

*Final publication of the
Sustainable Service Housing Ecosystem (KEKO) project*

SEARCHING FOR NEW FORMS OF SERVICE HOUSING



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& Ulla Saarela (Eds.) The
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TOWARDS A BETTER FUTURE

The Sustainable Service Housing Ecosystem (KEKO) project has created an ecosystem for service housing providers in the *Päijät-Häme* region and developed the future of service housing.

The number of people over the age of 65 is increasing both in Finland and Europe as a whole. As this figure continues to increase, so will the demand for service housing. Finnish wellbeing services counties may not be able to respond to this growth in demand, creating opportunities for private service providers. For this reason, the KEKO project aimed to study and create new concepts for service housing to increase the wellbeing of the elderly as they move from their homes to service housing. While the project focused on communal living, its authors remained keenly aware of how homes can be modified to meet the changing needs of their residents, both in terms of each individual's personality and their physical or mental capacity. In this publication, we will review the project's results and how they have taken the needs of older people into account.

You can use this publication to learn more about the project's ecosystem and current definition of service housing as well as the future of communal service housing. The publication also assesses the future through the profiles of older people as well as their housing-related wishes. It also considers the different methods and technologies that can be used to support people in their everyday lives. The publication also provides useful tips for organising workshops and interesting information on how KEKO has inspired new projects in the field of service housing and elderly services.

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SINI ROINE AND ULLA SAARELA

*How can we
develop service housing?*

POWER FROM ECOSYSTEMS

A sustainable service housing ecosystem. When the Sustainable Service Housing Ecosystem – i.e. KEKO – project was launched in the autumn of 2021, we had numerous discussions on how we each understood the “ecosystem” part of it and what its role would be in our service housing development project in the Päijät-Häme region. The project’s application document (LAB University of Applied Sciences, 2021) specified that this ecosystem will be based on the Living Lab method, i.e. its thematic development will take place collaboratively between the actors in the region, and partly in an authentic service housing location. Rusko-rinne ry, the location in question, will not be constructed during the project. Instead, the authentic location will be represented by a model housing unit constructed at the Lahti campus of LAB University of Applied Sciences, where it will serve as a development and testing platform.

The model housing unit will allow the project, together with its partners and the companies in the region, to test and pilot new solutions, products and services for service housing. The results of the pilots, experiments, and concepts implemented in the project can also be utilised after the project.

Why ecosystems matter

According to Valkokari et al. (2020, 3–4), the term “ecosystem” has not yet been established as a concept and does not work unambiguously in the formation of shared understanding. They define an ecosystem as both a structure and interaction process through which complementary actors create value together. In an ecosystem, several parallel network structures share the same operating model, vision, and objectives.

The Ministry of Economic Affairs and Employment (2023) defines ecosystems as interdependent networks between companies, entrepreneurs, research, public administration, and actors in the third sector. In particular, ecosystems are used to solve wide-ranging and complex societal problems that require the expertise of several actors. Ecosystems allow for collaboration and co-creation between companies of different sizes, education and research organisations, the third sector, administrative actors, and end-users.

In his blog, Lautanala writes that ecosystem-like business approaches will help Finland boost its future competitiveness. He highlights the usefulness of networking as a common factor among different ecosystems. In ecosystems consisting of public organisations, this is demonstrated and measured by effectiveness. Lautanala also emphasises the trust between the actors in an ecosystem, which is increased by mutual openness, clearly defined rules, and the willingness to follow said rules (Lautanala).

Ecosystems in the development of sustainable service housing

In the project, the ecosystem was built on the basis of Valkokari et al. (2020) with three levels of actors. The core group, presented in the middle, provides the resources as well as research and development expertise. Like the core group, the companies participating in the development group are interested in developing the theme of the ecosystem. The cooperating members on the outermost circle provide ready-made solutions, networking opportunities, and customer references.

The figure depicts a three-level ecosystem where LAB University of Applied Sciences is at the core of the project as the implementing party. The development group includes organisations and companies that belong to the project’s steering group and have actively shared their expertise and experiences in developing service housing. The cooperating members include stakeholder

representatives who have become part of the ecosystem through the project's activities.

The ecosystem has grown its membership through fair visits and workshops, as well as with the help of social media. The communication activities implemented by the core group have focused on providing information to the ecosystem's cooperating members in particular, for example by presenting the results of commissioned LAB student assignments and highlighting topical news and good ecosystem practices. By demonstrating the concepts created by its students, LAB aims to provide perspectives on human-oriented planning and ideas for the future of service housing.



The project's ecosystem in Mar. 2023. The ecosystem is expected to grow through new networks even after the project has ended. (Vienamo 2020. Adapted by Sini Roine and Siina Sipilä.)

The future of the project's ecosystem

The model housing unit, material library and concepts created in the project, together with the information collected on service housing, will remain available for the companies, actors and students in the region. Our hope is that the model housing unit and material library will help further unite the region's service housing providers and strengthen the ecosystem after the end of the project.

During the project, the idea that service housing is an important and interesting development area within Europe, and possibly across the globe, has become increasingly strong. The project has resulted in new contacts and preliminary collaborative opportunities, for example with KEA (Copenhagen School of Design and Technology), on future solutions for service housing and elderly services. LAB is also responsible for the Erasmus+ project *sUser – Introducing User-Driven Design and Agile Development Skills in the Case of Sustainable Service Housing for Elderly*. In addition to LAB, the project includes higher education institutions from the Netherlands, Austria and Serbia. The project's preliminary schedule includes a Summer School on joint service housing in Lahti, Finland, in the summer of 2024.

In the future, the project's ecosystem will strengthen and grow through the regional ecosystem's united efforts as well as with the help of new international projects and networking activities. With the help of shared information and experiences, we can develop and improve service housing and solve other challenges posed by ageing populations, both in Finland and abroad.

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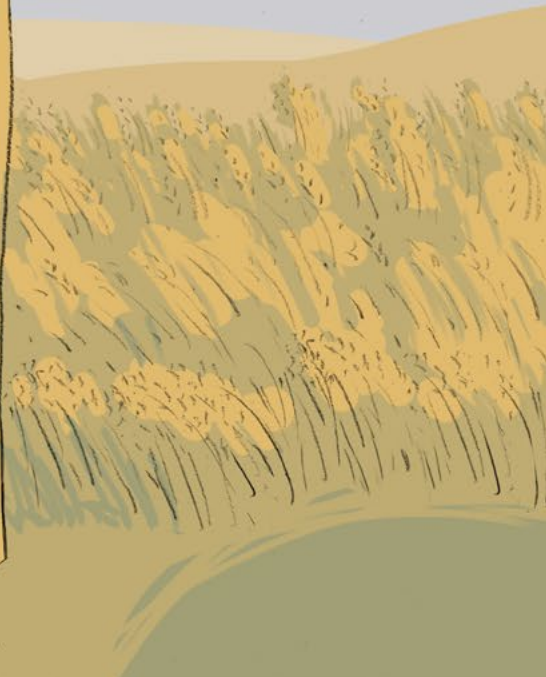
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LASSE PELTONEN

*Ruskorinne
as part of the KEKO project*

A MORE NATURAL OPTION

Ruskorinne's collaboration with LAB University of Applied Sciences began in 2020 when Ruskorinne commissioned the students of LAB's Institute of Design and Fine Arts to design its logo and slogan.

The resulting slogan, *Se luonnonläheinen* ("Closer to nature", or "A more natural option") reflects Ruskorinne's surroundings, its collaboration with its neighbouring farm, as well as its design aspirations and choice of natural building materials, such as timber. Ruskorinne aims to foster the conditions for wellbeing with various services that inspire residents to remain active and with easy-to-use smart technologies and communal spaces.

A key focus area has been on recognising the unique strengths and starting points for increasing the vitality of this small farming area while creating the conditions for an active and natural form of living in a rural environment that is still not located too far from the city centre of Lahti.

This was the starting point for the collaboration between the KEKO project and Ruskorinne, which began in autumn 2021. Ruskorinne has participated actively in the project and has even been included in its steering group. More concretely, Ruskorinne has served as a starting point for high-quality student projects, of which the most functional ideas and practices will certainly be utilised in Ruskorinne's final planning and implementation phase. Ruskorinne's inspiring interaction with the

KEKO project's various actors has certainly shaped and refined its planning as well. I also believe that the KEKO project's study modules have been well-received by our students, and once Ruskorinne becomes a reality, they will have the privilege of seeing their ideas and solutions put into practice.

A communal residential area that respects the privacy of its residents

In addition to high-quality construction, Ruskorinne's focus is on developing various services for the unique needs of its residents and Ruskorinne as a whole. Communitarity is a source of vitality that is made available to Ruskorinne residents, should they want to participate in it. All other necessary services are provided to residents according to their choices and needs. Above all, an active and socially stimulating life, daily routines, and delectable dining options help to provide a sense of purpose and an undeniable boost to a person's wellbeing.

The *Yhteinen yhteisöllisyys palveluasumisessa* (Shared Communitarity in Service Housing) seminar organised at the Mukkula campus in autumn 2022 highlighted the voices of those who are at the core of all these plans. While communitarity is a subjective experience, it is generally perceived as an opportunity. However, taking personal privacy into account in the planning of housing units and residential areas was also considered equally important.

What KEKO can provide to Ruskorinne?

Ruskorinne represents an idyllic vision of a residential area consisting of log structures that promote a natural, ecological and accessible approach to communal living and an active and valuable life for senior citizens. Ruskorinne will offer nature-friendly activities and daily routines that follow the annual harvest calendar, and its year-round programming will focus extensively on the opportunities provided by its neighbouring farm, surrounding natural environment, and the facility's own garden.

Ruskorinne's collaboration with LAB University of Applied Sciences has provided it with an excellent platform for refining its core idea by selecting the best solution models that have emerged in the project. KEKO is a topical and future-oriented project whose results are available to everyone. And, above all, we certainly need more discussion and debate on the forms of service housing that are being offered to Finland's ageing population.

Think about it from your own perspective: how would you like to spend your well-earned retirement once you reach the golden years of your life? Ruskorinne – A more natural residential area.



Ruskorinne's nature-inspired residential area will be situated in this landscape.
(Photo: Roni Lipponen)



ANU OLKKONEN-NIKULA

A new option for the wellbeing services county of Päijät-Häme

COMMUNAL LIVING

At the beginning of 2023, the responsibility for organising social welfare, health care, and rescue services in Finland will be transferred from municipalities and joint municipal authorities to 21 wellbeing services counties. The wellbeing services counties act as the organisers and principal providers of social welfare and health care services, but private actors, organisations and associations can be used to supplement public social welfare and health care services. In the Päijät-Häme region, the organisation of social welfare, health care, and rescue services is the responsibility of the wellbeing services county of Päijät-Häme.

Päijät-Häme is a strongly ageing region, and the relative share of its elderly population is set to increase significantly in the coming years. According to Statistics Finland (2023), the population trend of people over the age of 75 will be 29.6% (N =11,475) between 2022 and 2040. This demographic shift as well as the challenges posed by the availability of personnel, increasingly stringent funding, and changes in legislation will all impact the service system. The region has strived to develop its service structure for a long time, resulting in a solution that relies on home living and on-site services.

At the moment, approximately 94% of people over the age of 75 in Päijät-Häme live in their own homes. Around 9% of them receive their home care services on-site, i.e. at home. Allowing the elderly population to live at home is important, as it not only supports their wishes but also ensures the sufficiency of publicly provided services.

And when a person can live at home without any issues, they also require less demanding services. The national goal is to ensure that living at home remains the primary option, while 24-hour service housing is reserved for those who can no longer live in a regular home, for example when they suffer from an advanced memory disorder. In addition, a reform in legislation recently introduced communal living as a new dimension to the service system for the elderly.

A change in service structures and communal service housing

The reform of the Social Welfare Act, which entered into force on 1 Jan. 2023, introduced communal housing as a new type of service. The reform also clarified the terminology used in connection with 24-hour service housing. From a service structure perspective, communal housing is situated between home care and 24-hour service housing. According to the Act, communal housing refers to housing organised by a wellbeing services county in an accessible and safe location where each resident is provided with housing that meets their needs and activities that promote social interaction (Act on the Amendment of the Social Welfare Act, 790/2022, sections 21b and 21c). When it comes to communal housing, special emphasis must be placed on providing a living environment and housing that is accessible and safe, as well as the necessary services. Particular attention must be paid to the accessibility and the lighting of washrooms, bathrooms and kitchens, as these often pose the greatest accident risk. A person's housing and living environment should allow them to live their life to the fullest, even when they experience deterioration in their physical and sensory capabilities. A good and safe living environment is easy to navigate, accessible, and pleasant. At best, a communal approach can combine living, social interaction, hobbies, general services, and home care services into a functional, safe, and unintrusive whole. Communal housing fosters interaction, mutual support, and assistance between residents to support the quality of their everyday life. This form of housing encourages residents to lean into communal support and live independently without the need for social welfare services. And as a person's need for services develops, they can be provided the type of home care afforded to them by the Social Welfare Act, to assist them when they fall ill or lose their functional capacity. This legislative amendment has been welcomed by the wellbeing services county of Päijät-Häme, as our region is particularly affected by loneliness and insecurity, and a great number of our elderly population live in isolation. According to statis-

tics, in 2021, 49% of the residential population aged 75 or over lived alone.

Housing forms and preparedness

Future communal forms of housing will be built, at least partly, into other accessible and safe living environments. The same housing complex may feature senior housing, communal housing, and 24-hour service housing. The key is to minimise the number of times that an ageing person needs to move at the end of their life, once their functional capacity begins to deteriorate. In fact, it's a smart idea to look at your own home and living environment from the eyes of an elderly person, even if it's still your early days – when it comes to housing, anticipation pays dividends. Consider whether your home will be as comfortable, safe, accessible, and functional when your mobility or memory isn't what it used to be. The older you get, the more important it becomes to ensure the accessibility, safety, and functionality of your home. In addition, by choosing your forever home well in advance, you will ensure that you can recognise it even in the event that your memory begins playing tricks on you. We often see headlines about old people running away from their homes. But they're rarely running away from anything: they're usually just searching for the homes that they remember from their distant memories, before their memory loss set in.

Each of us has individual life circumstances and needs that affect how and where we would like to live. Most people want to stay in a familiar home and environment even throughout their golden years. If this is not possible, the next best option is to find a new apartment near your old, familiar home. Few people want to move far away from their home towns and cities as they age. This perspective will be taken strongly into account by the wellbeing services county of Päijät-Häme as it plans its communal housing solutions and their development, planning and construction together with the municipalities in the region.

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MATLEENA TAKALUOMA

Communal living will require

NEW EXPERTISE

With the reform of the Social Welfare Act (1301/2014), the future housing solutions produced by wellbeing services counties will be required to provide accessible and safe housing options that offer communal activities.

Communality requires expertise, and it will create new kinds of competency requirements for social welfare and health care professionals at different levels. This article examines the needs for change that communal 24-hour service housing will create in the operating culture of the social welfare and health care sector.

Communality in 24-hour service housing

According to the Social Welfare Act (790/2022, section 21b), 24-hour service housing refers to living in an accessible and safe home that offers communal activities. In such housing, a resident is provided with an apartment and care that meet their individual needs, at all hours of the day. In addition, the service housing must include activities that maintain and promote each resident's functional capacity, inclusion, and social interaction.

Communality can be built in many different ways, but the key elements in fostering a sense of community include equal and respectful encounters, encouraging participation, and providing residents with genuine opportunities for having a say in their lives. Communal

decision-making and feeling like you are being heard allow people to build a sense of community. Communal living requires acknowledging each resident's individual needs and acting in accordance with them, but it also requires activities that support a sense of community, as communality is created and deepened through opportunities for participation and interesting everyday activities. Above all, communality does not manifest by itself, as concrete measures and skilled employees are needed to build and maintain it. (Jolanki et al. 2017; Paavolainen 2020).

Communality is created by a community

As a new form of 24-hour service housing, communal living requires a new approach as well as a change in operating cultures. In current-day 24-hour service housing, most employees focus on care and nursing-related tasks and are likely to view residents as subjects or patients rather than as peers who are active in their own right. A work approach that supports functional capacity, which guides the care and nursing work done today, will remain the guiding principle in communal housing.

However, in the future, employees will be required to have more solid competency in supporting and strengthening each resident's agency and participation (Aro 2022; Paavolainen 2021; Ruusuvirta et al. 2023). In communal housing, residents must be genuinely included in the planning of activities, and they must be





provided with the continuous opportunity to influence the activities of their service housing unit (Aro 2022).

Although tasks related to communality can often become the responsibility of a specific employee, in the future, all employees will be required to participate in them (Paavolainen 2021). In fact, employees play an important role in promoting the communality of their service housing units, and this role becomes increasingly important as their residents' functional capacity deteriorates (Mikkola et al. 2015). However, supporting a sense of community is not just the responsibility of employees, but also of management as well as residents and their loved ones. An organisation's management culture can either support or discourage the formation of a communal operating culture.

Task-oriented job descriptions weaken the formation of a communal operating culture, while granting employees the freedom and responsibility to define their own job descriptions and approaches fosters communality. It

is also important to take each resident's family and local community into account and help them understand the significance of communality and advise them on how they can support it through their own actions. Volunteers and local actors also play a significant role in building a sense of community, as they can help extend its reach beyond the confines of a single housing unit (Jolanki et al. 2017; Paavolainen 2021).

New competencies and attitudes

Changes in operating cultures demand new kinds of competencies from employees, and changing competency requirements also necessitate changes in the educational contents of the social welfare and health care sector. Building and maintaining a sense of community requires expertise, and in the future, the education provided by the social welfare and health care sector must place further emphasis on not only nursing and care but also an operating culture that supports the participation of older people.

This will require skilful approaches and the knowledge to match. Future social welfare and health care actors must be provided with a sufficient theoretical foundation on the factors that affect the formation of communality, the operating cultures and methods that promote or hinder communality, and the pitfalls that can arise in a communal approach. In addition, they must possess a wide-ranging understanding of an individual's impact on communality as well as the ability to promote equal interaction between residents and employees. More competence is also needed in supporting the participation of residents with different functional capacities and enabling multifaceted cooperation with different actors. (Aro 2022.)

In addition to the knowledge and skills that promote communality, we must also be willing to engage in a comprehensive change in attitudes, both in the education provided by the social welfare and health care sector and in society as a whole. We must think of the elderly as genuinely active peers who have the right to a democratic say in their lives, even when they require 24-hour service housing. They must be seen as individuals, not just residents, and we must pay deliberate attention to any activities that support their autonomy, agency, and inclusion. When it comes to service housing, we must shift our focus from task-oriented care and nursing activities to working together with residents and providing them with a truly communal sense of belonging.

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SUSANNA BJÖRKLUND

*Towards a more
inclusive, empathic and
open-minded future*

UNIQUELY SENIOR

The aging societies are a megatrend, which will shape the world in multiple ways in the future. The elderly are a tremendously varied and diverse group of people from active super-agers to the growing number of fragile people suffering dementia, and everyone in between. To fulfill the needs of this heterogeneous group we need to change the mindset and attitudes towards aging – and to use design in a new, more empathic and multipurpose way.

All of us are unique individuals, having different skills and expertise, different wishes and hopes for our lives, no matter how young or old we are. Why would that change when we become elderly? There is a growing discourse in the society about the need to increase inclusivity and diversity – the right to be whoever a person is. At the same time, it feels that senior citizens have been largely forgotten from that discussion. After a certain age people reach a state, where they often seem to become either a homogeneous group of the elderly or even invisible in the society.

Ageism seems to start very early, highly skilled specialists in their fifties have had difficulties getting a new job, despite having lots of experience, digital skills and tacit knowledge as well as many fruitful years left to

fully give to an employer. The western society still idealizes youth over experience.

According to WHO (2022) people over 60 will double by 2050 (from 12 percent to 22 percent of the world population). By 2030 there will most likely be one billion people over 65. Already now there are more senior people than children in the world. It is likely that retirement age needs to be set higher as we need more people in the workforce.

Life expectancy has kept rising worldwide, in Finland it grows annually 0.2% and is now 82,48 years (Macrotrends, 2023) A 60-year-old might have over 30 years of lifetime ahead, how can we help making those years meaningful?

Active elderly consumers

Harvard University (Harvard Health Publishing 2017) has for years been researching people in their 70s and 80s who have the mental or physical capability matching their decades-younger counterparts. Medical science calls them super-agers. These people apparently have three things in common. Moving out of their comfort zone seems to help staying mentally and physically young. These people see problems as challenges, they are ready to learn new skills and do not give up easily. They also practice physical exercises regularly.

Not just the amount of elderly is on the rise, but they generally live longer and a lot of them are in good health both physically and mentally. They are active consumers.

Changing attitudes towards the elderly

Luckily attitudes seem to be changing slowly. Systemic societal changes take time, people might be naturally change resistant, but the world does change slowly. There are interesting designs, phenomena, and new concepts around the issue. Sometimes the changes towards positive futures can be tracked in little things and details.

Visual imagery has clearly changed in the past years with broader diversity apparent in the mainstream media. Wider spectrum of races, body shapes and finally, different ages has started to show in advertising, fashion shows and online shops. Taboos fade slowly, representing an elderly as a desirable, sexual being or advertising underwear would have been if not unimaginable, at least rare, some decades ago. Sofia Coppola's underwear video for Calvin Klein (2017) was the first add, where I noticed Lauren Hutton, ex model aged 73 at the time, being a part of the cast. Swedish brand Understatement underwear now uses models of all ages and so does Lindex. Feature film Good luck to you, Leo Grande (IMDb

2022), is a warm-hearted story about a woman in her 60's finding sexual pleasure for herself.

Social media on the other hand worships youth and perfection, but luckily also increasingly shows diversity. There are now popular influencers in their 70's (The Guardian 2018).

Living in the future

Urbanisation is another megatrend which affects everyone, also the elderly.

Even the super-agers grow older, so we need versatile homes which can evolve and be changed according to the needs of the inhabitants. 15-minute City projects are urban planning concepts where all the services from stores to healthcare should be easily accessible by foot or bike within 15 minutes. The concept is suitable for the seniors as well.

We need more variation and candid new concepts for living. Loneliness is a huge issue, not just for the elderly but anyone. How to increase networking and connection between people and encourage community integration is an interesting challenge. Co-housing and solutions with large communal areas are getting common, more innovative options hopefully are on the way.

Caring for the fragile with design

Another side of the aging society is the growing number of Alzheimer or dementia patients needing extra care. As the population grows older it is natural that the amount of people with diseases increase.

The need for aesthetic products does not vanish when people grow older. Most people wish to live in their own homes as long as possible. At some point there might be a need for aided products and furniture. Naturally nobody wishes to be surrounded by hospital furniture in their own homes. Design is in a crucial role in this. Lanzavecchia + Wai are designers leading the way. Their Together Canes (Lanzavecchia + Wai 2012), are stylish walking aids which double as containers or small tables, The design duo has also created a concept called Hack Care for Lien Foundation (Hack Care 2020), giving ideas how to hack existing furniture for it to function better for the disabled or elderly. The open source DIY instruction book can be downloaded by anyone.

Textile designer Samira Boon has designed textiles for Alzheimer patients in nursing homes. Empathy is a strong element in her work. Paravent (Boon 2016) is the result of a research project looking into how to give more privacy for patients in communal spaces. Each panel of the folding Paravent screen has its own shape, functionality and tactility. One panel is opened up to create a table, another

is designed as a visual separation or as an acoustic separation.

The Hogeweyk (DVA 2009) in the Netherlands is a different nursing home model for people suffering from severe dementia or Alzheimer. It is like any small village with shops, pub, restaurant and a theatre, except that the members of the staff are care professionals and the village has gates. The patients are able to live an active life as close to normal as possible.

There is a huge business potential in solving challenges that the aging societies will increasingly face in the future. Design has a huge role in it, best designs are sustainable, inclusive, functional, aesthetic and yet desirable for everyone, not just the elderly or the disabled.

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MILLA MÄKINEN

The service housing of tomorrow:

FUTURE IMAGES OF AGEING

By 2040, the Finnish population will age significantly in every region (MDI 2022). In the future aging will be influenced by global crises, the effects of digitalisation and climate change, ecological reconstruction, the diversification of the population, ageing, the reduction in birth rates, and rapid technological advancements (Petajärvi & Seikkula 2022). In the future, the experience of growing old may seem very different from that of today.

The statement to the Committee for the Future paints a picture of the future where ageing will present both threats and opportunities. One opportunity identified by the statement is the growing appreciation of ageing, i.e. the recognition of older people as a valuable resource who have a lot to offer in, for example, voluntary and peer work. The interaction between generations represents another area where the perceived value of ageing can be fostered by promoting the wisdom that comes with age. By investing in person-to-person interaction and contacts, we can build a sense of belonging that will have a positive impact on ageing in the future. And, according to the statement, the inclusion of hope in the discussions around ageing can also help create positive future images of ageing: “Ageing is a privilege. When you believe that someone can grow old with grace, you also

believe in a future that makes space for human dignity and empathy” (Petäjäjärvi & Seikkula 2022, 72).

Growing old in 2040

We studied how people will grow old in the future in a master’s degree-level course on human-oriented service design, together with our students, the KEKO project, and Ruskorinne ry. During the course, our goal was to approach the experience of ageing by visiting a service housing unit for the elderly in Lahti, Finland, and by experimenting with various tools that simulate ageing, such as ageing suits and medical arthritis gloves. Our students also familiarised themselves with current service housing solutions by conducting benchmarking, i.e. by searching for existing services for the elderly on the internet.

After this analysis, the students were instructed to step into 2040 and think about the lives of the elderly and what housing services they might wish for in the future. This information was then supplemented with interviews with 40–60-year-olds, i.e. the elderly of the future. The interviewees noted that factors such as the utilisation of smart technology and digital competence will be an everyday occurrence for older people in the future. They also emphasised the essential role of tailored services and extremely crucial role of community and security. Above all, the elderly population of the future will not approve of any scenarios where they will not be permitted to personally decide when they will transition to service housing.

Towards future service housing solutions

The service housing services provided for the elderly are under great pressure to change. Their future residents, who were described by the service design students in their final assignments, are looking for something very different from what is currently on offer. Both the current forms and overall reputation of service housing are in need of a positive transformation. When these types of services attain a negative reputation, the threshold for seeking service housing becomes steeper, even if it is necessary to address one’s personal needs. According to a rapid user survey conducted by students, this reputation could be improved by, for example, disrupting the negative image associated with growing old through positive and proactive marketing efforts related to ageing. The typical institutional image of service hous-

ing can make it a repulsive and even scary prospect for many people.

As a solution to the increasingly diverse range of experiences related to ageing, the students came up with ideas for housing service solutions that would enable a wide range of alternatives. In the future, service housing could be based on different service housing memberships that would allow people to choose between different options, such as a shared city block in Helsinki, a log cabin in Ivalo, a farmhouse in Kouvola, an apartment in Fuengirola, or even a villa in Tuscany. Future older populations will be defined by such features as multiculturalism, mobility, diversity, autonomy, and activity. According to the user survey, the elderly of the future will also focus on a sense of community and sustainable living. For example, future service housing solutions could come in the form of villages where people of different ages as well as different actors can network to ensure an age-friendly approach. The housing service solutions of 2040 will also be more equipped to utilise data more efficiently than today (LAB University of Applied Sciences 2022).

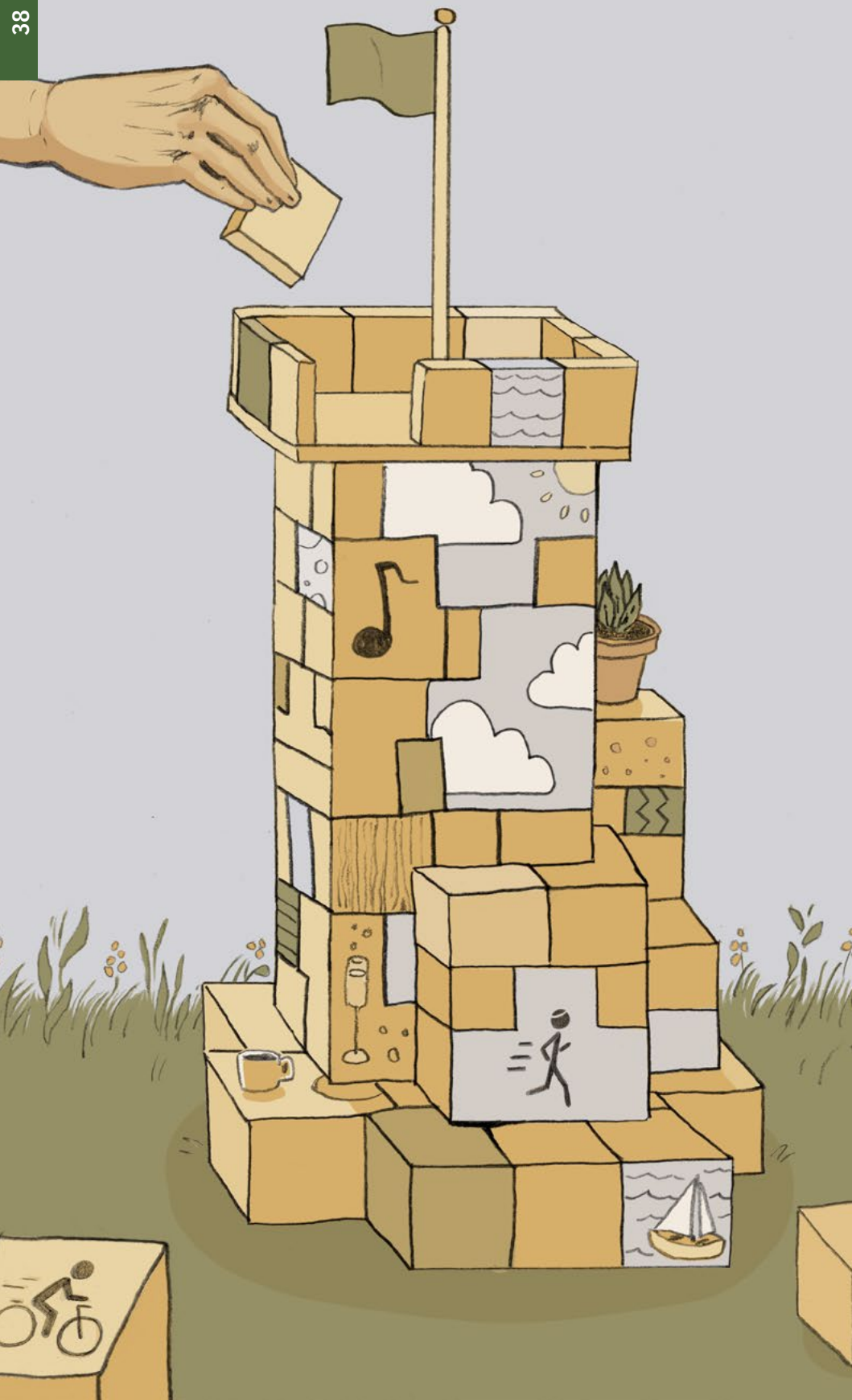
The students' peek into the future showed that the journey from the service housing of today to the dream housing scenarios of tomorrow still remains long. However, we will stay on the right track as long as we build the future together with our ageing population and remember the role that service design can play in this change.

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MILLA MÄKINEN

*Focusing on the elderly
in the development of services*

AGEING- FRIENDLY DESIGN

Service design is a framework based on design thinking that can be used to improve existing services or create entirely new service solutions. The practical approaches of service design are based on the principles of design, such as producing user-friendly and attractive solutions with the help of creativity, a solution-oriented mindset, and visualisations. The core task of service design is to develop better service experiences, i.e. improving the emotional responses that people have when they use a service.

User research is at the core of service design, as it allows designers to understand different service-related problems and needs together with actual users. The process also involves developing solutions and improvements together with those who use and produce a service. Above all, a service designer never presumes, but instead includes and consults relevant users. They also utilise various participatory qualitative research and design methods, such as observations, interviews, workshops, prototypes, and experiments.

What are age and ageing-friendly services?

As the Finnish population continues to age, many services are beginning to ponder what ageing-friendliness means from the perspective of a positive service

experience. In Finnish legislation, the term “ageing population” refers to those who are over the age of 65. However, ageing is always a very individual experience.

As your customer base ages, you may face completely new service-related needs and pressures to renew your existing selection of services. For example, the ageing-friendliness of services often centres around their accessibility and ease of use, and people will often look for services that are accessible both in a physical and non-physical sense. Physical service environments, such as buildings, facilities and routes, must be suitable for all users, while information, websites and applications must be easy to use and provide a service atmosphere that makes everyone feel valued. Your services must be accessible both digitally and physically to all types of people, regardless of their disabilities.

Age-friendliness has become a source of interest both in Finland and across the world. According to the Guide to Age Friendly Services produced by the Government of South Australia (2022), age-friendly services recognise the importance of elderly people as valued community members and understand the importance of recognising this fact. The design of age-friendly services means taking ageing-friendliness systematically into account in the management and organisation of services. Age-friendly services recognise the unique ways in which people experience ageing and the diversity of needs that ageing can bring, and they ensure that their components always remain genuinely accessible to elderly people. Age-friendly services also help to maintain and promote the idea of ageing as a valued experience. They involve elderly people in order to understand their service experiences and find and solve their service development needs, allowing users to actively provide suggestions instead of just passive feedback (Government of South Australia 2022).

In Finland, the discussion around services for elderly people often veers towards health services and service housing. However, the reflection on the development of age-friendly services should extend beyond these narrow confines. A study by Tiia Kekäläinen, Terhi-Anna Wilska and Katja Kokko found that elderly people represent a significant consumer group for various sectors, such as leisure services (2017, 14). The development of technology-related service solutions should be carried out together with elderly users. According to Minna Ylilahti and Veera Koskinen, who have studied the use of wellbeing technology, ageing people place increasing emphasis on, for example, being able to manage the technologies they use (2017, 29). With regard to housing, studies show

that an important part of ageing-friendliness is being able to display one's personality in their housing, i.e. allowing people to feel that the home is their own and that they themselves have created, assembled or made it in their own image (Kemppainen et al. 2017, 43).

Designing ageing-friendly services

Service design allows us to, for example, invite elderly people to explain how they feel about using and discovering services from the perspective of an ageing person or customer base. This allows designers to test different services with users and collect information on whether the service is appealing, accessible and user-friendly to its aging users. Designers can also focus on other issues, such as whether a service understands and reflects the experience of ageing in its interaction points, materials and digital environments. Are its ageing-related messages conveyed in a worrying manner, or do they make people feel like their age and experience are being valued? Designers can also assess how easy it is to find and use a service's forms and instructions, or how effortlessly users can interact with its chatbot. In the future, aging-friendliness will not apply just service housing and health care services: it represents an issue that should to be actively assessed in all kinds of services.

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SINI ROINE

*How can we make
service housing more attractive?*

NEW SERVICE CONCEPTS

Ageing and service housing can elicit fearful reactions as they often conjure images of loneliness and isolation, pricy services, being at the mercy of other people, and losing one's personality. (Vaarama 2022; Issakainen et al. 2022; Kotialho et al. 2022) As a response to this, the KEKO project created assignments for the students at the *Institute of Design and Fine Arts*, together with the Institute's lectures. The students studied the preconceptions related to service housing and designed new concepts as solutions.

Why do people fear change?

According to Kari E. Turunen, people face various transformative points in their lives where they lose their confidence, hope, and the forces that support their lives, which then leads to fear (Turunen 2004, 128). A person may have lived in the same home for a very long time before moving to a service home. This home, in turn, served as an extension of their own personality, as it was a space that they could freely modify to suit their needs. The change is also great because it forces the person to adapt to a new environment and new routines. In addition, the situation may serve to emphasise the deteriora-

tion the person has experienced in their physical condition. (Tähtinen-Aalto 2020.)

The fears associated with service housing emerged in the student work carried out for the KEKO project. This article focuses on the research conducted by students in Milla Mäkinen's Human-oriented Service Design course and Auli Haarnio's and Kimmo Liimatainen's Design Project 1, Space as a Service Experience course. The assignments and their authors are listed in the appendices at the end of the article.

In their research, the students focused on target group interviews. The interviews revealed two major, fear-related themes: losing one's personality and the preconceptions related to service housing. The interviewees did not always explain the origin of these fears and preconceptions: did they have family members in an

The themes selected from the students' research results:

- How people retain their personalities in service housing
- How foresight and familiarity can be applied to service housing
- New methods for taking personalities into account

assisted care facility, or were their fears shaped by news items on service housing, for example?

The students' observations were also reinforced by Jari Pirhonen's speech at the Good Age fair. According to Pirhonen, we must allow elderly people to indulge in unexpected, harmless ideas. "If grandpa finally decides to become a rock star and wants to wear red leather trousers, just buy him the trousers instead of wondering whether it's appropriate" (Pirhonen 2022).

The students' conceptual designs were guided by various themes. Personality and changing landscapes were reflected in the All Colours of Life and *Rajatonta Elämää* (Life Without Borders) concepts. In these concepts, the service housing provider would offer several locations in different countries. Residents could have a "home base"

where they live permanently, but they could also move to another location for a few months, for example.

Interestingly, two teams came up with the same concept, so perhaps there is a business opportunity here?

A person's personality is also linked to their home, which they can build and decorate to their liking. The All Colours of Life concept presented an interior design solution that emphasised a bold use of colour while encouraging residents to really personalise their homes. The concept proposed collaborating with a local kitchen solutions company, to create a pleasant environment for residents.

Safety through foresight and familiarity

Each concept also focused on activating residents and utilising their skills. For example, the Vanhustalo (Elderly House) concept proposed an approach where people living nearby could be invited to a service housing unit to learn more about it and become interested in providing their services. These could include recreational activities, such as music, art, sports, and language teaching. These types of activities would help activate the unit's residents and provide nurses with more time for care-related duties.

The *OmaPata* (MyPot) concept focused on a bonus system, where residents can accumulate bonuses by actively providing services, such as recreational activities. These bonuses could then be used to purchase services. For example, if a resident arranges a language course every week, they could use some of their accumulated bonuses to participate in the sports club, without having to pay any separate fees.

In the *Ikikylä* (Forever Village) concept, the service housing unit is located in a village that is also the home of the residents' caregivers and family members. The purpose of *Ikikylä* is to provide an environment where people can safely experience the entire spectrum of life, from their childhood to their passing, together with the people they know and love.

Most of the concepts incorporated technology into their foresight activities – for example, by using artificial intelligence to collect data on people and then using it to recommend specific housing options or other services. On the other hand, the *OmaPata* concept's foresight activities focused on more traditional advertising with an informational leaflet on ageing that is sent to everyone aged 55 and up. Recipients are also encouraged to respond to a survey, which is then repeated every 5 years to ensure that the information remains up to date. The survey is used to collect information on the ones wishes

and everyday routines so that they can be recreated in the daily life of their service housing unit.

From concepts to concrete solutions

The students' works focused on human-oriented design, which examines the wishes and fears of the target group's representatives. Based on these observations, the students implemented concepts that could be used to refine new approaches to the daily operations of service homes. The KEKO project hopes that these student concepts will be applied in service homes in Päijät-Häme and across in Finland.

Building new service homes in other countries or altering a housing unit's interiors to each person's tastes requires planning and resources. However, these ideas could be used to inspire the future service homes, and determine the types of collaborative opportunities that their implementation would need. Changes are best approached with small steps, for example by allowing nearby neighbours to provide recreational opportunities or by testing the bonus system for residents.

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ASSIGNMENTS AND AUTHORS

COURSE: Human-oriented Service Design

INSTRUCTOR: Milla Mäkinen

PROGRAMME: Master's Degree in Design Thinking and Management

ASSIGNMENT: Create a visualised concept of the service housing of the future (circa 2040) and its customer personas or profiles

ALL COLOURS OF LIFE:

Tuomas Kotialho, Anna Pirkola-Sipilä, Manu Rantanen, Elina Saunamäki, Iina Torpakko

IKIKYLÄ (FOREVER VILLAGE):

Niinamaria Arkonsuo, Meri Kirjavainen, Terhi Ollila, Noora Tuominen

OMAPATA (MYPATA):

Heta Hirvonen, Kaisa Nuutinen, Johanna Palm, Minna Porvari

VANHUSTALO (ELDERLY HOUSE):

Katri Issakainen, Jannina Nyholm, Pirita Paananen, Hanna Pekonen

COURSE: Design Project 1, Space as a Service Experience

INSTRUCTORS: Auli Haarnio, Kimmo Liimatainen

PROGRAMME: Bachelor's Degree in Design, Service Design

ASSIGNMENT: Map the spatial service experience on the basis of the floor plans and create conceptual descriptions of how different users can use the space.

RAJATONTA ELÄMÄÄ (LIFE WITHOUT BORDERS):

Vilja Heikkilä, Tytti Juhonen, Ilona Lyytinen, Eetu Markkanen, Iris Setianto



SARI ANTTONEN

*What do seniors want
from their home and
surroundings?*

A DREAM HOME FOR SENIORS

The Finnish population is ageing at an alarming pace, and it is predicted that, in ten years' time, more than a quarter of Finns will be over the age of 65. In particular, the share of the oldest population is growing rapidly; the number of people over the age of 85 will double over the next 20 years (Ministry of the Environment 2023). Currently, the aim is to encourage people to live at home, and accessible housing is usually offered as a solution.

However, there are major differences between the wishes, life situations, and functional capacities of senior citizens. An active senior life requires not only accessible housing but also other factors, such as communality and the ability to move safely in nearby environments. In addition to making existing dwellings more accessible, more housing models and residential environments that take seniors into account will be needed in the future.

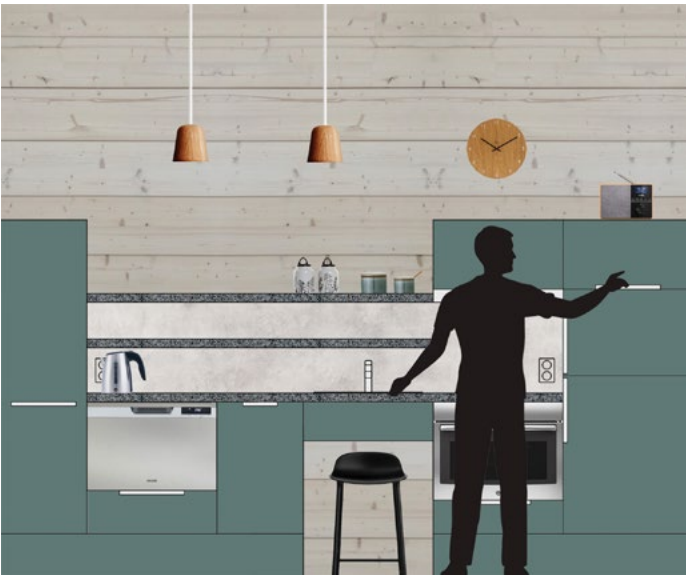
One such project is *Ruskorinne*, which offers a solution that encourages seniors to live actively and communally in an area that includes a farm, natural landscapes, and a lake.

Surveying the preferences of seniors

After they graduate, our current interior architecture and furniture design students are likely to work as designers in housing projects that involve senior citizens. The KEKO – Sustainable Service Housing Ecosystem project allowed them to engage with the topic during their studies.

In the spring of 2022, our third-year interior architecture and furniture design students were tasked with designing interior design solutions for the apartments, shared facilities, and garden areas of the Ruskorinne housing facility. First, they increased their user insight by looking into the architect's plans, related literature, and existing facilities for seniors. The students also participated in two workshops: one with service design students and another that included the KEKO project's specialists, elderly care experts, and senior citizens. Each student also interviewed one senior, which was usually their grandparent.

The interview examined the senior's current housing as well as their future dream housing scenario. The collected data was then analysed together. The interviews and workshops helped the students envision seniors as independent and active actors. This careful planning process was necessary, as it was the first time that the students were designing something for seniors in particular.



A small accessible kitchen designed by Catharina Laine (2022)

Applying user data to design

The design tasks were handled by small groups of students, one of which focused on improving the functionality and design of the 26m² apartments in the Ruskorinne service building. This was not an easy task, as the seniors had specified that the apartment should include its own kitchen and separate bedroom. The students duly modified the small apartment to better meet the residents' wishes.

The kitchen was enlarged, the top cabinets of the accessible kitchen were installed at a lower height and replaced with open shelves, and more foot space was added to allow residents to use the kitchen while sitting down. A light-weight divider was added between the bed and the kitchen.

The seniors had hoped that they could modify their homes to their tastes, and the students designed interior decoration and colour scheme options for residents who wanted to personalise their apartments. The cosy atmosphere of the small apartment, which was created by the log building's wooden surfaces, could also be further accentuated with the resident's own furniture, paintings and textiles. The students designed and integrated their accessible bathroom solutions in such a way that they would still look cosy and stylish. The apartment also featured a terrace and yard area, which required their own bespoke solutions to meet different needs. These included covering the terrace, providing movable planting boxes for green-thumbed wheelchair users, and green dividers for residents who want a little more privacy.

The workshops and interviews also provided guidelines for the students who were responsible for shared facilities. Above all, the hope was that their interiors would not be too sterile. When designing the lobby of the main building, the students sought inspiration from hotel lobbies while remembering to omit any furniture that would be difficult for seniors to get in and out of. The main hall's furnishings were designed with different social situations in mind, to allow the space to adapt to individual activities, small groups, and larger communal events. For the residential wing, the students designed an atmospheric breakfast kitchen where residents could enjoy their morning coffee together. The space could also be used for communal cooking and baking activities.

The importance of Ruskorinne's garden areas, which are located in a picturesque rural setting, was strongly highlighted in the interviews with seniors. The interviewees commended their accessibility and maintainability, but they also hoped for more opportunities for voluntary activities. As a result, the plan created by the garden group allows for many purposes, such as

cultivation, social activities, or just spending time by yourself or with a friend. It features a well-lit trail with comfortable seating areas and scenic spots for those who want to engage in outdoor activities. Also in addition to garden furniture and planting areas, the plan includes an outdoor stage for hosting dance orchestras and harvest parties. The group also included an outdoor sauna, as many interviewees expressed a keen interest in traditional wood-burning saunas and chopping their own firewood.

Accessibility and aesthetics were taken into account in the plans for the outdoor sauna, and the group's material choices and furnishings focused on making the space as safe and atmospheric as possible. The sauna is accessible by wheelchair, and residents can easily gather around the fireplace in the middle of the sauna's cool-down room, where the surrounding outdoor landscapes provide a sense of everyday luxury.

The students felt motivated by their work with senior living. According to one student, "As a whole, I found the course interesting and important from the perspective of future design. While the course expanded my understanding of this user group in particular, it also increased my understanding of the basic needs of all people when it comes to built environments." Feedback is at the core of human-oriented design. A person's home must allow them to live their life to the fullest, in the way they want to live it, regardless of their age or functional capacity.

Working Life Simulation course, spring 2022,
supervising teacher: Sari Anttonen

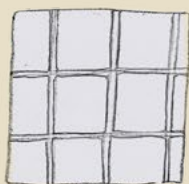
Third-year students of Interior Architecture and Furniture Design: Elisa Huttunen, Oona Kallio, Aada Katajala, Nana Keränen, Sonja Koivuojja, Catharina Laine, Rosa Pirttilahti, Suvi Saarnisto, Petra Siponen, Hanna Väyrynen

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Terrace and courtyard scenarios for wheelchair user, privacy-lover and communal occupants. Designed by Suvi Saarnisto (2022)



SARI ANTTONEN AND SINI ROINE

Researching the needs of users

A MODEL APARTMENT AS A TESTING LABORATORY

The starting point of the KEKO project has been to design different human-oriented solutions for service housing. Human-oriented design sees people as actors whose individual needs, challenges and opportunities must be taken into account, including all relevant communal and cultural perspectives (Design Forum Finland 2023). Since the project emphasised the needs of the elderly in service housing, one of its development targets focused on elderly-owned housing.

Different opportunities for studying user experiences in service housing

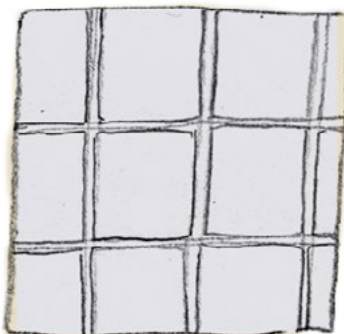
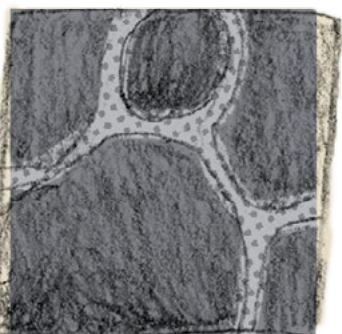
The beginning of the project included plans for the construction of a virtual environment at LAB University of Applied Sciences' Lahti campus. The space, which was dubbed CAVE (Cave Automatic Virtual Environment), would have been used to project a virtual environment on its walls, and the experience could have been further enlivened with the use of virtual glasses (Kirvan 2022). The CAVE's purpose was to assist students in their design and development work, as testing things in virtual reality can help save resources when designing larger building units (ST Engineering Antycip 2022).

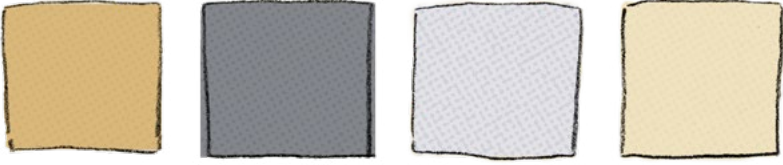
However, the use of a virtual environment was questioned from the perspective of human-oriented design, as elderly people may find it difficult to wear virtual glasses, and moving around in virtual reality can cause motion sickness and dizziness in some people. In addition, many aspects that are essential for accessible environments, such as ergonomics or how a material feels, cannot be simulated virtually.

In the end, the CAVE was replaced with a physical model apartment. At the beginning of the project, the plans for the Ruskorinne project focused on small apartments that were around 26m² in size, which would have been located in the main service building. As the project progressed, it emerged that there was no demand for small apartments. Instead, the facility's two-room apartments that were also available for couples and that featured a separate bedroom were the most sought-after option in Ruskorinne's preliminary survey (Peltonen 2022). After this change in plans, the model apartment was built in the image of Ruskorinne's second-phase terraced house apartments, which featured two rooms and were approximately 46m² in size.

Modelling opportunities

The final model apartment was designed with adaptability in mind. Its walls are modular so that its size can be enlarged or reduced according to future needs. The model's interior design solutions were designed by LAB's interior architecture and furniture design students as well as recently graduated alumni. The apartment's floor plan focused on accessibility and comfort, and the same applied to its different interior architecture concepts. The aim of the students' kitchen concepts was to design a space that could be adapted to each user's functional capacity and needs. The same adaptability will also be implemented in the storage furniture in the hallway and bedroom. The model's surface materials, windows and doors are all factory-made, and its finishings have been done to a standard where its atmosphere is as close to a real apartment as possible.





Companies and other parties seeking solutions to their service housing challenges can reserve the model apartment for testing, piloting, and demonstrational purposes. For example, a company can use the space to subject an aid or piece of furniture to focus group testing in a home-like environment. The model could also be a good solution for marketing a product, as it allows users to see the product in an environment that resembles their own home.

The model apartment includes recording devices that can be used to examine and analyse human behaviour and activities. For example, during user testing, a tester can be asked to go into the apartment with an assistive device, brew a cup of coffee, and then move to the bedroom and rest on the bed. This way, the people running the test can record the tester's behaviour in its most natural form. LAB also provides companies with an analysis service where LAB analyses the recordings and reviews the results together with the company.

In addition to products, the model apartment can be used to test various technological solutions related to service housing, such as motion sensors and safety products. The space includes a TV and computer for testing and demonstrating digital solutions. The model apartment has been used in various presentations, such as showcasing the Senior TV concepts designed by different LAB students in their study modules.

The model apartment has also proven ideal for educational use. Many employees in the social welfare and health care sector are required to visit their clients' homes as part of their work. A model apartment can be used to simulate the different situations that they may encounter when they visit an unfamiliar location.

The material library supports design work

A material library was prepared during the project to showcase the various materials and equipment related to housing and the built environment in general. The material library collects information and samples from different materials that can be utilised in the planning



of sustainable and accessible service housing. Physical material samples and models help students, designers, and users compare and select products that best meet their needs – for example, one cannot feel the roughness of a tile or assess the ergonomic properties of a support handle from a brochure photo. The material library makes it easier for both students and companies to evaluate a wide range of materials and equipment in one place.

The model apartment and material library serve LAB's students in a multidisciplinary manner, as they offer both a home-like test environment and the opportunity to immerse oneself in an extensive collection of materials. Our hope is that the model apartment and material library will serve the companies in the Päijät-Häme region as well as any other parties who are interested in service housing on a national scale. The model apartment was also designed in a way that it would inspire students and various partners to collaborate further in the development of future housing solutions.



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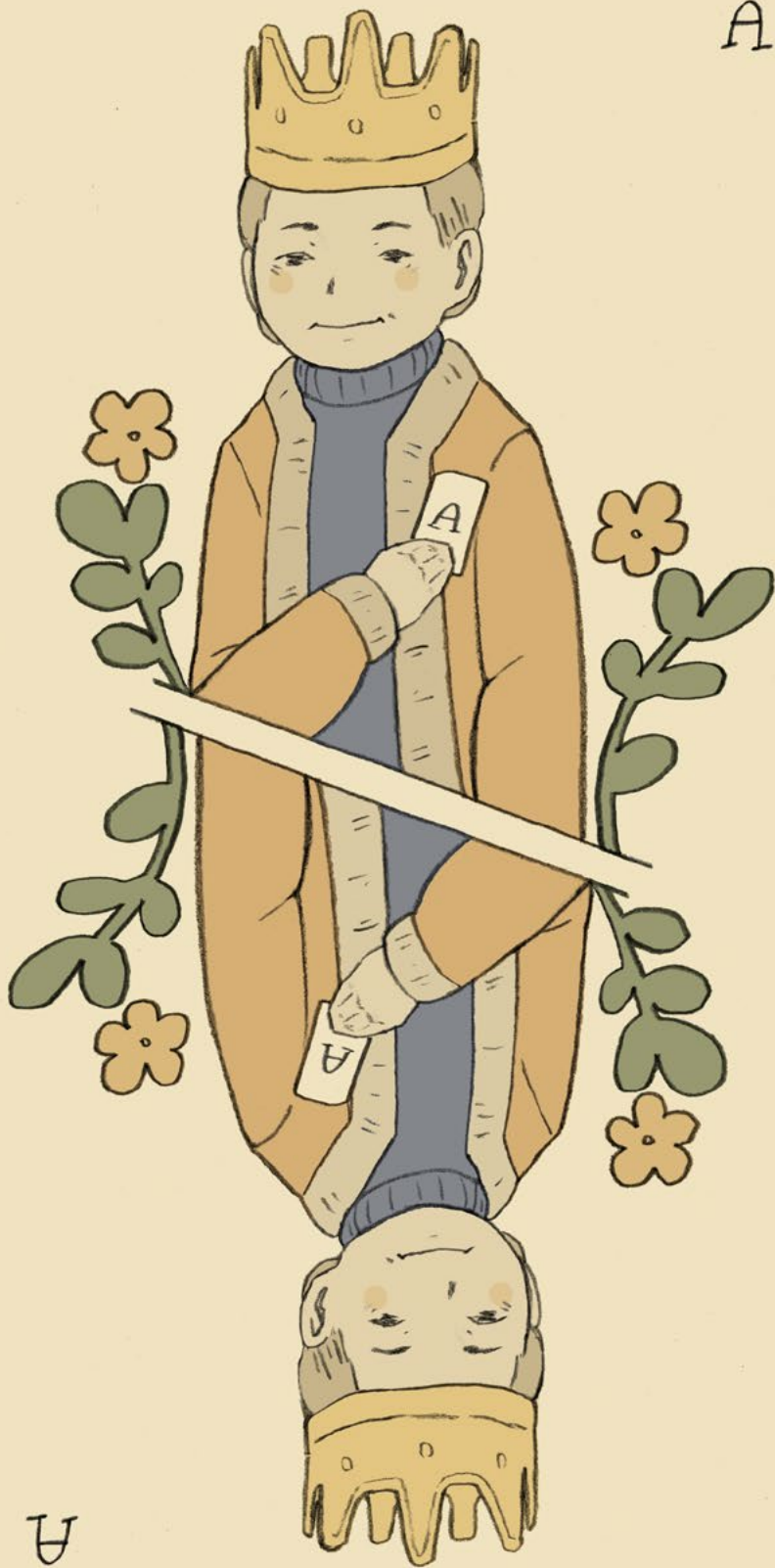
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HARRI HEIKKILÄ

People need to change their attitudes when it comes to developing digital services for older people

FROM USERS TO CUSTOMERS

I went to the gym yesterday. Or I tried to – I couldn't open the gym's door with my card. They don't have a service desk anymore, and I haven't been able to find their support number since last year. Maybe they got too many calls? Anyway, I opened their mobile app to find out what was happening. This proved to be a challenge, since I had left my glasses in my car. It was tough to distinguish between the app's thinly drawn and quirky icons, but, eventually, I found the payment transaction page. However, I couldn't make heads or tails of it, since all the information was presented in this small table with its minuscule text, and I couldn't even zoom in or out of it. Of course, once I checked my email, I discovered my card had expired.

This reminded me of another, similar episode. I have a hereditary degenerative condition in my middle ear, and I hear a ringing noise in my ears every now and then. One autumn week, my ears wouldn't stop ringing, so I decided to call the Central Hospital's hearing clinic since I've used their services before. An answering machine greeted me. First, I was subjected to some type of fusion jazz, then someone said something very quickly, and soon the line was ringing in a way that was difficult to distinguish from

what I already heard in my ears. And this was a service for people with hearing disorders! Yes, I left some feedback.

Feedback is the best

Why these types of situations aren't tested more thoroughly with their target audience, i.e. actual customers is beyond me. It would be easy to make a test call by piping different background noises into a pair of headphones and then checking how understandable someone's speech sounds before selecting the most appropriate (or any) background music. It would also be easy to test your app by wearing the wrong pair of glasses. In fact, my gym experience inspired me to do just that: in my next usability course at the Institute of Design and Fine Arts, I will give each of my students a pair of those cheap reading glasses that you can get at the supermarket and have them design a mobile user interface that they can still use while wearing them.

Another vital issue is the need for more guidance-oriented feedback. Bill Gates (2013) emphasises that people can't improve without feedback, which is why it should be seen as a precious resource. However, when it comes to elderly services, I have noticed in my research that older people are generally less likely to provide feedback and more likely to blame themselves and their lack of competence with digital services (Heikkilä 2017, 106). And when you believe that, why would you report any issues? While seniors are likely to say things like "Oh, I just don't understand these things" or "I'm afraid of doing something wrong", young people are on the opposite camp. They don't assume that all digital things must also be perfect, as they know from experience that most apps are subpar. They aren't afraid of adopting another approach or switching to a better app.

The attitude that elderly people have may also be influenced by the way people generally treat older people when they're confused by technology. When an elderly person has an issue, it isn't typically solved by finding and testing a service's usability, but by subjecting them to more "IT lessons for seniors". We need to change our attitudes, as the ageing population of the 2020s is not the same as those who reached their golden years at the turn of the millennium. A person who is 65 today was 35 when surfing the internet became commonplace in Finland.

This attitude is in line with the new concept of ageing where elderly are no longer seen as an issue that needs to be managed but as active actors in their own right (Wareham 2017). This attitude is also at the heart of the KEKO project. We need to promote independent, dignified, and

ecological housing, and new technologies can help us achieve this goal – if they are designed correctly. This is particularly important in a situation where analogue options, the traditional methods of managing things, are no longer available. In its digital leap, Finland has boldly chosen this path. I would argue that compared to Central Europeans, Finns are less likely to have access to more than just the digital option.

However, what has been forgotten is that an all-encompassing digital transition also requires a decidedly-better-than-average level of usability and user experience.

Do I have “customers” or “users”?

We need to build our services in a way that makes the elderly feel like they can succeed and supports them as independent actors. The first step in achieving this is good accessibility and usability. A mobile app must feature clearly legible icons, a discernible textual hierarchy, and typographical choices that deliberately guide users (Heikkilä 2023). This way, even an older user’s self-confidence will begin to grow. The old joke among usability researchers is that only two professions in Finland, the anti-drug squad and software developers, interact with users. Perhaps this is also indicative of a general attitude where users are treated more like objects than as valued customers – someone who needs to be told what to choose instead of letting them make their own enlightened choices.

We should stop talking about users entirely, at least in this context. This could help us act in a more user-friendly manner, that is, *customer*-friendly manner.

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PALVELUT

URHEILU

MEN

TÄNÄÄN

HARRI HEIKKILÄ AND VILLE TERVO

Designing digital services for older people:

CASE SENIOR-TV

The starting point of the KEKO project's digital work package was that technology for elderly people should be based on the principles of a natural user interface (NUI), the purpose of which is to make the technology between the user and the service seem almost invisible and make the user feel seamlessly and directly connected to the service. The user's previous competence is utilised in the service's design, and its technological aspects are offered in a package that is closely adapted to the service's actual environment. (Mortensen 2021).

This idea was implemented in the KEKO project through the opportunities afforded by recent developments in smart TV technology. The assumption was that elderly people would be more open to using applications on their TV rather than, for example, a mobile device. TVs are more connected to their daily lives than tablets, which belong to the world of computers – although most modern smart TV apps are very similar functionally to their tablet counterparts.

Assignment to students: activation and sociability

The KEKO project enlisted five student groups from the Institute of Design and Fine Arts' supplementary UX/UI programme to participate in the design of a pilot that had now been dubbed SeniorTV. Their task was to design an

Android TV app concept that could be used to inform, activate, and promote communality in service housing units. The groups carried out their own background research and interviews to find out what types of content would work best for both staff and end-users. Should they focus on news items, photos, cafeteria menus, or various functionalities? And what should people use to navigate the app?

The assignment brief also emphasised that the app should promote a sense of security and help seniors become more self-directed and independent. Above all, the participants were instructed to avoid situations where the app would become another new burden for staff. In other words, the interactive TV app had to be so simple that its users would never require any help or instructions.

Quite a challenge!

How did the course work?

The conceptualisation, design, and prototyping of the smart TV app was carried out in small, multidisciplinary groups of 3–4 people. The conceptualisation and UX design process utilised various approaches, such as the co-design methods developed by Futurice and Google. The process followed the design thinking model: the work progressed from researching and honing in on the problem to brainstorming and prototyping various

An example of the course's first smart TV concepts. (Pressmaster 2023. Modified by Sabine Nieminen)



solutions. The groups implemented their prototypes in Figma, a design platform, so that they could test their prototypes using both a computer and a remote control. This allowed them to test their prototypes in real user environments and on actual devices as effortlessly as possible.

The groups focused on user research to assess the competence and special needs of their end-users, and their designs were also guided by the service housing environment and the devices available there. The groups utilised the KEKO project's model apartment concepts to familiarise themselves with their operating environment. In addition, the groups examined the possibilities and limitations of smart TV technology, for example with the help of a visiting specialist who attended their lectures.

The resulting visualisations, interaction plans, and prototypes were guided by the understanding that the groups had deduced from their end-users, operating environments, and devices. Each prototype paid particular attention to its accessibility and ease of use: their user interface texts were designed to be easy to understand and presented using large, strongly contrasted fonts; their illustrations were clear, comprehensible, and suitable for their environment; and their interactions were designed with simplicity and typical TV remote conventions in mind.

The version selected for testing. (Jcomp 2021. Modified by Ville Tervo)



The TV apps were simulated at LAB's model apartment by using a computer monitor that looked like a TV and a wireless mouse pointer that resembled a remote control. In reality, the apps were Figma models running on a small Mac Mini computer.

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SINI ROINE AND MATLEENA TAKALUOMA

Top tips for facilitating your workshop

PERSONAS AND STORIES

The aim of the workshop day facilitated by the KEKO project was to produce versatile perspectives on communality in service housing. The framework for the facilitation process consisted of research questions, stories, and persona cards.

The principles of facilitation

Facilitation means directing a group in a goal-oriented manner towards an active and balanced approach and utilising the group's knowledge and wisdom to achieve a common goal. In facilitation, the active actor is the group itself, and it is provided guidance to analyse a matter,

The research questions that guided the workshop:

1. How can a communal operating culture be built in service housing?
2. How can people maintain a sense of community?
3. What types of actions will ensure that a community's sense of community can endure, even in times of change?

produce ideas, and find solutions for achieving a specific goal (Sipponen-Damonte 2020).

Facilitation always requires careful planning. Consider what the desired outcome of the event should be and what kind of information the participants are expected to receive (ibid.).

The facilitator is responsible for ensuring that the process is handled using suitable group work methods (ibid.). One method that is used especially in design is user personas. Personas are used to identify the target audiences of a service, and they are formulated with the help of research data obtained from various sources, such as interviews. The results are analysed for similarities that can be used to construct a persona, which represents a target group. A persona is not a direct copy of one person, but a fictional version that brings together the wishes, motivations and frustrations of several people (Friis Dam & Yu Siang 2020).

Efficient group work requires the right type of circumstances. Your space must be sufficiently spacious, airy, and modifiable for the work. How you position your chairs, for example in a circle, can influence the general atmosphere and promote active participation. In addition, colourful materials and other visual elements can help stimulate your participants' creativity (Sipponen-Damonte 2020).

When planning an event, it is a good idea to consider what will happen after it has concluded. Explain to your participants what your next steps will be and how the results of the event will be utilised (ibid.).

Facilitation in the Shared Community in Service Housing workshop

The definition of communality is not always unambiguous (Birck 2020), so the participants were first oriented to the concept of communality. The orientation process was handled by Community Educator Riitta Birck, who also introduced the participants to the workshop's research questions.

The organisers wanted to ensure a safe and inclusive atmosphere, so the groups were kept relatively small with only 5–6 participants per group. Each group included social welfare and health care professionals, service providers, facility and building planners, and seniors.

The methods chosen for facilitation process were storytelling and persona cards. The workshop's personas were created on the basis of the personas drafted by the students participating in the KEKO project (Roine 2022).

The personas made it easier for participants to begin their discussions, as they allowed them to talk about the types of people who live in service homes. In addition, the personas allowed the participants to distance themselves from the conversation; instead of feeling pressured to talk about any direct experiences, the participants could reflect on them through the personas (ibid.).

The event was held in an open room with a large wall that featured visual representations of a terraced house-like service housing facility, trees, and a tractor that indicated a rural location. This set the stage for a story where the persona cards would fit well. A facilitator guided each group's discussion with the help of a story and research questions, and they also wrote down keywords from their discussion on separate notes. These notes were then placed on the wall with the illustrations.

After the discussion and brainstorming session, the groups returned to a shared space where the facilitators summed up each group's work and results. At the end of the event, the participants were informed of how and where the results of the workshop will be documented.

Lessons learned

The participants gave positive feedback on the event's arrangements and discussions, which opened their eyes to new perspectives on communality. However, some wished for a more thorough discussion of the workshop's results. It is important to ensure that a workshop's participants receive something from the workshop, so that they feel that they have been a valuable part of the research work.

The results of the workshop displayed a connection to specialist Riitta Birck's versatile introduction to communality (Takaluoma 2023). The workshop's introduction could have presented communality as just a term, which might have encouraged some to provide different perspectives. In addition, the workshop's storytelling section could have used different scenarios to encourage participants to think more about the future and be less fixated with the present.

After the workshop, the organisers gained a better understanding of how different persona cards can be approached and utilised. One group used the personas to orient themselves to a service housing environment and to understand the types of people that move there. Another focused on the diversity of personas and how this can affect communality. The workshop was planned well, but since the groups implemented the workshop's

methods in very different ways, the organisers should have practised their use together.

When planning your facilitation, it is important to consider the purpose of your workshop, its goal, the methods used, the space available, and how you can create a safe atmosphere. Keep in mind, however, that every workshop is different, since your methods and participants will always change. Above all, workshops are an educational experience for both participants and facilitators.

Remember these when planning your facilitation:

- Define a clear goal and expected outcome
- Reserve enough time for your workshop
- Practice and simulate the workshop in advance with your facilitators
- Create a safe atmosphere
- Briefly orient your participants to your methods and topic
- Open the results of the workshop to the participants immediately during the day

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KATARIINA MÄENPÄÄ

*sUser develops user-driven
design education in
international collaboration*

THE EFFECT OF AGING EUROPE

Europe is aging. This creates new needs for construction, housing, and service sectors, while giving birth to the market for public and private service housing with significant amount of new housing investment and having a significant impact on the European economy. To provide a build environment that meets demand of the residents in the future, it is critical to introduce user-driven design and system thinking both in theoretical and practical levels, since a significant number of decisions are made the design phase that are of great importance for the ecological sustainability as well as the social and economic sustainability.

Climate change and sustainability challenge

Both climate change and sustainability claim apply to all spheres of life, both on personal and collective levels. Confronting issues like this requires total renewal in many sectors. The construction sector, (2nd largest contributor to CO₂ emissions) and the residential sector, producing app. 10 % of the EU CO₂ emissions (UNEP2022), are two very influential ones to consider. There is a strong need to develop CO₂ neutral buildings

and ways of living to be able to meet the expected climate goals.

Currently, the practices and processes in construction sector are old fashioned and the residents' need to settle predetermined norms that are developed for an average person. Planning, building design and procurement of materials is conducted mainly on desks of officials and engineers without considering the needs of the residents. Sustainability is designed on those same desks as well as cost-savings and comfortable living conditions.

Where the solution lies

There are several sectors like construction sector that need to be developed to meet the Green Deal objectives (EU 2019a), Sustainable Development Goals (UN, 2015), and Bauhaus initiatives (EU 2019b). Thus, the renewal skills and innovativeness form a competence that needs to be cherished. Although most approaches still focus on the technology solutions, studies suggest that making the society more sustainable and combating climate change “educating students seems to be more promising than changing industrial habits” (Mukhtar et al. 2022). For many products the usage phase has the most impact of the life cycle phases. By employing user-driven design, which actively involves users at every stage of the design process, the development of more sustainable, better products can be obtained.

Education is intrinsically intertwined with sustainability at all levels through competences embedded across the curriculum. It recognizes how all sustainability aspects are interrelated and how they are interlinked and embedded within disciplines and subjects. Sustainability education is then viewed in the same light as transformative learning as its aim is to change the person and the social institution through a holistic approach. (Bianchi et al. 2022) It is essential that HEIs produce relevant education also from the construction and housing sector's point of view. As the graduates enter into the work life, they have fresh knowledge and skills to change the dominating practices to more sustainable and user-driven. Residential circumstances define our everyday life and effect on our wellbeing.

sUser - Introducing user-driven design and agile development skills

Inspired by KEKO, Erasmus+ funded 3-year-project sUser was launched on December 31st, 2022, to tackle the spiral ball of educational future requirements when it comes to creative and innovative competences of the graduates. Four higher education institutions (HEIs), i.e., universities from Finland, the Netherlands, Austria, and Serbia decided to grasp the nettle, scan their own strengths to produce up-to-date teaching and courses on the theme, combine the scattered knowledge and establish an assessed framework to promote a transferrable, consistent, and multidisciplinary user-driven design education to provide necessary skills and competences.

The aim of the project is to develop and validate a methodology for acquiring user-driven sustainable design, eco-design and system thinking as well as agile development skills and competences, which are essential in addressing society's complex challenges. Comprehensively reformed way of thinking is essential and that can be achieved by only educating students to flexible, interdisciplinary (t-shaped) professionals with the ability to change existing practices in the working life and implement their knowledge and skills in their everyday life as well.

Few last years with remote teaching have shown that content and methods for classroom teaching do not suit straight to the digital teaching. Also, different skills need to be taught in contact learning environment, while other things suit for efficient digital lectures or self-learning platforms. This is where KEKO project and its DEMO environment is utilized to assess the co-creative and collaborative methods with the users, while MOOC content is for digital environment, which is easily available also for practitioners and self-learners, is created to meet the need of tailored content and methods for different teaching situations. Also, the features of sharing digitally the content from DEMO room needs to be assessed.

To sum up the tangible results of sUser will include:

- 1.** The collaboratively developed, integral methodology in developing user-driven, sustainable (eco-) design and agile development, based on shared experiences and state-of the art knowledge.
- 2.** Shared knowledge and teaching materials in bio-circular building materials and awareness creation on the climate change.
- 3.** Developing of multidisciplinary education in collaboration with practitioners using agile and scrum methods.
- 4.** Best practice in virtually enabled facility sharing and development of collaborative teaching between the partners.

The journey has just started, let's see what sUser can accomplish.



sUser partners visited the LAB University of Applied Sciences and the KEKO DEMO environment in Feb. 2023. (Picture: Sini Roine)

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THE END IS JUST THE BEGINNING

The KEKO project has generated discussion on the state of service housing, its future, and communality as a concept and as a form concrete actions. However, much remains to be done to make service housing an area where wellbeing is taken into account from the perspective of both residents and staff. Major strides can be made when we work together. The ecosystem in the Päijät-Häme region is forming, but we still need experts for its development, to ensure that everyone's voice is heard.

As was highlighted in many of the articles in this publication, Finland is ageing rapidly, and the share of its oldest population is growing particularly quickly. For this reason, we will need even more housing, living environments, and products and services that can ease the lives of older generations in the future. We should all hope to lead healthy and functional lives for as long as possible, so that we can live in our own homes and freely engage in our passions.

While Finland's national objectives include arranging services at people's homes, we should keep in mind that service housing can be (and is) an equally joyful, warm, and active option that can also takes everyone's personalities into account. Service housing should not feel like an intimidating and forced alternative; instead, it should be a home where people live and entertain and that

provides easy and immediate access to the necessary and desired services.

The project has resulted in a wide selection of open-access materials on different service housing solutions and the future of service housing. We have compiled these materials in a separate project portfolio.

The portfolio's materials are available to businesses and the ecosystem's actors via this link:

<https://kekohanke.myportfolio.com>

You are permitted to share and copy the materials, but remember to attribute them to the authors and to LAB University of Applied Sciences, KEKO project.

As a project, we are excited that our work has created new opportunities for international projects and collaborative opportunities.

LAHTI, FINLAND, APRIL 2023

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