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# **User-orientation in Facility Service Design**

**Case: JAMK University of Applied Sciences**

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Description  <p>The purpose of the thesis was to generate services for the Turbiini building. The building would include the working and learning environments for the staff members and students of JAMK University of Applied Sciences. The aim was to examine what kinds of facility services were considered important on the premises from the user point of view. Through applying the service design approach, user-oriented services were found out to support the core operation in the property.</p> <p>The study was conducted using qualitative research methods. The starting point was to get acquainted with the service design approach in order to find out how to apply it in this case. The organisational view and the present state of Turbiini building were examined through interviewing a representative of the owner company of the property. Service design was applied to gain deep understanding of the service needs of the future users. For this purpose, theme interviews were conducted with staff members and students.</p> <p>As a result of the study, the service needs of the future users were presented. It turned out that the most important services to support the core operations in the working and learning environment are food services, network and IT support services, facility design, office equipment services and physical exercise and wellbeing services. As the most supportive factor was, however, regarded the benefits of the physical facilities rather than a service supply. The results of the study can be utilized when implementing the services in the Turbiini building.</p>		
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Tiivistelmä <p>Opinnäytetyön tavoitteena oli selvittää palvelut Turbiinitaloon, joka tulee sisältämään työskentely- ja oppimisympäristöjä Jyväskylän ammattikorkeakoulun henkilökunnalle ja opiskelijoille. Tavoitteena oli tutkia, millaisia toimitilapalveluita pidettiin tärkeinä käyttäjien näkökulmasta kyseisessä kiinteistössä. Hyödyntämällä palvelumuotoilun lähestymistapaa selvitettiin käyttäjälähtöisiä palveluja tukemaan kiinteistössä tapahtuvaa pääasiallista toimintaa.</p> <p>Tutkimus tehtiin käyttämällä laadullisia tutkimusmenetelmiä. Aluksi tutustuttiin palvelumuotoiluprosessiin, jotta löydettiin sopivia tapoja soveltaa sitä opinnäytetyöhön. Yritysnäkökulmaa ja Turbiinitalon nykytilaa tutkittiin haastattelemalla kiinteistön omistajaa. Palvelumuotoilun lähestymistapaa hyödyntämällä pyrittiin syvällisen ymmärryksen saamiseen tulevien käyttäjien palvelutarpeista. Sitä varten tehtiin teemahaastatteluja Turbiinitaloon muuttavalle henkilökunnalle ja opiskelijoille.</p> <p>Tuloksina esitettiin tulevien käyttäjien palvelutarpeet. Tutkimuksesta selvisi, että tärkeimpinä työskentelyä ja oppimista tukevinä palveluina pidetään ruokapalveluja, tietoverkko- ja IT tukipalveluja, tilasuunnittelua, toimistotarvikepalveluja sekä liikunta- ja hyvinvointipalveluja. Tärkeämpänä asiana työ- ja oppimisympäristössä nähtiin kuitenkin enemmän tilojen tuomat hyödyt kuin laaja palveluntarjonta. Tutkimustuloksia voidaan hyödyntää toteuttamalla kaikki tai osa palvelutarpeista Turbiinitalossa.</p>		
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## 1 Introduction

Versatile operations and the combination of multiple work habits of different operators in the same property bring challenges for service planning. Part of the work is done as teleworking and learning is not anymore only sitting in a class room. In the same working and learning environment may be operating several units with different kinds of needs. Changes in working and learning habits require new kinds of services to support the everyday operations in the property. Planning these services that meet the needs of all the operators requires a new kind of approach to be applied.

Placing users to the centre of the design process leads to user-oriented service solutions that are beneficial for both users and the owner of the property. By generating services that customers need customer satisfaction will be achieved, and thus, the revenue of the company increased. The users will benefit from the process as they receive a possibility to affect the functionality of their operations. Through service design these kinds of user-centred services can be created, which means that the services are particularly planned for the users. This discipline will be discussed more specifically in this thesis.

Facility services are required to generate new kinds of solution models in a working and learning environment. Facility services are not only related to the real estate but more and more to the activities of the user. Appropriate facility services make the everyday of the user in a property effortless. The manager of the property is responsible for acquiring the facility services. However, the service implementation procedures in the property cannot be started before the users have defined their service needs.

In the thesis, the services are generated according to user needs. The thesis will be useful for both new and existing organisations that are willing to increase their

service value and thus, get new customers. In addition, the thesis will be beneficial for those who consider applying the service design discipline in their business or service development.

### 1.1 Research problem and objectives

The topic proposition for this thesis came from Jyväskylä University of Applied Sciences Facility Services. The company will be the most significant tenant in Turbiini building which is also the target property for the thesis. Because Turbiini will be renovated, designing of the facilities has been started. Furthermore, the creation of a service concept has to be considered.

The purpose of the thesis is to generate services in order to meet the needs of the users in the future working and learning environment. The objective is to find out the facility services that support the core operations of the users in the property. Another aim is to examine the service design concept and apply it to the research. In service design, the services are observed from the user point of view and thus, the aspect of the property owner is only narrowly considered in this thesis.

In order to generate services, an answer to the research question has to be explored. The research question for this study is: What kinds of facility services do the personnel and students need in the future working and learning environment?

### 1.2 The structure of the thesis

The thesis includes seven chapters. The organisation of the chapters proceeds in a logical order considering the studied topic. The introduction as a first chapter introduces the background of the topic, the research problem and the objectives of the thesis.

The next three chapters introduce the theoretical framework of the thesis. The second chapter consists of introducing facility services, production of them and their

role in future working and learning environment. The third chapter consists of the service design concept. It provides an understanding of what is service design, the brief history of it and the description of the common processes concerning it. The fourth chapter describes the operational environment of the thesis including the environment where the study is implemented and the operators related to the study.

The fifth and sixth chapters form the empirical part of the thesis. The empirical part describes the phases of the research process in detail. In addition, reasoning for the methodology used in collecting and analysing the data is given and the research results are presented. In the seventh chapter are discussed how the results of the study relate to the theoretical framework of the thesis, evaluated the reliability and validity of the research and provided suggestions for further research.

## 2 Facility services

### 2.1 Definition of facility services

The Finnish Association of Building Owners and Construction Clients Rakli (2012, 57) defines facility services as property and user services that modify the characteristics of a facility to support user's activities in a property. Partanen (2003, 12) argues that facility services are services that support the core operations in a building. Wiggins (2010, 9) states that these support services have a direct impact on the efficiency and effectiveness of the primary activities of an organisation. Facility services can be divided in a few ways. The following definitions below explain quite well the content and the meaning of these services.

Leväinen (2013, 47) divides facility services into **property services** and **user services**. Property services are related to the maintenance of the real estate and are divided into property maintenance and maintenance services. By property maintenance is meant operations related to the upkeep of the property through which the circumstances of the property are kept on a desired level. These kinds of operations



are, for example, the care of technical systems, property maintenance, cleaning, the maintenance of outdoor areas and waste management. By maintenance is meant the operations of maintaining the qualities of the destination by renewing or repairing the defective and worn parts without a relevant change on the relative quality level. (Leväinen. 2013, 47.)

User services are services targeted to the users of the properties and their facilities. User services include, for example, security services, the acquisition and maintenance of plants, food and restaurant services, catering services, lobby services, messenger and office services, phone, network, copying, moving and interior design and acquisition services. (Leväinen. 2013, 47.) The purpose of facility services is to serve the primary users of the property in order to be able to focus on their own core operations as well as possible (Partanen. 2003, 12). The Figure 1 below presents the division of facility services.

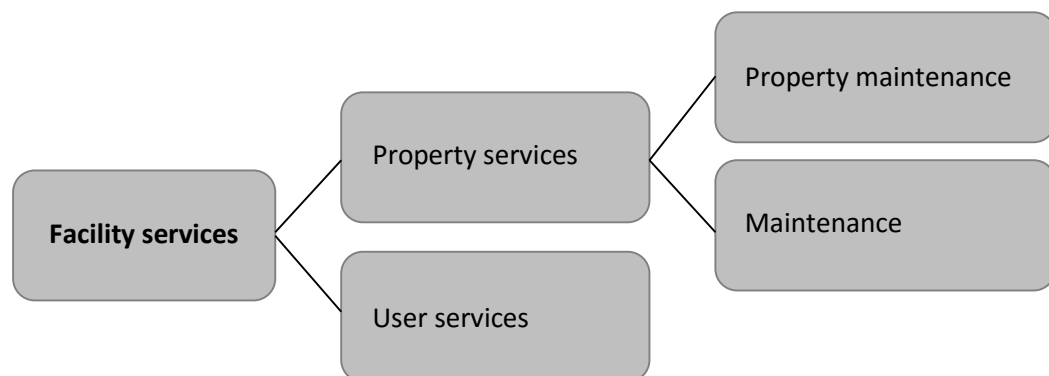


Figure 1. The division of facility services (Leväinen. 2013, 47).

There can be found also another relevant division for the services that support the core operations of the user and function during the use of the property. In this definition these services are divided into three groups. **Essential services** are services that upkeep the business and functioning of the property, for example, property maintenance and cleaning services. These services are often considered as “self-evident” for the user. **Additional services** are services that bring added value for both the owner and the user of the property. These services include, for example,

food and restaurant services, mail and mail carrying, phone services and lobby services. It is possible for the additional services over time to turn into essential services. **Services regarding the environment of the property** are not directly related to the property but can be available from the property or nearby. These services may include, for example, local public transport services, bank services or free-time hobby possibilities. These services essentially affect the intangible and operational quality image of the property. (Partanen. 2003, 12.)

As it can be noticed, facility services can be divided into several groups. However, it is relevant to separate user and property services in this project because user services apparently support the main operation in the property and are thus, very user-oriented. Instead, property services are planned to support the performance of the property, which does not directly regard the main operation.

## 2.2 Production of facility services

An organisation should consider a strategic decision making as starting to consider their facility services production. A strategy is formed by goals and procedures related to the success of the organisation. By the strategic decision making is pursued to achieve competitive advantage in the operational environment and fulfilled the expectations of markets and stakeholder groups of the organisation. (Ventovuori, Miettinen, Hyttinen & Paloheimo. 2004, 16–17.) The strategy can include a separate purchasing strategy. Purchasing strategy of the organisation is usually composed to implement a specific function and guided the choices related to purchasing (Ventovuori et al. 2004, 19). Alexander (1996, 134) argues that planning for support services must start by identifying the services needed to support the enterprise or operation. In addition, the user's requirements and the dimensions of service quality need to be identified (Alexander. 1996, 134).

Differences between different facets to plan their facility services can be noticed. In the commerce or industry, services support the production and delivery of a product or service. In the public sector services are delivered either directly to the community

or to support direct services and the organization itself. For new companies or those who are occupying new buildings, support services are usually planned around the building's design and operational concept. Older organisations, however, often group the support services in unusual and illogical way. (Alexander. 1996, 135–136.)

Alexander (1996, 137) states that there are three ways of providing facility services. Facility services may be provided by **in-house resources**, by **external contractors**, or by a combination of the two. However, variations to that may occur. The variations often depend on individual circumstances or market trends of an organisation. The traditional way of providing facility services was to employ staff in-house to carry out these services. (Alexander. 1996, 137.) In these days, outsourcing facility services among companies is mostly recognised. Typically outsourced facility services are catering, cleaning and security services. (Wiggins. 2010, 38.)

As is considered to produce services in-house, the owner of the property must evaluate how crucial the service is considering the business, and what benefits can be achieved compared to buying the service. Reasons for in-house production can be, for example, the commitment of personnel to the work tasks, reliability of service delivery and the need for decreasing the procurement resources. (Ventovuori et al. 2004, 53.)

Wiggins (2010, 39) sees both advantages and disadvantages in contracting, outsourcing or using directly employed labour to deliver a maintenance service. The choice depends on the location, the type of the building, the type and volume of work and the current workforce. Usually cost efficiencies are the driving force behind outsourcing. If outsourcing, companies are able to take non-core activities off the balance sheet and concentrate on their core business. Furthermore, outsourcing can increase innovation and service value. (Wiggins. 2010, 38–39.) On their blog of Service Futures, ISS (2015) states that well-organised outsourcing can increase profitability, improve productivity, reduce business risks and grow competitiveness. However, as outsourcing the required level of service has to be efficiently introduced

to the contractors in order to achieve the best possible service performance. Figure 2 indicates that there will always be a minimum in-house team kept in use for control and direction of outsourced organisation. (Wiggins. 2010, 39–40.) The presence of in-house team guarantees the right performance of the outsourced workforce.

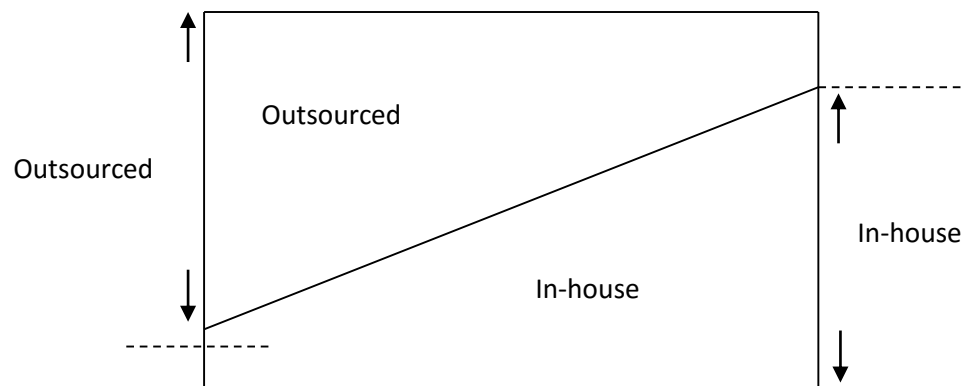


Figure 2. Relationship between in-house and outsourced operations (Wiggins. 2010, 39).

A service can be either standardised, which means providing similarly for everyone, or tailored according to customer's needs. The target for standardising and tailoring can be the service or production process or the end-product of the good or service. By tailoring the service, a service concept that meets the needs of the customers and differentiates from other provided choices is intended to build. By standardising cost efficiency and cost savings are looked for. (Ventovuori et al. 2004, 32.)

### 2.3 Facility services in future working and learning environment

Nenonen (2013) defines learning environment as a broad concept that includes the forums for operation. These forums can be, for example, campuses. Learning environment as a concept is considered abstract because it basically is the entity where and how learning happens. As considering the facilities where learning takes place, is meant places whose features support learning, for example, the transformability of the facility. Facilities, however, are physical elements that can be used for learning. An example of this could be a virtual learning platform. (Nenonen. 2013.)

Roper and Borello (2014, 141) see the impact of facility services especially in facility condition in future learning environment. Properly organised facility services have a major role in achieving healthiness in a property. The quality of the physical environment affects the performance of students as well as teachers. The factors affecting the condition of a school facility can be categorised into three categories: physical, spatial and environmental. Physical factors relate to the physical condition of a school, including interior and exterior conditions, such as structural damage and the age of the building. Spatial factors relate to sufficient space which is meant to fulfil the specific function. The environmental issues relate to the condition of a space, for example, general cleanliness, indoor air quality and lighting. (Roper & Borello. 2014, 141–142.) The spatial requirements set in educational buildings, including adequacy, organisation and quality of a learning space, are found to impact the performance of students and teachers. A school should have different types of spaces to achieve its spatial adequacy. For example, instructional, supplemental and support spaces have different kinds of space standards. (Roper & Borello. 2014, 144.)

Kuuskorpi and Gonzáles (2011, 6) argue that studying environment should provide various possibilities for learning to take place. Learning can vary from individual study to large group activities. Facilities in the future should be flexible and foster new types of teaching and learning. The physical learning environment should be equipped with modular work stations and areas with comfortable seating to support individual learning. Furthermore, adapting the furniture to different configurations should be possible. Equipment and wireless terminals should fit to different subjects and work methods in order to contribute to flexible teaching and studying. (Kuuskorpi & Gonzáles. 2011, 6.) Facility services in learning environments should support the needs of the students and teachers. By interior design, acquisition of services and adaptable equipment the needed environment can be created.

Work has become more mobile, cognitively complex, collaborative, social skills based, technology based and time pressured. The changes and requirements in work

affect also the physical workplace. The spatial, functional and environmental qualities of an office space affect employee satisfaction. Poor satisfaction of one's workplace may have influence on the organisational productiveness and turnover rate. Concepts such as videoconferencing and teleworking are gaining more popularity. Working hours are becoming more flexible and provide more alternatives for employees, as well as customers, to demand goods and services at other than the regular business hours. Concepts such as job sharing, flexible working, subcontracting and zero-hour working are changing the workplace. Technology is also changing rapidly, which affects the way to work in the future. (Roper & Borello. 2014, 153–155.)

On the article "Our built environment" Salmi, Pekkanen and Lindroos (2011, 28) state that working and learning methods and places of doing ones business will change. Since the growing share of knowledge work, office work will increasingly move from facilities to so called third places as homes, cafes, libraries, public transports and the facilities of customers. In 2025 are designed invigorating and energetic working and learning environments. Those will help people to enjoy themselves and manage their work longer. Furthermore, they support the goals of the organisation and react to the changing needs of the renewed procedures and work teams. The main issue is to consider the entity formed by the facility and services. (Salmi et al. 2011, 28.)

In the future working and learning environment, the knowledge will be shared effectively without barriers. Sharing of knowhow will take place together but also individually. In addition, virtual facilities will become common. Innovations will especially be generated in communal working environments that are used by experts of different fields. (Salmi et al. 2011, 28.) Changes in the organisation, work methods and workplace affect the way facility services should be organised and maintained. Facility managers have responsibility together with designers for creating a workplace environment that contributes to work productiveness. (Roper & Borello. 2014, 154–155.)

In addition to facility requirements, facility managers should consider proper security during all opening hours of the property and the proper cleanliness and maintenance of the property. Facility managers have to consider the changing needs of the users. According to Roper and Borello (2014, 158), “Facilities should provide the needed support for changing business needs by improving adaptability, health and comfort, and the potential for new technologies, and by optimizing resource consumption.” By the year of 2025 different kinds of facility service concepts and solutions that are both individual and cost-effective are provided. The main starting point is to consider the needs and requirements of people and interact with different user groups. (Salmi et al. 2011, 40.)

### 3 Service design

#### 3.1 Development of service design

In the past century, the focus in production, consumption and design was deeply product-oriented. Industrial products were produced and consumed, while services were seen as product extensions and additional features. However, in recent decades, the focus has moved towards services, while products have been increasingly seen as physical elements that make services possible. (Miettinen & Koivisto 2009, 47.)

Service design was first introduced as an academic field in design and education at the University of Applied Sciences in Cologne at the beginning of the 1990s. At that time, design was linked to the idea of styling and product cosmetics. Service design, instead, seemed an odd concept. Common design understanding and design education needed to be repositioned and redefined. Service design was established as a part of a holistic and innovative design education, and has now credibility in teaching, research and practice all over the world. (Miettinen & Koivisto 2009, 32–33.)

Service design is a quite new discipline, and the roots of it are strongly European. Probably the first to launch service design discipline was Professor Michael Erlhoff in 1991 while working in Köln international School of Design. However, internationally the development of service design was affected by Birgit Mager who started to work as a service design professor at the same School in 1995. (Miettinen & Koivisto 2009, 32–33.) The birth of service design was speeded up by the significant growth of service field. Moving from the postindustrial time to the time of services has been given an increasing number of requirements for services. Furthermore, these requirements have been significantly affected by the development of technology and the Internet. (Tuulaniemi 2011, 61–62.)

Product design has undergone changes during the past decades. In addition, the design of objects is no longer restricted to form, function, material and production. Design is now focused on the interaction between people and technology, and products are platforms for experiences, functionality and service offerings. (Stickdorn & Scheider 2011, 56.) The service design community has grown throughout the last fifteen years, and the approach has been implemented in practice. Service design has been applied basically in all the fields of service industries, such as banking, hospitality, transport, retail and education. (Miettinen & Koivisto 2009, 39.)

A service design network was established for sharing ideas about the topic. The Service Design Network (SDN) was initiated in 2004 by five European design schools (Tuulaniemi 2011, 62). SDN has organized conferences for both practitioners and academics offering a great platform for the exchange of ideas. There are also national service design groups and networks in the world. In Finland the network is called Helsinki Service Designers. (Miettinen & Valtonen 2013, 6–7.)

According to Tuulaniemi (2011, 16–18), owning items is not so meaningful anymore because we have already lived in an abundance of goods during a few generation. Instead, people want solutions for making their lives easier. Thus, organizations must



start to offer more services that are overall solutions for people's needs. These solutions include services and goods according to an individual customer's need.

Today customers are looking for service value, comprehensive solutions and compelling experiences. The challenge for the service business is to offer continuously improved or totally new services, be one step ahead of the competitors and at the same time comply with customers' needs and expectations. There is a rising demand for service innovation in the rapidly changing business environment. People who are able to understand service value and have the sensitivity to anticipate changes in customers' behavior, needs and expectations are needed. Furthermore, those who have the ability to rapidly create a repeatable and unique market success are especially needed. (Miettinen & Koivisto 2009, 99–101.) Service design know-how brings competitive advantage and effectiveness to both companies and the public sector as well as to organizations not seeking profit. Customers tend to look for good services and are willing to pay more for them. Furthermore, better services lead to better customer loyalty. (Tuulaniemi 2011, 29.)

### 3.2 Definition of service design

It is impossible to find only one common definition of service design and thus, defining service design is challenging. According to Tuulaniemi (2015), the definition of service design can vary depending on the context. The concept of service design is as challenging as the concept of technology; one cannot define one if one does not know the context (Tuulaniemi. 2015). However, most of the definitions for service design are partly similar.

Service design is an interdisciplinary approach that combines different methods and tools from various disciplines (Stickdorn & Scheider 2011, 28). Service design helps an organization to perceive the strategic opportunities of services in business, generate new services and develop existing ones. Service design combines the needs and expectations of the users and the transactional goals of the service provider of functional services. (Tuulaniemi 2011, 24–25.) According to Miettinen and Koivisto

(2009, 34), “service design aims to ensure that service interfaces are useful, usable and desirable from the client’s point of view and effective, efficient, and distinctive from the supplier’s point of view.”

### 3.3 User-orientation and user involvement

Service design is based on a user-centred approach which places the users of the service at the centre of the design process. In other words, the service is seen from the perspective of the users. (Miettinen & Koivisto 2009, 142.) The user as the design object has to be understood as the designer and the organization can only partly control the result of the design process. There are many tools and methods used for gaining understanding of the user. One method is to gain empathy through the deep understanding of latent needs, dreams and expectations of the users. (Miettinen & Valtonen 2013, 107–108.) According to Tuulaniemi (2015), the service design approach can be also user-oriented, which means that the user is not taken along to the design process but the needs and the insight of the user are considered.

According to Tuulaniemi (2011, 117), it is crucial in service design to understand the needs of the end-user and the motives of the operation to the service to be developed. These needs of the parties are not usually similar or convergent when comparing to each other. The other side is defined by the organization producing the service and the other by the customers. The task of a service designer is to take the both parties into account and joint these two needs. In addition, the objective is to find out the most important needs and the secondary needs of the parties, and try to prioritise those. The meaning is not to fulfil an every need but find an entity and create a service that is good enough. (Tuulaniemi. 2015.) Users may end up telling needs that they have not thought through and are, thus not considered the most important ones related to the specific operational environment or the core operation.

Service design, thus, gives the process and tools for growing customer understanding. With the help of service design customer insight can be gained, which

means perceiving customer needs. Those needs can be satisfied with new services. Furthermore, service design can decrease the possible risks of a new product because during the design process the services are prototyped and tested. (Tuulaniemi 2011, 100.) By decreasing the risks and generating services that customers need, the revenue of the company will be improved.

As a central goal of the service design process is the participation of all the parties being involved in the service. Those parties include users, different customer segments and everyone involved in the service production. The parties should be included to the process already at the planning phase. (Tuulaniemi 2011, 28.) The aim for user-involvement activities is to create something together with the people involved in the realization of the process. Because a service is seen as something that is not realized until co-creation of the users, it encourages discussion about participation. (Miettinen & Valtonen 2013, 108 - 109.) The benefit of collaborative development is that every party is strongly engaged to the development and production of the service. However, by collaborative development is not meant that every party would decide what kind of a service is produced. The goal is that all the issues and views related to the service will be noticed as widely as possible at the collection and analyzing phase. The service designers then choose the best suitable elements to the service concept to be developed further. (Tuulaniemi 2011, 117.)

### 3.4 Service design process

It is difficult to define a standardised procedure to design services because the process depends on the context of the service being designed, and thus, varies from project to project (Stickdorn & Scheider 2011, 120). Developing a service depends always on its nature of creating new and is thus, unique. That is why defining and describing service design as completely uniform, according to a specific form and process impossible. Thus, describing a process that would function related to all kinds of services to be developed and in all situations is also impossible. (Tuulaniemi 2011, 126.) The intention is not strictly to follow the process but consider those parts that are possible to be applied in one's case.

Service design benefits the development process known from product design. Design is always related to context, and when contexts change, the core know-how is applied with new tools in new areas. Through applying service design process and technique know-how, visualization and prototyping can be gained. However, service design and design differ from each other by their processes and end results. The work of designer is called designing and the end result is design. The work of service designer is called service design and the end result is a service. (Tuulaniemi 2011, 63–64.)

Iteration and co-design are processes that are characteristic in service design. Iteration meaning repetition is based on developing and testing the designed solutions and evaluating the results. By using repetition is clarified if the service is working and possible. (Miettinen. 2011, 23.) Service design process includes basically four stages that can be repeated, if necessary, several times. At every stage of the process it is possible to take a step back or even start again. In addition, learning from one's mistakes is crucial. The four stages of exploration, creation, reflection and implementation are a very basic approach to structure the service design process. However, the number of stages and the wording of them can vary in other frameworks depending on literature and practice. Fundamentally, they all share the same mindset. The next four chapters handle more detailed the four stages of exploration, creation, reflection and implementation. (Stickdorn & Scheider 2011, 122–126.)

### **Exploration**

In this first stage, a service designer should understand the culture and goals of the company providing a service. Furthermore, the company's motives and interest towards the service design process should be determined. The process starts by identifying the problem a service designer should work on. The problem is usually an organizational one or initially viewed from the organizational perspective. (Stickdorn & Scheider 2011, 128.)

The second objective is to gain a clear understanding of the situation from the perspective of current and potential customers of a certain service. Finding out the true motivations behind the customer behavior is important. At this phase it is crucial to look for customer insights by gathering empirical data. Next, these findings and the underlying structure of the previously intangible services should be visualized. For assist this numerous methods and tools from various disciplines can be adopted. (Stickdorn & Scheider 2011, 128–129.)

### **Creation**

The second stage represents the generative stage within this iterative process. The stage is all about testing and retesting ideas and concepts. It is crucial in the service design thinking to not to avoid mistakes but rather to explore as many as possible mistakes. It is important to notice the mistakes as early as possible and learn from these before implementing or adopting the new concepts. It is more costly to fail after the launch of a concept than make an additional iteration during the concept design stage. (Stickdorn & Scheider 2011, 130.)

The objective is to generate and develop solutions based on the identified problems and in-depth insights generated in the exploratory stage. In order to achieve holistic and sustainable solutions, it is crucial to include all the main stakeholders and work in teams that include customers, employees and management, as well as engineers, designers and other stakeholders involved in both service design and service provision process. For this stage there are a variety of tools and methods that can be used. (Stickdorn & Scheider 2011, 130–131.)

### **Reflection**

In this stage, the previously created ideas and concepts are prototyped and tested. However, applying prototyping techniques in the development of intangible services needs distinctive methods from those implemented in product design prototyping. One cannot simply insert a service on a table and ask customers what they think

about it but customers need a good mental picture of the future service concept in order to give feedback. The objective in this stage is generating a vision of a service concept in the mind of customers. It is important to consider the emotional aspects of a service. It is possible to provide a thinkable story through a comic strip, storyboards, videos or photo sequences to generate emotional engagement. It is important to prototype service concepts in reality or circumstances close to reality. Different staging and role play approaches from theatre to play through certain service situations can be used. These help to blend the emotionally important aspects or personal interactions with the service proposition. (Stickdorn & Scheider 2011, 132–133.)

### **Implementation**

In the final stage new service concepts are implemented. It is crucial to consider the management of change because new service concepts bring along changes. The change should be based on a consistent service concept formulated and tested during the previous stages. The concept should be clearly communicated and included the emotional aspects of a service meaning the desired customer experience. It is essential that the employees understand the concept and support it so that the concept can be implemented. (Stickdorn & Scheider 2011, 134–135.)

There are also other procedures for service design. A simple graphical way of describing the service design process was developed at British Design Council in 2005. The “Double Diamond” describes the service design process through four distinct phases called discover, define, develop and deliver. The process starts with the discovery phase. In this phase, the user needs are identified. They can be found out by doing market –and user research, managing information and design research groups. (Design Council.)

The second quarter of the model represents the definition stage, in which the objectives of the business are interpreted and aligned. At this stage project development and project management are done. The third quarter represents

development phase, in which design-led solutions with the company are developed and tested. Activities that can be done during this stage are multi-disciplinary working methods, visual management, different kinds of development methods and testing. The final quarter of the double diamond represents the delivery stage. At this stage the resulting product or service is finalized and launched to the market. The activities during this stage are final testing, approval of the service or product, launch, targeting, evaluation and feedback. (Design Council.) Figure 3 below presents the Double Diamond model.

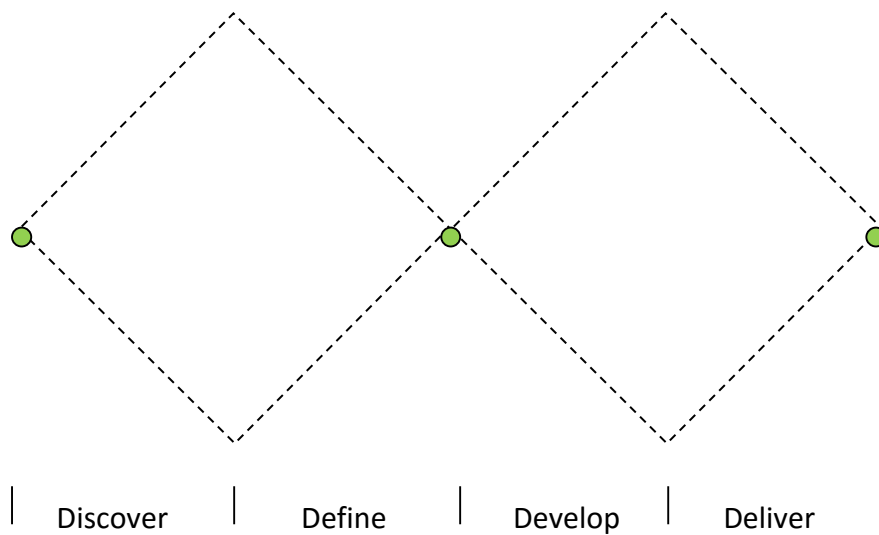


Figure 3. The Double Diamond model (Design Council).

The service design process according to Tuulaniemi (2011, 127), (see Figure 4.) includes the phases of defining, research, planning, production and evaluation. At the first phase, the problem to be solved and the objectives of the design process from the side of the order are defined. The purpose is to create an understanding of the organization producing the service. At the phase of research, a common understanding of the development target, operational environment, resources and user needs are built. This can be done by interviewing, conversations and doing customer research. Tuulaniemi (2015) states this being the most important phase in service design process.

At the planning phase, ideas and concepts of the possible solutions to the planning challenge are generated and quickly tested with the customers. Furthermore, the meters to the production of the service are defined. At the phase of service production, the service concept is taken to the customers to test and develop. In addition, the production of the service is planned. At the final phase, the success of the development process is evaluated. The implementation of the service on the market is measured and the service is fine-tuned according to the received experiences. (Tuulaniemi. 2011, 127–128.)

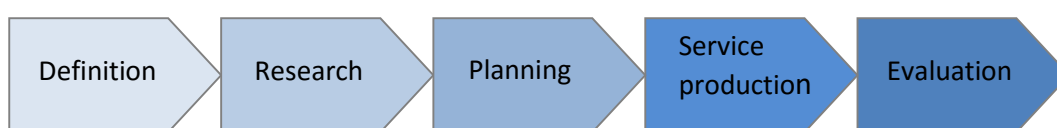


Figure 4. The service design process (Tuulaniemi. 2011, 127).

As can be noticed, the processes of service design invented by different directions seem to be very similar. They basically include the same phases and procedures. All of them can be applied to different cases, and thus there is not a right or wrong methodology to be used. One has to choose which one fits to the specific purpose.

## 4 Operational environment

### 4.1 Brief history and description of the Turbiini building

The Turbiini building located in Lutakko, Jyväskylä is the target environment for this thesis. The history of the Turbiini building dates back to the time when Wilhelm Schauman founded a plywood mill in 1910. It was the first plywood mill in Finland and included several buildings in the Lutakko area. The Turbiini building was built in 1932 also for industrial use. (Finnica 2003.) The industrial operation in Lutakko ended in 1995. After repair work, the Turbiini building was completed in 1999 by combining a board mill and Turbiini to be one ensemble in 2000. In the same year the building was included in the facilities of JAMK University of Applied Sciences (JAMK). (Finnica



2003.) More closely, Turbiini became a subsidiary for JAMK. The building was itself owned by Jyväskylä Turbiini Oy to whom JAMK paid rent for using the building (Mäntylä 2015).

Although the buildings in Lutakko have been renovated, preserving the industrial nature has been important. After the renovation, the building included working and learning facilities for an entrepreneurship unit of JAMK called Team Academy. (Finnica 2003.) In 2012 the personnel and the students of JAMK moved out from Turbiini because of observed indoor-air symptoms (JAMK University of Applied Sciences. 2013, 2). JAMK decided to sell Turbiini as the university wanted to center their operations and decrease facility costs. The property and the lot were sold to a real estate corporation called Kiinteistö Oy Turbiini in 2015. (Rahkonen 2015.)



Figure 5. Turbiini building (Jokinen. 2016).

As shown by Figure 5, the Turbiini building consists of two older parts that are combined with a modern looking glass section. The other building materials are brick and concrete. The outer and inner appearances of the building remind us of its

industrial use. The chimney can be considered as a landmark for the Lutakko region. The area of Turbiini is 3000 square meters and it has three floors (Mäntylä 2015). On the first floor of the building there are facilities for a restaurant and sauna. In the near future Turbiini will be renovated and its facilities will be rented in 2016 for different companies (Rahkonen 2015). The property will form an operational environment for several business purposes.

## 4.2 Description of operators

### 4.2.1 JAMK University of Applied Sciences

JAMK University of Applied Sciences (JAMK) is an international higher education institution with eight fields of study. JAMK has several campuses in the Jyväskylä area and a campus in Tarvaala, Saarijärvi. (The website of JAMK University of Applied Sciences.) JAMK is owned by JAMK University of Applied Sciences Ltd and all the real estates of JAMK are owned by Education Facilities Ltd. In the premises of JAMK are operating four units producing education and one administration unit. The four education units are The School of Business, The School of Health and Social Studies, The School of Technology and Teacher Education College. Furthermore, IT-Institute and The Institute of Bioeconomy are operating under The School of Technology. The JAMK Generator operates under the Administration unit. (Mäntylä. 2015.)

JAMK is going to be the biggest user group of the Turbiini building and operate approximately on 1400 square meters of the building area, partly including the first and the second floors. In the facilities of JAMK, in Turbiini will be accommodating several units consisting of approximately 150 students and 30 staff members. The units are Team Academy, JAMK Generator and part of The School of Health and Social Studies. JAMK has already made a plan of their need of premises in the Turbiini building. Team Academy and JAMK Generator are going to operate on the first floor. The second floor is partly going to include facilities for the meetings of the Team Academy and working facilities for The School of Health and Social Studies unit. (Mäntylä. 2015.)

JAMK Facility Services' responsibility is to choose the support services in JAMK's premises. The aim of the JAMK Facility Services is to organize user-oriented facility services for the customers. At the moment JAMK has outsourced cleaning, restaurant –and meeting services, security services and moving services in its premises. The janitor services and lobby services are produced in-house. Property maintenance is part of the rental contract. (Mäntylä. 2015.)

#### 4.2.2 Kiinteistö Oy Turbiini

The Turbiini building and its premises were sold to Kiinteistö Oy Turbiini owned by Esa Polas and Jukka Seppänen. Kiinteistö Oy Turbiini is a real estate corporation whose business idea is to provide qualified facilities for different kinds of companies. Among other things, it will take care of renting of the premises in the future. Pose Oy is a property company that is responsible for the administration of all the real estate corporations owned by Esa Polas and Jukka Seppänen. The premises of Turbiini are thus, partly managed by Pose Oy. (Kuulusa. 2015.)

The aim of Kiinteistö Oy Turbiini is to keep up the premises of Turbiini as qualified as they are at the moment. The premises, the facade and the milieu are wanted to preserve as such because of the historical value. Only the surfaces inside and the ventilation will be renovated. There is no need for changing the outer appearance of the premises. Furthermore, the renovation inside the building will be done according to the future customers' needs. (Kuulusa. 2015.)

According to Kuulusa (2015), Turbiini will have maximum three tenants in the near future but the number of tenants is not known exactly yet. The company wishes to find tenants who would stay in the premises as long as possible. Kiinteistö Oy Turbiini is not going to rent the facilities constantly forward for temporal use. According to the company, it is not necessary or profitable to have these kinds of services because there are other companies doing this business nearby. However, Kiinteistö Oy Turbiini allows the tenants of the building themselves to rent their facilities forward.

The company would also like to find a separate entrepreneur for the restaurant facilities. The restaurant would serve the users of the building and thus, bring added value to them. If wanted, the future owner of the restaurant could rent the meeting room and sauna on the side of it. (Kuulusa. 2015.)

Kiinteistö Oy Turbiini aims at bringing value to the users of the building by renting valuable and unique facilities and taking the needs of the user into consideration already at the planning phase of the renovation. The purpose is that the tenants would feel comfortable and stay in the building as long as possible. Kiinteistö Oy Turbiini wants to be customer-oriented and easy to approach by the tenants at any time. Furthermore, Kiinteistö Oy Turbiini tries to be flexible and notice the changing needs of the users in order to reach customer satisfaction. (Kuulusa. 2015.)

Kiinteistö Oy Turbiini needs to make sure that both user services and property services work properly in the building. Because Kiinteistö Oy Turbiini does not have resources and knowledge to take care of the real estate services in the building, it will probably buy the services outside. (Kuulusa. 2015.) Thus, the role of Kiinteistö Oy Turbiini is to decide how to organise facility services in the property. The services can be chosen by the company itself and the costs of the services can be included in the rents of the tenants. Another solution is to let each tenants to be responsible for their own services in the building. In that solution each tenant would take care of the organisation of its facility services and the costs of them.

## 5 Research implementation

### 5.1 Methodology

Silverman (2013, 122) defines methodology “as a general approach to studying research topics.” Methodology refers to the framework within which the research is conducted. It consists of theories and practises that relate to the research. In

addition, it tells which methods are appropriate for the research and which are not. (Braun & Clarke. 2013, 31.)

Qualitative research methods were found the most appropriate for this research. In qualitative the research is inductive, which means that in analysis the theory emerges from the data. Qualitative research studies issues in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people argue. (Glenn. 2010, 101.) The qualitative research approach allows one to identify issues from the perspective of one's study participants and examine their experiences in detail (Hennink, Hutter & Bailey. 2011, 8–9).

The purpose of the qualitative research is to understand or explain behaviour and beliefs and identify processes and understand the context of people's experiences (Hennink, Hutter & Bailey. 2011, 17). For this study, the qualitative research method was the most appropriate choice as the intension of the study was to understand the real needs, opinions and emotions of the interviewees towards services. The researcher needs to be curious, empathic and open-minded and have ability to listen to be able to understand the contextual influences on the research issues. (Hennink, Hutter & Bailey. 2011, 9.) In this research, the role of the researcher was an insider who shared common values and interests with the participants.

According to Silverman (2006, 43), quantitative research concerns to establish correlations between variables and provides only a limited description of the phenomenon. Quantitative research methods were not appropriate for this study because the data would have included numbers or statistics, which would have provided limited results for the purpose of this study. Instead of numerical results, was desired to achieve in-depth understanding of the participants, such as their justification for the service they thought to be beneficial in Turbiini. Qualitative methods allow the participants to be narrative and express their opinions in their own words. In the quantitative methodology the richness and deep meaning for

participant may be sacrificed because the experimental design requires tightly controlled conditions. (Glenn. 2010, 103.)

In this research, service design discipline was implemented. In service design gaining customer insight is important. Customer insight means understanding the elements that create value in the service to a customer (Tuulaniemi. 2011, 71). The main aspect of this study was to gather customer insight, which was possible through using the qualitative research method. Through gaining customer insight it was possible to understand the everyday working and studying routines of the users and their real needs towards the services. Instead of implementing the result of the research in the Turbiini building, the user-oriented services for the building premises were generated. The implementation of the services was left to the owner of the property. The owner would decide about the service concept to be implemented when the renovation work of the property was done.

## 5.2 Data collection

A few data collection methods were compared in order to find the most appropriate one for the research. Partly because of the qualitative nature of this study, the primary data was collected through interviews. Silverman (2006, 114) argues that qualitative interviewing is particularly useful as a research method for accessing individuals' attitudes and values, and that the use of open-ended and flexible questions more likely provides a considered response than closed questions and therefore provide better access to the interviewees' views, experiences and opinions. Structured and closed questions would have led the participant to answer in a certain way, which would have given restricted results.

### **Interviews**

At first the representatives of Pose Oy were interviewed in order to gain information of the company's motives for Turbiini as being the manager of the property. Furthermore, the expectations and values, goals and needs and vision and mission of

the operations of the company were examined through the interview. The purpose was to conduct a face to face interview with Pose Oy but because of the time limitations, the interview questions (see the Appendix 3.) were sent to the company by e-mail.

The other interviews were conducted using personal unstructured theme interviews. By using this method, it was possible to gain deep information about the respondents' wishes, thoughts and dreams. In this unstructured interview the researcher has a list of themes or topics to discuss with the participant. The interview is strongly participant-led. (Braun & Clarke. 2013, 78.) The structure of the interview consists of themes that include theoretical top concepts and specific sub concepts. Those concepts can be more detailed than the problems, very reduced and watchword types of lists. The themes and the concepts function as a checklist for the interviewer and lead the discussion during the interview. The theme areas are specified with questions during the interview. (Hirsjärvi & Hurme. 2009, 66.) The intention was to create a relaxed discussion with the interviewee, so that they would freely discuss their experiences and opinions.

The conducted theme interviews consisted of three themes that were formed by finding phenomena from the research problem. Every participant was interviewed by using the same theme structure (see the Appendix 1.). However, the order of the themes varied according to the progression of the interview, which is why the interviewee mainly led the discussion. The themes chosen were the background information of the participant, the services for Turbiini and the need for service development. The sub themes were based on the theoretical framework of the topic. By asking about the background information of the participant the author tried to understand what had they done at JAMK, how they would work or study in Turbiini and what kinds of every day operations they had. The intention of the second theme was to find out the service needs of the interviewees at Turbiini. The sub themes helped the participant to consider different kinds of aspects of services that they might have not otherwise thought of. The last theme questions dealt with the need

for service development in their present and future working and learning environment. These questions made the interviewee think what could be differently in their present environment and what would be needed in future environment. Furthermore, different kinds of specifying questions were asked in order to find out what the interviewees really meant by what they said. Some of the terms had to be explained to the interviewees and almost all of the participants also asked specifying questions during the interview.

The persons desired to be interviewed were mostly contacted by phone, in a couple of cases via e-mail. The interviewees were selected purposively in order to achieve as many different perspectives as possible. In addition, opinions from all of the units were wanted for the research. The interviews were conducted between the end of January and the beginning of February 2016. The interviews were conducted in Finnish because it was the mother tongue of the interviewees. Through using their mother tongue the interviewees could express themselves freely and say exactly what they thought. The interviews took place in a corner of a café, library and office. Those places were considered to be silent enough and did not have distractions. In addition, they were suitable to recording the interviews. The recordings were made by the permissions of the interviewees. Furthermore, every interview was conducted confidentially. Recording the interviews enabled the interviewer to carefully listen to the interviewee and save the authentic interview situation to be analysed later. The shortest interview took twenty-eight minutes and the longest one fifty minutes.

The target group was one of the tenants of Turbiini, JAMK University of Applied Sciences (JAMK). This target group was chosen for the research because it was the biggest user operating in the building if regarding the number of users and rented square meters in the property. The interviews were conducted with six people representing the Team Academy, the JAMK Generator and The School of Health and Social Studies unit because they would have Turbiini as their learning and working environment in the future.



The recorded interviews were transcribed according to the standard language from word to word. Dialect words were not considered in this case because they would not have changed the meaning of the transcript. After completing the transcripts from the recorded data, they were analysed by using a specific data analysis method.

### 5.3 Data analysis

A qualitative data analysis is interpretive, which means that the meanings that the participants themselves give to their views and experiences are interpreted. (Hennink, Hutter & Bailey. 2011, 9.) The interpretations of the data can be done with the help of different kinds of analysis methods.

The transcribed interviews were carefully read through several times in order to observe their contents and main themes. After getting acquainted with the interview transcriptions, each interview was divided into small parts according to the subject. Thus, the collected data was in an easy form to be coded using a table calculation program called Excel. Colour-coding was used to separate the repeated issues found in the small parts of the interview transcripts. In addition, colours helped to find the specific areas at the phases of analysis and discussion. Applying coding was used for organising and exploring the main content of the data.

The coded data was examined in order to notice the most crucial and interesting findings related to the topic. At that phase thematizing was also used to perceive the essential themes in the data. The themes found were related to the research problem forming a clear description of the content. Based on the data analysis made, the results of the study could be reported.

## 6 Research results

In this chapter the results of this study will be discussed. The results are discussed according to the main themes handled in the theme interviews. First, the background information will reveal the everyday operations and working and learning habits of

the interviewees. In service design the motives of the operation and general understanding of the background of the end-users should be gained. After that the reasons for the specific service needs can be understood. The facility services for Turbiini have divided into user services and property services. Finally, the need for service development in different environments will be discussed.

When presenting the results, the interviewees are referred to students and staff members. To protect the privacy of the participants, their names, titles or ages are not mentioned in the results. Furthermore, the interviewees cannot be recognised because the interview answers are presented translated into English.

### 6.1 Background information

The sample size in this qualitative research was six persons of which three of them were students and three staff members of JAMK University of Applied Sciences. Both of the genders were represented equally as fifty per cent of the participants were female and other fifty per cent were male. All of the interviewees were Finnish. The student interviewees were studying at the Team Academy. Two of them were the third year students and one a second year student. One of the staff member interviewees represented The JAMK Generator and and two staff members The School of Health and Social Studies unit.

The interviews revealed that studying at the Team Academy mainly comprised working in one's cooperative company and participating in different kinds of projects, rather than sitting in a class room and doing course assignments according to the curriculum. The main goal for the cooperative company is to earn money for their work and through that contribute to entrepreneurship orientated studying. The students plan their schedules for every day themselves. However, the students have eight hours a week compulsory time for the teams to get together and discuss their projects with their team coaches. Furthermore, they also have to read books and apply the information gained to the projects and reflect their own learning in forms of essays. The interviewed students told that they only have four compulsory courses

to be accomplished during their study time. However, the curriculum of the Team Academy has been changed and part of it will be now accomplished according to the regulations of the Finnish Degree Programme in Business.

One student told that because of the projects and work, the students spend quite a lot of their time outside their office meeting clients and running their businesses. At the office they contact the clients by phone and e-mail, planning projects and working in teams. The time spent in the office varies according to the number and nature of projects. The schedules are flexible, and some of the students may stay at the office even until the evening. One of the students told to come in the morning and leave as the work of the day has been done. It is also possible to do the office work at home.

The job descriptions of the interviewed staff members included project leading, expert tasks, coordination, administrative tasks, innovation and entrepreneurship operation, development work and education work. The staff members said that they start their morning at their office or workstation. Their office work consisted of working at the computer, going through e-mails and making phone calls. Furthermore, the everyday work consisted of meetings with their co-operation partners, colleagues and experts, working and planning projects, networking, teaching and guiding students and reading essays. Generally, the work seemed to be versatile. The concrete working methods of the staff members included workshops, formal and informal discussions, interaction, remote work and video conferencing. Two out of three participants told that they also had meetings outside the campus. One of them told to spend the biggest part of the day out of office.

## 6.2 Services for Turbiini

When asked generally, what services the users thought they would need in Turbiini, all of the answers included **food services**. Instead of a lunch or a dining possibility, all the student interviewees found a small café, a snack or coffee machine to be a good solution in Turbiini. The students hoped the café to provide take away drinks, some

salty and sweet snacks and bread. The freshness and healthiness of the products were appreciated by two of the students. Furthermore, especially the student interviewees wanted that the café was in the same property as their office facilities because of the short duration of their break times. A café would also function as a hanging out place for the students of the Team Academy. One interviewee argues reasons for the café below.

*It comes to my mind that it would be nice to have some café, where one can get such snack and breakfast. I would see that Turbiini should also have a café. Team Academy members, however, enjoy being in a common place and so... That I could then also myself go, and one can from the one place that is right nearby and one gets quickly without a need to go anywhere. (A student)*

Two out of three students and one staff member wanted a break room or a kitchen point where they could warm up their packed lunch and drink coffee. A lunch restaurant was appreciated by the staff members and one student. When asked, would they use the restaurant every day, the answers were positive. However, the relation between price and quality concerning the food would be a determinant. At the moment there are three lunch restaurants in Lutakko area. Related to that, one interviewee stated that “A customer or a user makes a decision where to buy”. According to the interviewees, the existence of a restaurant would also be beneficial for meeting partners, clients and having shared lunch time with one’s colleague. The comment of the participant below summarizes the interviewees’ opinions concerning the restaurant in Turbiini.

*And if it was like a good place close, I would probably go there. But then, if the quality was bad or price too high, I would perhaps not go. (A staff member)*

Most of the interviewees hoped that the restaurant or the café should be open from morning till evening. The facts supporting the opening times were that a morning coffee was appreciated by most of the interviewees and that some students of the

Team Academy might stay late in the property. One interviewee suggested that the restaurant was open also till the late night and had licence to sell alcohol.

Another service that came up right in the beginning of the interviews was **network services**. These services were mentioned by all of the three staff members and one student. Especially the functionality of network environment, connection of different kinds of technical devices and the performance of technical support were emphasized. Two of the participants argued that both the students and personnel would bring their own devices, and all of them should function trouble-free in the property. It should be simple to connect the devices to the cords and the network. In addition, different kind of audio visual technics, for example screens and speakers, is often needed by the personnel. One interviewee pointed out that in case where there is a video conference with an invited partner, the importance of the functionality highlights. Furthermore, two of the interviewees hoped easy and effortless device solutions as is presented below.

*And they are like, again it is highlighted a lot that one should have a functioning technics that is such in everyday use that one does not have to call help desk or anything but it gets started and functions with every device. (A staff member)*

*The cords would be all integrated to the table that there would not be any cord jungle or such that which cord goes where, and all the adapters and transporters are there like available. Thus, the easiness then. (A staff member)*

Every staff member interviewee also hoped that there was be a person to take care of the technical support nearby and ready to help when there is a need for an immediate service. One participant suggested that the technical support could be available in IT Dynamo, the building next to Turbiini.

Four out of six interviewees mentioned an issue related to **available working equipment**. The interviews revealed that in project and workshop type of working flap boards, smart boards, paper, screens and computers are especially needed. One

student told that there should be computers available for students in Turbiini because everyone does not have an own lap top. In addition to IT devices, at the Team Academy copy machine, fax machine and video cameras are needed for several projects. The same student interviewee also presented that some computer software, for example an image processing or a video making one would ease everyday working at the Team Academy. The interviewee's comment summarizes well the issue related to the working equipment.

*If it can be considered as services that I have appropriate working equipment, modern, appropriate equipment and I have such connections in all of them that I need in everyday work and there is no need to separately ask them but they are brought according to the given work task. (A staff member)*

All of the interviewees experienced facility solutions and **facility planning** as services that would affect the effectiveness of working and learning and alertness and comfort. The interviews revealed that the factors that would support working and learning related to facilities were the versatility and the transformability of the facilities, sufficient or adjustable lighting, careful and stylish **interior design and furnishing**, ventilation and cleanliness.

Learning environment was expected to include possibilities for silent working, group and project working, open discussion and coaching. The comments related to working environment included wishes of own working point, meeting and negotiating rooms, video conferencing facilities and possibilities for silent and peaceful working. Furthermore, an interesting point mentioned by one staff member was a possibility to discuss and interact with one's colleagues. That would require open spaces in the property. Two of the interviewees saw that it is important to have proper social facilities for personnel.

The most of the interviewees wanted that some facilities would be available anytime and one could be able to use them for short notice. However, one participant stated that it would be good if it was possible to reserve the space in advance to make sure

that one could certainly have a space, for example, for an important meeting. The comments below refer to the facility needs of the users.

*Sure, the quick transformability of the facilities. Chairs can be moved, grouped in different ways, organised, flexibility in the office type of facilities or coaching facilities. (A staff member)*

*And of course that that there are these different working spaces that I do not have to be surrounded by people that I can look for such a peaceful corner there where to work that I do not have to...that I do not have to have the feeling that I have to go home to do this work because I cannot concentrate here. (A student)*

*Or the facilities are like how... Or there can be found a right place for every working method or such so that is the most important... the most important issue. Well, it is mainly that that every facility is for that like what is done at the specific moment. (A student)*

The objects that stimulate senses were referred to in four of the interviews.

Background music, wall pictures, plants and plant walls, colours, furniture that allow relaxation and views were mentioned as aspects that also affected the comfort of the users. Two of the student interviewees hoped a reference library type of space where they could find literature related to their entrepreneurship orientated studies.

Four out of six interviewees raised an issue that there would not be indoor-air problems in Turbiini. One of the interviewees argued that bad indoor-air might affect the performance of the students and personnel and through that effect on the quality and the effectiveness of the operations. This interviewee mentioned also the importance of **property maintenance and cleaning** of the facilities.

When discussed about accessibility, **parking lots** in the surroundings of Turbiini were desired by four interviewees. One of them argued that one would not like to invite partners to the area because a car park could not be provided to them. However, for those who travel by bus or train, the location of Turbiini is ideal. According to three of the interviewees, finding a parking lot in Lutakko area is challenging, especially if one does not want to be charged for it. Two of the interviewees suggested that there

should be parking lots for guests. In addition, attention to proper bicycle parks should be paid as bicycles are popular way to travel among many of the students and staff members.

When asked what kinds of issues would make the participant feel safe in the property, the answers were variable. Three of the interviewees clearly stated that they had not felt unsafe in their present properties. Reasons for that were the sense of community and the experience that security issues had been smoothly taken care of. One theme raised regarding security in Turbiini was the access to different spaces. Two of the interviewees thought that the passes and keys would be a good solution to increase safety. However, two interviewees found locked doors unnecessary. One of them argued that in that kind of a property where the doors are locked, the interaction and free conversation between partners and colleagues would be challenging because of the lack of open space. As mentioned earlier, some students might stay late in the property. Two of the participants suggested that specific doors should be locked in the evening, and people with passes could enter the property. Most of the interviewees did not consider lobby service important in Turbiini. Reason for that was the small size of the property corresponding to other campuses as well as the small amount of user groups. Instead of a lobby service, one participant suggested visual signs to guide visitors. The interviewees' comments below argue the safety issue.

*There are pros and cons concerning like...that in a way everything is behind locked doors that it does, in my opinion, increase safety but it is then sometimes...I do not know if it is necessary during the day time such that one cannot move anywhere but in one's own facilities. (A student)*

*Sure these kinds of, well if are worked in the night time, that is it open or are there some closed spaces there. Those should be gone through for sure, especially the first floor as there is a lot of open space, and so in which ways these kinds of moving, access control... which spaces are open for the students, the personnel, and the restaurant for citizens but are there any other spaces. (A staff member)*



One interviewee considered fire safety, violence and bomb warning when asked about the security issues. As a major security factor, however, was seen the quality of indoor-air. A few of the interviewees had experience of working in properties where the quality of indoor-air had been bad. The reason for considering indoor-air as a safety risk among the interviewees was its harmfulness for human health.

When asked what kinds of services the participants would like to have in Turbiini regarding healthiness, some similar ideas among the interviewees were suggested. According to the interviews, healthiness consists of physical and mental wellbeing. Two interviewees hoped that healthiness should be considered in the served food. Five out of six interviewees were interested in some kind of **an exercise or wellbeing service**. Furthermore, activity and relaxing possibilities during breaks and at free-time were suggested. The mostly wanted exercise services were a gym, instructed exercise groups, a pool playing possibility and a break exercise. Three of the interviewees said that they would use the gym either in the morning or during the day time. The wellbeing services were especially interested by the staff member interviewees. Two of them told that they would like to go, for example a hair dresser, cosmetologist or massage, especially if they were in the same property as their workplace. In addition, they suggested that the wellbeing services could be produced by the cooperatives of Team Academy, which would support the entrepreneurship orientation. A sauna was mentioned as a good service for colleague groups. However, the interviews also revealed that the price of the service would be a determinant for the use. Below are presented some of the views of the free-time services.

*Thus, it comes to my mind that if I think work wellbeing and alertness and such, so such service related to exercise would not be bad though. If one is able do a little such that the energy level rises up and adrenaline comes to the body. (A student)*

*Yes, I would say that some gym could be pretty good. I believe that... Well, of course it depends on a people that how one likes to train but probably quite many people would go there like right after work day. However, of course it would be good that if it was there beside, so one could go there,*

*for example, in the middle of the day or right away after lunch or then right away in the morning. (A student)*

*And then, if the Team Academy cooperatives provided something these kinds of, for example a hair dresser, cosmetologist or massage service of which prices were very competitive... Yes, I would prefer those rather than going to somewhere else beauty salon. I would utilize those. (A staff member)*

Below in Figure 6 is visualised the user services to be considered as most important to exist in Turbiini when considering the core operation. As can be noticed, working and learning need several supporting services around in order to operate smoothly in a property. Some of these services can be considered more crucial than others but all of them affect the everyday life of the users in the property.



Figure 6. User services to support working and learning in Turbiini (Jokinen. 2016).

### 6.3 The need for service development

When asked how the interviewees would develop the service supply in their present environment, it turned out that there were many issues to that they wanted to have changed. All of the interviewees had changed their learning or working environment at least once during their study time or current work and thus, they were able to compare their former and present environments. The interviewees saw a few development targets in their present property that could be paid attention to.

The supply and availability of food services was one target to develop. According to one interviewee there is no a café in their present premises. Another interviewee said there was a café in their premises but it should be open later. Furthermore, the selection in the café should be larger and provide the same number of healthy as well as unhealthy snacks. Three of the interviewees were pretty satisfied with the food supply. Other services they wanted to be developed according to the interviews were parking, network services and working equipment and working facilities. The most relevant comments concerning these development targets are presented below.

*Well, parking is the one that affects the start of the day. I would, perhaps develop it that way that the personnel who has to travel by car was the priority. Guests are always guests. (A staff member)*

*And then, it sucks when one goes to the work point if one has to take off... As one always has the computer, so one has to take off the cords back and forth, so that is annoying and then, some of the cord is not functioning, and one may lose time while one clarifies, where the problem is. (A staff member)*

*The office should be more closed and then there should be more these like project facilities where one could work with a small group. (A student)*

Finally was discussed about service needs generally in future working and learning environment. For the students the concepts appeared slightly unknown and thus, there were barely relevant comments given regarding that subject. One student interviewee, however, mentioned a service suggestion related to occupational

wellbeing. According to the student, there could be a need for personalized wellbeing services in both the schools and the work places. The main idea would be doing what is desired for a few minutes during the work day to help one to take a break from the work. It could be, for example, taking a nap, a break exercise or reading a book.

The comments of the staff members regarding the future learning and working environment mostly included technical support, the change of work habits and facility requirements. In addition, cloud services were mentioned by one interviewee. The comments below summarize quite well the thoughts of the interviewees related to future learning and working environment.

*Yes, that is mostly related to the audio visual and technic support. These kinds of technical learning environments, where are like a lot of network solutions, network technics is that makes it possible. (A staff member)*

*Well, work tied up to a place will absolutely decrease, which should be understood. And this kind of teleworking, travel work, this kind of operation is absolutely the future. (A staff member)*

*Thus, versatile facilities to that that studying is also like diverse. It is no more teaching in a class, lecturing... That the facilities were then like that that it is possible, in addition to digitality, easy to study in these new ways. (A staff member)*

## 7 Discussion

### 7.1 Summary and evaluation

In a learning and working environment the effectiveness of everyday operations is highlighted. By organising proper facility services, these operations in a property can be supported. When creating service entities in a user-oriented way, focusing on the wishes of the end-user is crucial. In this part, implications based on the findings are

made. Furthermore, another issue is what kinds of services the users see essential in the property and how the findings correlate with the theory part of the thesis.

The purpose of this study was to generate user-oriented facility services and form an entity of them for the Turbiini building. The objective was to find out what kinds of facility services the users need in their future working and learning environment. This was carried out by using the service design method. The discussion below focuses on how well the thesis succeeded to fulfil these aims.

Service design as an approach can help to generate service ideas. In the thesis the service design process was partly applied. As mentioned in the theory part, the intention was not strictly to follow the process but consider those parts that are possible to be applied to one's case. Because the purpose of this study was to generate user-oriented services, a service design approach was considered to be suitable. The service design process of Tuulaniemi (2011, 127) turned out to be the most appropriate and clear for the purpose of the thesis.

At the first phase the problem to be solved was defined and the objectives of the design process from the side of the order were determined. A representative of Pose Oy, the manager of Turbiini, was interviewed and their interests towards the process were found out. Furthermore, the wishes of JAMK University of Applied Sciences Facility Services were found out in order to take into account the organisational point of view. At the research phase an understanding of the operational environment and user needs was gained. Theoretical information of the Turbiini building was collected in order to form a picture of the present stage of the target property. In order to understand the needs of the future users of Turbiini, the students and staff members of JAMK University of Applied Sciences, customer insight through theme interviews was gathered. Finding out the wishes, dreams and real needs of the users was the most important part of this user-oriented study. This method worked well, because all the needed information considering the operational environment and the different parties could be collected.

The next phases of the service design process would have included the generation of the service concept, testing it and implementing it in the property. However, taking the service design process further would have required the presence of all the stakeholder groups, such as the service producer and the other tenants of Turbiini. The service producer and the other tenants could not be involved as they were not known at the time of carrying out the research. Furthermore, the renovation work in the Turbiini building was unfinished, which affected the fact that the phases of planning and production could not be implemented. Instead, the concept of the service needs of the users was formulated in order to be able to answer the research problem.

It can be stated that the service design approach could serve the purpose of this kind of study, where user-orientation and planning of a service concept play a significant role. However, service design process could not entirely be benefitted and thus, applying service design reminded slight in the thesis. Continuing the service design process would likely result in the implementation of a great service concept that could be based on this user-oriented research.

This study successfully indicates which facility services are considered important in the working and learning environment from the user point of view. In the theory part of the thesis facility services are divided into two categories; user services and property services. The purpose of facility services is to serve the primary users of the property so that they can focus on their own core operations as well as possible (Partanen. 2003, 12).

During the research was observed that property services may be considered to be self-evident for the users of a property as was also stated in the theory part. For this reason, property services were barely mentioned by the interviewees. Three of the interviewees mentioned cleanliness to be important, and property maintenance was mentioned only by two participants. The fact that one cannot really use these

services that relate to the property itself may have affected to the way of thinking of the participants.

It could be interpreted from the results that security services are also assumed to be properly taken care of without mentioning them. Few of the participants described a bit more specifically the security aspects and especially the access to different spaces appeared as essential. When discussing of security, the quality of indoor air was also mentioned. According to Roper and Borello (2014, 141), the quality of their physical environment affects the performance of students as well as teachers, and the quality of indoor air is one of the environmental issues affecting the physical condition of a space. In a learning and working environment it is also important to consider all the aspects of security.

Food services were the most popular service mentioned by the interviewees. A lunch restaurant serving a qualified school lunch was supported by four out of six interviewees. The restaurant turned out to be beneficial in many ways, for example as a meeting place. Instead, two interviewees considered a café a suitable service. Food services are an important facility service that bring added value to the user of the property. The role of food services can be seen significant especially in a working and learning environment because they help the users to manage in their everyday routines. Even though, there is a lot of competition between the restaurants in the Lutakko area, a restaurant in Turbiini would be beneficial to its users and be probably a profitable operation.

Through the interviews, network services appeared to be crucial services in a working and learning environment. Furthermore, the availability of suitable working equipment and devices was seen essential for students and personnel. Kuuskorpi and González (2011, 6) refer to appropriate working equipment and wireless technics that fit the purpose of today's learning methods. Nowadays and probably also in the future, working and learning takes place more and more with the help of computers and other devices, which requires a wireless network. Technology is also changing

rapidly, which will affect the way of working and learning in the future (Roper & Borello. 2014, 155). A working and learning environment has to respond to these changes in order to make learning possible in a modern way.

Exercise and wellbeing services were seen beneficial in Turbiini by five interviewees. Wellbeing at work is nowadays being taken into account. In the theory was stated that wellbeing and exercise services have an effect on wellbeing at work and help users to manage their work longer (Salmi et al. 2011, 28). Sporty hobbies would give variation to studying. In the interviews gym, group exercise or some kind of break exercise were suggested in Turbiini. A relaxing possibility during a break as a wellbeing service was an interesting idea in the middle of one's daily routines. Four out of six interviewees stated that it would be beneficial to have the exercise and wellbeing services in the same property as their work place or school. This implies that exercise and wellbeing would be a positive user service for Turbiini.

Parking service was found to be in a significant role for the beginning of the day. In addition to car parking lots, a parking space for bicycles was wanted. A parking service as a facility service affects the accessibility of the property. According to the interviewees, the parking facilities of staff members, students and visitors should be taken into account.

From the results of the study can be inferred that the meaning of a service supply in a learning and working environment is not as significant as the physical elements that support these operations. Facility requirements were described more carefully than service needs. In working environments, in addition to one's own work station, different kinds of working facility possibilities and solutions were appreciated. Furthermore, several facility features were considered crucial, such as adjustable lightning, available work equipment and appropriate furnishing. As for a learning environment, the versatility and the transformability of facilities came up. In the theory part of the thesis it was stated that the quality of the physical environment affects the performance of students and teachers. According to Kuuskorpi and



González (2011, 6), the physical learning environment should be equipped to support different kinds of learning methods. Facilities are seen as basic preconditions for working and learning being the most crucial supporting factors to be considered in learning environments.

Services to be developed in the present environment of the interviewees were basically the same services that were considered to be beneficial in Turbiini. The most important development targets appeared to be the supply and availability of food services, working equipment and working facilities. It can be stated that the present working and learning environments might have had an impact on the answers of the interviewees. Turbiini could be easily compared to their present environment of the interviewees and thus, the same kinds of answers appeared.

According to the interviews, in the future learning environment versatile facilities are needed because learning will not anymore be sitting in a class room. Furthermore, in the future learning environments are applied more and more network solutions, which requires functional technics. According to the theory part, in the future, sharing of knowhow will take place together but also individually. In addition, new learning methods, such as virtual learning facilities will become common. (Salmi et al. 2011, 28.) According to the interviews, in working environments, different kinds of work methods, such as teleworking, should be considered in the future. New procedures of working will change the service requirements also in the working environment.

As the user-oriented service solutions have now been proposed, it is possible to apply the results of the research to the target operational environment. As mentioned earlier, the owner of Turbiini is responsible for the implementation phase of the services. As stated in the theory, facility services can be provided by in-house resources, by external contractors, or by a combination of the two (Alexander. 1996, 137). According to Ventovuori et al. (2004, 19), an organisation has to consider strategic decision making when choosing the way of organising the support services

in a property. In this case, Kiinteistö Oy Turbiini can decide whether making the decisions themselves on all the service supply or sharing the decision making process with the tenants.

Applying these services to the Turbiini building is possible because of the spatial versatility of the property. There are already facilities for a restaurant business and a lot of open space that can be modified for different service needs in the property. Furthermore, all of these services will support learning and working in Turbiini. Roper and Borello (2014, 144) argue that spatial adequacy can be gained with versatile and spaces. That can be also applied to services. A broad service supply affects the diversity of the property. The services mentioned above make the everyday life of the users easier.

## 7.2 Reliability and validity

According to Glenn (2010, 99), validity is one of the central issues in qualitative research. In this part, the credibility of this research is evaluated. When the data and the design are valid, the truth value of the research outcomes is stronger (Glenn, 2010, 144). In this study the answer to the researched problem was gained, and thus it can be stated that the research was valid.

Validity can be assessed through naturalism that refers to the natural setting in which the research should be conducted. The impact of the researcher in qualitative research may affect the results. (Silverman, 2006, 290.) For example, the researched may value specific issues and bring them up more than the others. Furthermore, the researcher has to be as neutral and objective as possible in order to gain truthful results. In this study, objectivity has been one of the essential issues to maintain. During the theme interviews it was important to let the participants to express their opinions in an open way. Although, the researcher kept up the pace of the interview, it was crucial to avoid telling one's own opinions about the topic. In the phase of analysing the results, the interpretation was done as accurately as possible without leaving out any of the essential issues regarding the research topic.

Respondent validation is a method, where one's findings are taken back to the subjects being studied. If these people verify one's findings, one can be more confident of their validity. (Silverman. 2006, 291.) It can be stated that if this study was taken into the same kind of operational environment studying the same kind of focus group, the validity of the research could probably have been proved. However, if taking the findings into a different kind of environment and different focus group, the results would be probably also different. It should be noted that this study was conducted for a specific operational environment with a specific focus group. Thus, the generalisation of the findings can be challenging in other cases.

According to Kananen (2008, 124), the reliability of research can be evaluated regarding the sufficiency of the data, the coverage of the analysis and the evaluation and repeatability of the analysis. In this study the results were gained through interviewing six participants. This sample size turned out to be sufficient for achieving valid results. A large number of interviewees would not have led to any variant results as the specific issues were repeated at some point of the interview process. The analysis based on the research results was conducted by using several methods and through that the data could be carefully analysed and interpreted. Furthermore, the different phases of the research were documented and described by making notes so that examining them would also be possible later.

### 7.3 Suggestions for further research

The thesis provides information of facility services that should be provided in a working and learning environment. When researching the topic, user-orientation was mostly considered. It would be important to study later, if the service concept has really supported the main operations in Turbiini and if there is something to be developed further regarding the service supply.

As for the service design approach, the rest of the stages, planning and production, could be applied. It would be interesting to know how the user-oriented facility

services were implemented in the property. It would be beneficial to find out if the service concept satisfies the manager of the property and if the manager is interested to implement all the services that meet the users' needs in Turbiini. It would be also important to take the other tenants of Turbiini into account, and research their service needs. Furthermore, it could be explored how the needs of all the tenants match with each other, and if they do not match how to consider the wishes of all parties in the same property.

## References

Alexander, K. 1996. Facilities Management. Theory and practice. United Kingdom, London: E & FN Spon.

Braun, V & Clarke, V. 2013. Successful qualitative research. A practical guide for beginners. United Kingdom, London: SAGE Publications Ltd.

Design Council. Eleven lessons: Managing design in eleven global brands. A study of the design process. Accessed on 26 December 2015. Retrieved from [http://www.designcouncil.org.uk/sites/default/files/asset/document/ElevenLessons\\_Design\\_Council%20\(2\).pdf](http://www.designcouncil.org.uk/sites/default/files/asset/document/ElevenLessons_Design_Council%20(2).pdf)

Finnica 2003. Perinteitä ja Heijastuksia. [Traditions and reflections]. Accessed on 8 November 2015. Retrieved from <http://www.finnica.fi/keski-suomi/arkkitehtuuri/14.htm>

Glenn, J C. 2010. Handbook of research methods. India, Delhi: Oxford Book Co.

Hennink, M, Hutter, I & Bailey, A. 2011. Qualitative research methods. United Kingdom, London: SAGE Publications Ltd.

Hirsjärvi, S & Hurme, H. 2009. Tutkimushaastattelu. Teemahaastattelun teoria ja käytäntö. [Research interview. Theory and practice of thematic interview]. Helsinki: Gaudeamus Helsinki University Press.

ISS. 2015. Service Futures. Can your company benefit from outsourcing? Accessed on 6 February 2016. Retrieved from <http://servicefutures.com/uncategorized/can-company-benefit-outsourcing/>

JAMK University of Applied Sciences. 2013. Tasekirja. [Balance sheet book]. Accessed 24 February 2016. Retrieved from [http://www.jyvaskyla.fi/instancedata/prime\\_product\\_julkaisu/jyvaskyla/embeds/jyvaskylawwwstructure/68722\\_jamk\\_tp\\_2013.pdf](http://www.jyvaskyla.fi/instancedata/prime_product_julkaisu/jyvaskyla/embeds/jyvaskylawwwstructure/68722_jamk_tp_2013.pdf)

Kananen, J. 2008. Kvali. Kvalitatiivisen tutkimuksen teoria ja käytänteet. [The theory and practice of qualitative research]. Publications of JAMK University of Applied Sciences. Jyväskylän yliopistopaino.

Kuulusa, S. 2015. Financial manager. Pose Oy. Interview 26 October 2015.

Kuuskorpi, M & González, C. 2011. The future of the physical learning environment: school facilities that support the user. OECD (Organisation for Economic Co-operation and Development) Publishing. Accessed on 6 February 2016. Retrieved from <http://www.oecd.org/edu/innovationeducation/centreforeffectivelearningenvironment/49167890.pdf>

Leväinen, K I. 2013. Kiinteistö – ja toimitilajohtaminen. [Real estate –and facility management]. Helsinki: Hakapaino Oy.

Mäntylä, U. 2015. Facility Manager. JAMK University of Applied Sciences. Interview 30 October 2015

Miettinen, S. & Koivisto, M. 2009. Designing Services with Innovative Methods. Savonia University of Applied Sciences, Kuopio Academy of Design. Keuruu: Otava Book Printing Ltd.

Miettinen, S. & Valtonen, A. 2013. Service Design with Theory. Discussions on change, value and methods. The Second Edition. Vantaa: HansaBook.

Miettinen, S. 2011. Palvelumuotoilu. [Service design]. 23. Tammerprint Oy.

Nenonen, S. 2013. Identiteetti ja brändi oppimisympäristössä. [Identity and brand in learning environment]. Seminar video. JAMK Moniviestin. Jyväskylä: JAMK University of Applied Sciences. Retrieved from <http://moniviestin.jamk.fi/ohjelmat/aokk/ops-seminaari-1/testi?searchterm=nenonen&fullscreen=1>

- Partanen, E. 2003. Käyttäjälähtöisyyttä tilasuunnitteluun. Toimivat tilat tilapalveluille. [User orientation for facility design. Functioning facilities for facility services]. Jyväskylä: JAMK University of Applied Sciences.
- Rahkonen, J. 2015. JAMK myi Turbiinitalon sijoittajille. [JAMK sold Turbiini building to investors]. Keski-suomalainen 25.9.2015, 13.
- Roper, K & Borello, L. 2014. Innovation in the Built Environment: International Facility Management. United Kingdom, West Sussex: John Wiley & Sons, Ltd.
- Salmi, J., Pekkanen, J. & Lindroos, K. 2011. NYT / 2025. Rakennettu ympäristömme. [Our built environment]. Kiinteistö- ja rakentamisfoorumi. Helsinki: Lönnberg Painot Oy. Accessed on 26 February 2016. Retrieved from <http://www.kirafoorumi.fi/attachements/2011-11-21T11-27-2857.pdf>
- Silverman, D. 2006. Interpreting qualitative data. Third edition. United Kingdom, London: SAGE Publications Ltd.
- Silverman, D. 2013. Doing qualitative research. Fourth edition. United Kingdom, London: SAGE Publications Ltd.
- Stickdorn, M. & Scheider, J. 2011. This is service design thinking. Basics, tools, cases. The United States of America, New Jersey: John Wiley & Sons, Inc.
- The Finnish Association of Building Owners and Construction Clients RAKLI. 2012. Kiinteistöliiketoiminnan sanasto. [Vocabulary of real estate business]. Second edition. Helsinki: RAKLI ry. Accessed on 24 February 2016. Retrieved from <http://www.rakli.fi/media/toimitilat/kiinteistoliiketoiminnan-sanasto.pdf>
- The website of JAMK University of Applied Sciences. JAMK Information. Accessed on 29 December 2015. Retrieved from <http://www.jamk.fi/en/JAMK-information/About-JAMK/>
- Tuulaniemi, J. 2011. Palvelumuotoilu. [Service design]. Hämeenlinna: Kariston kirjapaino Oy.

Tuulaniemi, J. 2015. Specialist. Entrepreneurship and Innovation. JAMK University of Applied Sciences. Interview 18 November 2015.

Ventovuori, T., Miettinen, I., Hyttinen, L. & Paloheimo, K-S. 2004. Toimitilapalvelujen hankinta- ja tuotantotavat. [Purchasing and producing practices for Facility services]. Helsinki University of Technology. Helsinki University of Technology Construction Economics and Management Publications 229. Espoo: Otavamedia Oy. Accessed on 28 February 2016. Retrieved from [http://bes.aalto.fi/en/publications-002/reports/raportti\\_229/](http://bes.aalto.fi/en/publications-002/reports/raportti_229/)

Wiggins, J M. 2010. Facilities manager's desk reference. United Kingdom, West Sussex: John Wiley & Sons Ltd.



## Appendices

### Appendix 1. The structure of the theme interview

#### HAASTATTELUKYSYMYKSET

##### TAUSTATIEDOT

Ikä, ammatti / koulutusala, työtehtävä

Arkipäiväinen toiminta

##### TURBIININ PALVELUT

Työskentelyn / oppimisen tehokkuus

Vireystila

Viihtyvyyys

Vapaa-aika

Turvallisuus

Saavutettavuus

Terveellisyys

##### PALVELUJEN KEHITTÄMISEN TARVE

Palvelujen kehittäminen nykyisessä ympäristössä

Palvelujen kehittäminen tulevaisuuden työ- ja oppimisympäristössä

Muuta mieleen tulevaa

## INTERVIEW QUESTIONS

### BACKGROUND INFORMATION

Age, profession / degree programme, work task

Everyday operations

### SERVICES FOR TURBIINI

The effectiveness of working / learning

Alertness

Comfort

Free-time

Security

Accessibility

Healthiness

### THE NEED FOR SERVICE DEVELOPMENT

Service development in the present environment

Service development in future working and learning environment

Something else that has come to mind

## Appendix 2. Interview questions to JAMK Facility Services Manager

### Jyväskylän ammattikorkeakouluun liittyvät kysymykset

1. Milloin Jyväskylän ammattikorkeakoulu (JAMK) perustettiin?
2. Kuka sen omistaa?
3. Minkälainen on toimitilapalvelujen organisaatorakenne Jamkissa?
4. Mitä käyttäjä - ja kiinteistöpalveluja Jamkissa on?
5. Kenen toimesta nämä palvelut tuotetaan?
6. Miten näet tällaisten ratkaisujen toimivan koulurakennuksessa?
7. Miten toimitilapalvelut tukevat kiinteistön ydintoimintaa?
8. Millä perusteella palveluntuottajat Jamkissa valitaan?
9. Mitä kehitettävää näet Jamkin palveluissa?

### Turbiiniin liittyvät kysymykset

1. Milloin Turbiini on rakennettu?
2. Kauanko Turbiini oli Jamkin omistuksessa?
3. Kenen omistukseen Turbiini siirtyi?
4. Mitä toimintoja Jamkillä tulee olemaan Turbiinissa?
5. Miten Jamk voi vaikuttaa Turbiinin toimitilapalveluihin?
6. Mitä kiinteistöpalvelufirmojen sopimuksia on jatkettu Turbiinissa?

### Appendix 3. Interview questions to Pose Oy

1. Kuvaile yritystänne, mitä se tekee ja mihin se pyrkii?
2. Millaisia suunnitelmia teillä on Turbiinin suhteen tulevaisuudessa?
3. Miten Turbiinin ilme ja ilmapiiri tulee muuttumaan?
4. Millaisille tahoille vuokraatte tiloja Turbiinista?
5. Montako vuokralaista Turbiinissa tulee olemaan?
6. Mitä toimintoja ja tiloja Turbiinissa tulee olemaan?
7. Onko Turbiinista mahdollista vuokrata tiloja myös lyhytaikaiseen käyttöön (esim. kokoukset)?
8. Millaisia palveluja Turbiinissa oletetaan olevan?
  - a. Kiinteistöpalvelut
  - b. Käyttäjäpalvelut (ravintola, jne.)
9. Millä tavoin pyritte luomaan asiakkaalle/käyttäjälle arvoa?
10. Miten kuvaisitte itseänne palveluntuottajana?