physical activities ourselves, have someone do them for us or buy a product that can provide this service.

In many instances "relationships" have been understood as multiple purchases over time. This view is compelling, but firms should see customers more relationally. Even relatively discrete transactions come with social (brand promise) or legal contracts (warranties). The goods-dominant view simply is not adequate to describe the models of relationships. Service-dominant view is more consumer-oriented because it aims to provide needed solutions continuously by co-creating them with the customer. (Vargo & Lusch 2004b, 12)

Vargo & Lusch (2004b, 12) argue that exchange is relational in nature. May the purchased thing be a service or good, provided interactively or indirectly by a tangible good. Value is co-created, and as with goods, the customer must interact with them after exchange has happened. More important than the transaction is what happens after the consumer has purchased the service or good.

Later adjustments and two additional FPs

The terms used in S-D logic were troublesome. As Vargo & Lusch (2008a, 2) say, there usually are no precise words to describe adequately the explained phenomenon’s in S-D logic, because we are bound by our history of explaining things in goods-dominant words.

Vargo & Lusch refined the original foundational premises with more suitable words. Below is a compilation of how the FP’s were molded in Service-dominant Logic: Continuing the Evolution (Vargo & Lusch 2008a, 6-9).
<table>
<thead>
<tr>
<th>Original FP</th>
<th>Refined 2008</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FP1 The application of specialized skill(s) and knowledge is the fundamental unit of exchange</strong></td>
<td><strong>FP 1 Service is the fundamental basis of exchange</strong></td>
<td>&quot;Unit&quot; was too much a G-D logic concept. Also application of skill(s) and knowledge equals service. The FP can be simplified by replacing these terms with &quot;service&quot;.</td>
</tr>
<tr>
<td><strong>FP2 Indirect exchange masks the fundamental unit of exchange.</strong></td>
<td><strong>FP 2 Indirect exchange masks the fundamental basis of exchange.</strong></td>
<td>&quot;Unit&quot; was too much a G-D logic concept, so it was changed to “basis”.</td>
</tr>
<tr>
<td><strong>FP3 Goods are distribution mechanism for service provision.</strong></td>
<td><strong>FP3 Goods are distribution mechanism for service provision.</strong></td>
<td>Goods (both durable and non-durable) derive their value through use - the service they provide.</td>
</tr>
<tr>
<td><strong>FP4 Knowledge is the fundamental source of competitive advantage.</strong></td>
<td><strong>FP4 Operant resources are the fundamental source of competitive advantage</strong></td>
<td>Operant resources term was not a widely used when Var- go &amp; Lusch first presented the &quot;Evolving to a new dominant logic for Marketing&quot; article. Now that it is more familiar to scholars, it can be used for the FP.</td>
</tr>
<tr>
<td><strong>FP5 All economies are services economies</strong></td>
<td><strong>FP5 All economies are service economies</strong></td>
<td>The singular “service” term is more suitable for the phrase. It represents better the process of using ones resources for ones and other peoples benefit.</td>
</tr>
<tr>
<td><strong>FP6 The customer is always a co-producer</strong></td>
<td><strong>FP6 The customer is always a co-creator of value.</strong></td>
<td>Because service-dominant view is about value creation and not production, the FP needed refinement. Co-production can be a part of co-creation of value.</td>
</tr>
<tr>
<td><strong>FP7 The enterprise can only make value propositions</strong></td>
<td><strong>FP7 The enterprise can’t deliver value, but offer value propositions</strong></td>
<td>The original FP7 can be mis-interpreted. The value-creation process does not</td>
</tr>
</tbody>
</table>
After the Otago Forum, Vargo & Lusch (2006a, 283-284) extended the eight foundational premises by adding a 9th premise. This was after they had thought more fully the resource application and especially resource-integrator function of companies and homes. FP9 states “Organizations exist to integrate and transform micro-specialized competences into complex services that are demanded in the marketplace” (Vargo & Lusch 2006). After publishing the article, they started thinking that the new foundational premise was also applicable to individuals and to all economic entities.

Achrol & Kotler (2006, 330-332), Grönroos (2006, 362) and Gummeson (2006, 350) have pointed out the significant role of interaction and/or networks in value creation. After this feed-
back, Vargo & Lusch (2006a, 2985) explain that S-D logic does not ignore interaction and networks. In service-dominant logic, interaction is central. The foundational premise FP9 withholds an idea, that value creation is an integrating and transforming process of resources. The process needs interaction, and it implies networks. Also, S-D logic co-creation of value is an interactive process.

Value is created in service systems

Service-dominant logic is an ongoing “open source” thought shift and there are a lot of scholars refining it as this paper is written. One addition to Vargo & Lusch 2004 article “Evolving...” is the concept of service systems and how value is created in a complex system.

The new framework focuses on value-in-use and service systems ability to integrate operant resources (knowledge and skills) for the benefit of themselves and others. (Vargo, Maglio & Akaka 2008, 151)

According to Vargo, Maglio and Akaka (2009, 145-146) core purpose and central process of economic exchange is co-creation of value. Services are exchanged for services, and the unit for analysis is the service system. A service system is a configuration of people, information and technology, which are different kinds of resources. These resources are connected to other service systems via value propositions. Vargo, Maglio and Akaka continue by explaining that service science is the study of these service systems.

So how is value created in a service system? Value can’t be created by one individual alone, but in a service system, that can withhold companies, employees, customers, stockholders, government agencies and other stakeholders. (Vargo, Maglio & Akaka 2008, 146)

When value is seen from a service-system perspective, the producer-customer distinction disappears, and the realization is that there are many parties that participate in creating value. A service system can be for example individuals, groups, companies, and governments if they can rearrange resources, take action and collaborate with others in mutually beneficial ways. In a service system everyone is interdependent on resources of others. (Vargo, Maglio & Akaka 2008, 146-149)

S-D logic embraces the concept “value-in-use” and extends the concept further to “value-in context”. That is, value is always determined in context (for example time, laws and weather). (Vargo, Maglio & Akaka 2008, 148-149)

Networks from Service-dominant perspective
Vargo, Lusch & Tanniru (2010, 20) believe that marketing and SCM should integrate to form a new concept called a value network. They define a value network as "spontaneously sensing and responding spatial and temporal structure of largely loosely coupled value proposing social and economic actors interacting through institutions and technology, to: (1) co-produce service offerings, (2) exchange service offerings, and (3) co-create value." A supply chain is a part of the value network. Vargo & Lusch (2011) refine the value network in “It is all B-to-B...and beyond: Towards a system perspective of the market” to a service ecosystem. So what holds the network or system together? Competences, relationships and information are the binding material. Each participant organization has competences, relationships and information they share with others. Value propositions connect the company with its customers and suppliers. To get a better advantage from a value network, he objective is to create, maintain and integrate competences, relationships and information and having abilities to create and maintain strong customer relationships and constantly learn from them.

Companies in a value network strive for better density. This means that at a given place and time, a company organizes resources to create the best possible value in a given context. A value proposition is followed by customer feedback (for example cash flow) that the firm can use to learn from customers. This creates a positive learning loop for a company. (Vargo & Lusch 2004b, 9)

Managerial implications of service-dominant logic

Service-dominant logic does not imply that the traditional marketing mix is false, but it does place it in a more strategic role. In today’s firms, the 4 P’s (product, price, place, promotion) are seen as tactical instruments. In a service-centered view, the 4 P’s is part of a continuous service flow where value is co-created with customers and partners.

Vargo & Lusch (2006a, 407-408) explain how we should alter the traditional marketing mix for service-dominant logic.

<table>
<thead>
<tr>
<th>Traditional marketing mix (tactical)</th>
<th>Service-dominant logic (strategic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Co-creating service(s)</td>
</tr>
<tr>
<td>Price</td>
<td>Co-creating value proposition</td>
</tr>
<tr>
<td>Promotion</td>
<td>Co-creating conversation/dialogue</td>
</tr>
<tr>
<td>Channel of distribution (place)</td>
<td>Co-creating value processes/networks</td>
</tr>
</tbody>
</table>

Service-dominant logic sees all offerings as services, although some offerings are provided through tangible intermediaries (goods). Price is replaced by co-creating value proposition. This means that the consumer participates over time to the value creation process. Vargo &
Lusch (2006a, 407-408) see promotion as tactical, and it is replaced with conversation and dialogue as a way to improve marketing communication. Co-creating value processes and networks replace the place utility. Networks are constantly learning and developing, and they should not be permanent mechanisms.

Figure 1: service-dominant marketing (Vargo & Lusch 2006, 413)

As figure 1 shows, the new three circles model places collaboration with customers and network partners in the center, while inside the second circle is the Four P’s remodeled version. The firm should focus on continuous processes that are reflected in the four sectors of a company’s strategic direction. All these sectors should be co-created with customers and network collaborates. The objective is not quite the same for setting the Four P’s as with the goods centered model, to optimize profit. The goal is to get feedback from the customers to better serve them. Profit is seen as a test of how well customers are served.

The outer ring of the three circles model consists of external and internal resources and obstacles. Service-dominant logic has a different perspective especially to obstacles than in the traditional view. It views the external environment as potential resources, a challenge. For example, if looked traditionally, competitors are usually seen as a threat. It would be wise to see them also as a resource, though they push your business to be better for the clients. Sometimes competitors have the same interests and can even collaborate with your business, for example by joint research projects. The attitude towards overcoming resistances is different from the traditional view.
Resourcing

Value creation happens when an actor turns potential resources into specific benefit. This is called resourcing. Resourcing withholds three essential aspects. These are resource creation, resource integration and resource resistance removal. Resource creation means that people turn a potential resource (either operand or operant) that in the past had little value (for example petroleum in the mid 1850s) to valuable resources. This act requires human ingenuity and knowledge. Resource integration means integrating many resources into appealing service provisioning. Removal of resource resistance means removing obstacles in the way to capture new resources. The obstacles can be physical (for example petroleum 50 000 feet below surface needs a special kind of drill) or mental (for example cultural). (Vargo, Lusch & Wessels 2008c, 8-9)

Servicing and experiencing

Vargo, Lusch and Wessels (2008c, 9-10) even state, that servicing and experiencing can replace the goods and services ideology. A service-oriented ideology would concentrate on understanding the customers experience and not just offer "manufactured" or "designed" services the firms can provide efficiently. Effectiveness is off course needed in firms, but it is essential to be efficient from the customer's point of view, not just from the company`s perspective.

Competing with service-dominant logic

Vargo, Lusch and O´Brien (2007a, 8) give advise how to compete with service-dominant logic. They submit nine propositions how to view your business environment differently.

Firms gain competitive edge by transforming their operant resources to better meet the customer’s needs than competitors. The predominant “marketing mix thinking” and customer manipulation has been quite successful in the past, but to be more efficient and adapting service-dominant logic thinking firms should preferably start thinking of their offerings as service. Competition in the marketplace takes on a new form. The big question is, who is able to serve their clients best? To provide the best service, the company should invest in operant resources such as skills and knowledge. (Vargo, Lusch and O´Brien 2007, 8-9)

Firms that collaborate with other entities acquire knowledge and competitive advantage. This statement means that service innovations are crucial for a business to survive and gain advantage in the marketplace. Innovations are dependent on collection of competences that are
acquired by transforming outer resources to useful forms and absorbing their knowledge to make new and more efficient value proposals. (Vargo, Lusch and O´Brien 2007, 9)

Firm’s constant application of information technology with an associated decrease in communication and computation costs can provide firms better resources for new competitive advantage through collaboration. S-D logic views technology as operant resources. Technology is created by creation of new operant resources. The goal is to find new ways to use information technology to be more efficient in value-creation, alter failure service steps and add valuable experiences to enhance the service-provision process. The objective is to more efficiently collaborate within the value network via technology and thus gain competitive advantage. (Vargo, Lusch and O´Brien 2007, 9-11)

Firms can gain competitive edge by collaborating with customers and partners in the co-creation and co-production processes. The statement means that there are opportunities for firms to better acknowledge their customers needs by engaging them in co-creation activities. In addition, firms could try to create platforms where they and their customers can meet and discuss their preferences and how they use the service. (Vargo, Lusch and O´Brien 2007, 11-12)

Firms should aim to know how their customers integrate and experience resources. This information can be crucial in new service innovation. The customer is also an integrator of resources. For example, if a consumer decides to buy a car and he already has a garage, where he can keep the car clean and repair it, the experience of using the car enhances from the original value-proposition. Thus, the experience is altered. These outer resources are usually viewed as the “uncontrollable external environment”. This proves that the customer is a primary integrator of resources and thus co-creates value. (Vargo, Lusch and O´Brien 2007, 9-11)

Customer experience can be enhanced if the company lets the customer be involved in the co-creation process. The client is willing to participate in the co-production process if the individual has knowledge that can be used in the co-production process to better it’s outcome or if the outcome is more valuable if co-produced. It is also more likely that the customer is willing to participate, if he wants control over the outcome. Co-production is also more likely, if the company can provide some of the needed physical capital (for example room for auto-self-repair). Customers usually want to participate in activities that are for pure enjoyment such as personal fitness training. (Vargo, Lusch and O´Brien 2007, 12-13)

Companies can gain competitive advantage by new kinds of collaborative development, risk-based pricing and value-proposition. The price can also be co-created if the customer is will-
ing to pay for value-in-use (experienced value). The price to pay and risk sharing can be agreed beforehand. If both parties have something to risk and something to gain, then this is possible, for example for a firm and its retail buyer. (Vargo, Lusch and O´Brien 2007, 13)

The prime-integrator of resources (in many cases, the retailer that is closest to the actual customer) is in a strong position in the market. This argument states, that it is possible that the company that deals directly with the end customer is in a strong position in market sensing; thus the firm hears straight from the client what he or she thinks of the value-proposition. (Vargo, Lusch and O´Brien 2007, 13-14)

Companies that think of their employees as operant resources are in better position in creating more innovative knowledge and skills for their competitive advantage. This means that if the company employees think they are co-creating with the customers, they are more innovative and valuable for the company. This transition from thinking people as not replaceable operand, but valuable operant resources should alter the company culture to a more S-D logic direction. The culture should be based on symmetric and open information between staff and executives. (Vargo, Lusch and O´Brien 2007, 14-15)

In addition, Merz, Yi He & Vargo (2009, 14) suggest that managers should focus on building and maintaining relationships with all their stakeholders. They could also benefit from collaborating with their clients and managing their network relationships. Customers are active brand value co-creators, and they should be taken into the firm’s co-creation process to create brand value from bottom-up rather than from top down.

To move from production-centered focus to service-centered focus, one must change the perspective of how the market, firm and customers are seen.

<table>
<thead>
<tr>
<th>G-D logic</th>
<th>S-D logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making something</td>
<td>Assisting customers in their own value-creation process</td>
</tr>
<tr>
<td>Value as produced</td>
<td>Value as co-created</td>
</tr>
<tr>
<td>Customers as isolated entities</td>
<td>Customers in context of their own networks</td>
</tr>
<tr>
<td>Firms resources mainly as operand</td>
<td>Firm resources as primarily operant</td>
</tr>
<tr>
<td>Customers as targets</td>
<td>Customers as resources</td>
</tr>
<tr>
<td>Primacy of efficiency</td>
<td>Efficient through effectiveness</td>
</tr>
</tbody>
</table>

Table 1. The transition from G-D logic to S-D logic thinking (Vargo & Lusch 2008, 5)

These shifts in view imply not just the move from goods to services, but also the purpose of the company and the co-operatory nature of value-creation. (Vargo & Lusch 2008d, 5)
2.2 How service-dominant logic can guide my way?

Service-dominant logic implies that the firm should find out customers changing needs and provide custom made solutions (Vargo & Lusch 2004b, 12). In this thesis customer needs are investigated by researching customer daily challenges. A challenge can be a latent need and a problem to be solved.

Service-dominant logic (Vargo & Lusch 2006a, 407-408) provided useful guidelines how I could approach new service development. First of all the service, dialogue, value proposition and final service would have to be co-created with users using the service-dominant marketing mix. The research question was molded so that it took on the challenge of co-creating the final service idea with clients.

I tried to keep in mind the lessons from service-dominant logic. I should investigate what knowledge and skills firm and the clients have to exchange (Vargo & Lusch 2004b, 10). Profit would be a test of how well the final service will deliver value. A valuable thing to keep in mind was also how clients co-create value with their own commissioners.

I kept in mind that value is not embedded in products but in interaction between the company and clients. The new service should not be seen as having value, but having value-in-use (Vargo & Lusch 2004b, 7). If products would be present in the new service, they should be thought to provide value through value-in-use.

The new service should also consider the users context (Vargo, Maglio & Akaka 2008, 148-149). Because the customer integrates the companies offering to his current context (working conditions, tools, design type etc.), the company should research in what conditions the client works. The new service should be offered through channels architects use and how they want to operate the service.

The case example should be a learning experience for the company. Service-dominant logic implies that one of the fundamental things in creating new service is to learn from users needs and latent needs (Vargo & Lusch 2004b, 9). The company should see what things clients value and why. This information is valuable to the case company because the firm should provide value efficiently and with optimal costs. The focus should be on process management. Earning money is not the final outcome; it just shows that you are providing valuable service (Vargo & Lusch 2004b, 6).

The final guiding principle on my way was that the customer decides value. Clients in every step of the way should evaluate the new service. It is not enough that I realize the service
value. I have to be able to communicate what value the new service would bring to the client so he can understand and evaluate it sufficiently.

The theory is useful, but it has its downfalls. First of all if you involve customers in the co-creation process of a new service ideation phase, you may end up having too narrowed view. Same goes with sales people who see things from their perspective. The best way in my mind is not to ask directly what people want, but how they operate and what obstacles they face.

Also, can I trust the client´s opinions? For example, if I would suggest a ceramic tile that changes colour every time you touch it, clients would probably say it would sell like crazy. I would go and produce this wonderful new product but what if nobody would buy it and I would go out of business? What then? How will I know people are talking about their needs if they do not even know them? For example, if asked a few years ago, how many people would have said they would need a touchscreen phone or a tablet computer? Or electricity a few hundred years back? Gladwell (2005, 156) explains that even careful user tests can lie, as with Pepsi in the 90s Pepsi Cola beat Coca Cola in a taste competition. The product sold at first but then something odd happened. It flopped. The reason for this was that Pepsi cola was too sweet. The customers liked the first glass but didn´t like the second one. Sometimes you can not trust what people say.

2.3 Service design as a way of executing service-dominant logic

Why develop services?

There are services all around us. We travel, use the Internet, visit the hairdresser and the local bank. These are certainties, but as we have learned through looking at service-dominant logic you can think more broadly about services than these examples. If you dare to think every object you see renders service for you, then you really live in a service-centered world. Imagine a hairdryer, doesn´t it provide hairdressing service for you? Doesn´t your car provide transportation service for you as in Shostacks (1977, 73) example? Moritz (2005, 26) provides an example of a mobile telephone functioning as a platform for communication service. If you look at services this way, it is obvious that developing user-friendly services are a major priority for companies to compete in today’s business environment.

The more developed the economy, the more it is dependent on services. In Finland the share of services from gross domestic product (GDB) is at the moment 66 %. In western EU-countries, the figure is 70-75 %. In the United States, it is over 80 %. According to Tuulaniemi (2011, 21) in Finland 1,7 million (from 2,4 million) are employed in the service sector. This is over 70 % of all labor force. It is clear that most new businesses operate in services rather
than production or selling tangible goods. These figures provide insight about the importance of services, but they do not tell the whole truth. It is hard to decide does a company belong to the service sector or do we classify it as a production firm. A firm may produce something, or offer it as a service or offer maintenance for its products. Nevertheless we have moved from agriculture focused, and industrially focused country to a service-based economy.

Image: the shift from agriculture and manufacturing based economy to service based economy (Tuulaniemi 2011, 23)

The market is full of products. Companies try to find new ways of coping in the ever tightening competition. The traditional way has been to push advertising and pricing towards quick gains. Because the service economy is booming, the product market is satisfied, technology has enabled new kind of services and humans have individual needs, companies are shifting their thinking towards services. (Moritz 2005, 25-27). For example, IBM’s (Moritz 2005, 25) services consisted 32% of their total turnover in 1994 and in ten years the percentage had gone up to 48%. Traditional product developing companies are developing towards solution companies that provide services to add to their products. Meroni and Sangiorgi (2011, 38) also argue, that the service economy shift will provide more sustainable future for us than resource-exploiting manufacturing-based economy.

The role of design in services
Meroni and Sangiorgi (2011, 40) suggest design should move from "signs" and "objects" towards "interaction" (interaction design) and "systems" (environment and system design).

Moritz (2005, 32) elaborates how designs role is changing. Design used to be used only to make things attractive for the eye. Designers were brought to the project in the end of a product development project. From designing features for products, services and spaces, design is shifting to be an ideology and can function as a strategy for competitive advantage. In the process design helps to design the customer experience and processes and systems to deliver this experience.

Levels of design
1. Design of features (product, service or space)
2. Design of client experience
3. Design of processes and systems
4. Design of strategy, philosophy, policy or ideology

Image: levels of design based on Worldviews of Design, Spirit of Creation 2004 (in Moritz 2005, 33)

Ezio Manzini (2011, 26) explores what design can do for services. Because services are performed mostly with human activity, with network relationships, they cannot be as simple as machines. As for they are so complex, they are largely not designable. Designers entering service design have to lose their illusion of total control over the thing they are designing. This changes design culture and is part of a larger transition towards sustainable service and
network-based economy. It used to be that a design group could gather all the necessary information about the designed artifact and then go to creation phase. Services are more complex than tangible things. There are more unpredictable factors and un-designable actors. Manzini (2011, 28) says design today is more about "designing for something" or "to get something to happen" and not "design something". In other words, designers create action platforms, enabling people to act in a certain way. The extreme case can be "The McDonald’s model", where every action is done by protocol. On the other hand, an action platform can also be the opposite "Radio taxi" model, where the taxi driver is very flexible in some boundaries.

Evolution of service design

Service design is a relatively new concept. Many people have been occupied in developing services without calling themselves service designers. There have been people who have used service design methods in improving the wellbeing of others as long as there have been societies of people.

The concept “service design” can be dated back to Shostack (1977, 73), who wrote the famous "Breaking Free from Product Marketing" essay in the Journal of Marketing in 1977. She proposed a systematic method for improving and developing services, the technique called Service Blueprinting (Shostack 1984, 134-135). Blueprinting is a method of mapping the whole service experience including the customers and the firm’s actions in the service process. With it, you can identify the service process steps, and it helps to isolate the fail points. It also helps to establish a time frame for the service and analyze its profitability for the firm.

Others joined Shostack and in 1988 Parasuraman, Zeithaml and Berry (1988, 64) presented the SERVQUAL-model for measuring customer perception of quality of service. The measurement tool divided total service quality to five dimensions: tangibles, reliability, responsiveness, assurance and empathy (Parasuraman, Zeithaml, Berry 1988, 23). The method takes into consideration people’s expectations for service and helps to identify gaps between perceptions and actions.

These developments led to the research of understanding, measuring, managing and planning the service encounter. Bitner, Nyquist and Booms were concerned about how to diagnose favorable and unfavorable service encounters. Together they set to create a tool that is known as Critical Incident Technique. (Czepiel, Solomon, Surprenant & Gutman 1985, 195)
As a discipline, service design started to emerge when design thinkers Morello, Hollins, Manzini, Erhoff and Pacenti started discussing about a new design agenda for services. (Meroni and Sangiorgi 2011, 9)

Service design was introduced as a discipline in 1991, when Professors Erhoff and Professor Mager created a service design education field in Köln International School of Design University in Germany (Moritz 2005, 66).

Mary Jo Bitner (1992, 67) made a significant contribution to service design by identifying the servicescape, explaining the role of the service surroundings and their effects on customers and service providing personnel’s behavior. She suggested that careful design of the physical servicescape can be great marketing, but it can also drive the company’s internal goals. The servicescape is a physical metaphor for a service companies offering. It can be thought of as a “service package”. The servicescape also effects how employees are able to provide the service.

One of the first companies that said they provided service design was Live|Work in 2001 (Moritz 2005, 67). The company had previously concentrated on interaction-design. IDEO also entered service design in 2001, when the company decided to concentrate on client experiences opposed to former product design.

In 2004 Spirit of Creation and Birgit Mager founded the Service Design Network, an international network for service designers, businesses and researchers to be a catalyst for theories and design methods of service design. (Moritz 2005, 73)

Tuulaniemi (2009, 62-63) provides insight into evolution of service design in Finland. The roots of service design are European, that is undoubtably, but the Finns have been contributing strongly in the Service Design Network and you can find strong players in service design in the Finnish market. Unfortunately, the group is quite narrow at the moment. A pioneer of service design was Satama Interactive in 1997, a company now owned by Talentum. A group of service designers moved from Satama to join the Taivas Group Beta Ego. Fourteen Beta Ego designers founded their own service design agency Palmu Inc. Mikko Koivisto was the first to write a masters thesis on service design in 2007. Laurea University of Applied Sciences works at the frontline of service design by providing the first Master of Business and Administration degree program in service innovation and design (2012 Laurea).

Meroni and Sangiorgi (2011, 35) question should we really call the new discipline service design or design for service. This is because services cannot really be designed in the way that
the designers are in control of the service outcome. You can design for service, and hope that most of the time people act as planned.

Holmid (2007, 7) has compared interaction design and service design. He has suggested that service design is a holistic approach and it may set other design disciplines into a “wider social and action context”. Also, as service design focuses on the whole service, interaction design is more focused on the interactive artifact, which is one part of the service journey.

Ramirez and Mannervik (2008, 37) present how the role of design has changed in the process of understanding customer roles. We have moved from thinking that the customer is a destroyer of value towards co-creation of value and from interface design to interaction design and forward.

Image: the changing role of design as the understanding of customer value evolves by Ramirez and Mannervik (2008, 37)

IDEO (2012 IDEO), the award-winning design company, takes a different perspective towards service design. They see designing for service as human-centered design. This approach doesn’t say anything about products or services. IDEOS design outcomes help organizations in the public and private sectors to innovate and grow. They design products, services, spaces and interactive experiences that bring companies to life. They apply design thinking in their profession, combining people’s needs with company’s interests and technology to create new innovative solutions.

Another concept close to service design is transformation design, introduced by RED, a UK Design Council research and development team (Burns, Cottam, Vanstone & Winhall 2006, 2-3). REDs goal is to promote innovative thinking and practical innovations to social and economic problems. Their goal is to make UK managers best users of design in the world. Trans-
formation design is a similar concept than service design, although the writers emphasize that the approach is tied to radical innovations, completely questioning today’s ways of doing (Burns, Cottam, Vanstone & Winhall 2006, 8). The method is also user-centric and uses same methods as service design, including gathering insight, making things visible and rapid prototyping (Burns, Cottam, Vanstone & Winhall 2006, 18-19). Transformation design aims high in cultural change.

Definitions of service design

Miettinen & Koivisto (2009, 34-35) define service design as an activity that addresses services from the customer’s perspective. Focus of service design is to create useful interfaces that customers need, are able to use, and interfaces that work efficiently and are distinctive from the companies point view. The discipline stands in between product design and interface design (interface design originated in interaction and experience design).

Service designers use an explorative, analytical design approach. Designers observe users behavior and try to interpret them. These observations are converted to future services. (Miettinen & Koivisto 2009, 15)

Tuulaniemi (2011, 10) adds that service design is a systematic way of approaching service development and innovation simultaneously both analytically and intuitively. He says that service design is a discipline that brings design methods to service development and combines them with traditional service development methods. The aim of service design is to design service products that are financially, socially and ecologically sustainable (Tuulaniemi 2011, 24-25).

According to Tuulaniemi (2011, 37) a new service can produce value through brand and status, usability, price, design, characteristics or helping people perform better. Other valuable things are accessibility, saving money, product customization, novelty value or reduced risk. The best suitable value can be retained through use-value, namely value-in-use.

Kimbell (2011, 49) has concluded that service design is a strategic design activity that combines social and material systems to create value. She argues if service design could be called a new discipline, but suggests that design has to reinvent itself and its role for businesses and people more broadly to incorporate designing for service.

Moritz (2005, 39) traces service designs origins back to design thinking. Moritz sees service design as total experience design of a service as well as the backstage processes and strategy behind the service. Service design process includes four D΄s - Discover, Define, Develop and
Deliver. He sees service design as not a design discipline, but a multidisciplinary platform of expertise. He summarizes service design as a connector of the “desires of the client with the desires of an organization”.

A key concept in service design is the service touchpoint. According to Moritz (2005, 41) service touchpoints consist of spaces, goods and peoples interactions. If you align these touchpoints together, they make up the whole service experience. Service designers create new and modify old touchpoints in order to create an experience that customer’s value. (Miettinen & Koivisto 2009, 16)

Service design is all about designing these touchpoints, but as you cannot predict how humans behave exactly, service designers focus their attention to creating conditions that lead to experiences. These practices, such as persona creation have come from interaction design that has traditionally been concerned with human-machine interaction. (Mager 2008, 354-355)

Service design is inherently a user-centric approach to services. To gain insight into customers, designers need to dive into customers needs, latent needs, habits, customs, values, others opinions, pricing of services, service attributes and competitors services. (Tuulaniemi 2011, 72).

Mager (in Miettinen & Koivisto 2009, 35-37) provides some basic guides service designers use to form new services.

1. Look at your service as a product  
2. Focus on customer benefit  
3. Dive into the customers world  
4. See the big picture  
5. Design an experience  
6. Create perceivable evidence  
7. Go for a standing ovation  
8. Define flexible standards  
9. A living product

Mager explains that one should not consider service design as a decorative discipline, but a substantial and useful way to create intangible outputs, because as she said “Good design is connected to good strategy”. Service design may rethink the organization in order to create more benefit for the customer. The move from backstage to front stage changes perspective. The designers are more interested about today’s customer’s feelings and experiences than old perceptions. They observe and probe customers in order to learn from them. Service design professionals try to see the customer’s context where the service is used. Sometimes the service starts before the companies offering and continue far beyond what is traditionally
seen as end of service. Service designers use for example theatre techniques in order to create an experience. They try to make the intangible more tangible for the audience to gain evidence of the service that is being consumed. They try to create servicescapes that are usable and exceed customer’s expectations. They try to find the right alignment of standardization and flexibility that suits the case. The services they design are never complete and they learn from feedback. One of the major changes service design can bring to a company is that it takes into consideration the existing culture, but can be also a change agent for a more user-oriented culture.

Companies and governmental institutions use service design. Parker and Heapy (2006, 80-82) say it can have transformational effect on public services if applied systematically. Service design has the potential to close the gap between policy markers and the regular Joes priorities. From just proposing simple improvements to services, service designers may come up with new models that may be valuable for the user and provider. Service designers are interested in service that can learn from itself. They try to design systems that are able to adapt and reconfigure themselves. (Parker and Heapy 2006, 90).

Harvey Dogson (2006) points out in his article “The core of service design” that improving value delivery by designing good services may meet customer needs, but every service needs to be in constant evolution; thus people tend always gradually expect a higher level of service. This is why service design must not be seen as a single project, but a continuous process.

What is the service designer’s role?

Miettinen and Koivisto (2009, 37; Kimbell & Seidel 2008, 54) explain that service designer’s work is interdisciplinary. Usually projects demand many types of specialist knowledge to be successful. It is typical that specialists from the client’s side are involved in the process (marketing, strategists, human resources, IT etc.). Many times psychologists and anthropologists can bring needed expertise for a project, but sometimes branch-specific knowledge is needed more. The point here is that service design projects need skills from the designers, client, and customer and possibly outside experts. The projects are co-created with these resources. The designer’s job is to bring in new (preferably radical) ideas and make them tangible enough for everyone to experience them.

Parker and Heapy (2006, 16) from the Think Tank Demos describe how service designers think. Designers do not consider the building blocks of service only episodes or institutions, but also touchpoints, channels, architectures and journeys that describe people’s services from start to the end of the service experience.
Manzini (2011, 29-30) sees users as an important resource. In the center there is the user, who can bring his needs, skills, capabilities and other resources on the table to create collaborative services with a service provider. The designer’s job is to be a facilitator or a provoker, who manages to listen and collaborate with users. Their job is to provoke conversation for something new to emerge. This can be done for example by prototyping and storyboarding. Miettinen and Koivisto (2009, 60) claim, that for these designers need to have good social skills, empathy for the users, ability to think outside the box and ability to bring his ideas forth in a visual way.

Moritz (2005, 49) proposes that service design can function as a hub, binding the organization and the client, and it can use various forms of expertise (marketing, research, management and design) in order to create value for both parties. To create a successful service, you may need expertise about branding, product design, psychology, interior design, participatory design, ethnography, interaction design, interface design, strategy, sensation, market research, marketing, process management, product development, communication planning and experience design.

Image: service design overview model (Moritz 2005, 152)

Moritz (2005, 150-152) has created an overview model of service design. The model shows how service design can function as a mediator between the company and the customer. Service design can add effectiveness and efficiency to a service for the company to be more productive. On the other hand, it can raise customer satisfaction by being useful, usable and desirable from the customer’s perspective (orange arrows on the bottom). The grey arrows represent how service designers navigate through company resources, client needs and con-
text to gain insight for the design. For the organization service design can help in strategy formation, change culture to be service-oriented, service concept design, provide solutions, present design processes and help to add guidelines. From the customer’s side, it can help to design touchpoints, assure service quality, create new service ideas and foster the brand. It is invaluable in gathering feedback and customer insight to maintain competitive edge and re-discover the company’s business. This way service design can create a win-win situation for both parties.

Service design approaches this win-win situation with specialized methods (for example the business model canvas) designed to bring efficiency and value with new business models. (Osterwalder Pigneur 2010, 48-49).

IMAGE: The business model canvas by Osterwalder & Pigneur (2010, 48-49)

Osterwalder and Pigneur (2010, 168) describe building a new business model (or service) by first deciding to pursue after a new service or to improve an existing business model and then go for a spin of design-prototype-provoke-design-prototype-provoke... until you are sure you have something you can execute.

Image: service design process by Osterwalder and Pigneur (2010, 168)
Morelli (2002, 11) sees service designs role as creationary, not so much as a maintaining force. Service management’s role is to foster the service to ensure that it is executed daily according to the design. To mold a product-service system one must focus one’s perspective how it takes form, understanding the users cultural and technological context. The trick is to present immaterial and material aspects of the service in a designed order (see the service blueprint).

Image: service design and management model (Morelli 2002, 11)

Harvey Dogson (2006) presents some core elements of service design. He adds, to the later description, that service designs job is also to cause consistent service delivery, to make a concept that works every time as it is designed.

Kimbell (2011, 48) has studied service designers and has found that designers approach services in a social and material way. This means their output may contain physical as well as social things and still they think they are designing service. They tend to think as service-dominant logic (Vargo & Lusch 2004b) suggests that physical goods render services too. From this point of view, everything is service. Kimbell has created a framework to understand service design.
Matrix: approaches to conceptualizing service design (Kimbell 2011, 45)

The above matrix by Kimbell (2011, 45) illustrates that in the engineering quarter the distinction between goods and services is obvious. Design is problem solving. Services are artifacts that are designed. The non-engineering design discipline quadrant can be seen as traditional art and design discipline, where the design process is exploratory. For example, traditional interior design or furniture design sits here. On the top right of the matrix design is seen as problem solving, but from a service-dominant perspective with engineering type of touch to it. Kimbell suggests that service designers sit on the bottom right quadrant, designing for service by thinking service-dominant way and making no distinction between products and services. These designers see service as the fundamental basis of exchange of value.

The service design process

The service design process can be described in many ways. Every author describes the process in somewhat similar way, using different words to describe the process. These all consist of first evaluating the objective and resources for the project. The process continues to research phase, and ideation phase. The ideas are filtered, and the best ones are selected to be used for a new or existing service. The service is launched and evaluated. All the process descriptions describe the process as iterative and some even a continuously looping one.

Damien Newman (in Stickdorn, Schneider etc. 2010, 125) describes the process of service design as a squiggle. At first the process goes back and forth with ups and downs. After a while, the objectives become clearer and clearer.
The service design process can be described (Stickdorn, Schneider etc. 2010, 126) as iterative. The idea is to learn and sometimes go back to a previous stage and start again. The process is not linear in that sense, but can be described as such. Stickdorn states, that it is useful to describe the process to get an understanding what impact the designers have had to the final outcome.

Most books (Tuulaniemi 2011; Stickdorn & Schneider 2010; Moritz 2010; Meroni & Sangiorgi 2010) about service design characterize the design process into stages. For example Tuulaniemi (2011, 126-129) defines the process as an efficient linear process, which consists of defining, research, planning, production and assessment. Although he states that every project is different, and the process can be altered to suit a certain design.

First the design team defines the problem to be solved and objectives for the beneficiary. At the first step, it is important to get to know the service provider. Then with interviews, discussions and other research methods the team should get a general understanding about the resources, working environment and user needs. The team ideates and creates alternative solutions and tests them with users. New service models are introduced to clients to be tested and re-evaluated. After the initial testing phase, the team concentrates its efforts in planning the actual service. After the final service is launched, the team fine-tunes it according to feedback from the market. (Tuulaniemi 2011, 126-129)

Moritz (2005, 154-159) describes the process more vividly in his framework. He divides the process to six stages and gives detailed descriptions on what to do in every step.
According to Moritz, the process isn’t linear, but continues back and forth towards a better model. At the first step Moritz encourages service designers to assemble a project team with various expertise and knowledge, clarify objectives, make a time plan for the design process and find out what resources are available. The first steps for a well-planned process are to find out market needs, client need and all about the client and the context of the existing (or new) service. After this initial compilation of talent and objectives, the team should investigate and learn from customers, end users and all participants involved in the service process to better understand their needs. At the third stage, the group assembles this information and uses different methods to define objectives for service improvement. At this phase, ideas are generated to solve problems, interferences and customers primary needs in the service process. The next step is to filter the generated ideas into acceptable solution suggestions. The fifth stage is to make the solutions or improvements visible and as tangible as possible. These methods are also used in previous phases, tough every realization and idea needs some visual explaining. When the investigation, ideation, filtering and visualization are completed, the service can be put to action to get feedback. The feedback takes the team back to phase three to evolve the service.

The British Design Council simplifies the process to four stages, starting with the letter D:

- Discover
- Define
- Develop
- Deliver

The process is described as "The Double Diamond" as the British Design Council has described the model.
Design Councils (2012) process starts by discovering the world through fresh eyes and seeing what others have missed. The designers gather inspiration and insight to develop an opinion what they see and what will help them generate new ideas. At this stage, the designers research the market, for current and potential service users. They also plan how to plan and manage the design process and with who. The first goal is to define the question that needs a solution. After the discovery-phase, the designers define what matters most and what should be acted upon. The design challenge is framed by creating a brief. At this stage the project gets its shape, form and management. At the third, development phase the designers create possible solutions to the problem, prototype and test the ideas. The process is filled with trial and error. Methods include a lot of different kinds of ideation techniques such as brainstorming. After the final idea is selected, the final quarter of the process is delivery and launch of the developed service. At this stage, final testing and approvals are made, and the service is launched. The collected feedback loops and enables designers to improve the service process.

Meroni & Sangiorgis (2010, 240) version of the service design process includes roughly same elements as the previously mentioned, but they stop to prototyping stage. They also note, that the process should be iterative, and the design team should make up their own version of the process. Their process, based on 18 case studies looks like this:
What is a good service design outcome?

Dogson (2006) claims that services may be designed in same precision as engineered goods. A service can be broken down to smaller pieces and every step may be improved, or the whole service may be restructured. He also claims that service processes may be as consistent as manufacturing processes by standards and training. This requires the design of touchpoints, systems and service policies.

According to Miettinen & Koivisto (2009, 101-105) to formulate a successful service you need the right idea, team, design process, leadership, target, time and the list goes on. You need to first gain insight about the service providers business, customers, business environment, and trends for the future. After this, you need to create an innovative value proposition to suit the situation. Prototypes are useful in this stage; tough they can be circulated to accelerate conversation with the stakeholders. You need to align the new service with existing offerings and create the service with analytical tools to measure its effectiveness in providing value for customers and the service provider (ROI). The last step is to make sure that the service is carried out as planned without deterioration of service quality and learn how the processes and value proposition could be improved in later stages.

According to Tuulaniemi (2009, 100) service design helps new service development by:

- Making the intangible tangible early in the development process.

Image: Meroni & Sangiorgi (2010, 240) design process.
- Providing a process and tools for gaining insight to customers, ideation, visualization, launch and evaluation.
- Bringing new customer insight that helps in finding out new customer needs.
- Providing tools for co-creation work for the company and its customers.
- Being independent of any supply channel and contact point.
- Helping to plan the customer experience in customer service.
- Helping to plan the customer service personnel work.
- Reducing the risk of new service failure.
- Improving the return of investment for a new development project.

A simple way to evaluate a new service offering idea is the Palmu Inc. evaluation matrix. A service can be really liked, but it can lack business potential. A service may be profitable, but customers do not like it. The aim is to get to the top right corner of the matrix to make it sustainable.

**IMAGE:** Palmu Inc. matrix for evaluating service ideas (Tuulaniemi 2009, 106).

This all sounds expensive doesn’t it? Miettinen and Koivisto (2009, 165) explain that service design might sound expensive, but if you look at the investment levels for services that fail, you can see that investing in prototyping and research pays off in the end. Service design projects are in many cases complex (Miettinen & Koivisto 2009, 179), but it is the dealing with complexity that drives people to work in this discipline.

Dogson (2012) guides to “Keep it simple“. But as we have come to know, people and services
are as complex and the designer’s task is to create a simple enough execution after a complex analysis. The under-relying fact is that designing services requires focus on the smallest details.

Drivers and barriers of service innovations

Tekes, in their Technology Review 2003 (Kuusisto & Meyer 2003, 56) have identified some drivers and barriers of service innovation. They conclude that in heterogeneous services, technology push is a major driver of innovation for new service delivery. Regulatory changes also effect new service development. If the government deregulates services, then there will be possibilities for new offerings. The emergence of systematic new service development is a driving force in its own. Industry champions make good examples and drive service innovation. Barriers for service innovation are lack of competition, too much supply of services, a business cycle that does not support services, tight industry structures and too few skilled people. Too little funding and other resources may also pose a challenge to service innovation. Intangibility and context specificity slow down innovation.

Future of service innovation

Manzini (2011, 27) says that the next economy can be named social economy; thus every organization is connected to each other. We will probably see more social innovation in the grass root level. What we will see in the future are more about solutions or systems towards specific problems, not just tangible consumer products. Manzini concludes that these changes will undoubtedly gear the economy towards services.

Tekes (2010, 69) the Finnish Funding Agency for Technology and Innovation, in their report "The Future of Service Business Innovation" conclude, that services will increase in number and will add value by making sense of vast amounts of complex, censored or captured data. Social networking, collaboration and user-centeredness will be important in service creation and delivery. Delivering value through the use of technology, especially cloud computing, mobile and web-based will continue to be important for any service business. Social responsibility will be expected of any service.

Tekes together with Peer Insight in their research paper “Seizing the White Space” talk about innovative service concepts and have pointed out some findings that support service innovation in the future. They have found, following innovative service concepts in the United States, that the customer is now the new reference point. It used to be the competitors who were followed in order to keep up in the competition. Today you cannot know who will challenge your business, so companies try to design their customer experience as good as possi-
ble. The second finding is that by changing who does what companies may reinvent their businesses. In some innovative business cases the service firm has reconfigured what tasks the customer does, and what it does for the customer. The third finding was that the driving force of innovation lies within entrepreneurship. The US examples presented in the paper were stories about entrepreneurs, who saw that an industry was performing badly, and they knew how to address the problems in an innovative way. Another thing driving innovation is IT, a service “factory” of the 21st century. The researchers saw IT as the production department of the services era. The last thing on their list was the Internet, as a distribution channel that enables new ways of providing value for the customer. (Ezell, Ogilvie & Rae 2007, 7-8)

How does service design comply with service dominant logic?

Service-dominant logic can act as a foundation and way of thinking for service designers. While reading about service-dominant logic and service design it became obvious that service design can put service-dominant logic into action in numerous ways. Below you can find the service-dominant logic FP´s and an explanation how service designers comply with them.

<table>
<thead>
<tr>
<th>Foundational premises (Vargo &amp; Lusch 2008)</th>
<th>How the service design discipline complies with Service-dominant logic?</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>FP 1 Service is the fundamental basis of exchange</em></td>
<td>For service designers, service (or experience) is what people value, not possession of things (Moritz 2005, 32, Kimbell 2011, 50). They are not in search after a drill. They are after a hole in the wall (or solution to suit their situation).</td>
</tr>
<tr>
<td><em>FP 2 Indirect exchange masks the fundamental basis of exchange.</em></td>
<td>Service designers do not make distinctions of product versus service (tangible and intangible output). They try to create action platforms (service systems) for customers to experience (Manzini 2011, 28, Kimbell 2011, 48). The task is to present immaterial and material aspects of a service in a designed order to create a favorable experience (Morelli 2002, 11).</td>
</tr>
</tbody>
</table>
**FP4 Operant resources are the fundamental source of competitive advantage**

Service designers combine companies and customers' resources and integrate external resources to create competitive advantage for the firm. Mostly they gather information about customers and company resources (knowhow and skills) to find out what kind of services can be done. (Miettinen & Koivisto 2009, 37; Kimbell & Seidel 2008, 54; Moritz 2005, 49). They rely mostly on operant resources, but require operand resources to function properly (money, facilities etc.).

**FP5 All economies are service economies**

Service designers may be employed within the private or public sectors, in product production companies or in intangible output service firms (Parker & Heapy 2006, 80-82; Kimbell 2011, 48). For them it is all about service and their work is valuable for any society or group of people providing something for another.

**FP6 The customer is always a creator of value.**

Service design focuses not only in companies' resources, but also in users of the company's output. They use tools to engage with customers to gather insight and co-create offerings with them, for them. (Miettinen & Koivisto 2008; 34-37, Tuulaniemi 2011, 72)

**FP7 The enterprise can’t deliver value, but offer value propositions**

In service design discipline, designers need to lose their illusion of total control over the thing they are designing, thus services cannot be designed, only conditions that can lead to good service experience (Manzini 2011, 26). The designs are tests of the designer’s ability to gather insight and ideate new value propositions.

**FP8 A service-centered view is inherently customer oriented and relational.**

Users (or customers) are at the heart of service design discipline. Service designers try to improve organizations relationships with customers by engaging with both parties to create win-win-situations that on the other hand are efficient and effective for the company and useful and valuable for the customer. (Moritz 2005, 150-152, Tuulaniemi 2011, 106). Thus, Service Design is customer oriented and relational.

Refined additional FP9: All social and economic actors are resource integrators (Vargo &
From this compilation we can see that service designers apply service-dominant logic way of thinking. I do not know how many service designers have familiarized with Vargo & Lusch service-dominant logic. It seems that for them it is natural to think in this way.

2.4 Introduction to service design methods used in case

The main research method for this thesis is in-depth interviews. Interviews are used to gather data from clients. In this section we will have a look at the advantages and disadvantages of in-depth interviews and how they should be performed. We will also go through all other service design methods and tools used in this thesis, such as co-creation sessions, design drivers, service blueprinting, brainstorming, sorting ideas with the affinity diagram, storyboarding and service evidencing. I will explain how these methods are used in the upcoming service design case.

In-depth interviews

Because in-depth interviews will be carried out in this study it is important to develop a good understanding about the definitions, benefits, disadvantages and ways of in-depth interviews compared to other interviewing methods. The framework discusses some basic definitions of in-depth interviews and proceeds to investigate the methods and guidelines of doing research with in-depth interviews.

Definitions of in-depth interviews

Crouch & Housden (2003, 124-126) divide personal interviews to four categories. These are fully structured, semi-structured, unstructured and in-depth interviews. In fully structured interviews the interview situation is controlled in detail. The interviewer can for example
read out the questions and write down the respondent’s answers. The participant parties, interviewer and the respondent do not speak about things that the research designer has not displayed in the questionnaire. In many cases, these interviews have multiple choice questions and not open questions. This data is easily compiled and analyzed. The semi-structured interviews are interviews where there are fully structured questions but also open-ended questions. These questions are harder to answer for the respondent and harder to analyze, but get more insight from the respondent. The interviewer can encourage the respondent to answer the questions more specific with questions like "What other factors are there". Conventionally the whole answers are written down as the respondent answered. Unstructured interviews are situations where the interviewer and the respondent are not bound by structured questions. The interviewer has a topic list which acts as subjects of discussion. The questions do not have to be asked in a specific order. This method gives great insight, but is difficult to analyze. The fourth interview category is in-depth interviews. This interview approach has been borrowed from psychoanalysis. The method tries to probe a lot of questions on a certain topic to go deeper and deeper into the subjects into the level of thought. The interviewer does not settle on the first answer and tries to discover real motives and explanations for behavior.

According to Malhotra and Birks (2006, 179) in-depth interview is an “unstructured, direct, personal interview in which a single respondent is probed by an experienced interviewer to discover underlying motivations, beliefs, attitudes and feelings on a topic.”. The method is a direct, qualitative way of obtaining data from subject persons. Unlike focus groups in-depth interviews are conducted one-on-one basis.

Carson, Gilmore, Perry & Gronhaug (2001, 71-74) say interviews purpose is to get inside someone’s head and see their perspective. Interviews are great when finding out feelings, memories and interpretations that could not be discovered with other research methods. The authors say that the interviewer should hold back his own perspective on the respondent. Even tough the interviewers contribution to overall data collection isn’t totally excluded. In-depth interviews scope can range in characteristics and uses from one extreme to another. Sometimes they are almost like informal conversations with a respondent to find out his view of a certain topic. These interviews have no structure or direction placed for the interviewer since the aim of the research is the internal reality of the respondent. Ethnographic interviews are examples of this method. These interviews often try to see the external reality picture of the respondent.

McDaniel and Gates (1998, 118) define in-depth interviews as being the "one-on-one interview that probe and elicit detailed answers to questions, often using non-directive techniques
to discover hidden motivation”. The term has meant in the past relatively unstructured interviews. The direction of the interview is guided of the responses of the respondent.

Aaker, Kumar and Day (2001, 187) describe in-depth interviews as "interviews that are conducted face to face with the respondent, in which the subject matter of the interview is explored in detail.”. They divide in-depth interviews to two categories, non-directive and semi structured interviews. The difference with these two is the amount of guidance or direction the interviewer provides. Non-directive interviews are interviews where there is total freedom for the respondent to answer as he pleases within the boundaries of the subject. Success is gained via constructing relaxed and sympathetic relationship with the interviewer, probed questions to better understand the subjects point of view and guiding the discussion to the right direction. The sessions usually last for one to two hours. Semi structured or focused interviews are interviews where the researcher tries to cover specific list of topics. The timing and question phrasing is decided by the interviewer during the session. The open structure provides unexpected data or behavioral data from the respondent.

In-depth Interview advantages

In-depth interviews reveal deeper insight than focus groups. Insight is better gained through discussions on certain subjects and developing an issue with the respondent. In a group situation interesting and knowledgeable people cannot be solely concentrated upon. In focus groups it is also difficult to determine which respondent made a particular response. Also, in-depth interviews the information exchange is free of social pressure. This makes in-depth interviews ideally suited for sensitive issues, especially commercially sensitive issues. (Malhotra & Birks 2006, 182-183). Also, compared to focus groups in an interview the researcher gets more quantity from one interviewee. This is because the respondent stays quiet most of the time in a group session and comments shortly to some questions and topics. (Aaker, Kumar and Day 2001, 188). McDaniel and Gates (1998, 119) point out that in in-depth interviews group pressure does not exist and respondent reveal more honest feelings than in group interviews. The personal interview situation gives the respondent the feeling of being the center of attention, whose answers to questions are important. This motivates the person to speak more.

Individual interviews are easier to set up and organize, because the interviewer can travel to the respondent and not the other way around (Malhotra & Birks 2006, 182-183). The longer the interview takes, the more the interviewer can get information. The nonverbal feedback in an in-depth interview situation can also give cues about how a person feels about a certain topic. This is valuable information for the researcher. (McDaniel & Gates 1998, 119)
In-depth interview disadvantages

The challenge in in-depth interviews is the lack of structure. This makes the results susceptible to the interviewer’s influence. The quality of the results depends mostly upon the interviewer’s skill. As with all qualitative methods the interviewer should try to gain awareness of the facts why the respondents ‘see’ in a particular way. Data of fewer persons can be difficult to analyze and interpret. The analysis raises questions about the interpretations of how respondents express themselves. (Malhotra & Birks 2006, 183). In in-depth interviews the group dynamics is missing, and the interviewer is left with only minor reactions with the respondent (McDaniel & Gates 1998, 119).

The length of the interview also presents a challenge with high costs. This usually means that there can’t be many interviews in a single research (Malhotra & Birks 2006, 183). In-depth interviews are more expensive than group sessions if viewed per-interview. In-depth interviews are exhausting for the interviewer and there cannot be many interviews in one day. In two focus groups there can be up to 20 people. (McDaniel & Gates 1998, 119)

In-depth interview application

In-depth interviews can be used to interview for example professional people or children. In-depth interviews are especially good when discussing confidential, sensitive or embarrassing topics, e.g. personal hygiene issues. The method suits situations where strong social norms exist and where respondents would be influenced by group response or to understand complicated behavior. In-depth interviews are used for example in interviewing competitors (who are your customers), who are unlikely to reveal the information in a group session and in situations where the product consumption is sensory, affecting the mood and emotions of the respondent. The method suits situations where the true feelings about a certain subject should be revealed. (Malhotra & Birks 2006, 187)

Interview process

In-depth Interview can take from 30 minutes to over an hour. It can be a single meeting session or multiple sessions. The respondent should always know what the research is aiming at. The process is explained so that the respondents know what they are participating in. (Malhotra & Birks 2006, 179)

The interviewer usually does not have many structured questions, but certain topics he is assigned to discuss with the interviewee. The first question is followed by probed questions.
The subject person is probed with questions that try to reveal underlying meanings to answers. Spontaneity ensures that the interview process is creative and meaningful to the respondent. The interviewer keeps an eye on the topic guide to ensure he is on the right track probing questions that ensure research objectives are met. Probing can be done by asking general questions such as "Why do you say that?" or "That is interesting, can you tell me more?". One of the key things in in-depth interviews is for the interviewer to gain a deep understanding about the nature of the person being interviewed. (Malhotra & Birks 2006, 180)

The interviewer should let the interviewee also discuss subjects the respondent wants to talk about, although trying to guide the conversation to areas, which are on the topic guide. It is important to notice what the respondents are enthusiastic about. The respondents should feel comfortable and relaxed which can mean that the interview should happen in a place most suitable for the respondent. This can be for example his office, sports bar or cafe, any place where the respondent feels that he can relax and be comfortable. The interviewee’s office tells a great deal about the respondent. (Malhotra & Birks 2006, 180)

If the interview is carried out in the respondent’s home or office, the researcher can observe the characteristics of the respondent in his or her working environment. These characteristics are for example formality in the workplace, reports and books that the respondent has around, the respondents IT equipment or the tidiness of the workplace. The things that are missed in focus groups are for example seeing the work schedules pinned on the wall, the working atmosphere, the freebies from the suppliers on the desk and the way coffee is served in the company. The context of the office can be helpful in order to make the interview work. The surroundings help fill out the picture. (Malhotra & Birks 2006, 180)

Malhotra and Birks (2006, 180) give six advises for the interviewer. First the interviewer should make his best effort to develop empathy with the respondent. Secondly he must make sure the respondent is relaxed and comfortable. In in-depth interviews the interviewer should also be personable to encourage and motivate respondents. He should note issues that interest the respondents and develop questions in these areas further. The in-depth interview should not consist of "yes" or "no" answers and the interviewer should phrase the question so that the respondent has to reply in depth to the questions. The interviewer should also note if a question is not answered clearly enough to be enough and which questions need probing.

The interview should be planned carefully. Most interviews are planned in three ways. First the researcher identifies the overall objective of the research. Secondly the researcher creates an interview guide to be a guideline for the interviewer. This guide consists of some general topics that address the research objective. These topics can be put to conversation in random order in the interview. After the guide is formulated, the researcher can make probe
topics below the general topics to find out more about the phenomenon. These probe topics are questioned if the interviewer did not get a clear enough answer from the respondent. Probe topics can be for example "where", "when" of "why". General topics are made to get the discussion started on a certain subject. Sometimes they do not have to be asked if the discussion goes to the general topics naturally without asking. (Carson, Gilmore, Perry & Gronhaug 2001, 74)

The researcher should begin the interview when he thinks the respondent is ready. Because the researcher expects honest and open answers from the respondent he should also be the same with the respondent. This is also why the research objectives will be covered first before any discussion is created. The respondent has to have informed consent to be interviewed (ethical requirement), and the data should be confidential. If the interviewer uses a tape recorder he needs the respondent’s permission to record the session. Taped interviews have the advantage of getting back into the interview later on and refilling the missing parts in the interview notes. Note that the tape recorder can sometimes distract both parties during the interview, if it draws attention. For example when the tape recorder clicks and the researcher has to change tapes. (Carson, Gilmore, Perry & Gronhaug 2001, 75)

The first topic can be very broad. The researcher can for example ask the respondent to tell his story about the research topic. This way the respondent does not need to worry if his answer is the correct one. Armstrong (1985) has made up good interview rules. The most important rules are to encourage the correspondent to speak more about the subject by for example say "yes" or murmur from time to time to inform that he understands. The interviewer should also use the "active listening technique of feeding back dialogue on the researchers own words to check his or her own understanding and what they are discussing is interesting. The interviewer should use the respondent’s terms rather than academic terms, for example "partnership" and not "strategic alliances". Also, the respondent should not be interrupted. The researcher should never ask leading questions that could imply the "right answer" or to introduce his or her own ideas to the interview. Also, the awkward pauses should be filled with the respondent’s words, not the interviewers. (Carson, Gilmore, Perry & Gronhaug 2001, 76)

Aaker, Kumar & Day (2001, 187) argue that a major challenge is to establish "a rapport credibility" in the early stages of the interview and then maintain the mood throughout the session. For this the interviewer should relate to respondent on his own terms. The interviewer should try not to ask threatening questions. To maintain a trustworthy atmosphere the interviewer could for example summary some of his findings with the interviewee.
Questioning methods: laddering

The first questioning technique is the laddering technique, a widely used in in-depth interviews. The following example is from the book Marketing Research by Aaker, Kumar and Day (2001, 188). When asking about airlines, the interviewer could ask the respondent to compare three airlines in sets of three to the other two. The question could be “How does airline A differ from B and C?” Each answer such as "a softer seat" is probed to find out why this is important to the subject. Then that answer is probed. The discussion could sound like this:

Interviewer: "Why do you like wide bodies."
Respondent: "They are more comfortable."
Interviewer: "Why is this important?"
Respondent: "I can accomplish more."
Interviewer: "Why is this important."
Respondent: "I will feel good about myself."

The discussion has gone from tangible thing to intangible thing such as self-esteem in this case. (Aaker, Kumar and Day 2001, 188)

Interview data Analysis

The interviewer tries to build up a narrative and create a story of the customers who he wishes to understand. This requires the interviewer to "step into respondents shoes". The shape of the narrative is formulated of two factors. The first factor is the theoretical understanding of the researcher as he collects and analyzes the data. Theory helps researchers to understand what they should focus their attention upon in their questioning, probing, observation and interpretations and to focus their questioning. The second factor is marketing understanding. The researcher must understand and appreciate what is the objective of the interview in order to create a narrative that helps the marketer to gain the ultimate goal of for example building a communication campaign or changing product features. The researcher needs to see what the marketer is after. (Malhotra & Birks 2006, 204)

The interviewer should make notes and observations during the interview. The field notes are a vital part in analyzing the data. The researcher goes through a learning process and can see things differently when the discussion and observation goes on. The notes will aid the researchers memory when in the analysis phase. The data is often structuralized afterwards. The main task however is to help the researcher formulate a sense of what is happening.
There are four different kinds of notes an interviewer can make. These are short notes at the time of the interview, expanded notes made as soon as possible after the interview, fieldwork journal where the researcher records problems and ideas in the research process and a provisional running record of analysis and interpretation. (Malhotra & Birks 2006, 206)

The field notes prove their value in the data verification process (Malhotra & Birks 2006, 214).

A good way to analyze qualitative data is Grounded Theory. Glaser and Strauss developed grounded Theory in the late 1950s. By then qualitative research was seen as "soft science" or journalism. The researchers accepted that people study should be scientific as quantitative research, but with qualitative approach. In other words, they wanted to get a validation process for qualitative research. Grounded Theory is a method that follows a set of procedures to systematically collect and analyze data. The trick is to gather the data and analyze it simultaneously. The aim is to develop generalized data, to organize it and to categorize it in a systematic way. (Malhotra & Birks 2006, 145)

First the grounded theorist gathers the data and collects every bit of information that can be coded. The words and responses are coded for example in charts. Then the second step is to code the data into code themes and to distinguish links between the data. This can be done by looking at the data from a distance and making comparisons between the gathered data charts. The connections between codes can be identified with the help of qualitative data analysis software, for example comparing interview answers. When the analysis is complete, the researcher typically uses diagrams to present the data to visualize the data. Both objectivity and sensitivity are needed in the data-gathering phase. This is hard, because the researcher is influenced by the research situations and when they are repeated with other individuals the earlier information should not keep the researcher from being naive in the repeated situations. In qualitative research objectivity means being open to subjects and willingness to listen to them. It means to "give them voice" and wanting to hear what they have to say. Having sensitivity means being able to give meanings to subject’s actions. (Malhotra & Birks 2006, 145-147)

In this research in-depth interviews are used as primary data gathering method for new service development. Architects are interviewed with a topic guide specially designed to develop understanding about their challenges in their work. The research method was highly successful and overwhelming amount of data was gathered. The data was analyzed with the guiding principles of grounded theory together with the affinity diagram.

Idea Cards
Idea cards are used to gather ideas. According to Koivisto (2011, 5) idea cards are a form of brainwriting. Everyone fills out idea cards and passes them on to another. Each person draws a card from his neighbors pile for inspiration. Idea cards are also described as a method for describing an idea for a certain touch-point in the service process. The idea card then withholds information about for what need the idea aims to fulfill, its benefit for the recipient and the resources needed for it to be implemented.

In this thesis Idea Cards are used in a different way. A real-world problem was presented in one idea card and brainstorming was used to come up solutions to the problem. All ideas were recorded to the idea card. The idea cards method were used in a co-creation workshop with eight salespeople. The method helped formulate fresh ideas for new services and potential fixes for old services.

Design Drivers

Design Drivers are usually definitions that are derived from research findings. With design driver’s designers identify customer needs, objectives and motivations. Well-defined design drivers help designers focus on topics that are valuable for customers. These drivers are often transferred to profiles. They are crystallizations of what the service should offer and why. (Tuulaniemi 2011, 156-157). After the team has come up with the proper design drivers, they can prioritize what needs to be done and how the design should be evaluated. Usually five design drivers is the maximum number for one concept (Koivisto 2011b, 26).

In this thesis three design drivers were formulated after the in-depth interviews were analyzed. The interviews were used to gather insight to create good design drivers. The design drivers were used to evaluate service ideas that were generated in workshops. All service ideas that did not serve the design drivers goals were rejected as not valuable for architects. In this thesis case, the design driver’s acted as catalysts, not filters.

Service blueprinting

Service blueprinting is a customer-focused approach for service innovation and service improvement. It is specially designed for customer experience design. The technique helps visualize the service process. It points out customer contact points and the physical evidence associated with service from the customer’s point of view. Blueprinting views the service process as a chain of activities that allow the service to function effectively. To function effectively for the customer, the entire process should be coordinated and managed as a whole. Blueprinting can help add more value to customers through new ideas. (Bitner, Ostrom, Morgan 2008, 71)
Blueprinting views the service process from customers and company’s point of view and enables us to see how we can be more efficient internally and externally. The total customer experience evokes perceptions of service quality and value – along with perceptions of the brand. Brand experience influences future preferences and customer loyalty. Service blueprinting is also a highly useful tool in the concept development plan of new service innovation as well as identifying failure points and help solve problems in the current situation. (Bitner, Ostrom, Morgan 2008, 71). Bitner, Ostrom and Morgan suggest all parts of the organization should be focused on the common goal of creating an integrated and memorable customer experience.

Bitner, Ostrom and Morgan (2007, 11-12) make suggestions how to apply the blueprinting method in practice. People who are involved in the blueprinting method should be aware what is the objective of the method and what they are doing. This may mean, that the method should be first educated by blueprinting a simple example service. After participants know what they are doing, they should work in teams to create a blueprint of a service as it happens most of the time. The ideation and insight is typically captured during this phase, so notes of agreed and disagreed improvement suggestions should be created. After the blueprint is done, the teams brainstorm ideas how to improve the customer’s experience. The focus should be with the customer. The method is a great way for starting a discussion about factors that influence the customers overall experience in touch-points he is participating in the service.
The blueprinting method is not just an executive tool, but a tool for all participants included in the customer process. A smoothly delivered service is more likely to result in favorable brand image evaluation. (Bitner, Ostrom, Morgan 2008, 69)

Service blueprinting presents a process, which has various components. All are presented in lines. At the top of the lines lie the customer actions. Below the customer line is the onstage contact employee actions. Onstage actions are actions the customer can see. Below onstage actions are backstage actions, tasks the customer doesn’t see. They are for example the service provider writing an offer or brainstorming ideas for the customer. Below these lines are support processes and physical evidence. Physical evidence is the service scape what customers evaluate to give cues about the company and service. Every time a line is crossed between the customer and onstage employee actions, a moment-of-truth has occurred. The line is called the Line of Interaction. Below the onstage employee actions is the line of visibility. The customer can’t see these processes, but can hear or see the outcome. (Bitner, Ostrom, Morgan 2008, 71)

Tuulaniemi (2011, 210) states, that if the service is blueprinted in too much detail, the whole image of the service can be hard to realize, although if too narrowly blueprinted some valuable phases can be left unnoticed. He states, that blueprinting is meant for professional developers, not amateurs. Also, blueprint is not beneficial for service design if the focus is on the service provider’s actions. Blueprinting can also be used for counting costs for a particular service. Cost counting also helps when the designers are considering customized offerings.

How to build a blueprint?

Before you start blueprinting you must specify which segment of customers is blueprinted. Companies have specific services offered to many kind of customers and the process should be focused in just one at a time. First you present the customer actions one by one. This component serves as a foundation of all other elements in the blueprint. After that the contact persons onstage and backstage actions can be added followed by the support processes. After these actions, you can draw the lines connecting these actions. Physical evidence is typically added last at the top of the blueprint. You should include people that are familiar to customer actions and support functions and possibly even actual customers in the blueprinting process. (Bitner, Ostrom, Morgan 2008, 73)

The blueprint should be mapped as it happens most of the time. The blueprinting method should give your team the visual image of the customer process. In the process new ideas usually emerge and people start to discuss the problems in detail and how to solve them.
Besides being the visual image of the customer process, the blueprinting method is excellent for new service innovation. (Bitner, Ostrom, Morgan 2008, 73)

Blueprinting was used in this thesis case in two ways. To come up with new service ideas and to present how a new service would be used. First the blueprint was used in a co-creation workshop with eight sales people innovating new services. They were given the task to present how today’s service was usually provided and make suggestions how the service could be provided in the future. The task presented to be too much for a fast paced workshop and the blueprint wasn’t really accurate. Still it provided the context what we were talking about. When the new service was decided I described the service with the blueprinting method.

Co-creation sessions (or co-creation workshops)

Service design embraces co-creation in all its forms. Co-creation can happen for example between customers, service providers, staff members and designers. The participant parties try to innovate new possible solutions for a given problem together. The settings vary, and sessions can be organized in many ways. The designers usually organize a session, where they try to moderate the conversations towards beneficial outcome, new ideas and new customer insight. The crucial things to consider are how to get the participant parties lose their fear of being embarrassed or feeling unfamiliar with the situation. In other words, they need to be relaxed. The designers can for example place boundary objects they think could generate discussion and not try to constrain the responses. It is possible to moderate the conversation with structured or non-structured questions that are well thought of beforehand. (Stickdorn, Schneider etc. 2010, 198-199)

The method is exceptional in the sense that a group of people first generates ideas and instantly filters them as most potentially useful ones. If there are a lot of people involved, many perspectives for a problem are heard. The shared ownership of the ideas also brings the group together and motivates them in the following phases. (Stickdorn, Schneider etc. 2010, 198-199)

In this thesis co-creation workshop played an important role. A session was organized for sales people to innovate new services. I had interviewed architect clients and could provide real-world problems people tried to find solutions to. Blueprinting was also used in the co-creation session. I recorded the session to video and concentrated on moderating conversation. I tried my best not to interfere and tried to be a catalyst of innovation by asking provocative questions. The session was quite chaotic, but the video helped a lot in gathering all ideas and to formulate new ones after the session.
Brainstorming

The brainstorming method was first published by Alex Osborn (Mycoted 2012) He was one of the founders of BBDO advertising agency. From the 1950s the method has become somewhat of a common word to describe idea generation processes in general. The technique has become successful mostly because it is free of criticizing group member’s ideas.

The classic brainstorming method is simple. You gather a group of people (usually 6-8 persons), introduce the problem or theme that needs a solution and people openly try to generate as many ideas as possible in a given time. There are a few ground rules that must be applied. There should not be any criticism or censorship of ideas at the first stage of the process. People should listen to others ideas and try to refine them or prompt new ones as they come to mind. People should concentrate on generating ideas, not discussing them. Every idea is written down for everyone to see. Everyone is free to give out ideas at any time or the process can be more structured, giving everyone a chance to give out their ideas at a time. Combining similar ideas concludes the session and discussing what ideas should be looked at more thoroughly.

Brainstorming can also be creatively adjusted for a given situation. For example, the facilitator can add random adjectives for the problem words to inspire people to invent new ideas. This is called Associative Brainstorming.

The brainstorming method was used in this thesis in many ways. Brainstorming happened while interviewing architect clients. A more formal brainstorming method was used in the co-creation sessions where I gave some rules how people should give their ideas freely without judgment.

Affinity diagram

The affinity diagram is a good way to organize gathered information or suggestions to clusters. The researcher looks for patterns and organizes the research data under common themes. The patches are named after subject, and they are linked with other headers. The classification lifts up important subjects from the users point of view. (Tuulaniemi 2011, 154). As Koivisto (2011b, 4-5) mentions, the method, presented by Kawakita Jiro is great for interpreting vast amounts of data, which is gathered for example by observing people. It is also a good way to get people to interact and participate in the design process. Koivisto explains that it is better to organize the data in groups with affinity sessions because teams see more than one person. The sessions should be arranged shortly after data gathering, and a team can consist of 2-6 people at a time. According to Koivisto (2011b, 6-14) the process starts by
transforming notes from data to understandable statements what the customer would like to have or needs. These notes are written down to Post-Its. The notes are then attached to a wall so that everyone in the team can see them. Then they are organized into clusters, themes or ideas that are linked or similar. These clusters are given a header. Two headers can be linked with a superheader. These superheaders give clues where the team should draw their attention.

The affinity diagram was used to analyze interview data. The method was used with placing everything that was said in the interviews to a large Excel canvas and then organizing the data in more understandable format. Then the data was clustered into themes, and three design drivers could be filtered from the data. Affinity diagram was also used to cluster ideas after the sales people co-creation workshop.

Storyboards

A storyboard is a visualization of the service process (Stickdorn & Schneider etc. 2010, 187). It can be a series of drawings like a comic, or pictures. The method can be used to describe the current service or a prototype of a new service. Key thing is to include as much contextual information of the situations so that people who do not use the service get the idea. The sequence should be visualized as straight forward as possible. Scenarios can be used.
There can be alternate endings to the story to provoke discussion in the design group. The method forces the designers to step into the users shoes for a while. The storyboard can also be filmed (Moritz 2005, 230). Different character profiles should be considered, and storyboards can be made for each one to investigate their differences. The method helps find important details about the characters and customer touch-points.

Sometimes the storyboard is divided to front stage actions and backstage actions as service blueprint. Moritz argues with Stickdorn & Schneider that the storyboard should in some situations best be left to sketch stage to underline that it is a prototype, not a ready made service. (Moritz 2005, 230).

The storyboard method was used in this thesis case to show how the new service would function for the client’s perspective. It first demonstrated what was the client problem and how the new service helped him to get what he needed.

Service evidencing

Sometimes people have ideas that are clear to them, but hard to express in words. When a designer has decided on a new service or a fix to an existing one, there comes time to present the idea for people who have not participated in the service design process and have no idea why a certain idea is selected. Koivisto (2011, 17-22) describes the method called ”evidencing”. This method includes making objects, images or other tangible evidence of a new service. The evidence describes the new service and how it feels and works. The method also helps the designer to evaluate the ideas for further adjustments. Evidence of a new service can be for example an ad, tomorrow’s headlines in a newspaper or an imagined customer feedback.

Service evidencing was needed in this thesis case for visualizing new service ideas to architect clients. Simple words wouldn’t have been enough to get their attention, so some imaginary was created and a small brochure of all the service ideas was created for the architects to “get the idea”.

3 Case: in search of a new service for Kaakelikeskus

After looking at theory, it was time to start the thesis service design case. The case for Kaakelikeskus architect services included careful qualitative research by interviewing architects about their daily challenges and turning these challenges to new service offerings. The
case study included all the above service methods, careful data analysis and presenting new service ideas to the company board.

3.1 My design process

This service design project was completely designed and organized by the author. I suggested the project to Kaakelikeskus, because I believed Kaakelikeskus could benefit from a completely new service that would be co-created with architects and sales staff. Luckily the company did not have anything against my proposal and I could continue to the research phase.

From the above service process descriptions it is obvious, that every author has quite the same kind of design process, they just tend to use different words to describe them. For this thesis there are phases and characteristics of the process descriptions described earlier from Stickdorn & Schneider (etc. 2010, 123) and others. I have changed the words to be more appropriate for my process and added a new phase (organize). I consider organizing ideas and themes so crucial, that it had to have its own stage.

I designed the service design process taking into consideration the customers and case organizations resources and selected service design methods that I believed I would have time to organize. The process was flexible and iterative and other methods were used if an opportunity presented itself or something would go wrong in the process. For example, if interviews or on-site analysis couldn’t have been organized sufficiently.

After looking at the literature, I started to plan the design process. I had previously designed services with interior designers and got some experience of in-depth interviews. I decided interviews would be my main research method because they could reveal architects needs and latent needs. I started to interview architects clients with a topic list and making quick sketches. I recorded every discussion on my mobile phone (recording software included). After interviewing clients, I interviewed sales staff with a modified topic list.
Image. Tuomas Suominen thesis service design process.

After I got all the data from the interviews, I coded it all to Excel and divided all challenges to themes. After this, I could compile some challenges to idea cards for the upcoming co-creation workshop to be used as triggers for innovation. Then I made a design driver list for the new service. It would serve as a filter for new ideas after the workshop. After analyzing the data and interpreting it to design drivers, I organized workshops where sales staff brain-stormed new service offerings with the idea cards and service blueprint exercise. I sorted all ideas from the workshop with affinity diagram to themes. After the session, I reflected the ideas to the design driver list, and dropped a lot of ideas. The final ideas endured the design driver test and Palmu Inc.’s profit-value-matrix. I conceptualized them to new service ideas and formed them into brochures of new services. The brochures would explain what value the services would bring to the architect. I sent these five ideas to architects to be evaluated and commented upon. After feedback and some discussions with architects, I conceptualized the final idea. I blueprinted and storyboarded the idea to be presented to the company board.

To do the research, I needed the following resources:

- 9 architects who specialized in big building projects for interviewing
- 2 salesmen, who provide the current Kaakelikeskus architect services for interviewing
- 8 salesmen for co-creation workshop.
- Company executives approval for research
- 15 months time to do the research
3.2 Understand

User interviews

The research started as planned with in-depth interviews. I carefully selected the participants. The focus was on architects who design large public and corporate buildings. Sales people provided the list of potential candidates. I contacted the potential candidates for interviews by phone, and described the objective and method thoroughly. Luckily almost all the architects booked time from their calendars for an interview session to be held at their office. The interview sessions lasted for an hour. I tape-recorded all the interviews to a mobile phone with this kind of software.

Discussion topics and guiding questions:

<table>
<thead>
<tr>
<th>Question</th>
<th>Research objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>How did you become an architect?</td>
<td>Background information. Why the architects do what they do?</td>
</tr>
<tr>
<td>What kind of buildings have you designed?</td>
<td>Background information. To find out what expertise he possesses.</td>
</tr>
<tr>
<td>What does your client value?</td>
<td>To gather insight what the architect is trying to achieve.</td>
</tr>
<tr>
<td>What are the upsides in your profession?</td>
<td>To gather insight what kind of tasks architects like to do.</td>
</tr>
<tr>
<td>What are the downsides in your profession?</td>
<td>To gather insight about challenges in architects daily job.</td>
</tr>
<tr>
<td>What tools do you use in the design process?</td>
<td>To gather insight what kind of tools the architects use daily.</td>
</tr>
<tr>
<td>What are the biggest challenges in your work?</td>
<td>To gather insight about challenges in architects daily job.</td>
</tr>
<tr>
<td>What attributes you value in services (examples)</td>
<td>To gather insight what architects value in service providers.</td>
</tr>
<tr>
<td>TASK: Design a dream tile service for architects.</td>
<td>To involve architects in the design process.</td>
</tr>
</tbody>
</table>

Service-dominant logic helped in formulating the discussion topics. Service-dominant logic advised to investigate what is the context the clients (users) operate (Vargo, Maglio & Akaka 2008, 148-149). First six discussion topics tried to reveal this context. Some time was used for covering this topic. The discussion about challenges started by discussing the downsides (challenges) of the architect client’s profession. A downside could be a challenge, latent need and a problem to be solved. After discussing challenges, I invited architects to co-create a new “dream tile service” for Kaakelikeskus.

I designed the interviews to be informal discussions. The discussion usually led to other subject areas, which was ok. I focused on hearing what was said and what topics the architects were keen to talk about. It helped tremendously to have all the discussions on tape to be
listened after the interviews. No notes had to be taken, and focus could be on making probing questions to discover needs and latent needs.

The interviews took place in the architect’s office; thus they tend to be busy, and I wanted to have a glimpse of the context where the design takes place. Some interviews were arranged in a restaurant near the architect’s office. In these meetings, I would pick up the architect from his or her office. This enabled me to see also their working spaces. Two interviews consisted of two participants so they could be labeled as focus group interviews. The participants suggested this arrangement, and I agreed.

The participant architects:

Matti Salminen - Arkkitehtitoimisto Matti Salminen & Co
Pekka Koski-Lammi - Arkkitehtitoimisto Mirja ja Pekka Koski-Lammi Oy
Heikki Viherkoski - Arkkitehtitoimisto Mirja ja Pekka Koski-Lammi Oy
Kari Palaste - Virta Palaste Leinonen Arkkitehdit Oy
Aulikki Jylhä - Gullichsen Vormala Arkkitehdit Ky
Kirsu Korhonen - Arkkitehdit Kirsu Korhonen ja Mika Penttinen Oy
Mika Penttinen - Arkkitehdit Kirsu Korhonen ja Mika Penttinen Oy
Olli-Pekka Jokela - Arkkitehtitoimisto Olli-Pekka Jokela Oy
Susanna Hyden - Arkkitehtitoimisto CJN Oy

Sales people interviews

After interviewing the current service users, I interviewed two Kaakelikeskus sales people. The questions were modified to suit them. The aim of the interviews was to find out do the sales people recognize the architect’s needs shown in the earlier research phase.

The participant sales people:

Panu Koiso-Kanttila - Project Manager at Kaakelikeskus Helsinki Oy project sales
Yrjö Ahonen - Sales Manager at Kaakelikeskus Helsinki Oy project sales

Idea generation workshop for sales people

After interviewing and analyzing carefully the research insights, I organized a workshop. The workshop was for sales people, and the idea was to gather lots of ideas how to address these three drivers. To get the eight sales people to generate ideas, I used idea cards. Every idea card presented a new architect real world problem. The Idea cards are shown in appendix 1.
The idea cards had two functions. One was to gather ideas and the other was to educate salespeople about architect’s daily profession. All ideas were laid to quickly sketched service blueprint to present the service steps they could be applied. The session was recorded on video for me to better concentrate on steering the conversation and not writing things down. I watched the video afterwards and made some additional observations, such as what was considered more important and what was not. The Post-Its didn’t provide this kind of information, but the video did.

Image: using idea cards and service blueprint to come up with solutions to customers’ problems during the service journey.
The blueprinting exercise didn’t go as planned. It still functioned as a boundary object that would keep the discussion in topic.
After the ideation session, I compiled the Post-Its to service encounter themes into an affinity diagram. One theme was the service encounter happening in the architect’s office. One was how better sell quality products that would not be changed by the contractor. One theme was how to provide more accurate product information. One concentrated on how to get the right products into the right design. One was how the client could find suitable products.

Image: sorting all ideas into affinity diagram themes.

3.3 Organize

Analyzing the client interview data

I compiled all the architect discussions, comments and suggestions to a big data sheet. I categorized the comments to topics covered in the interview guide. This way I could get an overview of everything that was said and the data could be interpreted and quantified.
After gathering the data, I refined it to lists. I sorted the lists lists to be comprehensive. I erased some comments that were mentioned only once.

I summarized the challenges to lists.
Image: Interpreting challenges to themes and deciding what design drivers to use.

Design drivers top 3

1. Save architects time
2. Serve 24/7
3. Offer products to suit space user needs.

Design driver 1 - Save architects time

This design driver became obvious after a few interviews. As mentioned, architects struggle with limited time and it seems that their job will get even more stressful in the future. May a new service offer whatever, the service should be designed so that it consumes less time than the alternative way of doing things. Architects time is money. The faster he or she is, the more he can design. The more he can design the more he gets paid. The companies who realize this important fact will probably provide better service than others. For example, you should not decide that the architect needs to step outside his office to use your service. You should think of ways of providing the service in the office or via the Internet (or mobile). You should try to avoid interrupting him with things that are not relevant at the time.
Design driver 2 - Serve 24/7

Architects time goes in meetings and communicating with many shareholders in the daytime and in many cases they need to design in the evening when it is quieter, and they can concentrate. You should think of ways the client can use your service when he has the time, may it be early in the morning or in the evening.

Design driver 3 - Offer products via use value

Architects design things for the users as well as their client. You should provide service that concentrates on the space user. The user values aesthetics as well as functionality. The new service should take users in the center of service offering. The service should provide important information about what users need and want to educate the architect and service provider staff.

Architect interview insight

Why become an architect?

The interviewed architects said they were directed to architects profession by their passion for architecture or simply because they had the talent to visualize their thoughts on paper combined with mathematical talent. All of them were interested about art and drawing when they grew up. Many of the interviewees grew up at a time when everything had to be drawn by hand, when no computers were used in the design process. The architects see architecture and buildings as works of art, so they see themselves as artists. Many of them have studied abroad where the profession looks a bit different than in Finland.

The architect’s profession looks a bit different from the inside than from outside. Some of the architects said they were attracted to architecture because they wanted to design by drawing sketches and creating something new and exciting. In the end, they all are creative souls. They get to be creative at times, but a large part of the architect’s profession is designing technical details others fail to see. One can spend a lot of time designing for example suspended ceilings bottom rails, as one architect put it.

The architect’s profession seems to be a lot about controlling chaos. Besides the esthetical design of the building they, have to know all the technical data behind the design. This is challenging, tough buildings tend to be built of thousands of different products. This is not only a challenge. The architects see their profession as the broadest profession there is. This is because they stand between art, technology and architecture. The architect sees the needs
of the users, contractor, planners and government officials as well as product providers’ vast range of materials that can be used in the design. The architect is the only one who sees it all and has to take every parties needs into consideration. Others do their work from their own perspective.

So why should one become an architect? If you like to solve difficult problems, then maybe architects profession might be your choice. It quickly became obvious for me that architects like to solve technical or esthetical problems. They enjoy solving problems others can’t. These problems make up for the sometimes-dull phases in the design process. The trickier the problem, the more satisfying it is to solve it.

The architects say that there are fewer routines today than there was on the past. This is because of software that enables them to do time-consuming tasks in a blink of an eye, such as drawing shadows to objects. Some architects liked these past time-consuming activities, when the brain could relax for a while, but recognize that the transformation of the work has been a needed one.

In the architect’s profession, there are things that drive towards mediocrity. Some counterparts involved in the planning and manufacture of the building such as the contractor, HPAC engineers or structure planner or the firm buying the building may want to do things that are easy for them. Not necessarily best for the design or people using the design.

The work in different architect agencies seems to look quite the same, although there are other things that can change such as the social ambience. The work is for most parts done solo, but in many big projects there is a project group to complete the design.

What do these architects do?

The architects that were interviewed were selected because they had designed several public and corporate buildings. The group of architects had designed public schools, universities, libraries, sport spaces, hospitals, ice rings and churches. On the corporate side, they had designed company buildings, factories, banks, hotels, restaurants and other spaces. In the process, they had also designed thousands of private homes, mainly large-scale multi-story houses.

When asked how did they specialize in these kinds of big spaces, they said their success in architect contests and school projects were major influencers. Many public projects are given to architect companies that provide the best suitable design in contests. When you win, you
get to make your design a reality. This way you get a testimonial of your talent. These references help you compete in future competitions because customers (such as the Finnish government) value past experience of certain kind of designs, such as hospital design. To note, winning an architecture contest also means you get to decide the boundary conditions for the design. They aren’t provided by the subscriber. Architects say these projects are exciting to work on. Architects that do not succeed in contests many times end up dropping out from contests all together. It is important to get good feedback when you are a young architect.

You can also get a deal by entering a public acquisition contest. One big change has been that the government has decided to place every design to a bidding contest. The design company that succeeds to get most things right (namely price, references, design) in the bidding contest ends up winning the deal for the design. The government values highly past references, so architects tend to specialize in certain type of buildings. For architects, this is frustrating, tough they feel that if they can design a school, they could also design a common place for citizens. The general feeling is that the government places too much weight on past references. This does not support new ways of thinking about the spaces we use.

Architects plan their work well. They have schedules for every phase of the design process. They need to schedule HPAC plans, build plans, electric plans, customer approval times etc. in order to make their work profitable and to stay on schedule. They start by hearing the customer and the sometimes the users. First they design blueprints, floor plans and draft the outlines of the building. In phase two, they create 3D models and select materials to be used in the design. In this phase problems become smaller. They drive for unanimous opinions about the design with the customer and make adjustments. After these phases, they go to construction detail planning, which can take a lot of time and effort. In large projects there usually is a lead designer, who is in charge of the first half of the project. In later stages, he stays in the background and sees that the construction architect and additional architect finish the design as guided. In smaller projects, the lead architect does everything by himself.

The architects are not alone in the design process. When building up the design, the customer usually compiles a project group to gather important information about the user’s preferences. In hospitals, there is usually a project manager who gathers all the opinions (of staff, patient and goods transportation etc.) the space users (mainly doctors and nurses) in workshops and compresses them into consensus. He is the link to users of the space. The customer may also provide specific instructions for floor materials and other products used in the space. Architects can do their job sufficiently if the customer can communicate what he wants. Especially in housing co-operatives the customer may not be a professional builder, or he may not have a clear picture what he wants. Some architects who were interviewed tend to prefer designing to professional customers. Professionals know how to communicate their
wishes in detail. Architects are also really strict that their design will be built as designed. They do not want to change their plans during the construction process if not necessary. For example, private homeowners often do not consult the architect when making changes to plans. The result is far from what the architect designed. The larger the project, the more architects plans are respected and followed.

Architects love to draw and sketch. They love to visualize loosely and without great constraints. They want to imagine, rethink and conceptualize. They want their design to look fresh and exciting. Unfortunately, this part of the project takes little time comparing to the overall mechanic design process, which compiles all the bits and pieces together. When you get to be the lead designer, you do not have to be considering all the details. Your job is to monitor and guide your personnel who are making your plan reality. On the other hand, the designers who are building up the plans have to get inside the lead designers head to select solutions and products that are suitable for the design. This requires a lot of communication between the people involved in the project.

When asked do people specialize inside the architect office the architects said it is natural. People are interested in different things. Some know a lot about materials, someone knows a lot about elevators or someone knows a lot about a certain user group. Architects tend to rely on the opinions of their more knowledgeable co-workers to be efficient. It is beneficial for the company and especially for the architects to get to do all sorts of projects and learn new skills. This makes the architects work more meaningful and rich in content. All architects like that their days are filled with different tasks and problems to solve.

What kind of tools architects use?

The architect’s office is usually quite plain. It includes an office (or open office) space, a large desk and a big bookshelf. They usually have a powerful computer with architect software such as ArchiCAD and AutoCAD. They use both software. They also need Photoshop and other visualization software. They need Microsoft Office or similar software. Sometimes they make tangible 3D models, but this tradition is decreasing thanks to software that does the same thing faster in digital format. The bookshelf includes hundreds of books about architecture and lots of product provider information. For example, they have slots for furniture and tiles where they insert brochures and other marketing material.

What does architect’s customer value?
Who exactly is the customer? Is he the one who placed an order for the design? Or are the customers really the users of the space? Also, a space may have multiple different users you have to consider. Or is the customer the one who will buy the finished building after it is finished? The architect has to navigate between these stakeholders when creating the design. Usually architects emphasize that their customer is the one with the wallet, he should know what he and the users need.

According to the interviews, you win architect competitions by having the best quality-price relation ratio. You have to know beforehand what the customer values (gives points in bidding contest). It also helps if you know the people asking for the offer. Sometimes they emphasize things they know you are good at. The architects feel that customers usually say they value good quality design, but actually costs whey more. This is sad because architects would want to design spaces to be innovative, with good quality products and get more time for the design process. But sometimes the budget itself really makes the architect innovative. You need to come up with solutions that at the same time cost less and save time.

The architect’s own customers value good customer service. They value reliable service, where timetables are met, work is done thoroughly, and the design is presented in a way that the customer gets it. Architects usually try to make their design in detail; thus they say the customer values design where everything is drawn in detail. For example, blueprints should be 90% right. This is necessary also from the architect companies’ side, because doing double work costs a lot. Sometimes when there is a big project you do not have all the plans ready, but you have to have them ready in your head and communicate that they are not ready yet. Architects almost never show incomplete plans to their customers.

So what is a good design from the customer’s point of view? The architects say that there are some general things you must consider. First of all the spaces need to be designed so that people can work or live efficiently in them. Building, renovating and maintaining the building should be affordable, easy and fast, because all these phases require money and time from the customer. You should always keep in mind lifecycle costs. The buildings are meant to be used for decades or in some rare occasion centuries.

Some customers tend to value things they have seen before. This creates a challenge, when the architect wants to present a new visual or technical solution for creating something with his own thumbprint. New solutions are sometimes scary for the customer, and they need to be well presented and well justified.

In today’s business, the architect is in enormous time pressure, and it does not help that their customers value constant communication in the design and construction process. You should
answer your phone and email right away when the customer has a question. A lot of questions are about the design and the customers could easily check details from the project plans, but instead they ask the architect. This is frustrating and time consuming. Some architects see this as double work because they have already provided the plans, and now they have to go back to the design papers to see what they wrote there. This problem occurs because construction sites are busy and they have a lot of plan papers there. It is sometimes faster to contact the architect than find what you are looking for from a pile of construction plans.

Magical moments in the architect’s job

Architects job is creative. With your design, you can actually have an impact on people’s surroundings and how people operate.

A magical moment is when the architect gets an interesting project, and the plan is not ready even in his head. This is the time when he needs to get the big idea what the building should look and feel like. When he is in this situation, he may have difficulties concentrating elsewhere, for example boring office routines.

The interviewees said their magical moments consist also of situations where they have figured out a solution to a difficult problem. The more difficult the problem, the more satisfying it is to solve it. Some people would have great difficulties motivating themselves to projects without these situations.

It would seem obvious that one magical moment would be to hand out the design papers to the client. This is rarely the case. The architect and the client communicate a lot in the design process. In the final versions of the plans there are rarely things that make you go wow. On the other hand, a magical moment is when the architect visits the almost ready made building to see how his plans worked out. He wonders about in the building and may feel very excited. Or he may feel disappointed if the plans have not been followed.

The architects say there are many things that make architects work easier today than before. For example, computers have speed up the boring and sometimes effortful tasks. It used to be that first you thought the project all the way through in your head and today you design as you think in the process of making the plans with architecture software.

The evolution of the Internet and email has also transformed the architect’s work. Searching for products and their specifications is easier today than before thanks to Google. Phone calls
have decreased thanks to email. Email is great, tough every bit of information stays there, and you can check things if you do not remember what was said before.

Challenges in the architects profession

When I set out to figure out the challenges in architects job, I never thought how many challenges I would encounter in nine hours of interviewing. For convenience, I have divided the challenges to time, company management, costs, design, customer, regulations and product challenges.

Time challenges

The interviewees said limited time creates the biggest challenge. You should be designing, but you are somewhere else all the time. A lot of time goes to creating reports no one cares to read and what are made to secure that there is a report if something unexpected would to suddenly happen. They feel their work could be done with much less paper work. The reports are meant to secure the builders and architects backs, but the necessity to be prepared for everything takes too much effort.

Also, there are too many meetings in a week to do your design. When you go about your meeting in daytime, you have to design in the evening. It used to be that you had just one meeting a month at the construction site, but today you need to be there every three weeks. On top of this, you have site building supervision meetings and office meetings.

The architect’s time is shattered; tough he is interrupted time after time. This is bad because you are efficient when you are in a zone of design when you can fully concentrate on it. The phone is ringing, emails keep on piling up, and people assume that you will provide quick answers to their problems. In many cases, the customer would get the answer from the architect’s plans without contacting the architect directly.

The architect needs time to keep up with the design deadlines. Making reports in a rush can be quite stressing. When you are late, the construction site might suffer from time problems, tough they cannot start without your plans. Sometimes architects need to do some serious overtime.

Company management challenges
Running your private company also creates challenges. Architect companies are usually quite small (2012 Tilastokeskus), and most operate with under 300 000 turnover. There are just a few architect companies in Finland that employ over 50 people.

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Table 1. Employees in architect companies in Finland (transformed to whole-time employees). (2012 Tilastokeskus)

This means that in many architect offices, the entrepreneur has to take care of all the office routines from buying software and office supplies to billing and people management. The entrepreneur has a lot of things to do and rarely enough time to do his tasks. If you have a bigger company, maintaining a sufficient workflow for everyone at the office is challenging. Every hour the architect is not doing things worth billing or strengthening his competences is a waste of money.

Cost challenges

The general feeling is that financial restraints have increased in the past 40 years. The client (meaning town and government) is very strict on expenses. Architect competitions push design prices down. How can you design with less money every year, when your own costs increase at the same time? People’s efficiency has limits. Architects need to have overall efficiency in their own doing as well as with the design. The budget for the design also creates a challenge because architects would like to use high quality products. Under pricing is a big problem in architect design.

Design challenges

To design a building is not easy. There are a lot of people you must convince. You may have a vision the customer is not ready to accept. You may design a visual interpretation of a building the users want to reject because of the colors. Your boss and colleagues may disagree
with you. The architects feel technical solutions are easier to justify than the esthetical side. After all, buildings are pieces of art and everyone usually has opinions about them. The ones who are good at communicating their esthetical characteristics (forms and colors) have a greater possibility to get to build them. If you are a lead designer, you may disagree with your design colleague about the overall look. If you are the designer who has to follow lead designers plans you may have difficulties maintaining the plan. It is hard to make things so simple that details do not jump in your face. Every little piece should be thought so that it fits to the overall plan.

The architects see no real challenge in designing “normal” buildings. For example, multistory houses are easy; thus you can use past projects as foundations for a new one. It is easy when you can identify with the user. You also know how much time you can use to design the building. The task becomes more difficult when you want to rethink the spaces totally, or you design for users who’s needs you do not know. If you use a lot of new kinds of solutions, you need a lot of statements from government officials to make the design. This takes a lot of effort. It is better to use one or two innovative solutions in a project to make the project more feasible. Many times architects use a lot of time on lobbies and entrance halls; thus they make up the first impression of the space. Architects enjoy solving difficult problems and they want to create unique and novel visual and technical characteristics to buildings. To make unique is challenging in ever so tight deadlines, but these new solutions are why some architects like their job.

When the architect is doing his first designs he has to compile large material lists that are troublesome to do from scratch. More experienced architects may use earlier material lists and change them to suit the new project. They can use these lists when building flats but not in unique buildings such as churches and hospitals.

Some architects see more challenges in new buildings and some see more challenges in an old building renovation. On the other hand, there are challenges in old buildings because the rooms and structure do not sometimes match today and you have to design on top of old design. You do not have control to everything and history is a burden. On the other hand, new buildings are more complex; thus there is no history, and you need to start from an empty canvas.

The architect’s day fills up with small technical problems that bother them. The mind tries to solve the puzzles even after working hours and the ideas or solutions may come at any time, usually off-duty.
Architects feel disappointed at times when their design isn’t as good as they thought. If they leave things undesigned, the constructor or subcontractors may have to add things to the design. For example, one architect said there were suddenly air conditioning pipes in one finalized building he hadn’t planned there. He thought they ruined the design, but he could do nothing about it tough he hadn’t made the design all the way through. Another example was a building where the designer hadn’t designed what kind of clocks should the space include. The architect walked in the new floor and saw ugly looking clocks in odd places. So, architects like to be specific about their designs. In many cases, the architect does nothing about the interiors such as select sofas and other interior items, but they care how their designs look and feel when it is finished.

Sometimes when there are no big puzzles to solve architects may feel as if they were just adding small things to a gigantic canvas. It is not as exciting as you would thing architects work is, but important for the final result.

Customer challenges

Customers generally provide good guidelines and brief to architects. But there are exceptions and sometimes opinions collide. Architects are proud of their profession and expertise, and they want to be appreciated. In Finland, architects operate in somewhat different way than in Europe and the rest of the world. In other countries such as in the UK, the architect has more responsibility of the final project and needs to be at the center at all times. In Russia, you do not question the architect’s design. It is unheard of. In Finland, the architect is responsible only for their design, but not the actual construction process. It seems that construction companies have gotten much power because they have to try and get all materials most cost-efficient way. In the process, they may end up destroying some quality by changing products to cheaper ones. The architects say their profession is not as appraised in Finland than in some other countries.

It bothers them if their customer doesn’t get what they are after, and they do not like when the customer starts to tell them how the design should look like. One architect said that there is a problem if the customer grabs the pen. Usually these things happen because the customer doesn’t know what he wants and the architect has to guess. Sometimes the customer doesn’t even realize that he has a problem. He cannot see himself from a distance as the architect can. Some architects say that customers have difficulties accepting new kind of solutions they have never seen before. They tend to appreciate solutions they have seen.

There may also be conflicts between the one who is paying and the ones that are using the space. Usually the builder wants to condense spaces to save money, but the users would ap-
preciate more space. This is a constant battle and architects need to be thinking both parties interests. Nowadays customers may have a group that decides things for the space users. The group is a good thing, but sometimes they tend to drive for only economically efficient solutions, not user-friendly solutions.

Regulations challenges

The government regulates a lot of things related to building. These things sometimes create problems. There are a lot of parties you need to keep informed, and everyone needs their report. A lot of new building principles have been added for insulation, sound, non-impediment and other things. And they keep piling up. Doing these reports takes a lot of time and effort.

The government also seems to be against new esthetic solutions. The ones who can justify their visual interpretations of the building may get to design it with government approval. You need to present the design in some way, and you need to make sure you “sell” your design with great visualizations. The architects feel that the government is more after preservation of old buildings than new innovative building.

The biggest thing for architects who are designing public projects is that every project must go though a bidding contest. This means you should get as many points as possible for your company in an architect competition to win the job. The problem here is that you need a lot of past references of similar projects. If you have in the past designed a school, you get more points in a new school design contest. If you want to design a hospital, you should have experience of designing hospitals. The government seems to think that if you have not designed a school, you cannot do it. While architects feel that the design process for these kinds of learning facilities and corresponding spaces are quite the same. They would know how to design a school even tough they have more experience from other projects. From the government view, this is a safe route, but our schools will probably not get innovative new solutions this way.

So what if you have designed schools before and you like to design more of them? You are in a pleasant situation, but you still have to start from the same bidding contest starting point over and over again. One job well done will not guarantee the next job. So, there is no continuity, and you live in constant uncertainty. And if the government decides not to build schools, what then? It used to be that people did a lot of different kinds of jobs. This progress can slow down learning.
Service provider challenges

Service providers such as material providers and software providers usually do their job well. When asked about service providers the participants remembered more good things than bad. Usually bad things are related to how fast and precise the service provider can provide valuable information to them.

Before entering to discussions with the architects I had always wondered how do architects manage all the thousands of product they need to add to their design. In particular, I was interested about ceramic tiles, but the discussion was about all product and service providers.

The architects feel annoyed if a service person is too pushy. A lot of product providers rely on architects who are designing with their products. They try to lift their products up as well as they can. Sometimes they contact the architect too often or try too hard to push their product into a design. If you are a service provider, you should try not to disturb the architect if the products are not needed at the time. Some sales people slander competitors’ products. This is seen as bad conduct.

In general, selecting interior materials for wall and floor is relatively easy. There are harder materials to select such as hospital equipment or furniture. Architects value providers who can supply everything in their category (such as Isku with furniture).

One challenge for architects is that materials tend to change every year. Large design projects such as hospitals may take up to five years. The architect needs to select materials for the design that are still valid after a few years. If he has to come back to the design and select new materials he may have difficulties getting paid. Also, how can you renovate old buildings when same materials are not possible to buy any more?

Specific product information is important for architects. They do not want to make hasty decisions without knowing all the technical characteristics. The problem is that the architect many times has difficulties finding all the necessary information. A product provider company may have a brochure about the latest product, but it may lack the important technical product information such as what it is made of. Architects are responsible that the products they choose to their design suit the space.

Architects want to design buildings that last. They would want to select the best possible materials for their design and they feel frustrated because their client tends to be more interested about price. They may get to include a top quality product, but it isn’t usually
enough that it looks great; it has to have some characteristics other products do not have. Or else it gets changed to a cheaper one in the construction process.

The architects make detailed room product lists that are used in the construction phase. For products that are unique (such as lamps) they write down a specific product name. In products such as paint that is not as unique, they might just write a RAL color number or an example product.

Tiles are usually chosen with not only aesthetic qualities but also functional characteristics. These being mainly easy clean, slip resistance and size. The tile should be timeless and strong. When the architect is interested about a tile or needs one for the design he needs to get the salesman as quickly as he can to provide samples. In the material selection phase, the architect needs to act fast and get all the information possible at minutes notice. One problem is that usually the product folders in the architect’s shelf are outdated. This is the biggest reason they use the Internet a lot. It is the fastest way to get information, but they also need a trustworthy salesman to find products that are not listed on the web.

Architects are very interested about new solutions that are being applied around the world. They read a lot and use architecture books for inspiration. Their offices are filled with books about architecture. Their offices are also filled with bookshelves with product folders and marketing brochures. Their offices are quite small, and the computer is the main tool they use.

The customer may also constrain the architect with deals he has made with product providers. The builder may have contracts with product providers where the architect needs to get the products. Sometimes it is the case that the architect can’t find the best suitable product from these collections. They have to make compromise solutions they hate.

Architects want service personnel to not change. It seems to be that when a salesman has figured out the architect’s distinctive style and knows what kind of projects the architect does, he can offer just the right kind of products and service. If the service person changes monthly, the architect has to use more time educating the sales people what kind of products they should offer. Architects need reliable, knowledgeable and fast salesmen. They need to listen and learn what the architect likes. All architects have distinctive styles and needs. You should also do what you promise. For example, two architect companies relied on a certain bookstore salesman because he knows what kind of books the architects want and brings only those to their office. His service was praised in the interviews spontaneously. The architects do not need to go look for books elsewhere.
Besides sales people, these architects use the Internet a lot. They think every technical and esthetical bit of information should be on the company’s website. This is because usually they like to figure things out by themselves. The more essential details you can provide, the more valuable is your website. And the website should also provide contact information to your salesman. Today’s websites are professionally done with a lot of readymade 3D images and instructions. For example, when picking an elevator to a project the architect needs only to give information about the users and Kone sales people (or website) can provide a suitable solution. You do not have to design every piece of the elevator, just the elevator shaft.

The salesman does not need to know everything, but he should try to get information fast and be precise. For example, architects are nowadays very interested about product delivery times. If you cannot provide this information on your website, you should try to find them out before entering the architect’s office.

Companies that provided excellent service for architects were for example Upofloor, Kaakelikeskus, Ala-Carte, Isku, Bookstore Saarikoski, Dorma, Target, Teklux and Vallila Interior. Tikkurila and Kone were also seen as good service providers, but they got also negative feedback.

Dream tile service

I gave the architects a task to design a new “dream service” for Kaakelikeskus. Architects gave suggestions and improvement suggestions. Here is a compilation of what they said:

- Tile collection should always be up to date whether it is the architect’s bookshelf or in the company website.
- The company website should include all the products with detailed information and a perfect search machine to find what you are looking for.
- You should be able to search by use qualities such as maintenance and slip resistance as well as color, size and other important qualities. The search engine should suggest the best possible product according to where the tiles would be installed. The search engine should provide information, which tile series, is most used in same kind of projects.
- We always want the real thing, a real size model of tiles. Small pieces are not enough to get the big picture.
- You should arrange products according to their use space.
- The architect should not have to search for products, but to get fast hold of the sales man who can give examples of products that fit perfectly to the design.
• Grey collection would be nice. Architects who create public spaces need grey because it is a timeless color. You should have many shades of grey.

• A tile series, which is in production for several years or decades. Basic colors such as grays and beige shades should remain, but some vivid colors could change from time to time.

• A color chart as Tikkurila paints provides. Or mosaic wall chart of all tile colors.

• The service should not cost anything for architects.

3.4 Ideate

Quick sketches

Shortly after and during the interview process, I sketched some new service ideas. Some of them were based on intuition. Some were the participant architects ideas and some came from careful analysis of the interview data. The clue was to get ideas on paper the minute they came into mind. I also listened all the interview recordings and made some new sketches. Below you will find a compilation of ideas from the interviews.
I discussed some wild ideas with architect clients and they evaluated them immediately. Ideation was easy, tough there were no financial restrictions and no design drivers to explain what is valuable for clients. The wild ideas were drawn to provoke thinking and conversation.
Examples of wild ideas for new services:

**Color Splash** > pick any color and size, and we will produce it for you.

**Designers Box** > custom-made box with tile samples customized to architects style.

**Book & Sample** > books provided about architecture with tile samples.

**Tile trip to Italy** > tile education for architects with Kaakelikeskus sales staff in Italy.

**30 years product guarantee** > tiles should last a lifetime, so why no lifetime guarantee?

**Time Machine** > shows how products get old (wood and rubber versus tiles) and how tiles last.

**3D-design service** > 3D-images of spaces where tiles are used.

**Quick delivery** > fast delivery when you pay extra.

**Best price guarantee** > if you find the same tile cheaper, we’ll sell it 10 % cheaper.

**Everlast series** > we will provide same colors and sizes minimum 10 years.

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Sales people interview insights

Sales people recognized almost all the main challenges architects had. They talked about time pressure and business problems architects face. They have been working with architects so long that they know what their clients like and dislike. They said architects time is valuable, so the company should help them by acting fast and efficiently. Architects work with small profit margin and the company should help them be more efficient for the architect to earn more. For example, the company should avoid situations when the architect has selected products to be used and they have to come back, and change them for some reason.

It was not very fruitful to discuss these subjects with salespeople. I guided the discussion to new areas covering how we should develop our business to better suit architects needs. This opened up a treasure chest of ideas how we as a company can serve well. Here is a compilation what they said:

**Passion for architecture**

People working with architects should be interested in what they do, mainly about architecture. You should recruit people who are passionate about esthetic and technical things related to architecture. This way you do not have to force your staff to go out and sell your things, they do it with passion and really go the extra mile to serve the architect. This way they can earn trust from architects. Architects are ambitious, and you should also be. Otherwise, it will seem that you are not interested about what you sell. You should aim to be the best in what you do, architects will appreciate it. You may have the resources and knowledge to
provide good quality products, but you need passionate people to sell your products. You should aim to be a great consult that solves the architects problems related to your products.

Get inside their heads

Sales people should get inside the architects head and think how they do, only then they can solve architects daily problems. You should not restrict your staff to know only about your own products but competitors and supplement products as well. This way you know what context your products are evaluated. This is vital also because the sales representative must be able to discuss detailed technical attributes about products that are close to the company’s products. Cost knowledge is also important.

Train your staff

I do not know can you really train people to be passionate about architecture, but you can create a place where architecture is everywhere. The company should aim resources in training their staff to know history of architecture and today’s architecture. The sales reps should read literature related to architecture to get to know who is doing what in this field. Sales staff should be at fairs and other meeting places and network with architects.

The sales reps emphasized that the company should invest in more training. The training should be arranged so that they are efficient and provide instant solutions. Sales people need for example critical incident training to constantly improve their work.

Conclusions from sales people interviews

Sales people gave lots of ideas related to this service design case. They emphasized that architects work 12-hour days and that you should train your staff to meet their needs. This led me to think that the service design concepts I was working on should include an element that could educate the sales staff and the service should be provided 24 hours a day. The service should reduce the architects time and effort.

Co-creation workshop ideas

In appendix 3 is a compilation of ideas people discussed about in the workshop. The session lasted for four hours with no pauses. It was intense and exhausting. All ideas were marked to Post-Its. The ideas could be clustered to themes after the session. People discussed what is the real goal of architect services, how could sample presentation be improved and how product information or website search could be improved or re-designed. We also talked
about how architects could more easily find suitable products and how to be available to the architect client when he needs service from the sales rep. All ideas came from trying to find solutions to architect challenges (problems) in his daily job presented in the 10 idea cards. All ideas are shown in appendix 3.

3.5 Filter

Co-creating the final service idea

I had created fast sketches of new service ideas. I added New ones after the workshop. Now that there were a lot of new ideas, I selected the ones that addressed the design drivers best by reflecting all ideas to the design drivers. The aim was to identify most potential ideas that could benefit the architect and at the same time be possible and profitable for the case company (win-win-situation). The ideas had to deliver the best customer experience as well as have significant business value. I tried to pick ideas with Palmu’s method, where these two elements are aligned in harmony.

![Matrix for evaluating service ideas](image)

Image: Palmu Inc. matrix for evaluating service ideas. (Tuulaniemi 2011, 106)

I conceptualized the service ideas into understandable formats and then asked feedback from the interviewed architects. This way, the new service would be co-created with the users. While there was little work made how the services would actually work, I wanted to get confirmation about where to put my effort and time. If the architects could pick the most valua-
ble service proposition for them, they could also contribute how the service could work. They could suggest some other execution ways than I had in mind.

Images: from seven ideas to five ideas with the help of three design drivers.

Service ideas to be proposed to architects

I made five quick brochures with Adobe Photoshop and Microsoft PowerPoint software. They served as service evidence for all the services to be handed out to architects to collect feedback. I created some imagery for the services to make them look more attractive and to highlight their advantages.

Service concept 1: 24 Hour Samples Service

The 24 Hour Samples Service could save the architect’s time. He could easily contact the firm and submit his sample order and get samples with guaranteed one-day delivery. This doesn’t apply to products Kaakelikeskus does not have in stock, but it applies to over 3000 stock tiles. The service could be provided by phone (and answering service in the evenings), website and email. Sample orders coming in public holidays and on the weekends would be delivered on the next business day.
The idea endures the design driver test of serving day and night and saving the architects time. The problem is today, that the architect has to do his design in the evenings when sales people cannot be contacted. The architect is compiling products for his massive project and needs to get things done and move on to other things. When he orders samples from Kaakelikeskus via this service, he can instantly move on to do other things. He doesn´t have to worry about when he can decide what tiles to use in his design. They will be at his desk the next day, and the project continues on schedule.
Service concept 2: Architect Tile Search

The new search engine takes into account the space user better than the one, which is operating today. The architect can select a space, which to tile, how the space is operated and what kind of users there will be. In addition, there will be important new additions to the search engine such as maintenance and slip resistance. The search result will provide the most used and suitable series to the architect’s design and some references of former projects tiles with the tile series.

Image: Architect Tile Search idea sheet

Service concept 3: Product technical data sheet

The technical data sheet would make it possible to print and download PDF-format product data documents from the Kaakelikeskus website. The data sheet would contain relevant information such as the product name, product code, price, availability, size, color, toughness, surface, slip resistance, cleaning, and how it is produced. This data sheet can be saved, archived, printed or sent via email to people who need the information. The architect could save it as an attachment to his design plans quickly with minimal effort and time used to compile the data from various sources (web and sales people) would decrease.
Service concept 4: Super Tile Database

The Super Tile Database is the boldest idea in this service design project. Kaakelikeskus has an extensive 3000 stock tile product search engine, which has been developed for several years. The competitors have similar tile search methods at their website. Kaakelikeskus has over 50,000 tiles it can order from factories around the world. To differentiate from competitors and to bring an overwhelming product collection to architects, the company could develop a Super Tile Database that could include a lot more products than in stock. The architect could order a sample of the product and get a sample in 4-6 weeks. If this would be ok for the architects, it could be worth investing in.
Service concept 5: Tile Folder Order Service

Today sales representatives book meetings with architects to update their current tile folders, which the architects have archived in their bookshelves. The problem is that these folders typically outdate in some time and Kaakelikeskus has problems updating them as fast as they should. With the new Tile Folder Order service, the architect could easily check from an Internet page, email of via phone that he has an updated tile folder with current data about the tile folders. If they are not up to date, he can easily order an update the folders.
Feedback from architects

I sent the new service ideas to architects via email, and asked them to contribute what idea would best fulfill their needs. It was obvious that the best idea would be service concept number 2, the Architect Tile Search. The idea was praised because it would have all the attributes architects need to find a suitable tile. It was surprising, that architects didn’t value a larger tile collection, but a simple tile search machine in the website. The architects select tiles according to the space user needs, so they need specific data about surface, maintenance and various other attributes.

3.6 Prototype

When evaluating these service concepts, one participant client suggested these service ideas to be converted to one service path. The service ideas addressed some different real and latent needs. An idea came to mind that could three ideas be brought to the process to make a completely new service process?
With the new service process, the architect could first find what he is looking for from the new search engine, then proceed to download a technical data sheet. After this, he could order a real size sample of the product.

This idea could provide value for the company and architect client. Architects would find tiles that suit the space user needs and that would benefit the space owner (for example cleaning costs easier to predict). The architect could make his first selections without contacting the sales rep and familiarize with the technical details. When he would be satisfied with a tile (or tiles), he could instantly get product data about his selection(s). Then he could order the tile sample(s) that would be delivered in 24 hours to his desk. This way he would be efficient. For Kaakelikeskus, the service would ensure that architects would use their service opposed to competitor’s service. If the architect would choose to use Kaakelikeskus products, it would ensure future tile sales. The service would also save sales peoples time that are providing the service. This is a needed bonus tough Kaakelikeskus only has few people offering the service full-time.

Details of the new service process
In order to give an explicit image how the service would operate from customers and service provider’s side, I created a service blueprint of the service process. If the company would to proceed to developing this new service process, I would suggest taking future users to the testing phase to make the service user-centric. For example, users could provide additional information about how the search machine drop-down menus should be sorted or would they want to order the tile samples via email, phone or from the website search machine. Involving users would also provide knowledge would the service operate as designed, or would there be obstacles this thesis hasn’t provided answers to.
The blueprint presents how the client would proceed from need recognition to Kaakelikeskus website to the search engine and how the search engine would use different databases to formulate the search result. He could adjust the search result by sorting it and refining it. The service could continue from a digital service to analogue form by the salesman entering the scene. He would present the tile samples and provides additional advice. The blueprint stops to client selecting the final product to use. In the future it would be useful to blueprint the whole process into what context the service is provided, blueprinting the whole building design process and how the space users benefit from the service.

Storyboard for the new service process

From the users point of view, the new service would function as the below storyboard demonstrates. The user would use the tile search via the Kaakelikeskus website (www.kaakelikeskus.fi). He would select attributes from a drop-down menu and get a search result. The search result would show with star ratings most relevant search results. Below the search result images, there would be a short description of the tile and a link to detailed product info. Product info would open up, and there would be reference images of tile usage in similar types of buildings the architect is designing. This way he could be sure that the tile is ok for this design. After the architect would find what he was looking for, he could order a
sample from the sales rep or possibly via the search engine. After seeing the tile, he would write how and where the tile would be used in his building design.

Image: A storyboard of a new service process with three designed touchpoints: tile search, tile technical data sheet and 24-hour sample service.

4 Conclusions
The aim of this thesis was to develop a new service for Kaakelikeskus architect customers. The service idea had to be valuable for architects and at the same time profitable for Kaakelikeskus. The thesis succeeded in this task by developing not only one service touchpoint, but three linked touchpoints making a small service journey. The journey starts with a novel idea how to display Kaakelikeskus tiles at the Kaakelikeskus website. The new search engine would emphasize what is the space where the tile is used and who is using it. The idea is highly user-centric in the sense that architects can choose tiles by their use, not technical characteristics. The idea is simple to execute, valuable for architects and it can differentiate Kaakelikeskus service offering from competing offerings. If architects use the service, it would mean that Kaakelikeskus tiles would be selected to new and renovated buildings more than before. This in turn would mean more tile sales.

The service design case has demonstrated, that by looking at customers daily challenges a company can innovate new service offerings may they include tangible products or not. The qualitative research in this thesis has provided useful data that can be used and reflected upon by companies who deal with architects. I have learned how architects work and how they think. This information can benefit the firm and its architect customers by developing understanding where the company should allocate its resources.

The thesis provides a useful service process that is in my opinion applicable to any company, may it produce goods or offer intangible services. It may be applied to companies working in the B-to-C and B-to-B sectors and public sector. It may also be applicable to third sector foundations and associations as well as any social group. Being able to discover needs and latent needs is valuable for every organization to be able to innovate new service. The aim is to solve problems together with the service user.

How is service-dominant logic realized in the new service process?

Service-dominant logic has guided how the new service has been created. The service was formulated with the use of service-dominant logic marketing mix (Vargo & Lusch 2006a, 407-408). The value proposition, dialogue, value and final service were all co-created. Service-dominant logic embraces co-creation as Vargo & Lusch (2004b, 12) describe in FP6, the customer is always a creator of value.

Kaakelikeskus is a service firm not because it does not produce anything, but because it has knowledge and skills it can exchange with architect clients (Vargo & Lusch 2004b, 10). Profit in this case will be considered to be a test of how well the service provides value for the client.
I co-created a new service idea together with clients. It that is based on exchange, but not exchange of money. The architect client and Kaakelikeskus exchange knowledge. The client gives information of the space user, and Kaakelikeskus gives information what products are most suitable. So you could say that (as in Vargo & Lusch 2004b, 6) service was exchanged for service.

The final new service process takes into consideration customers changing needs, and it provides information according to tiles use-value (as in Vargo & Lusch 2004b, 7). Each design is different, and each architect need is different. Service-dominant logic praises custom-made solutions to problems and interaction with customers to find solutions (2004b, 12). A tile may have use-value because it is a tough material, it is not slippery, maintenance is easy, and it looks good. The user is satisfied if the architect makes good decisions what products to use in his design. With the new search engine customers are able to choose more wisely what products to use.

The newly designed service is not valuable on its own, but when it integrates with the architect clients knowledge and skills (FP7 & FP9, Vargo & Lusch 2006a, 285). The architect has information about users of spaces and how spaces are operated. He also has a vision how the design should look like. Kaakelikeskus knows the boundaries what products are available and what products suit space users. The new service is a service platform for information exchange. The new service helps to create value taking into consideration client’s current context (tools, design type, time and needs of space users) as in service-dominant logic FP 9 (Vargo & Lusch 2006a, 283-284); all social economic actors are resource integrators. The search engine and other services were co-created with knowledge and skills from Kaakelikeskus and from architects as Vargo & Lusch (2004b, 7) have suggested.

In this project, I have learned through co-creating this service what customers’ value as Vargo & Lusch (2004b, 9) emphasize is one of the fundamental things in creating new service. The focus has been on process management. Focus was on architect clients decision-making processes and design processes and how to mold a valuable service process for them.

Service-dominant logic has the power to shift thinking from goods-dominant thinking to how you can provide value to customers via service. The theory is a thinking shift that sticks after reading it. I believe everyone who participates in designing value should get familiarized with service-dominant logic to make the thought shift to be more service-oriented.
5 Final words & my own reflections

The thesis has moved from service theory to service innovation to case example. The journey has been breathtaking and a lot of effort and time has been invested in gathering insight companies can use to create new service offerings for architects. The case example teaches how you can convert customer daily challenges to new services. A totally new service path has been presented to show how you can combine specially designed touchpoints.

The thesis has tough me how to think about service through service-dominant perspective. I have become familiar of the historic perspectives of the theory, and I have developed my own framework how the theory is applied in practice. I have realized that service design can be the application of service-dominant logic. Service design is a discipline that cuts through all functions on the company and therefore it can have a wide perspective on business. It can also act as a unifying function between traditional marketing, logistics, R&D and other areas.

The thesis service design case was fascinating and needed in the case company. I got to make interviews, that were eye opening and people opened up more than I could have hoped for. Analyzing in-depth interviews is a tough job, and there are many ways how to interpret the data. I interpreted it my way, someone else could see things in another light. I am convinced that by informing people about architects’ challenges, others can transform their businesses to better serve their architect clients.

Academic writing and presenting your research is hard, but I tried to “keep it simple” as good as I could, following research guidelines. I have also learned how I can modify the process a bit by designing my own research agenda; understand, organize, ideate, filter and prototype.

But most of all, this thesis has trained me to think like a service designer. As Kimbell (2011, 50) I also believe that service is what people value, not possession of things. I created an action platform, an experience as Ezio Manzini suggested (2011, 26-28). Although experiences cannot be really designed, only conditions that led to them. I combined the case companies resources and integrated them with architect clients’ resources as Miettinen & Koivisto (2009, 37) guided. As service designers, I aimed for win-win situation (Tuulaniami 2011, 106) for the service provider and the service user. And I believe as Miettinen & Koivisto (2009, 101-105) that the firm can earn more money only by providing useful services that beat competitors offering. While thinking like a service designer, I approached the problem systematically and designed the new service process with sufficient customer insight. I applied some service design methods I hadn’t used before such as co-creation workshops. I used them in a creative way as I also did with the idea cards turned into “challenge cards”. I have learned that these methods are meant to be modified and used creatively.
Finally, I would like to thank everyone who participated in creating this thesis. Special thanks go to architects who took the time to discuss about their challenges and evaluated service ideas. I thank teachers and students from Laurea masters program who provided valuable feedback and suggestions in the thesis process. And I would like to thank my wife and sons for support and understanding that this thesis took a lot of time and effort away from being a dad.
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Interviews:

Matti Salminen, M. Interview. 23.5.2012. Arkkitehtitoimistomatti Salminen & Co. Espoo


Appendix 1. Idea Cards

**IDEA CARD 1**

"Tarkka tuotetieto on meille arkkitehdille tärkeää. En halua tehdä päätöksiä esimerkiksi kohteen laatointoa sisäistämättä laatujen teknisiä ominaisuuksia. Ongelmani on, että naita tietoj niin vähän, että se vaikuttaa asiakirjoja ja kohtien kanssa.

Tarkka tuotetieto tarvitaan työmarkkinoihin. Natutu papereihin menee kauheasti aikaa. Tieto ei tarvitse olla liian käsiksi, vaan niin, että jokin jokin pysty toimimaan.

Lisaäksi minua hyvääkin se, kun asiakkaani soittavat oikein ja kyselevät työmarkkinoihin kirjoittamistani tietoista, vaikka kaikki tieto löytyy papereista."

**IDEA CARD 2**


Olisi hienoa saada edes viiden vuoden kuluttua samoja laitteita, jotka suunnitellin kohteeseen.

Lisaäksi, miten rakennuksia voidaan korjata viimeistelystä, jos samoja laitteita ei löydy?"
IDEA CARD 3

"On turhauttavaa, että rakennuttajia ja urakoitsijoita kiinnostaa vain kohteen hinta. Miten perustelen tämän hienon keramisen laatan vaalinnan kohteeeseen, kun se menee varmasti kilpailutukseen ja urakoitsija valitaa sen tilalle jonkin ruman ja halvan laatan?

Minun pitää perustella kaikki tuotehankinnat järjellä, kaunis ulkonäkö ei riitä. Jos tuote ei ole unilikki teknisiltä ominaisuuksiltaan, se kilpailutetaan varmasti."

IDEA CARD 4

"Ärsyttää, kun ulkopuoliset kommentoivat valitsemani värejä. En halua muuttaa niitä vain siksi, että kollegani tai tilaajaosapuolen vaimon käy ei pidä vääristää.

Visuaalisia asioita on vaikea perustella muulla kuin tunteella. Pitää olla aikamoinen Runeberg, jos saa puhuttaa päättäjät toteuttamaan korkea rakennuksen Helsinkiin.

Kollegani käyttää termiä "vertikaalikomposito" puhuessaan näistä asioista. Termi myy paremin kuin korkea rakennus."
IDEA CARD 7

"Laatasi valinta on yksi suunnittelun helpoimmista vaiheista. Valitse vain tyypin, pinnan, koon ja väri. En kirjoita lietyä tuotetta työselostukseen, koska julkisissa rakennuksissa kaikki tuotteet kilpailutetaan. Jos tuote on hieman erikoisempi, kirjoitan sen työselostukseen.“

IDEA CARD 8


Jos on kyse esimerkiksi sairaalasta, voin käyttää värikkäämpiä laattoja henkilökunnan tiloissa. Silloin minun pitää kuunnella sairaalan henkilökunnan toiveita.“
IDEA CARD 9

"Kun kiinnostun jostakin laasta, minun pitää saada laatat tunteva myyjä kiinni nopeasti ja toimittamaan henkilökohtaisesti mallilaatat toimistolleemme.

Olisi todella hieman, jos henkilö pistäytyisi henkilökohtaisesti tuomassa tuotteet paikan päälle samana iltaa päivänä tai seuraavana päivänä.

Laatat suunnitellaan kohteeseen työselvityksen laatimisen aikana. Tämä on kiireinen vaihe suunnittelussa, koska urakkakuvien pitäisi olla tämän jälkeen valmiina nopealla aikatauluulla. Jokainen tuntu maksaa paljon yrityselleemme ja haluamme olla tehokkaita."

IDEA CARD 10

"Julkisten rakennusten suunnittelu laadukkailla laatollahi vaikeutuu tulevaisuudessa, kun arkkitehdilta ei tarvitse enää kysyä voidaanko tuote vaihtaa. Tuotteet vaihdetaan halvempiin, jos edullisempia on saatavilla.

Tämä ongelma tulee vaikuttamaan rakentamisen laatuun tulevaisuudessa."
IDEA CARD 11

"Pyrin aina siihen, että suunnittelemani kohta olisi omalleimainen. Etsin paljon uusia tuulia Maailmalta ja seuraan alan kirjallisuutta, jotta kohteeni eivät näyttäisi tylsilta."

IDEA CARD 12

"Haluan löytää julkiseen koulurakennukseen sopivan lattialaatan aulaan. Samaa laattaa pitäisi voida käyttää muissakin tiloissa, mukaan lukien portalissa. Laatta ei saa olla liukas, sen tulee olla helppohoidoiva ja kestävä.

Kello on 18.00 ja ehdotus pitäisi saada huomisaamun palaveriin."
IDEA CARD 13

"Minun pitää löytää suunnittelemani yrityksen pääkonttorin aulan laitteen. En luota toimistomme mallifolderiin, koska ne eivät ole yleensä ajan tasalla. Mistä tiedän mikä laattasarja kohteseen sopii ja mikä on saatavilla neljän viikon toimitusajalla?"

IDEA CARD 14

"Ongelmani on, että tilaa ja asema puolesta tulee monesti lista tavarantoimittajista, joiden tuotevalikoimasta minun pitää valita kaikki kohteesani käytetä materiaalit. En saa valita muiden tavarantoimittajien tuotteita.

Joskus toimittajilla ei yksinkertaisesti ole tarjolla kohteseen parhaiten sopivia materiaaleja, joten joudun tekemään kompromisseja."
## Physical Evidence

- Advertising, peer reviews, newsletter, tile folder, catalogue
- Google, kaakelikeskus.fi site banners, advertising, web catalogues, website product info
- Search result and sorting buttons

## Architect client

- Needs a suitable tile(s) for building design.
- Go to www.kaakelikeskus.fi Architecture tile search.
- Client selects from drop-down menu: space type, user type, surface, floor/wall, colour, colour variation, availability, price category, maintenance, slip resistance.

## Line of Interaction

### Kaakelikeskus website

- Search engine receives architect client needs.
- Search engine receives data from products and reference images.
- Search engine displays search results by relevance.

### Salesman

### Line of visibility

### Support

<table>
<thead>
<tr>
<th>Product info database (large XML sheet)</th>
<th>Product image database</th>
<th>Reference info database</th>
<th>Reference image database</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Evidence</td>
<td>Architect client</td>
<td>Line of interaction</td>
<td>Salesman</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------</td>
<td>---------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Advertising, peer reviews, newsletter, tile folder, catalogue</td>
<td>Need a suitable tile(s) for building design.</td>
<td>Client selects from drop-down menu: space type, user type, surface, floor/wall, colour, colour variation, availability, price category, maintenance, slip resistance.</td>
<td>Search engine displays search result by relevance.</td>
</tr>
<tr>
<td>Search result and sorting buttons</td>
<td>Client refers search result by references, relevance, price, availability</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Line of visibility**

**Salesman backstage**
### Appendix 3. Ideas from the co-creation workshop

<table>
<thead>
<tr>
<th>What is the goal?</th>
<th>Sample presentation</th>
<th>Product info</th>
<th>The right product</th>
<th>In the web</th>
<th>Contact sales</th>
<th>Why buy expensive?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Friendship. Create a relationship that is based on trust.</td>
<td>• The architect tells what he needs. You should provide all technical data he needs.</td>
<td>• R-value to product sticker</td>
<td>• Make a hospital/school/church folder or brochure</td>
<td>• Specific product data.</td>
<td>• Leave a message to a recording device and we will contact you.</td>
<td>• Provide 10 year guarantee for some products?</td>
</tr>
<tr>
<td>• Create a service that saves the world (and saves money).</td>
<td>• Print the EN-standard to product info sticker.</td>
<td>• Slip resistance and maintenance info with the product!</td>
<td>• Include Euro norms to products.</td>
<td>• Provide ready-made product sheets of product packages to use in certain situations.</td>
<td></td>
<td>• You can save more with cleaning and maintenance costs.</td>
</tr>
<tr>
<td>• More rubber mats please.</td>
<td>• Provide reference project info with the product.</td>
<td>• Renovation tiles should also have a product info sticker!</td>
<td>• Make a new search engine that concentrates on the space function and users.</td>
<td>• Automatize a reference list for all products in the website.</td>
<td></td>
<td>• Make a lifecycle cost calculator “Time Machine”.</td>
</tr>
<tr>
<td>• Know the budget</td>
<td>• Print the maintenance guide link to the offer.</td>
<td>• Include Rectified, frost resistance and R-values to products in our website.</td>
<td>• Sell by theme “hospital tiles”, “school tiles” (Tikurila Paints).</td>
<td>• Present tile sample folders in the web and make an order form.</td>
<td></td>
<td>• If products are no longer produced, inform customers who have bought them before.</td>
</tr>
<tr>
<td>• Know what the price class for the tiles should be (A, B, C or D).</td>
<td></td>
<td>• Print date <em><strong><strong>/</strong></strong></em> to products and folders.</td>
<td>• Include reference project images in the website after product info.</td>
<td></td>
<td></td>
<td>• The sales rep offers products from reliable producers</td>
</tr>
</tbody>
</table>

- **Contact sales**
  - Leave a message to a recording device and we will contact you.
- **Why buy expensive?**
  - Provide 10 year guarantee for some products?
  - You can save more with cleaning and maintenance costs.
  - Make a lifecycle cost calculator “Time Machine”.
  - If products are no longer produced, inform customers who have bought them before.
  - The sales rep offers products from reliable producers.
  - Inform the customer to buy some % tiles for renovation.

- **In the web**
  - Specific product data.
  - Provide ready-made product sheets of product packages to use in certain situations.
  - Automatize a reference list for all products in the website.
  - Present tile sample folders in the web and make an order form.

- **Contact sales**
  - Leave a message to a recording device and we will contact you.
  - Every customer has its own salesman.

- **Why buy expensive?**
  - Provide 10 year guarantee for some products?
  - You can save more with cleaning and maintenance costs.
  - Make a lifecycle cost calculator “Time Machine”.
  - If products are no longer produced, inform customers who have bought them before.
  - The sales rep offers products from reliable producers.
  - Inform the customer to buy some % tiles for renovation.