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The design thinking method as an example of social innovation in action based on the case study of ProPoLab

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Abstract

The aim of the paper is to explain and to understand the processes of public services delivery from the perspective of social innovation. Concepts of co-creation and social innovation were elaborated on the basis of one of ProPoLab's milestones: Design Thinking Workshops. Hence the research object are the residents (mostly seniors) of the district of Popowice, while the quality of life of seniors is its subject. The main research goals were firstly to identify needs of residents in relations to public services, and secondly to design a socially innovative solution that will increase the quality of life of seniors. To achieve these goals, the following research tasks have been set: (a) identifying the needs of seniors, (b) identifying which of those needs are being met locally and which are not, (c) to identify what are the relations between neighbors and the attitude towards cooperation, (d) identifying how the needs of seniors could be met. The research mainly covers the period of 2018–2019. Following research methods have been used: analysis of scientific literature and normative documents, design thinking methodology, comparative analysis and statistical analysis. Utilizing design thinking methodology helped to reveal that the problem of communication between residents can be solved by creating a small, accessibly located community/activity center in their housing estate. This place should meet the needs of activity and self-fulfillment, exchange of information and intergenerational exchange. Time availability is very important, and the space intended for seniors should function in an hourly timeframe similar to daycare centers. Residents should be included in drafting a program to better identify and respond to their needs. Seniors would likely be happy to provide volunteer work in such a place. The facility should be located in the middle of the housing estate so that all residents have easy access to it, optimally in pleasant natural surroundings (i.e. near vegatation), as well as in close proximity to playgrounds for children.

Introduction

The paper presents findings from the Design Thinking Workshops that took place in November 2018–March 2019. The workshops in Wrocław, Poland were organized as part of the inauguration of the Popowice Laboratory [Laboratorium Popowice]. These events were some of the first of a planned series of meetings and workshops with the inhabitants of the district of Popowice as part of the Popowice Laboratory, or ProPoLab. Figure 1 presents a detailed roadmap of ProPolab, as well as the list of project milestons (to the right).

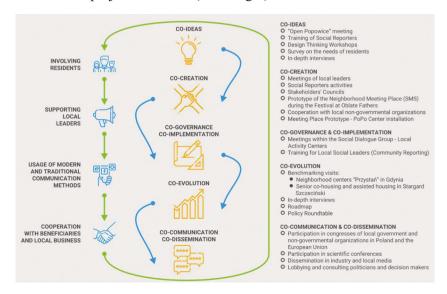


Figure 1. The roadmap of ProPoLab

Source: Wiktorska-Święcka, Dybał, Janus, Miśniakiewicz and Timler, 2020, 186.

ProPolab is a part of pilot program called Co-housing of Seniors. The pilot's aim is to implement the concept of senior co-housing using the tools developed in the co-creation model. The experiment is taking place in Popowice, where we (the project implementers) want to develop a space to implement joint plans and meet the diagnosed needs with an active involvement of the local stakeholders (ProPoLab 2018a, 6).

The final shape and form of the laboratory will be determined by the stake-holders involved in the project (the residents, the municipality, the housing co-operative, social and church organizations, developers, among others). As the project implementers, we encourage the main stakeholders to develop their own definitions, tools and model of this novel, joint public services facility, which will be a huge step towards changing public awareness in Poland, especially regarding the perceptions of public services and social innovations. As presented in Figure 1,

this joint public services creation consists of: co-ideas, co-creation, co-governance and co-implementation, co-evolution, co-communication and co-dissemination.

Given the above we may say that project is therefore a combination of theory and practice. The University of Wrocław provides theoretical tools and diagnoses, while the Active Senior Foundation [Fundacja Aktywny Senior], a local nongovernment organization, is responsible implementing them in the local community. The goal of the project is to help seniors to identify and meet their needs.

Co-housing of Seniors, along with other eight individual (but interlinked) pilots make up the EU CoSIE project. CoSIE is an acronym for Co-creation of Service Innovation in Europe. CoSIE is an consortium of 24 partners from 10 countries. According to the CoSIE, public service innovations can be achieved by creating collaborative partnerships between service providers and service beneficiaries. During the implementation of CoSIE (2017–2021), the partners involved will test and develop the diverse methods of co-creation in the field of public services (Sakellariou 2018, 8).

Theoretical framework of the research

The main stakeholders of ProPoLab are seniors from Popowice. However, although the project is implement locally, it also has wider implications related to the aging population in general. The main causes of population aging can be narrowed down to increasing longevity and low fertility rates. According to the data, the world's share of persons aged 65 years and over will increase from 8% in 2015 to almost 18% by 2050. (OECD, 2015, 8). This issue is viable to pose considerable economic, societal and political challenges. They are seen as serious and imminent enough that the European Commission has announced 2012 as the European Year for Active Ageing and Solidarity between Generations. Various studies on the subject have already been published, outlining it from various points of view, both local and general.

Economists are — naturally — most interested in economic changes or in creating a functional pension system. See Stiglitz (1986); Barr (1992); International Labour Organization (1993); World Bank (1994); Szumlicz (1994); Golinowska (1995); Żukowski (1997); OECD (1998); Góra, (2003); Blake (2006); Jakubowski (2013) and Chłoń-Domińczak (2016).

Financiers have examined fiscal costs linked to pensions, healthcare and long-term care; the trade-off between adequacy and sustainability, as well as investment efficiency and the rate of return of pension funds: Queisser (1999); Davis (2001); Ambachtsheerm and Ezra (2001); Yermo (2002); Stańko (2003); Willmore (2004); Dybał (2008); Chybalski (2012); Bielawska (2015); Szczepański (2016); Makarski, Hagemajer and Tyrowicz (2017); Rutecka-Góra (2017); European Commission (2018); Marcinkiewicz (2018).

Sociologists on the other hand debate on, among other issues, the quality of life of seniors: see Nussbaum and Sen (1993); Golini (1997); Długosz and Kurek (2006); Gałuszka (2006); Daszkowska (2007); Kurek, Kwiatek-Sołtys and Długosz (2011); Miłkowska (2012); Mollon and Gil (2014); Błędowski (2014) and Janiszewska (2015).

In this paper the author is especially devoted to co-housing, co-creation and design thinking theories. Co-housing is an example of co-creation, which might be defined as a process in which people who use services work together with professionals to design, create and deliver services (SCIE, 2015). Therefore, co-housing means co-creation of a social housing policy for elderly people, which is an issue at the heart of the Popowice Laboratory. Here one can recall the works of Osborne (2006); Kim (2006); Durrett (2009); Zaniewska (2011); Zralek (2012); Alves (2013); Voorberg, Bekkers and Tummers (2014); Killock (2014); Sundberg (2014); Labus (2015); Osborne (2018); Brandsen, Steen and Verschuere (2018); Wiktorska-Święcka (2018), Dybał (2021), as wells as reports including the three HAPPI Reports by the Housing and Communities Agency (2009) as well as Best and Porteus (2012, 2016), or one conducted by Co-EldeRly (2013).

Design thinking has long been a topic of research and education, both in the field of architectural design process studies (Lawson, 1980; Rowe, 1987; Cross, 1990; Goldschmidt, 1994; Cross, Christiaans and Dorst, 1996; Dorst, 2010) and outside it (Kelley and Littman, 2001). The architectural design process presented problem solving strategies, methods, tools and techniques that can be used by teams of architects and urban planners. Rowe's methodology became popular in the business world when the importance of services in the global economy rapidly increased (Rochacka, 2011), and it received attention in other fields as well (Brown, 2009; Brown and Wyatt, 2010). In the meantime, the design thinking method has successfully entered many areas of commercial activity, such as industry, trade, services, medicine, sport, business media and social organizations.

Since social innovations such as co-housing, co-creation and design thinking are not widely discussed in the Polish literature, this paper could be seen as an attempt to shed some light on these concepts.

Research methodology

The lack of satisfaction with the existing public service options prompts public organizations to look for new arrangements. One of them is co-creation — a model in which citizens actively participate in delivering and designing the services they receive. This collaborative, participatory aspect can be introduced in various stages of the process: co-initiating and co-designing, co-deciding, and then co-governance and co-implementing of public services. Overall it seems to be the

most effective means to answer to the need for new social innovations and the growing demand for personalized services.

The focus in of this paper is on the delivery of local public services at the urban level in Poland throught a co-creative approach towards public services delivery with the focus on one particular case study — ProPoLab, implemented in Wroclaw. The aim of the article is to better understand and explain the processes from the perspective of social innovation. The concepts of co-creation and social innovation are elaborated upon using one of ProPoLab's milestones, Design Thinking Workshops, as a case study.

The basis of design thinking is the adoption of an iterative model of the design process in which the sequential nature of the various stages of design organizes the thought process and thus leads to innovative solutions — the so-called problem-solving process (Cross, 2019). This process has been transformed by the Institute of Design at Stanford University into the current design thinking model, consisting of five steps: empathy, definition, generating ideas, prototyping and testing (Ratcliffe, 1.08.2009). However, the pilot program is based on a concept introduced by the British Design Council, who proposed a model of a double diamond, systematizing the process in relation to time (Design Council, 2007).

To sum up, the research object are the residents (mostly seniors) of Popowice, the research subject — the quality of life of seniors, and the research aim — firstly identifying the needs of residents in relations to public services, and secondly designing a socially innovative solution that will increase the quality of life of seniors. To achieve these goal, the following research tasks have been set: (a) identifying the needs of seniors, (b) identifying which of those needs are being met locally and which are not, (c) identifying what are the relations between neighbors and the attitude towards cooperation, (d) identifying how the needs of seniors could be met. The main focus of the research is on the 2018–2019 period. The following research methods have been used: analysis of scientific literature and normative documents, design thinking methodology, comparative analysis and statistical analysis.

Design Thinking Workshops findings

The Design Thinking Workshops were a series of events that followed the Open Popowice Meeting and Community Reporter Workshops as part of the EU project ProPoLab. The project's previous stages have given some insight into problematic issues and the needs of seniors in relation to life at the estate (ProPoLab, 2018d). Two topics that require a more in-depth study were selected, and they happen to be the most urgent issues related to residents — the issue of communication and information at the housing estate and the location of a neigh-

borhood meeting place. Both of them were singled out for further workshop studies. The workshops were attended by a group of local senior leaders (with a 8-15 person turnout) and the meetings were held at weekly intervals at the Tecza club in Popowice. During the first meeting, the most pressing problem was precisely identified as the lack of communication and interpersonal integration in the estate. Hence, the workshop concerned communication between the residents themselves, as well as between them and institutions in the estate. The use of the design thinking method allowed the participants to define the problem. The next stages of the workshop consisted of a joint discussion and filling in the prepared charts. It started with defining the problem and determining the user value and awareness of design challenges. This led to creating a profile of the average project participant. This activity also helped them define their own personal characteristics and formulate their deep-seated needs. The personas created by the workshop participants represented a group of lonely seniors (65–70 years of age). The characters (in spite of the fact that they represented an active group) were characterized by numerous problems and concerns — mainly related to interpersonal interactions (see Table 1) (ProPoLab, 18.11.2018).

Table 1. ProPoLab's user values

Needs	 calm health conversations with neighbors places to meet with friends and neighbors bringing the library closer access to information about the work being done on the estate (e.g. from the housing cooperative) more efficient cooperative care access to home visits by certain service providers (hairdressers, doctors)
Benefits (what they wants the service to provide)	 going to the sea for the first time the feeling of safety the feeling of being needed the ability to realize oneself finding companionship and friendship finding calm being treated in a respectful manner
Expectations (relative to the service)	 home health care love and warmth from loved ones quick "fulfillment" of needs that one cannot meet on their own (i.e. cleaning the carpet) greater (more visible) involvement of the housing cooperative and the city (maintenance of roads and pavements) financial support, monitoring at the estate

Work to be done (needs and values met by the service)	 creating a community that will support its own being able to open oneself to others developing assertiveness working up the will to do things the will to meet one another observing the effects of activities undertaken by certain entities (cooperatives, NGOs, authorities) — this is highly motivating
Emotions (before, after and while using the service)	— frustration, but also happiness because of having relatives — anger — friendliness towards neighbors
Concerns (related to the service)	— poor quality of service or a misdiagnosis of the actual needs — not being able to integrate with the group even if a meeting place exists — no one will have the competence to judge if the service is adecquate or not — the service will not be personalized

Source: Miśniakiewicz, 2021.

The preliminary probe contributed to formulating the objectives of ProPoLab: creating a system of neighborhood communication and achieving greater degree of activation of (and between) neighbors. This approach was further refined by prioritizing activities aimed at achieving the intended goal, which were as follows: creating a bottom-up neighborhood communication and a separate information system, giving the people a reason to spend more time outside of their homes, making the people feel noticed, giving them opportunities to share their experiences, expanding their awareness, opening them up to others, helping them overcome their fear of face-to-face contact. The participants prepared a list of people and institutions (stakeholders) that they think should be involved in the process of creating a solution to their problem. Awareness of the risks associated with the project was also important. These include the passivity of people and institutions, general discouragement, as well as the fear of being misunderstood and judged by others (ProPoLab, 2018d).

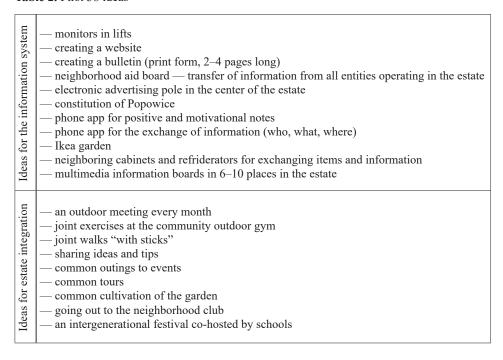
During the second Design Thinking Workshop, participants engaged in the development of a solution for the communication system between the residents of the estate, as well as between them and the institutions operating in the estate. In the first part of the meeting, a selection of inspiring solutions for neighborhood communication from other cities (in Poland and abroad) was presented. Following that, the workshop participants pondered on how this problem can be solved in Popowice.

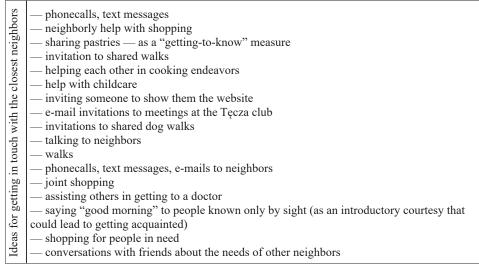
The problem of interpersonal communication was addressed with various ideas on integrating residents on the whole or establishing closer bonds and con-

tacts with the closest neighbors. As per the need for a functioning informational policy, traditional media — such as advertising columns, information boards or newspapers — were pointed to as potential means of keeping the resident "in the loop." Seniors were also favorable towards modern solutions such as a website, app, multimedia notice boards and text message notifications. A significant part of the seniors' proposals for improving the flow of information revolved around social gatherings. In support of these ideas, the workshop participants recalled how, in the first decades of the estate's existence (the 1970s/1980s), despite no one having access to the Internet, telephones being rare, and there being no local community center to speak of, obtaining relevant information on the comings and goings of the neighborhood was not an issue, since everyone in the estate knew each other (ProPoLab, 26.11.2018).

The next stage of the workshop involved coming up with solutions using creative methods, mainly brainstorming techniques and games. The numerous ideas from many service areas were then passed through a filter, a "funnel," which allowed groups to focus on a single, selected idea. This "filtration process" was used to match the proposed ideas to the project assumptions developed at an earlier stage of the workshop. Individual ideas were later refined in groups, and then sketched in the form of the so-called storyboards.

Table 2. First 38 ideas





Source: ProPoLab, 2018c.

At first, a set of 38 were proposed (Table 2), later followed by 74 associations and finally another 70 ideas developed during a brainstorm (Table 3).

Table 3. Another 70 ideas developed during a brainstorm

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request help from space
       illuminated announcements in front of entrances to supermarkets and shops
       leaflets placed behind windshield wipers
       announcements broadcast by megaphone
       bulletin board in the neighboorhood library
       bulletin boards in lifts
       reporting demands and issues on a bulletin board
       illuminated bulletin boards
       people wearing informational placards: "human bulletin boards"
Ideas for the information system
       people dressed as some kind of creatures acting as "neighborhood criers"
       electronic information sources in lifts
       bulletin boards placed outside buildings
       announcement in lifts or stairwells
       information projectors on the front walls of buildings
       tablets in lifts
       lighted display cabinets in front of entrances to schools and kindergartens
       daily information newsletter by phone
       "I will introduce a notebook recording the neighboorhood's needs in one of the apartment
    blocks"
       estate-wide newsletter
       website

    announcements

       a newspaper with a frequent publishing schedule
       informational written in chalk on the neighborhood sidewalks
       a monthly print newsletter

    light information in the lift

       an advertising column used for announcements
       notice boards in front of entrances to the apartment blocks
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Ideas for estate integration	interest groups in schools: intergenerational exchange of knowledge and experience neighborhood volunteering
	— more events
	— meeting places in apartment blocks (e.g. in laundry rooms)
	— monthly intergenerational outdoor meetings
	— interest groups
	— meeting the needs of teenagers
	— recreation
	— seeking people willing to work together
	— "generational meetings" (of people in the same age group)
nte	— frequent neighborhood meetings in the housing estate office or clubs in the estate
e ii	— neighborhood meetings
stat	— field festival in the estate
Ğ	— active use of the neighborhood library
loj	— "invisible hand" auctions with children
sas	— communal gardening
Ide	— gardens on every floor
	— attracting youth interest in the problems of the estate through social education lessons
	— joint cleaning of the estate
	— establishing a club that would meet the previously researched needs of residents
	— a neighborhood dance
	— a neighborhood dance — meetings
	— meetings — meetings held on cushions placed in the stairwells
	— information on festivities held in the estate
,,	— saying "good day" to neighborhood acquaintances
OU	— informing each other about your respective needs and offering to help
ldž	— inviting residents for joint excersises on the equipment available at the estate
eig	— volunteer aid shifts for helping the persons most in need
st n	— locating the persons most in need
Se	— responding to needs
clo	— growing one's network of contacts
pe	— conversations on other neighbors' suggestions
h t	— networking; responding to the problems of others
Wit	— getting acquainted with passers-by, exchanging conversations
ch	— calling people from balconies for integration meetings
no	— informing passers-by on current events
n t	— transportation of people to doctor's appointments, managing fees and other matters
18	— "everyone has a phone and thus the means to get in touch with neighbors"
Ideas for getting in touch with the closest neighbors	— contact via telephone
	— caring for other neighbors' plants when they are away on vacation
	— sharing ideas on ways to decorate the estate
	— skillsharing
	— cultivating and sharing neighborhood history
-	— improving the aesthetics of the estate
	improving the destinctes of the estate

Source: ProPoLab, 2018c.

During the third Design Thinking Workshop, participants were assigned the difficult task of choosing the best solution that meets their needs regarding communication on the estate. Their ranking can be found below (Table 4). The idea of creating a neighborhood meeting place decisively won first place.

Bearing in mind the issues that they identified as recquiring the most immediate attention — communication on the estate — the participants indicated creating a neighbohood meeting place as the best solution. The idea was then developed and refined.

Table 4. Ranking of ideas

Ideas	Points
Neighborhood wardrobes and refrigerators	
"The heart of the estate" — a mini-club where the neighbors can exchange items and food, where you can meet other people at any time	
Meetings at Polana Popowicka next to the allotment gardens — sharing vegetables and fruit from gardens for the purpose of preparing snacks.	
Meeting place inside the apartment blocks (e.g. laundries). Unused laundries could be adapted for for mini-clubs where the locals could do things together	16
A neighborhood club placed in the center of the estate in order to support the community	
Common meeting place on the estate — a club of approximately 150 m² — used for meetings, drinking tea, cooking and eating together; it should come with a small health food shop, a shop with dietary supplements or a grocery selling locally-grown produce from the surrounding allotment plots	15
Round advertising column	
A place of management, a community center, providing leisure and social aid, cooking classes, care — the Sadyba	
Neighborhood emergency services for people in need of care — concrete actions for the benefit of other people	12
Electronic notice poles in the top 3 most frequented places	10
Saying "good morning" to friends and strangers from the estate. Everyone should greet the person they come across, offer help them in carrying heavy grocery bags, inform them about the current events on the estate, or offer sharing a walk	9

Source: ProPoLab, 4.12.2018.

The seniors first listed the amenities that they feel the meeting place should have, then outlined the activities that should take place there (Table 5). The priority, as previously stated, is for it to play the role of an information center that is tailor-made for their needs. They also signalled their willingness to participate in its daily functioning by way of informing other seniors about their possibilities and rights, carrying out information duties or disseminating knowledge about events, training courses and discounts meant for seniors. The issue of the neighborhood aid and how it was organized came up not just during the Design Thinking Workshops, but during all of the meetings held as part of the project (e.g. help with shopping, paying bills, reaching clinics, sharing meals, childcare, taking care of neighbors' plants while they were away, improving computer skills).

Table 5. Specifics of the neighborhood meeting place

What should it consist of and where should it be?	 the container-based Local Community Center "Popowicjusz" a kitchen with equipment and dining room a porch glazed walls a place with couches, living room, library a pergola with a fountain and bench a shop on the mezzanine a micro-storage of own crops and produce a signboard with a logo that is clearly visible from all sides it should be built at the site of the old factory it should be near the playground for children
What amenities should it have?	 food exchange refrigerator cabinets for the exchange of items fitness equipment tables and chairs computer station awnings over the windows RTV equipment benches for chatting loungers, hammocks, a beach water cooler with the local Popowiczanka mineral water brand a dinner table the constitution of Popowice a telephone pleasant, green surroundings a colorful interior shopping melex an external toilet open 24/7
What will take place there?	

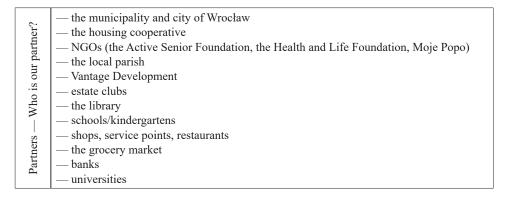
Source: ProPoLab, 4.12.2018.

A space between apartment blocks was then proposed as a convenient and accessible location for a small pavilion or container facility which would house the meeting place. The workshop participants agreed that ideal surroundings of the meeting place should allow for to outdoor activities, including spacious areas (both roofed and unroofed, preferably in sunlit spots) that would enable visitors to sit and lie down. Various other amenities were proposed, among them

a pergola, a fountain, a water cooler, as well as a space housing the constitution of Popowice. All of the would not only serve their respective practical goals, but were enable and even induce guests to get acquainted with each other and this new, universally accesible space created with their specific needs in mind. The architecture of the meeting place should be both aesthetically attractive and harmoniosly fitting into the surrounding terrain, all the while remaining cozy and neat.

During the subsequent Design Thinking Workshop, held on March 1st, 2019 participants shared their ideas about the layout and specifics of the meeting place itself. The plan we (as ProPoLab and Social Reporters) developed would allow for supplementing the resources and manpower at out disposal with a collaborative involvement of other local actors and institutions in all stages of the project, i.e., the development, maintenance and day-to-day operations of the entity. A plan was also developed for enabling the pursuit of activities that the residents may be interested in, and which are currently not available in the area. They were defined on the basis of the previously designated main recipients — users, who are primarily seniors, children and adolescents. It was decided that the Neighborhood Meeting Place (NMP) should activate seniors by including them in the creation of both the animation program and the space itself. There were several ideas for creating information channels informing about the NMP. Among the many benefits that the implementation of the meeting place would bring is the not unlikely possibility that it would act as a motivational stepping stone to further activities, broadening the scope of current operational concept. Other, more tangible and immediate benefits for the residents include the possibility of making new friends and acquainances, access to a welcoming and stimulating space for relaxion and enjoyment, developing and sharing their passions, education, broadening their horizons, joint physical activities and many, many more. All of which were listed by the residents themselves on the board titled "How are we going to implement our idea" developed during the workshop (Table 6).

Table 6. Neighborhood meeting place — How we are going to complete our idea?



Activities — What actions are going to take place there?	 training courses, workshops (Social Reporters, healthy eating, culinary classes, art workshops, handicrafts, restoring old things) training on security (conducted by the police), first aid, social aid (MOPS), ecology (garbage disposal), information (the management board of the cooperative) cultural activities (film screenings, open-air cinema, book exchange, concerts, reading poems, reading to children, card games, theater school) sport (gymnastics, team sports, activities conducted by students of AWF as part of internships) theme clubs (lectures, talks on various topics, inviting special guests) grocery market (stalls for gardeners, item exchange) street food (field kitchen, food trucks) graffiti jam
Package/bundle of benefits — What do users gain from our solution?	 having a good time relaxation making friends knowledge; discovering new things sharing your passions and discovering new ones joint physical activity learning, broadening horizons gaining awareness of the possibility of change, improvement and impact learning to act in a group possibility of childcare possibility to help the disabled
Users segment — Who is our user?	 — seniors — children — parents with children — youth — inhabitants of Popowice — inhabitants of Wrocław
Relations with users — What is the nature of our relations? What do we focus on?	 deep relationships between seniors inclusion in the running of the meeting place activating seniors as co-creators change the vision of the place a special offer of invitations information relationships with other users, mainly on weekends

Distribution channels — How do we reach our users?	 — Grapevine — newspaper inserts — website, social media — estate clubs — plaques at estate gates and stairwells — additional initiative (e.g. pavements and stairs marked with the "Popowicjusz" logo, information broadcast by megaphone, mascots: costumes, performances by actors from the theater school)
Resources — What do we use for you to reap the benefits?	— ProPoLab team — concept, design — contacts, good relations — involvement — human capital — experience, knowledge, skills

Source: ProPoLab, 2.03.2019.

In the final phase of the Design Thinking Workshops a proposition was put forward that the neighborhood meeting place take the shape of a small pavilion or container facility in the space between apartment blocks (Figure 2). The surroundings of the place that were the participants of the workshops should be conducive to outdoor activities, there should be numerous places to sit and lie, both roofed and located in sunny places. Moreover, a pergola, a fountain, the constitution of Popowice and a water cooler were proposed, which are to serve all residents and encourage them to get to know this universal place. The architecture of such an object should be attractive and integrated into the surroundings, being at the same time a cozy, well-kept and homely place (ProPoLab, 2021b).

Conclusion

The aim of the paper was to explain and to understand the processes of public services delivery from the perspective of social innovation. Concepts of co-creation and social innovation were elaborated on the basis of one of ProPoLab's milestones: Design Thinking Workshops. Hence the research object were the residents (mostly seniors) of the district of Popowice, while the quality of life of senior was its subject. Utilizing design thinking methodology helped reveal that problem of communication between residents can be solved by creating a small, accessibly located community/activity center in their housing estate. This place should meet the needs of: activity and self-fulfillment, exchange of information and intergenerational exchange. The working hours of such an institution are very important

(as they place a huge role in making it accesible), and the space intended for seniors should function all day (e.g. at similar hours as daycare centers). Residents should be included in drafting a program to better identify and respond to their needs. Seniors would likely be happy to provide volunteer work in such a place. The facility should be located in the middle of the estate so that all residents have easy access to it, optimally in pleasant natural surroundings (i.e. near vegatation), as well as in close proximity to playgrounds for children. The facility serving as the activity center should be aesthetically and architecturally interesting, colorful and distinctive. Seniors are favorable towards modern solutions such as a website, social media, application, they only need to learn how to use them and a little guidance during their first attempts at using them.



Figure 2. The concept of a neighborhood meeting place developed during the Design Thinking Workshop

Source: ProPoLab, 15.04.2020.

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