

## SERVITIZATION AS A TOOL TO INCREASE VITALITY OF AGEING RURAL COMMUNITY

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**Abstract:** Recently, the EU policy measures have been widely applied to encourage early retirement from farming. Current age structure of society requires opposite approach. Key challenges for rural development policy aiming to increase quality of life of elder people are dealing not only with traditional help and support measures, but also with the involvement of elder generation into economic and social life. New EU agricultural policy measures should ensure that funding and institutional incentives support extending working and active social life of elder farmers. One of the possible ways to change the approach deals with servitization. However, despite implementation of service-driven business model in agriculture, which opened new possibilities to use knowledge and experience of old generation, the servitization movement is still weak in agriculture. Restricted adoption of service-driven business models in agriculture largely depends on the lack of research on this topic and guidelines for practitioners. The aim of this paper is to conceptualize the organizational model aiming to implement product-service system in agricultural business by joint efforts of elder farmers and beginning gardeners. Case study on innovative servitization initiative “Rent a piece of garden” in rural areas of Lithuania is used as an illustration of innovative business model in agriculture and territorial servitization with multifaceted impact on vitality of ageing rural community and as a source to gain new knowledge on how to organize similar projects.

**Keywords:** service-driven business model, servitization, rural development policy, agriculture, ageing

## 1. Introduction

A lot of studies on the field of rural development discuss the need of transition towards more innovation-based rural economy and emphasize the role of such factors as education, training, R&D investment, university-farmers collaboration and other forms of triple-helix collaborative innovation activity. However, most of them are based on the theory of knowledge-based society and discuss drivers of rural development in the framework of knowledge management, acquisition and creation. This paper aims to discuss the new way of rural development in a framework of servitization movement based on other aspect of paradigm shift in post-industrial economic system dealing with the new role of services.

Recent theoretical developments have revealed that key innovation in post-industrial economy is business model change from product-driven to service-driven business model. The phenomenon of servitization has been widely observed in manufacturing, because manufacturing companies producing technically sophisticated equipment and vehicles have started servitization process first. In addition to their core production, they provided services in financing, operating, maintaining and updating their own or other manufacturers' products installed in the production process. For example, Rolls Royce, a company that produces jet aircraft engines, earns a share of its revenue by leasing its engine performance on a pay-per-hour basis, and providing its comprehensive product maintenance service to ensure that engines run smoothly. Some manufacturing companies have started to implement business model innovation giving priority to the provision of services. For example, the Xerox Company, initially known for photocopiers, now positions itself as an enterprise for business processes and management. In recent years, Xerox has branched out to offer document publishing and production services, document management, and business process outsourcing. Today, over half of Xerox's business comes from services. Currently a lot of manufacturing firms are increasingly adopting “servitization” by product plus service offering. This new tendency to organize business was called “servitization”. The most significant challenge facing both researchers and practitioners of servitization is how to exploit this opportunity.

Research of servitization movement in manufacturing cuts across several disciplines and communities such as product-service systems, business model innovation, economic and

regional development, organisational change, service marketing, service operation, and service science. However, research of servitization in agriculture and rural regions is very limited. This study focuses on one possible way to use servitization movement for the rural development and presents an example of the potential territorial and social contributions of product-service systems and investigation of servitization phenomena in manufacturing multinational corporations. The aim of the paper is conceptualization of the organizational model aiming to implement product-service system in agricultural business by joint efforts of elder farmers and beginning gardeners. The case study on the innovative servitization initiative “Rent a piece of garden” in rural regions of Lithuania is provided as an illustration of service-driven business model in agriculture relevant for the elder generation and as a way to understand in-depth the organizational mechanisms of servitization. In contrast to majority studies on servitization where it is dominated by micro-level analysis, this servitization project integrates goal to develop innovative form of agricultural business on micro-level with goal of territorial servitization. As far as we know, no previous research has investigated such kind of approach in the context of servitization used as a tool for rural development.

## 2. Theoretical background

During the last decades, significant changes have occurred in the traditional economic and social structure of the developed countries. This study integrates several research trends dealing with major structural changes, including the following:

- Transition from product-driven business model to service-driven business model;
- Territorial servitization;
- Ageing of society;
- Platform-based networking.

The first two research directions are focused on a new tendency, to provide services not only by specialized service companies but also by manufacturing or agricultural enterprises. In the last decade of the 20th century, entrepreneurs have realized it is no longer enough to make products and have started to focus not just selling products, but also by providing different services wrapped around produced products and their own resources (Kastalli, 2013; Lambert, 2013; Smith, 2014). The transition from product-driven business model to service-driven business model was called “servitization”.

The term “servitization” was first introduced in 1988 in the article of S. Vandermerwe and J. Rada “Business servitization: adding value by adding services to products”. Their paper is upbeat about the role of services, arguing that services are sweeping the industrial landscape. “Servitization is happening in almost all industries on a global scale. Swept up by the forces of deregulation, technology, globalization and fierce competitive pressure, both service companies and manufacturers are moving more dramatically into services” (Vandermerwe, Rada, 1988, p. 315). Over the last couple of decades, the term “servitization” has become one of the most popular new terms describing the post-industrial economy. The servitization of manufacturing is widely and thoroughly studied in the scientific literature (e.g., see systematic literature reviews by Tukker, Tischner, 2006; Baines, 2009; Vasantha, 2012; Lightfoot, 2013; Reim, Parida, Ortqvist, 2015).

Similarly to what happened in manufacturing sector, innovative farmers reorient their value propositions from selling products to providing services. Case studies confirm that a lot of successful projects in agriculture exist but servitization of farming is an on-going process, which is not yet mature. The main current challenge to farmers is a business-model change from selling goods to selling an integrated combination of goods and services aiming to propose to customers’ new kind of use-value. Transitioning “from products to services” entails major managerial challenges, since implementation of servitized business model require radical changes in the organizational structure and relationships between farmer and customers. In order to successfully move from products to services, farmers need to redesign their business model. Nevertheless, service oriented business models in agriculture are not investigated in the literature yet. Although recently, the issue of sustainability of agricultural enterprises used to be analyzed

very often, research is not oriented to promote innovative business model in farming by shifting from the “product-driven” to a “service-driven” model. The concepts of the industrial economy are still used while analyzing innovations in the agricultural sector dealing with the servitization of farming. For example, all efforts made by farmers to apply new business models to respond to the needs of consumers for fresh, locally produced food are defined as the desire to shorten food supply chain. However, they use different business models and the business model when a farmer starts direct sales business in order to reduce the number of intermediaries involved in the supply chain is fundamentally different from servitized business model when a farmer tries to provide more services.

During the last decades, investigation of servitization was focused on a micro level. The academic and professional business literature has increasingly taken servitization concept for the explanation why service thinking is the pathway to long-term survival of manufacturing enterprises. Recent theoretical developments on servitization and notable servitization cases show the rationale and effects of successful shifts from product-driven business model to service-driven business model. This shift provides a way to restore manufacturers' competitiveness in both local and global markets (Crozet, Millet, 2017). Servitization can enable firms to differentiate their product from those of their competitors (Baines et al., 2009), increase customer loyalty (Baines, Lightfoot, 2013), and lead to higher market values (Fang et al., 2008). Firms that start selling services instead of the products experience an increase in their profitability, employment, total sales and sales of goods (Crozet, Millet, 2017; Osterwalder, 2010).

Most recent studies have revealed that positive effects of business servitization are found not only on individual firm level, but on regional and national levels also. A number of studies introduce servitization as a promising business model in addressing environmental and social challenges (Gaiardelli et al., 2014) and as a key driver of regional development (Lafuente, Vaillant, Vendrell-Herrero, 2018). However, the question of how to achieve more servitized economy in the region or country is a very new discussion issue in the regional development policy agenda. With exception of some political initiatives (European Commission, 2011), there are very few specific policies to stimulate the implementation of service-driven business models. Important developments in the field of territorial servitization have been made over the last couple of years only (Capello, Kroll, 2016; De Propriis, Storai, 2018; Horváth, Rabetino, 2018; Gomes, 2018). Most of them are exploring servitization of manufacturing and impact of the knowledge-intensive services.

Rural studies and development policy still ignore the potential of servitized economy and society. The analysis of servitization in rural areas is very briefly addressed in the academic literature (Milbourne, 2012; Ulvenblad, 2014; Pereira et al., 2015; Homrich, Theodoro, de Carvalho, 2017; Vendrell-Herrero, 2017; Vidickiene, 2018; Vidickiene, Gedminaite-Raudone, 2018) and no guidance's to policymakers on how to achieve a more servitized economy in rural regions exists. Governments could act as catalysts for the servitization movement in rural regions only in such case if policy-makers understand drivers, barriers, and mechanisms of servitizing in farming and organizational structure of the servitization projects. However, policy-makers are lacking answers to the questions: „What are the likely impacts of a servitized agriculture and farming on rural economic and social prosperity?” and „What kind of support is needed for development of the emerging servitization of agricultural system?” To our knowledge, no prior studies have examined what organizational models of territorial servitization may be used and what kind of positive effects for rural regions can be generated by implementing service-driven business model innovation in agriculture. In such state-of-the-art regarding knowledge about the business models in agriculture and farming and about the role of servitization in rural development no public discussions are emerging on opportunities to use servitization movement as a tool to increase vitality of rural regions.

The special problem in economic development of rural regions is ageing of rural community. The western societies are ageing and this tendency is more remarkable in rural regions. In most countries, the proportion of elder people in population is higher and growing more rapidly in rural than in urban areas (UN, 2009; Eurostat regional yearbook, 2014). Therefore, caring for the elderly is expected to present greater economic and social challenges in rural areas. Current rural development policy in western countries is mostly oriented to negative aspects of rural

community ageing. They are described in the studies analysing how limited access to various services, long distances and lack of public transportation, isolation and poverty particularly affect the elderly in rural areas (Shucksmith, Chapman, 1998; Scharf, Walsh, O'Shea, 2016). However, other studies have shown that exist some positive aspects of ageing in rural communities exist, including strong social networks, social integration, and a healthy and safe environment (Winterton, Warburton, 2012; Bowling, 2005). All positive aspects should be employed to support and increase vitality of rural communities by encouraging them to be more active in economic and social life and attracting new inhabitants and visitors.

In our opinion, servitization of agriculture is one of the promising tools for embracing opportunities presented by shifting demographics because most important strengths of elder people are knowledge accumulated during a long time and their wish to participate in social networks. Elder people have wealth of experience and intangible knowledge that is very important in the knowledge-based society and could be shared and utilized in their communities. Therefore, elder generation can become an active actor of networking-based servitized economy and social life because social networking is especially important for elder generation. According to the studies, elder people: i) are more likely to live in the same community for most of their lives than younger generations (Phillipson, 2001), and ii) tend to spend more time in their local neighbourhood than younger and employed people do (Means, Evans 2012).

Organizational models relevant for servitization of agriculture and aiming to adapt economic system to the needs of ageing rural community may be different. Our research is focused on one more innovation inherent to post-industrial economic system – platform-based networking. The platform-based two-sided network (market) concept is rather novel: the first publications analysing two-sided network effects in business management appeared in the first decade of the 21<sup>st</sup> century (Rochet, Tirole, 2003; Hagiu, 2006; Eisenmann, Parker, Van Alstyne, 2009). A network with homogenous members is called a one-sided network, as opposed to a two-sided network which has two distinct groups – the so-called parties – whose respective members have different and sometimes contrary goals. In fact, a conventional one-sided network can be described as a part of a two-sided network because two-sided networking also generates same-side network effects, although it concentrates on cross-side network effects (cross-side network effects mean that the strengths or weaknesses of one side have an impact on the development of the other). A two-sided network may be developed into multi-sided network, i.e. a network joining several distinct groups of network members. A two(multi)-sided network must have a platform that creates a certain infrastructure and sets rules for interactions of network members. A platform-based organizational structure essentially differs from the conventional “pipeline” businesses that have dominated industry for decades (Van Alstyne, Parker, & Choudary, 2016). Derived from service-dominant logic, this new business model logic responds to phenomena in contemporary business environments characterized by increasing connectivity and sociality among actors. In platform business models value is co-created through network relationships between various involved actors.

### **3. Methodology of research**

The integration of four new research fields described may help to create an innovative tool for rural development. Aim of this research was to gain deeper understanding of such integrated approach by investigation of organizational structure of the project aiming to implement product-service system in agricultural business by joint efforts of elder farmers and beginning gardeners. Case-based research was selected for this analysis which is appropriate for exploratory and theory building research, suitable for dealing with “how” type questions (Yin, 2003) important in conceptualization of organizational model. The unit of analysis for the research was social project “Rent a piece of garden” initiated in Lithuania in 2016. Project “Rent a piece of garden” was created for collaboration of small elderly farmers with city residents who want to grow vegetables and fruits in the countryside. Selected project for investigation is used as an illustration of innovative business model in agriculture and territorial servitization with multifaceted impact on vitality of ageing rural community and as a source to gain new knowledge on how to organize similar projects. A semi-structured data collection protocol was focussed on determining how and why project participants had begun to deliver servitized offerings and what kind of positive effects

servitization initiative generates. Interviews were conducted face-to-face with the project leaders and ordinary participants: small elder farmers and city residents.

The guiding interview questions were organised around theoretical framework of network based on servitized organisation principles, they included:

1. Who are initiators, managers and sponsors of the project?
2. What are the main goals of the project?
3. How organizational structure of the gardening servitization initiative is designed?
4. How organizational process of the gardening servitization initiative is managed?
5. What are effects of servitization?

Data was collected for three years of observations of case projects from 2016 until 2018.

#### **4. Case study on the innovative servitization initiative „Rent a piece of garden“**

Content of the case study was based on results of the interviews with project initiators and sponsors of the project. Paragraphs were organised following the structure of the interview questions.

##### ***Initiators, managers and sponsors of the project***

Creation of the innovative initiative started from two initiators when they started to build a team involving managers and sponsors to the project. The initiators of the project were two friends from Vilnius, who graduated from the University of Birmingham and returned to Lithuania after their studies. They were looking for interesting activities and decided to implement the project “Rent a piece of garden”. They brought the idea of the project from international conference where garden rental experiences for city residents in the UK had attracted her attention. She proposed to implement a similar project in rural areas around the capital of Lithuania in Vilnius county. 50 percent of increased number of participants in the project from 2016 to 2018 from Vilnius city indicated that Vilnius has a lot of residents who would like to practice in gardening, but they are not ready to buy a plot of land and arrange their own garden. Young families hesitate whether they are able and willing to spend a lot of time in garden during agricultural season. Another barrier is a lack of knowledge on gardening and a need of an extensive study beforehand. Rent a piece of garden in small farms solves both problems. Firstly, the land ownership is not transferred to the customer. Secondly, with a service-driven business model, farmers can propose a lot of different services for their customers. Services may include not only consultations and trainings on gardening. The farmer-owner of the garden can make some special operations that need special skills, e.g., fruit trees vaccination and pruning, or taking care of rented piece of garden when customer is not able to visit the garden, e.g., during the period of sickness or vacations.

The project started with no financial support, all organizational activities were implemented on a voluntary basis. Initiators of the project and supporting volunteers created a platform. During the project implementation phase, more volunteers joined the project to help manage an innovative gardening project through their knowledge and skills. The economic rational of the project participants is based on paid access to gardening place and consulting services. Farmers dedicate a part of their farm land to the rent, and they receive about 10–15 percent of all harvest from this piece of land.

##### ***Goals of the project***

Main goal of the project – provide platform for collaboration of two groups: i) elder small farmers who have a garden, and ii) young families from cities who want to practice in gardening but have no place for it. Project brings two types of participants together and they explore many initiatives and collaborative actions. The farmers participate in the project as service providers and families from cities are their clients. The project leaders believe that increasing demand for fresh local

food and new consumption habits of city residents opens new opportunities to small farmers provide a lot of other services in parallel with renting. New gardeners need advice on how to choose the right plants, take care of soil before planting, plant at the right time of the year, etc. The first option for most of them is to grow organic products as a supporter of healthy eating; accordingly, they need knowledge on organic agriculture. The farmers also provide various garden maintenance and harvesting services.

### **Organizational structure of gardening servitization initiative**

Project leaders chose organizational structure based on the concept of two-sided network. A two(multi)-sided network has a platform that creates a certain infrastructure and sets rules for interactions of network members. One-side network was formed by city residents, small farmers and rural entrepreneurs. Each group get one side effect when they interact internally within their group. Interaction between groups creates multi-sided effect for each of the group and concentrates on cross-side network effects (cross-side network effects mean that the strengths or weaknesses of one side have an impact on the development of the other). The organizational structure of the project “Rent a piece of garden” based on the two-sided network model and developed into three-sided network is provided in Figure 1.

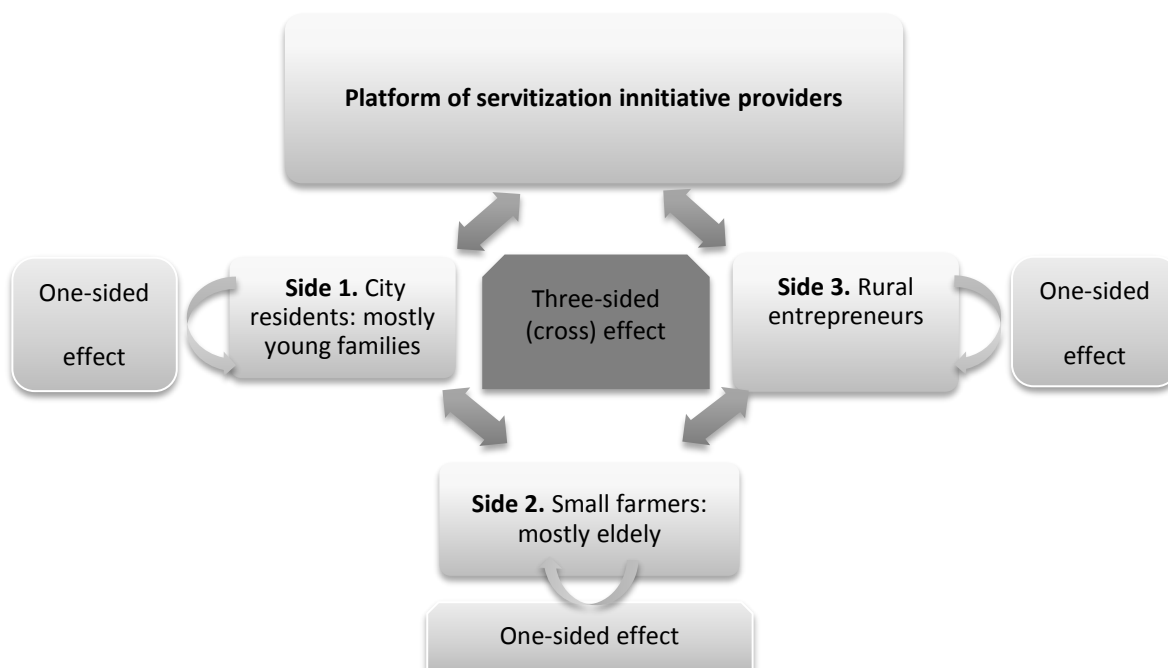


Fig 1. Organizational structure of the servitization project. Source: composed by authors.

### **Organizational process of gardening servitization initiative**

The project activities and scope have evolved step by step. The analysis of three year project development experience shows that an organizational process of the gardening servitization initiative consisted of several stages.

*Stage 1. Platform creation.* Preparatory work for implementation of the project idea started in July, 2015. First task was the creation of a platform for gardening practices that brings together land-owners and renters. Theoretically, platform is a tool for connection of interests between consumers and farmers. The key components of a platform should cover a governance structure, that determines who can participate in the project, what roles they might play, how they might interact, and how disputes get resolved. The project initiators designed the first version of the collaboration rules between farmers and their clients with the intention to make some improvements after discussions with first participants of the project.

*Stage 2. Involving 1st group of network members in the project – small farmers ready to rent a piece of garden.* In January 2016, initiators of the project started to search for participants ready to rent part of their garden. Their target group was small farmers that keep part of their land free for gardening and are ready to rent it to the city residents. Various channels were used for searching the above mentioned participants, firstly asking friends that have a direct relationship with small farmers from rural areas, who know them personally and can help them to provide information about this project. Initiators of the project also cooperated with several NGOs, especially with the Lithuanian Caritas organization, association zali.lt (Green.lt), church communities and rural communities in Vilnius county. At the beginning of the project in 2016, 10 farmers were ready to rent a piece of garden for city residents for growing various vegetables and fruits. Most of the participants were from villages located in Vilnius county. In 2018, the number of farmers increased 2 times and 20 farmers invited city residents to use their land for gardening.

*Stage 3. Involving 2nd group of network members in the project – city residents ready for gardening practices.* In February 2016, initiators of the project started to register participants who wanted to grow vegetables in rented gardening plot. Networking principle with the aim to cooperate was used for organization of gardening activities in this group. Participants were asked to create groups and to work in teams, when planting and harvesting. Also, group members decided to collaborate in garden maintenance work, so that each participant did not need to go to the garden every week. In 2016, 20 participants joined this project and have started this activity, in the next two years the number increased up to 30. Members were mostly groups of friends or young families with small children. Large increase of potential users – city residents – noticed when initiators started to write a blog in 2017 on their website and when the project created initiative profile and started to use social network (Facebook). In January 2019, it had 337 members in social network Facebook and 2,431 followers. The followers were interested in various topics, discussions, practical advice and other initiatives that are proposed by project initiators.

*Stage 4. Collaboration between two groups of the project participants.* Networking principle was also used with the aim to find best ways on how to organize service provision process and make project activities attractive for both types of participants, i.e., for small farmers and city residents. The first meeting of two groups of the project participants was organized in March, 2016. During the meeting, organizers introduced their vision of the project platform tools i.e., main rules, agreements, service pricing models, etc. After discussions, project participants agreed that each farmer and a group of the farmers' clients should have relatively big freedom in service pricing and work division in their gardening activities. In the next part of the meeting, farmers discussed all details with their clients personally, including when they start gardening, how many times per week/month they will come, what type of vegetables they will grow, what kind of services and how often they are needed, etc. Frequency of the visits depends on the time: when the season starts, visits are more frequent (1-3 times a week), later participants come more rarely (once in 1–2 weeks). At the end of the season, visits become more frequent again to collect all harvest and to finish gardening work.

*Stage 5. Gardening practices.* First year gardening activities from spring until autumn aiming to grow vegetables and fruits in chosen places showed some weaknesses of the individual farmers in consulting. For this reason, platform providers decided that big number of new gardeners in parallel with advices of a farmer-owner of the garden needs more general knowledge on gardening. Some common events for project participants were organized as trainings on specific gardening operations and seminars on healthy eating and ability to grow desirable organic products by themselves. Both types of participants participated in these events. Topics of events were agreed by the project participants depending on their needs.

*Stage 6. Platform improvement.* A platform should allow network members to create and consume value by helping resources and network members become more accessible to each other on 'as-needed' basis. At the end of the season, results of gardening practices and effectiveness of the platform tools were discussed in internal meetings of platform providers – initiators of the project, and in seminars of all project participants. They were focusing to highlight how to start organizing activities for new gardening season and what changes in agreements and new



additional actions or tools are needed. First year experience showed that the key to success is strengthening interactions between farmer and customers. After discussions, some platform improvements were organised concerning functionalities that help in finding the desirable 'gardening partners' and reduce search costs based on desirable garden place, characteristics and services provided by the farmer.

*Stage 7. Network extension.* Two directions of the network extension were used. In 2017, efforts were focused on new members because the first year of gardening was successful and some new farmers and clients appeared. The task of the platform providers was to arrange contacts and help in choosing the best ways of collaboration.

In 2018, the network was redesigned from two-sided network into three-sided network. The third side appeared by natural evolution and represents rural entrepreneurs. In order to gain more network effects, platform providers decided to involve representatives of rural communities into project activities that are ready to provide other services for clients of farmers-owners of the rented garden. Development of new service offered by local rural entrepreneurs generated a lot of additional positive network effects. From one side, such services like accommodation, catering, gastronomy, transportation, education, and entertainment increase attractiveness and value of the gardeners-participants of the project visits into the village. The city residents were spending more time in nature, enjoying a series of memorable events and lessons, and in such way receive functional, emotional, social and educational value. On the other side, various services provided by rural entrepreneurs are helpful for attracting other rural tourists to participate in the project. As more clients use the platform, farmers and other rural entrepreneurs find greater value from servitization activities and vice versa.

After 3 years of the project development, some shortages of the project appeared – lack of financial support to gain a scale effect. Another drawback – insufficient work with public-institutions as local municipalities and rural communities that could give more synergies with social projects that are implemented by some of the municipalities, where participants are located.

### ***Effects of servitization project***

Case study confirms that the project "Rent a piece of garden" is able to successfully generate a lot of positive effects not only for project participants, i.e. on individual level, but also for the whole rural region and country also. The impact of the project is growing step by step. The project leaders noticed three types of effects on rural development from servitization project, including:

- Effects of shifting from product-driven business model to service-driven business model;
- Effects of networking between three project participant groups;
- Effects of networking inside project participant groups between homogenous network members.

According to project participants, initial gains of the project appeared as a result of shift from product-driven business model to service-driven business model. They cover the following key benefits for rural areas:

- Project created new attractive livelihood for elder small farmers;
- Land, physical and human resources of elder people are used in more effective way;
- Elder farmers are involved in active social and economic life;
- Grows a number of visitors in rural areas, especially young families; they became clients of local entrepreneurs.

Empirical results also reveal a lot of positive effects generated as a result of chosen organizational structure of the project (see Figure 1). Project was designed as servitization project based on multi-sided network model and aimed to encourage network effects. Such kind of networking generates same-side and cross-side network effects.

Cross-side network effects appeared as a result of networking between three project participant groups – farmers, other entrepreneurs of rural communities where project activities occur. Such kind of network effects means that the strengths or weaknesses of one group have an impact on characteristics of the other groups. The cross-side network effects mostly depend on the project's platform ability to create relevant infrastructure and sets of rules for interactions of network members. In the opinion of the project leaders, designed platform helps create and capture new economic, social and cultural value and become powerful catalysts of rural development. The cross-side network effects generated during development of the project activities cover the following key benefits for rural areas:

- Farmers and other rural entrepreneurs that start selling services for project participants – residents of cities – increase their turnover and profitability;
- Farmers receive social services from city residents;
- Grows attention on nature-friendly agriculture between rural population;
- Collaboration with city residents is building healthier eating and consumption habits in rural communities.

Same-side network effects appear as a result of networking between the members of the homogenous group. Firstly, networking between clients of farmers has been developed. Cooperation in garden maintenance jobs and work in teams when planting and harvesting, sharing of cars when going to the village, and other collaborative activities are increasing the attractiveness of gardening because it helps to save time and money.

Other result of the networking between clients of the farmers increase possibility to involve more farmers to join this initiative as networking between clients increase the size of renting services and thus creating a situation when one farmer cannot be able to rent required plot of land. In such cases, the farmer tries to convince neighbours to start renting plots of land, and participate in servitization initiative. Increasing number of farmers involved in servitization activities brings described benefits for rural area. Growing demand of services is also a factor encouraging collaboration between farmers. They start to cooperate in the provision of consulting and garden maintenance services. Such cooperation is increasing quality of services and makes a project more attractive for clients.

Networking between rural entrepreneurs generates effects similar to effects of networking between farmers. Rural entrepreneurs cooperate to provide a set of various rural tourism services and products for gardeners from cities: accommodation, rent of gardening and sport inventory, gastronomy, transportation, education, entertainment, etc. The collaborative activities develop servitization movement and serves for economic, social and cultural development of rural area.

All described multifaceted impact of servitization project "Rent a piece of garden" is increasing vitality of ageing Lithuanian rural communities involved in project activities. Achievements of the project encourage interest of other rural communities to participate in the project. Project leaders would like to involve other rural regions of Lithuania into project activities and develop project from regional scale to national. However, in such case, voluntary job of platform providers should be changed into normally paid. Till now, the project has been developed as a social project with no fees for participation in the network and use of platform services. In the opinion of project leaders, it is a doubtful ability to re-arrange project platform into economically self-sufficient business. The wide scale public platform-based social project needs governmental support.

## **5. Conclusion and discussion on the future of agricultural and rural development policy**

Recently, the EU policy measures have been widely applied to encourage early retirement from farming. Current age structure of society requires an opposite approach. Key challenges for rural development policy aiming to increase quality of life of elder people are dealing not only with traditional help and support measures, but also with involvement of elder generation into economic and social life also. New EU agricultural policy measures should ensure that funding and institutional incentives support extending working and active social life of elder farmers.

One of the possible ways to change this approach deals with servitization. However, despite opportunities of service-driven business model in agriculture to use knowledge and experience of old generation, servitization movement is still weak in agriculture. The restricted adoption of service-driven business models in agriculture largely depends on lack of research on this topic and guidelines for practitioners.

Our research provides empirical evidence and theoretical explanations regarding service-driven business model implementation in rural regions with effects of territorial servitization. Results of our case study revealed multifaceted impact of servitization initiative „Rent a piece of garden” on rural communities in rural regions of Lithuania. Research findings demonstrate that service-driven business model in agriculture and other farming activities has a big potential to increase vitality of rural regions by generating a lot of positive economic, social, environmental and cultural effects. The analyzed servitization initiative also contributes to the general situation in the country by promotion of new eating and consumption habits and healthy lifestyle.

Case study provides some important guidelines not only for the rural regions wishing to pursue a similar servitization journey but also for agricultural, rural and regional policy developers also. The analyzed servitization initiative can be used as best practice example on how to make work more relevant for elder people by increasing flexibility of organizational forms of business activity in agriculture. Support for similar social initiatives and service-driven business could be helpful in ageing society to link agricultural and rural development policies with age and skills policies. Our findings show that elder farmers are able to implement successful transfer from product-driven business model to service-driven business model. However, an organizational support for design, building and governance of a public project platform is needed because the adoption of servitization requires profound modifications in traditional business model.

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