





21th International Scientific Conference **ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020**

12-15 May 2020, Jelgava, Latvia

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COMPLIANCE OF FIRE SAFETY MEASURES FOR ACCOMMODATION OF PEOPLE IN RIGA SCHOOLS

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Abstract

This article describes the situation with fire safety at Riga schools regarding their compliance with the fire safety requirements set in Latvia for accommodation of people in schools. The research was conducted in spring of 2018, prior to the Dance and Song Festival, assessing the compliance of 60 accommodation sites with the Latvian regulatory enactments on fire safety. During the Dance and Song Festival, it was planned to organise accommodation places in schools for 24 000 persons – participants of the festival events in the city of Riga.

Aim

To research and evaluate the compliance with the requirements of regulatory enactments regarding the accommodation.

Tasks

- Inspect 60 educational establishments in Riga, check the fire safety situation;
- Identify the existing deficiencies in provision of fire safety measures;
- Analyse the factors contributing to the deficiencies regarding the overall situation at accommodation sites.

Materials and methods

The subject matter of the research was fulfilment of the requirements of the Cabinet Regulation No. 238 adopted on 19 April 2016 "Fire Safety Regulations" during the Dance and Song Festivals.

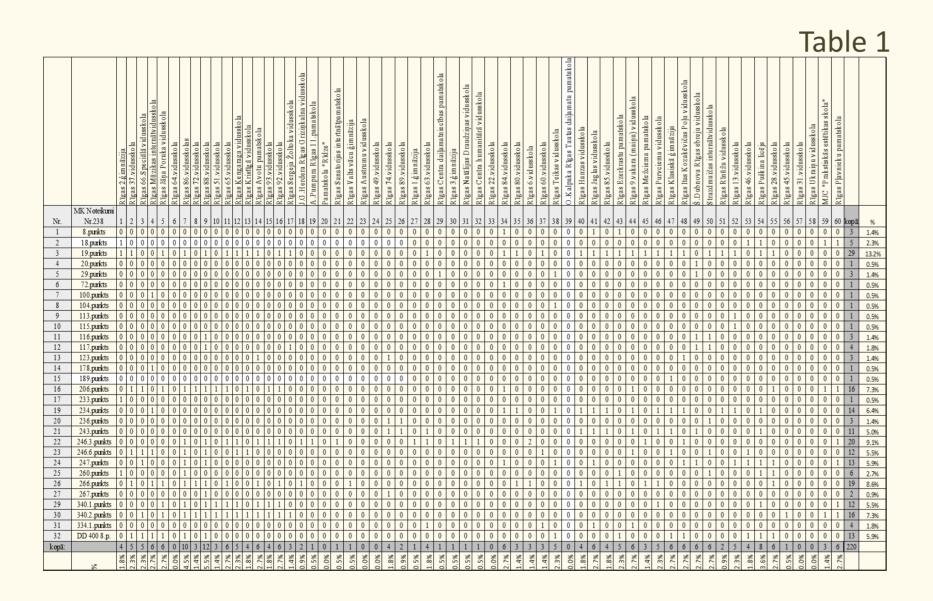
As the research object, 60 accommodation sites in Riga

As the research object, 60 accommodation sites in Riga for participants of the Dance and Song Festivals — schools were selected. The scientific methods applied: the analysis - actual fire safety rules were divided into separate points and examined in separate parts concerning appropriateness of the Song Festival accommodation capacity and the fire safety situation; the induction — general judgments and conclusions were made on the individual shortcomings of each educational institution in the background of the survey.

Results

The effective functioning of the fire protection system at educational establishments is achieved by the provision of efficient fire protection measures. Therefore, it is important to understand what shortcomings exist and why they have occurred.

- 1. The maximum number of deficiencies revealed at a single educational establishment during the research is 12, while the average number of deficiencies ranged from 4-6 at a single educational establishment.
- 2. It has been established that only eight educational establishments have completely fulfilled the requirements of the Regulations, so participants of the Song and Dance Festivals can be accommodated there, as well as nine educational establishments have just one deficiency, which can be eliminated fast, if funds are allocated to improve their fire safety systems.
- 3. In total, only 17 out of 60 educational establishments can be used during the Song and Dance Festivals, provided a part of them makes immediate improvements of their fire safety systems and elimination of deficiencies.



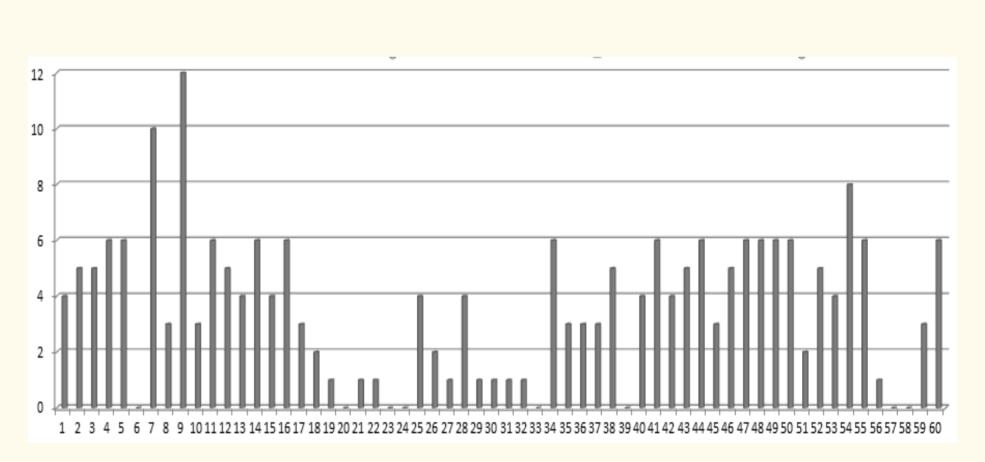


Fig. 1. Number of deficiencies

- 1. The authors carried out a study and assessed the accommodation facilities of Riga general education institutions, as well as established their shortcomings and deficiencies, which allows to judge on the lack of full preparedness of the institutions for the accommodation of participants of the Song and Dance Festival.
- 2. The current research established that any further delay on the part of the administration of educational establishments may endanger the lives of people who are accommodated in such premises.
- 3. The results have revealed the need to improve fire safety measures that have not been provided by the administration of educational establishments and that, in view of the established deficiencies, accommodation of people during the Song and Dance Festivals is inadmissible at most of the educational establishments and may result in a wide-scale tragedy.









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REDUCTION OF NON-ALUE ADDED ACTIVITIES IN RESTAURANT SERVICES: THE CASE OF BBS-DIZAIN LTD

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Abstract

In order to ensure the development and competitiveness of an organization, it is essential to continuously enhance processes, particularly those that generate revenue, i.e. business processes, as well as to introduce innovations. One of the business processes at BBS-Dizain Ltd that needs to be enhanced is the catering service. Rearranging the workplace of a chef, using the 5S methodology, and replacing the worktop for the chef with a freezer allows significantly – two-fold - reducing the number of the steps made during the shift. However, rearranging the restaurant's storeroom, using the 5S methodology, allows saving 95% time spent on searching for things needed. Therefore, the possibilities to reduce order processing times at the restaurant of BBS-Dizain Ltd involve decreasing unnecessary movements of chefs at their workplaces and reducing the time spent on searching for things in the storeroom.

Aim

to examine possibilities for shortening order processing times at BBS-Dizain Ltd.

Tasks

- 1) to justify the need to shorten order processing times at BBS-Dizain Ltd;
- 2) to test the enhancements identified for the purpose of shortening order processing times;
- 3) to identify which restaurant cooking process needs to be optimized.

Materials and methods

The research employed general scientific research methods, statistical analysis, logical construction, analysis and synthesis as well as experimental methods.

The research used unpublished data provided by BBS-Dizain Ltd for the period 01/01/2019-31/12/2019, as well as primary data acquired during the experiments conducted by the authors.

Results

Table 1 Number of steps made by the chefs before and after the rearrangement of their workplaces at **BBS-Dizain Ltd**

	Differenc							
Phase I		Phase II		e				
Days 1-7	Days 8-14	Days 15-21	Phase II average	between Phase I and Phase II average				
Chef 1: soup and main course supplements								
631	549	480	515	-116				
108.9	100.5	102.82	101.7	-7.2				
15557	14357	14689	14523	-1034				
Chef 2: m	ain courses							
631	549	480	515	-116				
100.7	97.8	93.2	95.5	-5.2				
14386	13971	13314	13643	-743				
Chef 3: salads and desserts								
471	384	322	353	-118				
87.2	41.2	38.0	39.6	-47.6				
12457	5886	5429	5657	-6800				
	Days 1-7 1: soup and ma 631 108.9 15557 Chef 2: m 631 100.7 14386 Chef 3: salad 471 87.2	Phase I 1: soup and main course supple 631 549 108.9 100.5 15557 14357 Chef 2: main courses 631 549 100.7 97.8 14386 13971 Chef 3: salads and desserts 471 384 87.2 41.2	Days 1-7 Days 8-14 Days 15-21 1: soup and main course supplements 631 549 480 108.9 100.5 102.82 15557 14357 14689 Chef 2: main courses 631 549 480 100.7 97.8 93.2 14386 13971 13314 Chef 3: salads and desserts 471 384 322 87.2 41.2 38.0	Phase I Phase II Days 1-7 Days 8-14 Days 15-21 Phase II average 1: soup and main course supplements				

Source: Experimental results

takes for a customer's dishes to be ordered.

After analysing the cooking process and its duration, it was concluded that it was possible to reduce the time spent on extra work or unnecessary movements. The loss – unnecessary movements – could be minimized or avoided by rearranging the workplace, using the 5S methodology. In order to test the suggested enhancement – rearranging the chef's workplace to reduce the unnecessary movements – the authors made a count of the steps made by the same three-chef shift, using bracelets – step counters, for 21 days.

One way to shorten the waiting time for an order is to reduce the time it

As shown in Table 1, after the workplace was rearranged, the number of steps made by Chef 3 decreased by 6.8 thou. per day, or 55%, which was significant progress.

No significant positive effect was found for Chefs 1 and 2: the number of steps made by Chef 1 decreased by 1034 or 7%, while for Chef 2 the decrease was 743 steps or 5%. An analysis of the cooking process allows assuming that a significant decrease in the number of steps made by Chefs 1 and 2 could be observed if replacing a worktop with a shelf system with a freezer with six drawers at their workplaces.

The authors conducted a second experiment – the time spent on finding necessary things was recorded by means of a stopwatch both before and after the rearrangement of the storeroom. During the experiment, the storeroom was rearranged, using the 5S methodology. However, rearranging the restaurant's storeroom, using the 5S methodology, allows saving 95% time spent on searching for things needed.

An ABC - XYZ analysis of the dishes offered by the restaurant was performed, thereby identifying which product categories (dishes) were in demand and the changes in order to find out which food preparation processes the chefs could optimize in order to shorten the cooking times.

Since changes in the demand for the dishes on the menu of the restaurant exceeded 25%, and none of the dishes on the menu was a leader in terms of revenue generated, there were no dishes, the cooking process of which BBS-Dizain Ltd needed to optimize. The chefs of BBS-Dizain Ltd could enhance their skills in preparing Group AY meals, as the demand for them was relatively steady.

Table 2 ABC – XYZ combined analysis of BBS-Dizain Ltd products

Indicator		Value Share					
		A (high) B (moderate)		C (low)			
	X (constant)	High value percentage Continuous demand High predictive value	Average value percentage Continuous demand High predictive value	Low value percentage Continuous demand High predictive value			
Consumption	Y (unsteady)	High value percentage Fluctuating demand Average predictive value 7; 28; 23; 37; 13; 9; 4; 21; 51	Average value percentage Fluctuating demand Average predictive value 44	Low value percentage Fluctuating demand Average predictive value			
Cor	Z (sporadic)	High value percentage Irregular demand Low predictive value 18; 54; 27; 22; 8; 10; 16; 56; 57; 15; 50; 1; 48; 29; 20; 5; 43; 42; 30; 12; 35; 31; 38	Average value percentage	Low value percentage Irregular demand Low predictive value 33; 6; 45; 26; 19; 24; 36; 3; 41			

Notes: the research assigned a code (number) to each dish included in the menu according to their order in the menu

Source: author's calculations based on 2019 data provided by BBS-Dizain Ltd and Pandya &Thakkar, 2016

- 1. The average rating of order processing time at the restaurant given by the employees of BBS-Dizain Ltd (internal customers) was higher (4 points) than the rating given by visitors (external customers) (3.49 points). A contingency analysis showed that there was no correlation between the ratings given by external and internal customers; therefore, the restaurant's personnel did not critically assess their performance in terms of order processing time.
- Rearranging the workplace of a chef, using the 5S methodology, and replacing the worktop for the chef with a freezer allows significantly two-fold reducing the number of the steps made during the shift. However, rearranging the restaurant's storeroom, using the 5S methodology, allows saving 95% time spent on searching for things needed. Therefore, the possibilities to reduce order processing times at the restaurant of BBS-Dizain Ltd involve decreasing unnecessary movements of chefs at their workplaces and reducing the time spent on searching for things in the storeroom.







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Table 2

THEORETICAL ANALYSIS OF FACTORS AFFECTING THE **DEVELOPMENT OF LOGISTICS CENTRE**

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Abstract

Profitable logistics complex system is an important factor for stable growth in economics of the state. Efficient management is the key to success, especially in logistic sector. To achieve great success in logistics it is decisive to understand and analyse all factors which influences on development of current sector. Furthermore, as the sustainability construction Tasks qualitative analysis method was employed as basis to conduct the research. Based on the literature, authors defined different factors influencing on the development of logistics centre and conducted groups of factors. Using qualitative analysis author developed main factors and elaborated definitions for each factor to provide information about included sub-factors. Service level was indicated as one of the important category. It shows level of clients satisfaction about service given by the logistic centres. Finally, all factors were ranged by importance, to show gradation and influence on development.

Aim

The aim of the present study was to review scientific literature about the factors affecting development of logistics centre.

Authors definded tasks to fulfil this study: theoretical analysis of factors and setting one clear group of factors which affectes development of logistics centre.

Materials and methods

Within the research, the authors used a summative content analysis method for defining categories and sub-categories, after that one common list of factors where defined.

Most important - to start searching for the right literature; therefore, were used different databases like Ebscohost, Web of Science, ResearcGate and Scopus. Most important searching words were: logistics centres, development, factors, warehouse.

Articles were chosen by conformity to research question and exploring field. After that these articles were re-checked and authors chose 31 papers, which were close to this research question.

All citations got coding and were analysed during this research.

Results

After exploring the field authors decided to research more about factors, which influence development of logistics centres. Therefore, research question was defined: Which factors affect the development of logistics centres?

were not part of the mix. But twice he noticed that green environmental warehousing strives to reduce environmental pollutions, cargo spoilage, and transportation costs.

Weng (2016) explains, that in the past, companies only considered quality, costs, flexibility, and time in the measurement of performance, and environmental factors

Jardas, Dundovic & Badurina-Tomic (2016) states that city logistics can be defined as the process of optimizing the logistics and transport activities of individual companies in an urban area, respecting traffic, environmental and energy factors, and the respective organization of existing urban transport mechanisms in place. Shin & Shim (2013) explains that failures of data warehouse projects are not only due to technological problems, but also due to the lack of consideration on managerial and environmental factors, such as characteristics of host organizations, top management support, and end users.

Gorecka & Maksymiuk (2015) insist, that for private entrepreneurs it is necessary to have ability to cooperate with the administration and local government units, ecological and environmental factors, legal and financial factors. In the case of the private sector, the most important aspects are the economic and technical conditions of a given location, which include: the value of the logistics market, investment attractiveness for potential clients, availability of a multi-branched logistics and communications infrastructure, availability and price of land.

From thirty-one (31) literature resources authors got forty three (43) different coding's of factors, which influence development of logistics centres. Authors highlighted fourteen (14) categories. Table 2 gives overview about all sub-factors, which were included during this study in current category.

Authors elaborated definition of all combined categories. It is illustrated in Table 2. Definitions gives overview of all factors and defines main ideas of each factor.

Table 1

Frequencies of categories

Factors	Sub-factors from analysis	Frequencies
Environment	Environment	5
Costs	Costs	12
Transport network	Transport network	12
Service level	Service level, Service, Quality	13
Organization infrastructure	Employment growth, Size of organization, Infrastructure, Management, Good workers, Number of transport companies	9
Political issues	Government, Relationships between countries, Social, Economic crisis, Legal	6
Human factors	Human factors	2
Financial aspects	Tax system, Value of logistic market, Financial, Investment, Price of land, Land availability	6
Technologies	IT system, Technologies, Process changes	7
Time factors	Trade-off, Flexibility, Time, Accessibility	5
Location	Centralization, Location	6
Processing goods	Demand characteristics, Delivery frequency, Errors, Lead time, Flow of goods, Planning	7
Market	Existing trends, Competitors, Product characteristics	5
Product demand	Product demand	2

Definitions of elaborated factors

Factor	Definition, sub-factors
Costs	Value of money which is spend on development of logistics centre and its facilities.
Environment	'Green logistics'; all factors related to environmental issues and aspects, decreasing air pollution and packaging recycling.
Financial aspects	All coding's related to money and payment, investments etc.
Human factors	Influence of people on different processes.
Location	Place were logistic centre is located, accessibility and availability.
Market	Market share of logistic.
Organization infrastructure	Structure of the company, involved divisions in development of logistic centre.
Political issues	Different governmental decisions, which can influence development of logistic centre.
Product demand	Influence on development depending on product market share.
Processing goods	Process of flow of goods in the company, inside processes.
Service level	Providing the desired level of service to clients / cooperation partners.
Technologies	IT and different innovations, which can be used in development of logistic processes.
Time factors	Definition of a time for any processes, which are related to development of logistic centres.
Transport network	Different transport noodles and accessibility from different types of transport.

Source: created by the authors

Conclusion

Source: created by the authors

- 1. Scientific and practicable literature provides a broad range of factors and ideas. The aim of article is reached by exploring different literature resources and established group of factors which influences to development of logistics centres.
- Elaborated definitions gives quick overview about included sub-factors and allow to understand point of view and influencing area.
- Frequencies of factors can be evaluated differently and can be used for exploring next steps of logistic centre sustainability in different places.
- 4. The results of the analytical study show that the many of factors are influencing one to each other and always connects with great investments. Factors can be divided also of importance for special groups – clients, partner, possible strategical partners, renters etc.







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PRINCIPLES OF EFFECTIVE MENTORING COMMUNICATION IN ENTREPRENEURSHIP: THE RESULTS OF A SURVEY OF EXPERTS

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Abstract

development of mentoring networks, communication between mentors and mentees and related problems in entrepreneurship have become an increasingly important topic in recent years. The aim of the research is to identify the most important problems that hinder an effective communication process between the mentor and the mentee in entrepreneurship based on expert opinions on the elements of and barriers to the communication process. The research results have revealed that mentors' willingness to communicate, appropriately engaging in dialogue with their mentees, as well as honour and other skills and traits are essential. The experts have emphasized that it is important that the mentee does not take the mentor's experience literally but critically assesses whether his/her resources are aligned with the goal.

Aim

The research aim is to identify the most important problems that hinder an effective communication process between the mentor and the mentee in entrepreneurship based on expert opinions on the elements of and barriers to the communication process.

Tasks

To achieve the research aim, the following specific **research tasks** were set:

- 1. To theoretically examine the nature of mentoring;
- 2. To assess the results of a structured survey/interview of experts.

Materials and methods

Research methods used: the present research applied the descriptive approach for identifying the behaviours being associated with effective interpersonal communication – defining the skills of interpersonal communication. In addition, the following methods were employed: monographic, analysis, synthesis, statistical analysis and a sociological method – structured expert surveying/interviewing.

The present research used specialist literature pertaining to the fields of mentoring and entrepreneurship as well as research papers by foreign and national scientists and other materials as well as articles by industry experts that pertained to the research topic.

Average

Results

The expert surveying method was adapted to the research hypothesis and the survey was conducted in several successive stages. Initially, based on scientific research studies (Renge V., 2003; Memon J., et al., 2015) and in consultation with experts in mentoring and sociological surveyors, a structured questionnaire was developed by the authors.

The structured questionnaire consisted of three sets of questions, in which the experts rated:

- the role of rational and emotional aspects and characteristics of mentor communication and of communication skills;
- the role of non-verbal communication ways;
- the impact of communication barriers on communication between the mentor and the mentee.

The experts were selected based on a prior assessment of their level of competence. Nine experts participated in the structured survey/interview.

Rating the role of rational and emotional aspects and characteristics of mentor communication and of communication skills (in a 5-point system), the experts admitted the following factors to be the most important (scored equally): "Skill to actively listen (reflect, ask questions, conclude, discuss)" and "Experience". The experts rated the mentioned factors at 4.89 out of 5 with a mode of 5 that indicated that a rating of 5 was the most frequently given one (Table 1).

Ratings of the role of rational and emotional aspects and characteristics of mentor communication and of communication skills by the experts, points (n=9)

Factors	rating	Mode
Ability to create a wish to communicate and cooperate	4.78	5
Ability to correctly choose the strategy and tactics of dialogue	4.22	5
Ability to arouse the partner's interest in a topic of conversation and allow the partner to make an informed choice	4.44	4
Ability to ensure correct dialogue	4.56	5
Ability to control one's activity and coordinate it with a communication partner	4.44	4
Ability to regain inner peace after intense communication	4.00	3ª
Skill to actively listen (reflect, ask questions, conclude, discuss)	4.89	5
Ability to put oneself in another's shoes, understand each other's emotions and experiences	4.44	5
Ability to interpret a person by appearance and behaviour	3.44	4
Ability to argue	4.67	5
Openness	4.56	5
Honesty	4.78	5
Ability to use modem communication technologies	4.22	4
Ability to communicate electronically	4,00	4
Availability (reachability)	4.33	5
Sex	3.11	4
Age	3.22	3ª
Nationality	3.00	4
Ideological views	3.56	5
Social status	3.00	3
Education	3.89	4
Experience	4.89	5

a. There are several modes. The smallest value is presented.

Source: authors' calculations based on the structured survey/interview of experts

Conclusions, proposals, recommendations

- 1. Mentoring is one of the most effective ways to transfer successful experience among entrepreneurs by actively sharing knowledge, experience and contacts. Mentoring in entrepreneurship is mainly used to promote the development of new and less experienced enterprises.
- 2. The research results have revealed that mentors' willingness to communicate, appropriately engaging in dialogue with their mentees, as well as honour and other skills and traits are essential. The experts have emphasized that it is important that the mentee does not take the mentor's experience literally but critically assesses whether his/her resources are aligned with the goal.
- 3. Feedback is one of the essential components of the communication process; according to the experts, mentoring participants should have skills to actively listen (reflect, ask questions, conclude, follow a thought).
- 4. The research results have revealed that mentors need relevant experience and knowledge in the field of the mentored entrepreneur or business that contributes to an overall entrepreneurship knowledge of the business model and management, as well as a systematic and structured approach to providing targeted and effective mentoring throughout the support phase.
- 5. The research results have revealed that the most essential barriers to communication were a lack of time and logical barriers and obstacles that emerged to partners with different ways of thinking.
- 6. Researchers need to continue the research started by the authors of the paper by working on and designing a communication model for mentors and mentees, taking into account the communication barriers identified in the present research and other factors relevant to communication in entrepreneurship.

Table 1









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LATVIAN INFORMATION TECHNOLOGY COMPANIES EXPORT PROMOTION TO US

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Abstract

Information technology is one of the fastest growing service export industries in the world. According to information collected by LIAA (Information and Communications ..., 2018), in 2017, 40% of Latvian information technology companies export to the Baltic States. In 2017, the United States (further – US) was the ninth largest export partner and the 18th largest import Tasks partner of Latvia. The US is the world's largest software information technology services provider, accounting for 34 of the total global IT market. Consequently, it is necessary to evaluate the export potential of Latvian information technology services and to determine the export promotion activities of Latvian information technology services to the US. So far, there are no analysis of the Latvian IT export promotion to US that be based on company's needs, experience and resources available. The results of the research concluded that the export tendencies of IT services are upward and the export balance of Latvian IT services with the US is positive.

Aim

Latvian information technology companies export Quantitative and qualitative research methods, promotion analysis, in order to clarify the trends of including the structured expert interviews with Latvian information technology companies export to representatives of the information technology US, to promote Latvian information technologies industry, quantitative data analysis, SWOT companies export to US.

- •To explore the theoretical aspects of export promotion and the implementation process in information technology companies, and to identify the key factors influencing these processes;
- •To analyze and compare the information technology sector in Latvia and the US, to identify the main export promotion activities of Latvian information technology companies and to evaluate their results;
- •To make structured surveys for Latvian information technology companies which are interested into export to US;
- •To identify approaches to promote the use of these factors to promote exports to the US, and to estimate the cost and effectiveness of implementing the export model developed.

Materials and methods

analysis, the selection and analysis of available information about information technology services export in the study were used.

Research sources and materials: the research includes scientific articles and studies, books, reports (Latvian Annual Report, Companies Annual Report, etc.), informative reports and statistics from databases as Lursoft, Firmas.lv, Central Statistical Bureau, OECD Database, Statista, NASDAQ, United Nations statistical database, US Census Bureau, Eurostat, etc.

Results

Services provided by the Latvian IT industry are in demand not only in the Member States of the European Union but also in other continents. Thus, for example, exports of computer and information services to Member States increased by 20% in 2015, but outside the EU by 41% (Export of ICT ..., 2016). Despite the fact that the IT sector accounts for about 4.7% of GDP, it plays an important role in economic development. In addition to modernizing and improving the way businesses operate, information technologies can help boost economic competitiveness, creativity and innovation and tackle social challenges (as quality of life). Turnover of IT companies increases every year (IKT sektora uzṇēmumu ..., 2018). When analyzing the changes in the number of IT companies and the total number of companies in Latvia in the period 2012-2016, it is possible to determine that the total number of companies has increased by 25.60% and the number of IT companies by 49.59%. The share of IT companies in the total number of companies has increased by 0.91% during this period. While in 2012 the number of IT companies was 4.8% of the total number of companies in Latvia, in 2016 the number of IT companies reached 5.7% of the total number of companies. These changes affected overall economic growth, which has led to increased demand for IT services and IT products (IKT sektors ekonomikā, 2018).

The study carried out an evaluation of Latvian information technology exports by conducting expert interview analysis, which reflects experts' views and observations on the IT industry and IT services export potential to the US. The results of the interviews conducted and the additional information analyzed indicate that the export trends of Latvian IT services to the US are upward. Experts estimate that Latvia's IT services are qualitative and competitive in the US, however, in order to promote export development, it is necessary not only to improve the IT legal framework in Latvia, but also to develop support measures for Latvian IT companies that want to attract partners or investors from the United States. Taking into account the specifics of the Latvian information technology industry, among Latvian IT professionals, is concluded that in order to promote the export of Latvian IT services to the US, it is necessary to develop criteria on which based to decide which are the necessary export promotion activities and include a summary of market research methods and export strategies. As the study concluded, Latvia's trade balance with the US is currently positive and the interest of Latvian IT companies in acquiring new export markets observed, it is necessary to promote the export of Latvian IT services to the US.

The results of the expert interviews reflects, that the developed export promotion model enables to reduce the time of development of IT service export promotion activities for SMEs to 63% of the average time planned or about 22h, and to increase the budget for export promotion activities on average by 80% of the total export budget. This permits to save an average of 19% - 37% of the expenses necessary for the development of export promotion activities. Research results, including the results of the research and their reliability, the authors proposes proposals, Latvian IT companies that are interested to export to the US, to use the potential of the US as a potential export market need to establish cooperation with companies in the US using different IT platforms, as well as participate in presentations and trade missions.

- 1. The efficiency of Latvian IT companies' export strategy development and implementation is influenced by ill-considered and unprofessional behavior during its development and implementation, moreover, Latvian IT companies, for reasons of resource efficiency, mostly choose not to carry out export market research and export market acquisition strategy development.
- 2. The main export markets of Latvian IT companies are Lithuania, Estonia and Scandinavian countries. The trade balance of IT services is negative, but from 2012 to 2016, the export of IT services increased by 74.9% and the imports by 76.0%.
- 3. Evaluating the opinion of experts on the Latvian information technology sector, it was found that the export tendencies of IT services are upward and the export balance of Latvian IT services with the US is positive, however, in order to promote Latvian IT companies export potential, is necessary to consummate IT field law.









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TRENDS IN THE DEVELOPMENT OF AGRICULTURE IN CONDITIONS OF TAX REFORM IN GEORGIA

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Abstract

At the current stage of development of the Georgian economy and in conditions of existing resources, only the agriculture sector can contribute to the reduction of high levels of poverty and unemployment in the country. Improper assessment of the role and importance of the sector, lack of programmes based on scientific research, inconsistent reforms led to the low competitiveness of Georgian agricultural production and the prevalence of imported products on the internal market.

Aim

This paper aims to assess the impact of tax reform on the development of the agriculture sector in Georgia, and to compare it with Latvia

Tasks

To analyse the existing situation in the agricultural sector of Georgia and elaborate the respective suggestions.

Materials and methods

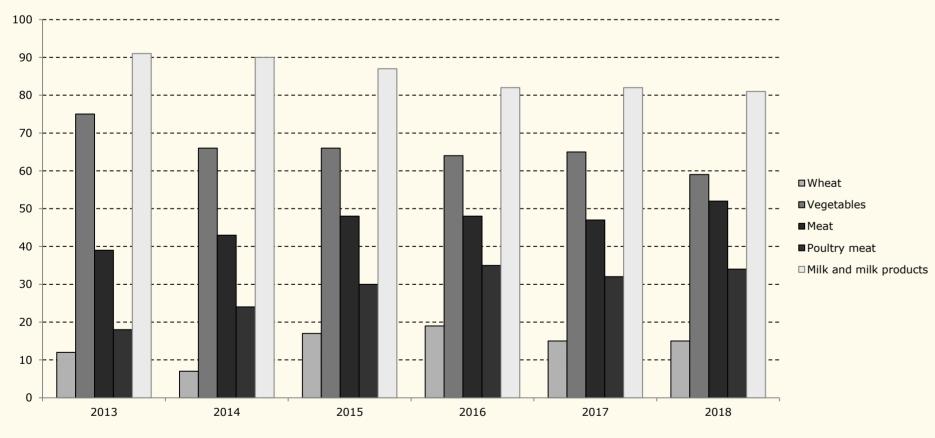
The methodological basis of the research is the dialectical method of cognition that has enabled us to study the interaction of economic events. The research methods like scientific abstraction, comparison of information, analysis and synthesis were also used. The empirical basis of the research is the official information of the National Statistics Office of Georgia, the normative acts of the Government of Georgia, the Georgian Tax Code and scientific publications.

Results

At this stage, the agriculture sector has a critical importance for Georgia to eliminate poverty, reduce unemployment and ensure the substantial improvement of living standards in the country. The issues of food security and food safety depend on the realization of the full potential of agriculture. The process of development in the agriculture is hindered by existence of weak and poorly developed infrastructure, lack of storage and refrigerator facilities, shortage of modern technologies and proper qualifications, chaotic situation in terms of irrigation and drainage systems and many more: therefore, the work efficiency and land productivity is extremely low. This negatively affects the competitiveness of the sector.

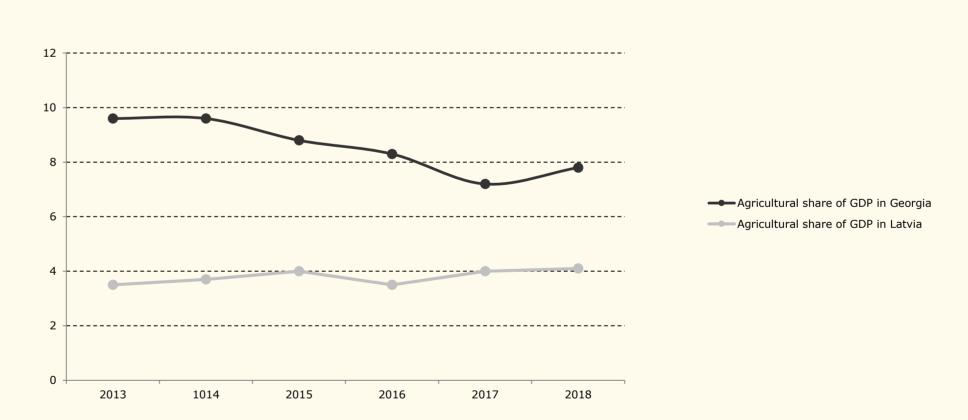
According to researchers of the 2000 tax reform in Estonia, the main goal of the tax reform was to stimulate investment growth (Prohorov A., 2017). So far, we cannot see substantial economic results of the tax reform in Georgia. Georgia currently consumes more imported agricultural products, than produces them. The self-sufficiency ratio in terms of such important products as vegetables, milk and dairy products is decreasing since 2013. The self-sufficiency ratio for wheat is very low, which has also decreased since 2016 and currently stands at 15% (Figure 1).

The situation existing in the agriculture sphere makes clear that at this stage the significant growth rates are not achieved, as well as technological modernization of leading segments, development of infrastructure, taking steps to clear the obstacles for Georgian products on the international markets, elaboration, and implementation of policy for replacing the cheap imported production by local production on the Georgian market, expansion of processing plants and their stimulation to work on local raw materials by means of law regulations, and breathing new life into agricultural cooperatives. Therefore, the food value chain development in all segments of agriculture proved to be weak (primary production, processing and storing infrastructure, marketing and realization), and it was not able to respond to the fierce competition, which was the result of trade liberalization. The share of agriculture in the GDP in 2018, compared to 2013, decreased to 7.8% from 9.6% (General Agro Sector, 2020). In comparison, the share of agriculture in Latvia is smaller, but has increased slightly over the same period from 3.5% to 4.1% (Figure 2).



Source: National Statistics Office of Georgia

Figure 1. Self-sufficiency ratio in Georgia in 2013-2018, %.



Source: National Statistics Office of Georgia, Central Statistical Bureau of Latvia

Figure 2. Agricultural share of GDP in Georgia and Latvia, %

Thus, at this stage we can say that Georgia lacks a unified and consistent vision for the development of the agriculture sector, therefore, it is very important to understand to what extent the intervention of the state in the agriculture sector would be justified in the conditions of an open economy, so that to ensure the stable and irreversible process of development in the sector.

- 1. In it's current conditions, Georgia's Agriculture sector has proved to be completely unprepared for liberal trade regimes, and, as a result, the development process is significantly slowed down. This situation is especially negatively affecting the levels of poverty and unemployment in Georgia.
- 2. The tax reform was not able to perform the stimulating role in the development of sector, because undeveloped infrastructure and lack of mechanisms for protection of internal market hampered the normal functioning of agricultural activities. Without solving this problem in the first place, in our opinion, any attempts to facilitate the development of the agriculture sector by means of tax reform would be unsuccessful.
- 3. The tax legislation of Georgia does not facilitate a development of agriculture sector, including in the part of profit tax, and does not create conditions for promotion of activities of agricultural cooperatives and for overcoming the crisis existing in the sector, nor it promotes an implementation of modern technology, which would positively affect the process of overcoming the existing barriers to the external markets. Therefore, it is necessary to review the tax legislation in Georgia.
- 4. The development of agriculture in Georgia and Latvia is difficult to compare in terms of tax reform. The development of agriculture in Latvia is mainly influenced by the EU and state aid payments, as well as by significant tax reliefs that preceded the tax reform. The impact of the latest tax reform on agriculture may not yet be assessed.







21st International Scientific Conference **ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020**

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ASSESSMENT OF RESULTS OF REORGANIZATION OF LAND RELATIONS IN BALTIC STATES

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Abstract

After the collapse of Soviet system, immediately after declaration of independence, Estonia, Latvia and Lithuania decided to initiate land reform within the framework of agrarian reform. However, the legislation and administrative systems of separate Baltic States were different, so the objectives and tasks of land reform, as well as the measures and methods for implementing the land reform, were different.

Aim

The aim of the article is to evaluate the processes of restructuration of land ownership rights in Baltic States, to analyse their legal background, objectives and tasks of reform, progress of process and procedures, as well as its results and to make comparisons between them.

Materials and methods

The study summarises the studies published previously by the authors of the article and other researchers on the progress and results of land reform in the relevant countries, as well as analyses legislative framework for land reform in all three countries.

Results

The objectives and tasks, as well as process of land reform can vary from country to country, depending on public administration system, existing structure of land ownership, social situation and other circumstances. Estonia, Latvia and Lithuania - neighbours at the Baltic Sea, at beginning of reform had similar land use situation due to similar geographical conditions and unified management system in frame of soviet system. As can be seen in Table 1, there are no significant differences in total area and population between these three countries.

Table 1
Features characterising the territory, population and land use in Baltic
States (on 01.01.2019)

Indicators	Estonia	Latvia	Lithuania
Territory of country, million ha	4.52	6.46	6.53
Population, million people	1.33	1.91	2.79
Population density, inhabitants per square km	29.4	29.5	42.8
Types of land use, %:			
agriculture land	30	36	52
forests	53	48	33
others	17	16	15

Although completion of land reform has not been announced yet in any of three countries, however the main tasks of land reform in Estonia, Latvia and Lithuania have been fulfilled - by 2019 in Lithuania and Latvia the majority of land (93% and 92% respectively) has been registered as ownership, while in Estonia this rate is less – 57%. Analysing land properties according to property status, it can be concluded that largest area of land was transferred to private ownership in Lithuania and Latvia (89% and 71% respectively), and majority of this land is owned by natural persons. In Estonia, compared to other two countries, private ownership is limited to 60% of land properties, at the some time significantly higher proportion of land are owned by public authorities (Table 2).

Until land reform all land resources in the territory of Latvia, Lithuania and Estonia were suborned under national jurisdiction, but as result of various processes of land reform it became as private ownership of natural and legal persons, municipal or state authorities. Although procedural course of land reform in mentioned states differed, all measures could be divided into four main directions, results of which are illustrated in Figure 1.

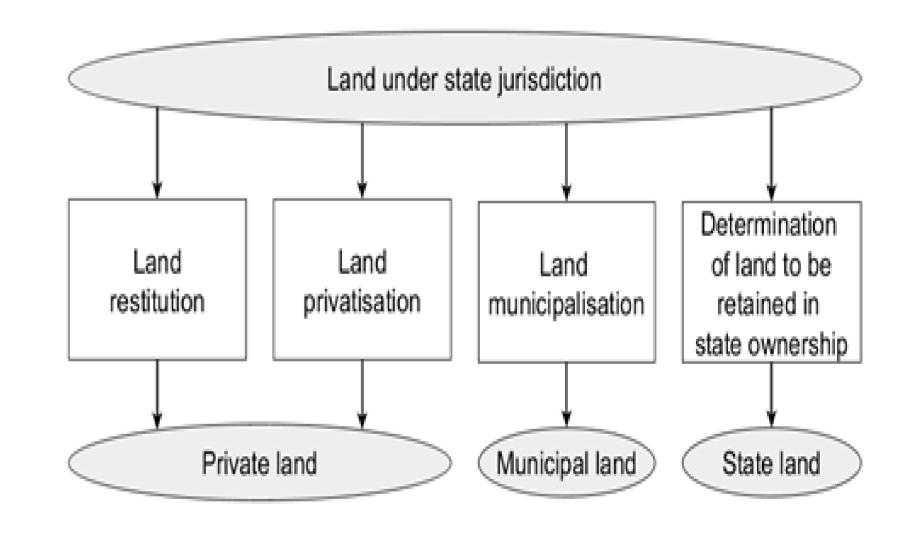


Fig.1. Main measures in frame of land reform

Table 2

Breakdown of owned land in Estonia, Latvia and Lithuania on 01.01.2019, %

Property status	Estonia	Latvia	Lithuania
Owned by physical persons	58	51	75
Owned by legal persons	gal persons		14
Owned by municipalities	1	2	1
Owned by the state authorities	41	27	10

- 1. The land is returned for ownership citizens of Estonia, Latvia and Lithuania, the right of people to acquire land has been exercised, as well as conditions for development of land market have been established.
- 2. For the first time land reform in Estonia, Latvia and Lithuania covered the entire territory of country. It greatly increased amount and complexity of work, and affected the period of processes. The land reform created the related legal environment in all spheres of life.
- 3. As positive moment in result of the land reform should be noted that modern system of cadastre and legal register was established and implemented in all three Baltic countries.
- 4. Analysing results of land reforms it should be concluded that the next phase of the "land reform" needs to be carried out. Changing legislative acts should be planned measures of land consolidation or land use planning, to create conditions for rational land use.









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Topicality of crafts in the development of Jelgava Old Town quarter

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Abstract

The first part of the research explained the role of crafts and artisans in urban development. The second part of the research performed a comparison of the operational patterns of current houses and centres of crafts, conducted an expert survey of administrators of the houses and centres of crafts and identified the demand for artisan products by the population and their interests in the development of the Jelgava Old Town street quarter.

Aim is to identify the role of market demand for artisan services in the development of the Jelgava Old Town House of Crafts.

Tasks

1) to identify and analyse theoretical findings and legal documents on the role of demand for crafts and artisans in urban development; 2) to identify the developments in and specifics of crafts by means of an expert and population survey and analyse the qualitative and quantitative indicators of the market demand.

Materials and methods

content analysis of theoretical and Internet sources, the abstract method, qualitative and quantitative analysis, data processing and interpretation by means of statistical analysis methods: data grouping, comparison and calculation of factors.

Results

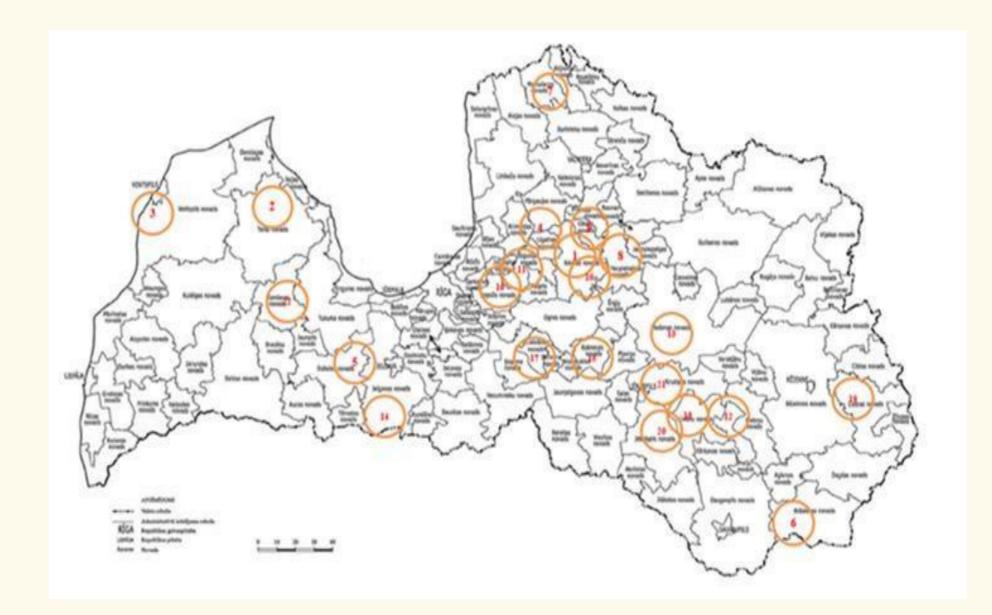
- 1. Summarizing and analysing the theoretical findings on the topicality of the demand for crafts in urban areas, it can be concluded that crafts promote the socioeconomic development of the territory.
- The authors combined the theoretical characteristics of crafts (Table 1), which express the diverse functions of crafts. Each function adds a new value to the craft, creating a value chain.
 Summarizing and analysing normative documents on the topicality of demand for crafts and crafts in the development of Europe. Latvia and Jelgava, it can be
- 3. Summarizing and analysing normative documents on the topicality of demand for crafts and crafts in the development of Europe, Latvia and Jelgava, it can be concluded that crafts as an important, supportable and development able activity is embedded in a number of European, Latvian, Zemgale planning region, Jelgava city and county development strategies and programs emphasize the need for support for traditional craft activities.

Table 1

Functions and characteristics of crafts

No.	Functions	Value	Authors
1.	Cultural, historical	Ancient skills and cultural heritage are preserved through	Nilsson, 2019,
	and educational	developing products/services; ancient skills are a symbol of	Barbora, 2017
		national identity traditions; societal cultural identity competences	
		are built up and passed on to future generations.	
1.	Innovative and	High value-added products/services are virtually and intelligently	Development, 2014,
	creative	created and sold by creative industries. New craft products in	Divandari, 2017,
		terms of design are developed by using modern technologies.	Sandell, 2016
		Latvian identity, cultural heritage, ethnographic signs and	
		"sources" of natural wealth give inspiration and information while	
		taking care of preserving, developing and transferring ancient,	
		traditional and long-term skills and knowledge.	
1.	Economic and	Crafts represent the kind of economic activity whereby artisans	Divandari, 2017,
	social	sell their products or services and pay taxes; the artisans belong to	Ammar, 2017,
		economic entities, and their enterprises provide jobs, reduce	Hadgich, 2005,
		social tension in the area and represent creators of economic and	Jeroscenkova et al.,
		social values.	2015
1.	Regional and urban	A recognizable image of a locality – a city, a municipality or a region – is created, the environment is used sustainably,	Danosa, 2019
	development	brownfields are regenerated, the environment for tourism is	
	acreiopinene	transformed. Adjacent areas and services are developed, and	
		business activity is facilitated. A higher value-added could be	
		generated in the area.	
1.	Tourism and	Tourist attractions – houses, centres, associations and quarters of	Lukich et al., 2015,
	marketing	crafts – represent new tourism products and marketing elements.	Dutton, 1983
		Focus is placed on customer (buyer, tourist etc.) needs.	
		Total is placed on easterner (wayer, tourist etc.) freedo.	

Fig. 1. Geographical distribution of houses of crafts in the municipalities of Latvia



An analysis of the information available on the websites of the houses and centres of crafts reveals that the geographical distribution of the houses and centres of crafts in the regions of Latvia are not homogenous (Figure 1). The houses and centres of crafts are mostly located in Latgale (65%) and Vidzeme (19%) planning regions, followed by Kurzeme (9%) and Zemgale (7%) planning regions.

In September and October 2019, a survey was conducted to find out the opinions of inhabitants of Latvia, including Jelgava municipality and Jelgava city, on the need for a house of crafts in the Jelgava Old Town street quarter. The questionnaires could be filled in person or electronically. Totally, 193 respondents were surveyed, the respondents had to rate 16 assertions on a 10-point scale developed by Fishbein (1967), with 1 being the least important and 10 the most important. The assertions to be rated by respondents pertained to five groups of functions of crafts (Table 1).

Conclusions, proposals, recommendations

- 1. The respondents highly rated the need for a house of crafts in the Jelgava Old Town street quarter; 45% expressed very convincing opinions, while 42% rated it as average. The main benefits in the context of craft functions are the cultural and historical heritage and social value.
- 2. The respondents (92%) almost unanimously believed that the development and maintenance of the Jelgava Old Town House of Crafts have to be funded by the national and local governments.
- 3.Based on the data collected in the field of crafts, it is important for local governments to develop a policy for the management of centres of crafts in order to continue attracting financial support from the EU Funds.
- 4. The research found that a house of crafts is needed in the Jelgava Old Town street quarter, and the current 19 artisans of Zemgale region and five artisans of Jelgava municipality could be potential entities for the house of crafts.









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Banku augstskola

FINANCIAL VIABILITY OF CIRCULAR BUSINESS MODELS IN TYRE RECYCLING INDUSTRY IN LATVIA

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Abstract

End-of-life tyre recycling industry in LV is encountering economic and sustainability challenges. Improvement of tyre waste management and recycling is important within the context of sustainability and circular business models (CBMs). It is also recognized at the EU level in relation to the the European Green Deal strategy. The tyre recycling industry in LV demonstrates a relatively unfavourable financial situation. Tyre recycling companies run traditional and inefficient business models that require large operating costs with low profitability.

Key words: circular business models, entrepreneurship, financial viability, tyre recycling

Aim

To clarify challenges related to the financial viability of tyre recycling companies adopting the new CBMs.

Methods

Literature review, semi-structured indepth interviews, case studies and financial analyses of 5 companies actually operating in tyre recycling.

Tasks

- 1) To investigate, what are the theoretical interpretations and discourses related to the CBMs and recycling;
- 2) To describe the general characteristics of the tyre recycling companies in Latvia;
- 3) To assess the financial performance of tyre recycling companies and identify the obstacles that interfere the development of new, financially viable CBMs.

JEL code: M19, L26, L65

Results

The Circular Economy (CE) is focusing on the extension of the lifecycle of products and materials as long as possible and exploring options to utilize the waste as a valuable resource in the manufacturing of other products. It has become increasingly complex question: how to integrate the CE principles on the enterprise or microbusiness level as new CBMs.

CBMs can be defined as business models that incorporate the principles of the CE ("3R - Reuse, Reduce, Recycle" and more "Rs") thus contributing to the business restructuring towards sustainability and through that ensuring new opportunities for a growth of productivity, efficiency and competitiveness of the company. In spite of the benefits from integrating environmental aspects into a policy or a strategy, there were insufficient interest by entrepreneurs to integrate into business environmental and CE principles.

This research shows an important development transition in the industry in the last 3 years, when 3 out of 8 companies have launched the tyre recycling production with new modern technologies (see table below). Table 1

Net profitability of tyre recycling companies in Latvia

Company	2013	2014	2015	2016	2017	2018	Trend line
AK LRPMK					12%	14%	/
E-DAUGAVA	-4%	-0,4%	22%	-9%	13%	24%	~~
MAKROL	6%	7%	-55%	-72%	-50%	-13%	
VVV RECYCLING	-2803%	n/a*	-5620%	-334%	-211%	-55%	~
R-TECHNOLOGY					0,07%	11%	/
Average	-934%	3%	-1884%	-138%	-47%	-4%	~~
Average excl. VVV Recycling		3%	-17%	-40%	-6%	9%	

The net profitability ratios show that the tyre recycling companies in LV run inefficient business models (BM) with large operating costs ensuring comparatively low return in profit.

The tyre recycling companies operate with losses. Yet the situation is improving in last 2 years, when 3 out of 5 companies have performed with positive profit.

Investments, including the public support, in new technologies has improved the efficiency and

performance of BM.

* This ratio can not be calculated as the turnover constitute 0

adopting investment intensive technologies.

Source: author's calculations based on Lursoft, 2019

Return on Assets (ROA) of tyre recycling companies in Latvia

Table 2

Companies with the higher ROA run traditional	Company	2013	2014	2015	2016	2017	2018	Trend line
BMs, e.g., producing a pyrolysis oil or mechanically						21%	26%	
cutting tyres in rubber chips as the heating material.	E-DAUGAVA	-3%	-0,32%	16%	-5%	11%	16%	<u> </u>
Most of the BMs are not efficient having the	MAKROL	3%	3%	-12%	-11%	-11%	-8%	
negative or low profitability. Lack of long-term assets and comparatively large	VVV RECYCLING	-10%	-2%	-4%	-5%	-12%	-16%	
amount of short-term liabilities may affect the						0,01%	10%	/
credit capacity and ability of attract funding for	Average	-3%	0,23%	-0,30%	-7%	2%	6%	_

Source: author's calculations based on Lursoft, 2019

The specifics of the tyre recycling require the adoption of new BMs that would complement the existing BM. R-TECHNOLOGY has adopted new CBMs in last 2 years and demonstrate promising financial viability, but further success lies in manufacturing of various innovative products for different customer segments.

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Conclusion

- New CBMs improve the financial viability of the tyre recycling companies, and for that the development of new innovative products is important
- Tyre recycling companies having several business models combined within one portfolio or introducing CBM innovations with different innovative products for various customer segments demonstrate better financial results
- 3. Further investigation is needed about new perspectives of the development of the CBMs, identifying new products and industries relevant for the industrial symbioses with the EOL tyre recycling products; new tyre recycling CBMs that ensure higher profitability and encourage the industry for re-generation.

Acknowledgements

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SOCIAL ENTREPRENEURSHIP AS A TOOL FOR THE DEVELOPMENT OF NON-GOVERNMENT ORGANIZATION'S ACTIVITIES: A CASE STUDY OF THE ASSOCIATION "ORANZAIS STARS"

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Abstract

In Latvia, the non-governmental sector (NGO) sector is largely dependent on external funding. In addition, competition for external financing is increasing. One of the solutions to reduce the effect of external financing is to engage in economic activity. Social entrepreneurship is becoming increasingly popular in Latvia - a business model that allows economic activities to be carried out without losing the mission, goals and social impact of NGOs. For municipalities, social enterprises are a tool for solving social problems.

Aim

To create scenarios for the development of NGO activities, using the example of Oranzais Stars Association.

Tasks

study theoretical aspects social entrepreneurship; 2) find out the normative regulation of social entrepreneurship in Latvia; 3) analyse the activities of NGOs, 4) develop scenarios for starting a social business

Materials and methods

Combined research approach using qualitative approach - document analysis, questionnaire survey, monographic method, strategic analysis and planning methods -PEST, SWOT, VRIO matrix, scenario method. The target group of the survey are legal representatives of children with disabilities. The population consists of 82 persons. Total number of respondents is 30.

Results

- 1. Here are the hallmarks of 21st century social entrepreneurship responding to the needs of society to which the state is not responding or responding too sluggishly or unsuitably. Social enterprises are thought to have emerged as a reaction to market or public sector problems in providing public services. The emergence of social entrepreneurship has also been driven by increased competition for external funding in the non-governmental sector. There is currently no common definition of social entrepreneurship in the European Union. This term is often used to refer to the principles and forms of entrepreneurship that involve starting a business to achieve social and environmental goals.
- 2. In Latvia, social entrepreneurship is regulated by the Law on Social Enterprises of the Republic of Latvia, which stipulates that Social enterprise is a limited liability company which has been granted the status of a social enterprise in accordance with the procedure specified in this law which carries out economic activities with a positive social impact. The Cabinet of Ministers of the Republic of Latvia has issued the following Cabinet Regulations related to the Law on Social Entrepreneurship, which additionally regulate the issues related to the Law: 1) Cabinet Regulation No. 173 of 27 March 2018, Regulations on the Groups at Risk of Social Exclusion and the Procedures for the Granting, Registration and Monitoring of Social Business Status; 2) Cabinet Regulation No.101 of 20 February 2018, Regulations on the Social Enterprises Commission; 3) Cabinet Regulation No. 197 of 3 April 2018, Regulations on the Conditions of Granting Commercial Aid to Social Enterprises and the Procedures for Granting Aid; 4) Cabinet Regulation No. 467 of 11 August 2015 Operational Program for Growth and Employment implementing measures of 9.1.1. specific objective "Increase labour market integration of disadvantaged unemployed" for 9.1.1.3. 'Support for social entrepreneurship'.
- Association "Oranzais stars" is a non-governmental organization whose core business is non-profit making and its specificity is different from that of other forms of business. Analysing the financial data of the association, it is concluded that the specifics of the organization significantly influence its financial results.. A SWOT analysis was performed on the significance of the factors, identifying the impact of the factors on the organisation's performance and revenue. "Creating quality community-based social services" stands out as an important opportunity. One of the most important prerequisites for further development is the "development" of quality community-based social services". And the most important threat to the development of the organization is "low solvency of the target group". On the basis of the analysis of the activities of the "Oranzais stars" association, it is concluded that the association is recommended to establish a new company and register its activities in the registers of social enterprises and social service providers, thus increasing access to public funding for both business start-ups and service payments. Developing social entrepreneurship within the association would primarily reduce the high impact of external funding on organizational performance and increase financial stability, while addressing a number of social challenges.
- 4. Collecting data from the analysis of organizational performance, 3 scenarios of organizational development were identified: new product development, social business start-up, niche strategy. The social business model is based on three main components - beneficiary, measurable social impact and profit. The authors developed 3 development scenarios for care and employment of young people with MD aged 15-29 living in Jelgava.

Table 1

Advantages and disadvantages of the development scenarios of **Association "Oranzais stars"**

Strategy	Advantages	Disadvantages				
New service	Free market, Cooperation with NGOs,	Competition, Narrower				
development strategy	Cooperation with recognizable persons,	consumer base, Limited market				
	Technical support, Material resources	capacity				
Change of the form of	Solving the social problem (community based	Bureaucratic burden, Need to				
activity (starting a social	services and employment promotion), Financial	attract investors or seed capital,				
business)	stability, Operational development	Lack of knowledge				
Englisher strategy	Niche Advantage, Loyalty, Company	Inflexibility, Strength of				
Focusing strategy	Recognition	Suppliers, High Cost				
Source: authors' Study, 2020.						

Summary of scenarios for setting up a day care centre in Jelgava

Table 2

Scenarios	Identified problems	Solutions	Estimated annual expenditure, thsd. Euro	Estimated annual revenue, thsd. Euro
Scenario 1 "Social enterprise DCC where municipality purchases service"	Jelgava lacks CBS for young people with severe MD, resulting in difficulties for legal representatives of young people with severe MD to enter the open labour market	Establishment of a DCC centre for young people with severe MD, where care is provided.	151.8	183.6
Scenario 2 "Youth Farm"	Jelgava lacks CBS for young people with severe MD, resulting in difficulties for legal representatives of young people with severe MD to enter the open labour market	Establishment of a DCC centre for young people with severe MD, providing care, leisure, education, employment and employment of legal representatives of young people.	218.4	120.0
Scenario 3 *DCC in municipal delegation"	Jelgava lacks CBS for young people with severe MD, resulting in difficulties for legal representatives of young people with severe MD to enter the open labour market	Establishment of a DCC centre for young people with severe MD, providing care, leisure, education, employment and employment of legal representatives of young people.	218.4	216.0

Source: authors' Study, 2020

Conclusion

1. Social entrepreneurship is a way to solve effectively the problems of people at different risks of social exclusion, which can have a positive impact on the development of the city and society in the long run. By implementing the social entrepreneurship, it is possible to facilitate the work of the municipality and reduce the municipal budget expenses.

2. Association "Oranzais stars" has the necessary resources and platforms for successful social entrepreneurship and new community-based social services. However, the "Low solvency of the target group" is a significant threat to the development of the association. It may hinder development in the long run.

3. After evaluating the development scenarios of the Association "Oranzais stars", Scenario No. 3 "Day care centre in the delegation of the municipality" is the most effective that provides development of the new community-based services. The developed development scenario has a great potential for social impact and expansion and in the long run it is a financially self-sufficient.







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Ekonomikas un sabiedrības attīstības fakultāte

MONITORING OF LAND USE AND LAND ABANDONMENT AT THE MUNICIPAL LEVEL: EXAMPLE OF SAMARA REGION

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Abstract

The article discusses modern legal regulation of land monitoring and necessary changes in appropriate legislation. Land monitoring is divided into monitoring of land use and monitoring of land quality. The problem of land abandonment or non-use of land resources on the example of Samara region, where more than 75% of territory is agricultural land has been studied. Inverse relationship between remoteness of local municipality from centre of the Samara-Togliatti agglomeration and area of unfarmed agricultural land has been analysed. Since the start of land reform, large areas of abandoned land have appeared in Samara region. The information on unfarmed agricultural land on municipal level of Samara region has been presented and the changes in their quality conditions are characterized.

However, there are significant problems in monitoring of land conditions. It is proved that absence of single authority for land management on national level and fragmentation of this function across different federal ministries leads to uncoordinated actions and lack of reliable information about land quality. As result, land quality continues to deteriorate, degradation processes are going on. At municipal level there are no possibilities and necessary investigation materials for land management and monitoring. The purpose of the research was the study of results of land monitoring in Samara region for analysis of dynamics of land stock and identification of main reasons for formation of unused (abandoned) agricultural land in the region. It is proved that land stock of Samara region mainly consists of agricultural lands, and most part of them (60%) are owned by citizens. Significant problem of land use is the availability of unused arable land, which is 8% on average in the region, but in local municipalities it ranges from 0% to 29%. The highest proportion of unused arable land is located in areas closer to Samara-Togliatti agglomeration, where most of the land has been privatised by individuals for conversion to other land categories and further resale, as well as problems with uncontrolled urbanization there have been Total within administrative boundaries of Samara Region observed.

Aim

The purpose of the study is to investigate the results of land monitoring in Samara region in order to analyse the dynamics of land stock and identify main reasons for formation of unused agricultural land.

Tasks

The article studies land monitoring system in Russian Federation. By example of one of the regions of the country the indicators of land stock state in different municipalities and the changes that have taken place within 30 years since the land reform beginning have been studied. Due to lack of single land management authority in Russia and fragmentation of this function by different ministries, reliable information on the state of land cannot be obtained. As a result, the state of land continues to deteriorate, as there are processes of degradation and there are no measures to prevent and eliminate them.

Dynamics of Samara Region land stock

No	Land category	Area, thousand ha					
		2007	2010	2013	2015	2017	2018
1.	Agricultural land	4112.5	4089.4	4070.1	4067.4	4067.2	4067.2
2.	Land of settlements, including - urban settlements - rural communities	344.4 168.5 175.9	356.2 170.8 185.4	359.3 170.8 188.5	359.6 170.8 188.8	359.8 170.8 189.0	359.8 170.8 189.0
3.	Land of industry, transport and other special purposes	69.6	70.0	71.0	71.5	71.5	71.5
4.	Specially protected areas	135.3	138.8	138.8	138.8	138.8	138.8
5.	Forest land	527.0	534.4	549.6	551.5	551.5	551.5
6.	Land under water	167.4	167.4	167.4	167.4	167.4	167.4
7.	Reserve land	0.3	0.3	0.3	0.3	0.3	0.3
Total within administrative		5356.5					

Materials and methods

The hypothesis of the study is - the basis of current problems of land use in the studied region is the lack of single land management authority and fragmentation of supervision function between different agencies.

The purpose of the study is to investigate the results of land monitoring in Samara region in order to analyse the dynamics of land stock and identify main reasons for formation of unused agricultural land.

The objectives of research are - organization of land monitoring system in the Russian Federation and its federal regions, dynamics of the land categories of Samara region land stock in period 2007 - 2018, land ownership forms, distribution of unused land in municipal regions and reasons for increase of area of unused agricultural land closer to urban agglomerations.

The method of analysis of scientific literature, annual statistical data reports, tabular and graphical methods conducting the investigation were used.

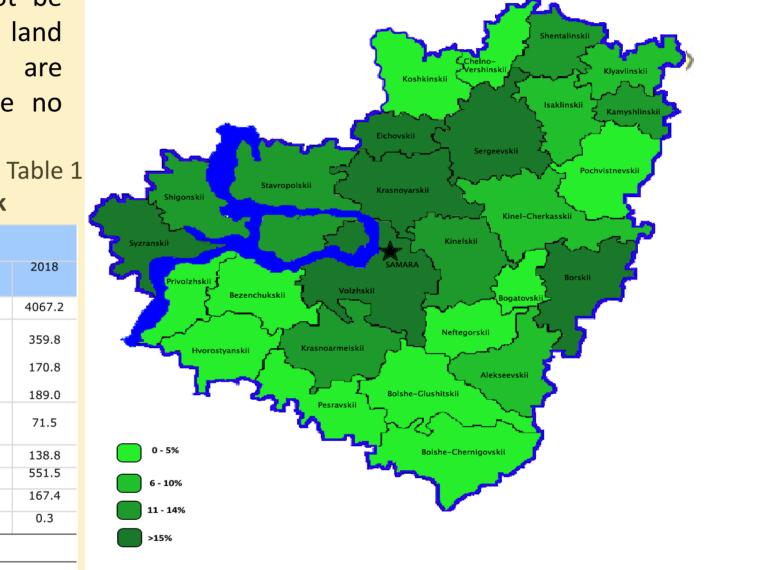


Fig. 1. Location of unused land in municipal areas of Samara region, %

Results

On average 8% of agricultural land is not used in the region. However, this indicator varies greatly from municipality to municipality. In some municipalities (Bogatovsky, Bolsheglushitsky, Bolshechershnigovsky, Koshkinsky, Neftegorsky, Pestravsky, Hvorostyansky and Pokhvistnevsky) this indicator is equal or close to zero. But in some municipalities it is significantly above the regional average: Elkhovsky - 29%, Sergievsky - 22%, Borsky - 20%, Syzransky - 18%, Volzhsky - 18%, Krasnoyarsky - 15% etc. The majority of municipalities located far from regional centre have small proportion of unused arable land. In peri-urban areas, on the contrary, this indicator is higher, as agricultural land is often purchased by individuals in order to be transferred to another category.

It should be noted that total area of unused arable land in Samara region has decreased in recent years: in 2007 about 700 thousand ha (24%) of arable land was not used, in 2011 this indicator was reduced to 417 thousand ha (15%). Measures taken by the Ministry of Agriculture and Food to engage in the turnover of unused arable land have led to reduction of unused land area. Road maps have been developed for some municipal districts to organize and conduct an inventory of agricultural land in order to identify arable land that is not used for agricultural production and is not used for its intended purpose.

Monitoring of land use is an important part of the land management system. Modern problems in the field of state land management lead to violations of land laws, such as:

- 1. unauthorized land seizure;
- 2. occupation of valuable agricultural land and land of environmental importance;
- 3. use of land not for its intended purpose and in contradiction with the permitted use;
- 4. consumer use of land, which leads to depletion of soil fertility or loss of the soil layer etc.

Conclusion

Improving the land management system, it is required to address land management problems. Unreasonable and thoughtless change of legislation in the sphere of land management, simplification and rejection of land management activities can lead to irreparable damage.

Process of further improvement of land management monitoring is currently under way. Plan of measures to improve legal regulation of land relations has been approved by Government of the Russian Federation in 2018. Adoption of number of federal laws under this Plan will facilitate solving of problems in use of land resources and increase the responsibility of legal persons and individuals working on land. There should be implemented protection of agricultural land and reduction of withdrawal of land from agricultural turnover. In author's opinion most important directions for improving the land legislation of the Russian Federation are as follows:

- 1. establishment of criteria for attributing land to especially valuable agricultural land and its allocation to separate territorial zone;
- 2. determination of the procedure for changing of types of permitted use of land;
- 3. establishment of restrictions for changing of types of permitted use of especially valuable agricultural land, as well as ban of open-cast mining of common minerals on agricultural land;
- I. improvement of the inventory system of the land, especially of agricultural land;
- 5. carrying out of passporting of agricultural land in order to obtain an information on soil conditions and properties, etc.