

Smart Work Centre – An Opportunity to Increase Economic Development in Balvi Municipality

Ilze Judrupa, *Riga Technical University*

Abstract – The main goal of the research is to define advantages and disadvantages of telework and smart work centres (SWC) and to evaluate main problematic development spheres in Balvi municipality. Research methods are the following: analysis and synthesis, quantitative data analysis, comparison, graphical methods. Smart work centre will be a real way how to increase the competitiveness of Balvi municipality; it will provide new working places, decrease unemployment and help maintain population in the municipality.

Keywords: Regional Competitiveness Index, telework, smart work, smart work centre

I. INTRODUCTION

Nowadays the rapid speed of information and communication technology development allows reorienting the existing traditional forms of management to more flexible and effective work – telework.

The owners of companies realize that it is possible to do many kinds of work not in the office. Most often programmers, translators, book-keepers, lawyers, designers, writers, journalists, editors of Internet portals, managers of e-shops, advertising agents work at home.

Establishment of smart work centre is one of the possibilities how to maintain population in regions, also in Balvi municipality, keep them back from immigration, create new working places and possibilities for population exactly in the region. In such a way the competitiveness of Balvi municipality will increase over other municipalities.

II. CONCEPT OF TELEWORK

Telework is the way how enterprises and public authorities can become more progressive. They will allow their employees to combine work, private and social life – not only domestic life, but also participation in non-governmental or political organizations, cultural activities, which enable people to express themselves as social beings [1].

Work outside the office has many definitions in different regions. The beginning of such kind of work was in the USA and the first name used to describe this work in the 19th century was “outwork”. However, in the 1970s the term “telecommuting” appeared. Terms “telecommuting” and “telework” were introduced by Jack Nilles in 1973. His work was concerned with the development of spacecrafts and telecommunications for the U.S. Air Force and National Aeronautic and Space Administration (NASA). He worked at the University of Southern California as a researcher in various projects whose main goal was to study possibilities how to decrease traffic jams if the telecommunications system

would develop and people would work near the home or at home [2].

In the Telework agreement among the European Trade Union Confederation (ETUC), Union of Industrial and Employers’ Confederations of Europe (UNICE), the European Association of Craft, Small and Medium-Sized Enterprises (UEAPME) and the European Centre of Employers and Enterprises providing Public Services (CEEP), signed in 2002, telework is defined as such a form of job management / implementation, when an employee regularly does work, which is possible to do in the office, out of office and by using IT [3].

Terminology Commission of the Latvian Academy of Sciences offers the following definition of telework: replacement of regular going to work with working at home or other distant office, when documents and data are sent to a central office using electronic data interchange [4].

Definitions of telework rely on 3 main concepts: organization, location and technology. More than 60% of these definitions are based on the combination of at least two of these concepts. Since remote work and the use of new technology imply organizational changes, telework may be defined as work carried out in a location, where, far from central offices or production facilities, the worker has no personal contact with co-workers there, but is able to communicate with them using new technology. Within this broad definition, telework may be performed “on-line” or “off-line”, it may be organized individually or collectively, it may constitute all or part of the workers’ job and it may be carried out by self-employed workers or by employees [5].

TABLE I
OVERVIEW OF DEFINITIONS OF TELEWORK [6]

Source	Definition
ETO 2000	Telework occurs when ICTs are applied to enable work to be done at a distance from the place where the work results are needed or where the work would conventionally have been done.
Nilles 1994	Telecommuting is the partial or total substitution of telecommunications technologies, possibly with the aid of computers, for the commute to work.
Mokhtarian 1991	Telecommuting is working at home or at an alternate location and communicating with the usual place of work using electronic or other means, instead of physically travelling to a more distant work site.

Most relevant definitions are shown in Table 1. It is important to note that most definitions in literature focus on the workplace location being moved or the substitution of physical travel. Nilles (1994) and Mokhtarian (1991) concentrate on reflecting the process of travel substitution

while ETO (2000) focuses on locational changes caused by telework [6].

Thus, it means that there are various approaches to defining telework. Some of them hold a view that telework is employment when only IT and network of data transmission are used without interruption. The others consider telework to be any job, even not concerned with the use of IT and data transmission, inter alia all forms of self-employment. The first concept of telework is used in the USA, but in the European Union the second approach to telework definition is used. However, in recent years the International Labour Office has begun to separate telework and self-employment to apply different political instruments for teleworkers and handicraftsmen [7].

The nature of telework, its advantages and disadvantages from employers' and employees' point of view have been studied by several authors. One of the researchers of telework, who have teleworked since 1979, is British researcher Noel Hodson. He wrote several books and articles about telework, for example "The Economics of Teleworking", "Teleworking and Employment in Europe", and was the managing editor of the book "Teleworking Explained" [8].

One of the scientists from Latvia, who has conducted significant research about telework and its popularization, is Daiga Kamerade (Riga Teacher Training and Educational Management Academy). She has successfully carried out research about telework as an alternative way of working and defended the results of research at the University of Cambridge. The goal of the research has been to clarify whether telework leads to the society, where people will be isolated and socially passive. The topicality of research is determined by the fact that it has been suggested that her findings need to be published. The research has proved that teleworkers are 1.35 to 1.7 times more active in terms of political and trade union events [9].

Telework must be done both at home and outside the home. Therefore, teleworkers can be classified as follows:

- teleworkers, who work at home – they work for company from home in the working place, which is organized at home;
- teleworkers in the smart work centres – they work in the special office or room, which is equipped with IT and communication equipment;
- mobile teleworkers – they work in other places, not smart work centres, where the necessary technologies are available, for example, Internet café, library etc.

The above-mentioned classification of teleworkers suggested by experts from different countries is only one way how to classify teleworkers. In general, all classifications are based on those three basic forms, while others suggest merging them or subdividing them [10].

III. ADVANTAGES AND DISADVANTAGES OF SWC

One of the possibilities to do telework is to work not at home, but in the special smart work centres (SWC) or telecentres. Development of telework in smart work centres,

which are provided by the developed communication systems, will help find new possibilities of flexibility of working places and job management. Decentralizing of professional work can help decrease environmental pollution, which is caused by daily movement from home to work by car or public transport [11].

There are different ways how to establish telework centres, find necessary premises, financing, teleworkers and enterprises interested in telework. Telework centres in the European countries are different by their scale – they vary from 1-3 rooms with only 4-5 working places to big buildings with large office places and conference rooms.

There are also various goals why the telework centre is needed. In one case it is possibility to create new working places and decrease the level of unemployment, in other cases telework centre is one of possibilities to maintain population in the region or municipality. In some cases, telework centres are established exactly for disabled persons or they are the way how to involve in the labour market people in risk groups – young people, mothers of small babies, elderly people.

Telework centres can be formed using finances from the EU funds or within the framework of different projects, as well as financed by the central or local government. Sometimes they are financed in cooperation with private partners, but there are also private telework centres that work like independent enterprises. The possible kinds of telecentres are shown in Figure 1.

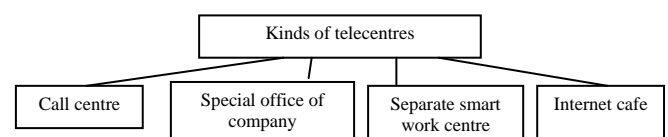


Fig. 1. Kinds of telecentres [elaborated by the author]

Smart work centre is an office or room near the person's living place, where employee or group of employees are provided with individual working space and necessary technologies. Employers provide their employees with flexible and appropriate working conditions. The main advantage of smart work centres is their nearness to employee's place of residence, as a result, the transport costs and use of transport are decreased and productivity is increased.

The smart work centres are flexible and multifunctional in use that depends on the group of their users (Table II).

TABLE II
SERVICES PROVIDED IN THE SWC [12], [13]

Basic facilities	Additional services
Computer with appropriate programmes (Internet, access to the most popular data bases etc.); Office equipment (xerox, printer, scanner etc.); Telecommunications.	Access to interactive technologies, for example, high quality video conference; Conference rooms; Special recreation zone; Large public rooms; Day-care services for children; Café or shop to get food; Financial services (bank office, ATM etc.); IT support services; Notary and law office; Employment service; Excellent access to highways and public transport [12], [13].

It is possible to see the “architecture” of smart work centre – system and services provided – in Figure 2.

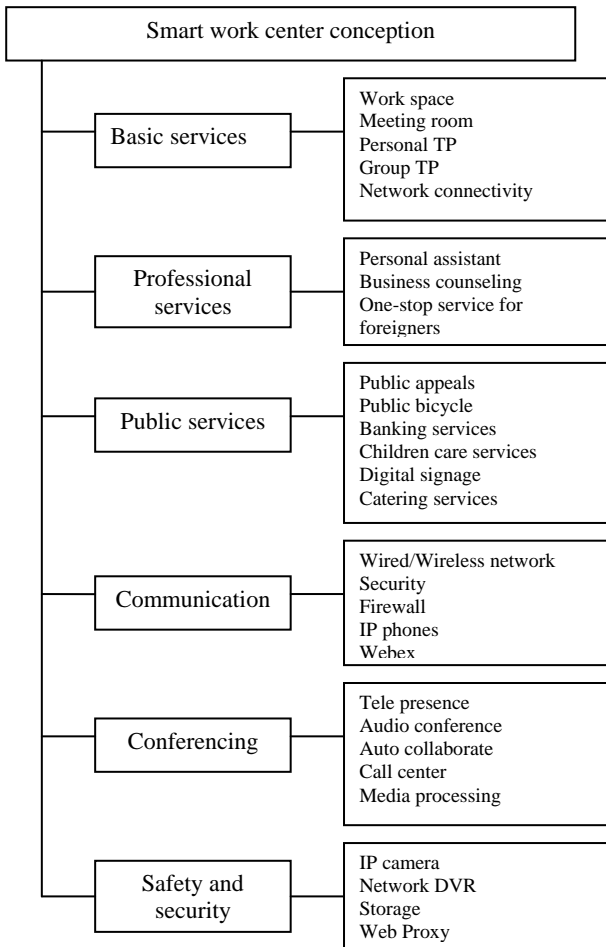


Fig. 2. SWC conception [14]

From Table II and Figure 2 it is possible to see that SWC provides many types of activities and services. The SWC gives people a choice, so instead of making the stressful and time-consuming journey to the central office every morning, they can go to a place much closer to home where they can concentrate on their tasks, meet other people, drink coffee and do nearly all things they would normally do at their place of work.

Most people who use SWC do not use them every day. They use the centre only once or twice a week, and on the other days they go to their usual workplace, or attend meetings with clients or colleagues. In some cases, they use the centre for half a day – or just a couple of hours [15].

The main advantages, if we compare work at home with the work in special smart work centres, are summarized in Table III.

From Table III it is possible to conclude that both kinds of telework have their own advantages. Thus, to choose the way of working, it is necessary for everybody to evaluate

advantages and disadvantages of telework, personal touches and specific features of work.

TABLE III

MAIN ADVANTAGES OF WORKING AT HOME AND IN THE SWC [12], [13], [16]

Work at home	Work in smart work centre
<p>Time economy (it is not necessary to spend time on the way to work/ from it). It is not necessary to spend money for travelling to work, business clothes, eating outside the home. Person can plan the working hours her /himself. It is not necessary to simulate working if the work is done, but working hours are going on. It is possible to combine work with child care or sick-nursing. At the same time, it is possible to do many other household chores that do not need continual presence (for example, it takes only 5 minutes to put laundry into the washing machine and after 2 hours it is possible to put in the next “portion”). There is no discomfort for shy people, which can appear in the communication process in the office. It is a real possibility to work for handicapped persons [16].</p>	<p>There is equipped special working space (table, shelves, chair, lighting, technologies). There must be very big motivation to work at home, otherwise the work will be postponed and will be done in a hurry and non-qualitatively later. There is an opportunity to use ICT, office equipment. There is an opportunity to meet and communicate with other professionals. There is a higher level of protection against equipment breakdown or its non-authorized use, as a result of which the information loss is possible. Safety of communication – to provide safe access to office equipment for teleworkers, communication must be encoded. Responsibility for providing the encoded communication, safety of e-mail and protection against viruses lies with company’s IT staff. There is an opportunity to use additional services. Savings on energy, for example, electricity costs [12], [13], [16].</p>

There are also advantages and disadvantages of the telework from the employers’ point of view:

1) Main advantages:

- enterprise flexibility and cost savings (in such cases teleworkers often accept a lower salary, so that a large office is not necessary);
- recruitment and retention of staff – it is possible to attract good specialist, who otherwise will not work in this office (no possibility to pay such high salaries / specialist is living far from the office / the office is located in a rural area, where there are not good specialists);
- the image of the company improves, because it is the company that uses alternative working methods;
- decrease in costs of public facilities (lower power consumption, lower rental costs etc.);
- productivity increases;
- jobs for the disabled;
- reducing commuting time.

2) Main disadvantages:

- it is difficult to control employees, process of work (most often the final product is received);

- costs of education increase (it is necessary to work out special methods, training will be done more often);
- if an employer is in the office, he always feels atmosphere in the working place, learns from colleagues; the news and possible working methods have been discussed;
- if an employee works at home and is provided with equipment, it means that, in fact, control over the equipment is lost;
- in some cases it is necessary to get special equipment that provides secure remote access to office computers;
- it is impossible to have a team of colleagues because there are just individuals, who work for a company [5], [16], [17].

Also employers must evaluate advantages and disadvantages of telework introduction in the company life.

At the country level, in its turn, the main advantages of the telework are concerned with a decrease in traffic jams, decrease in hazardous emissions, inter alia CO₂, and improvement of environment. It is a real possibility to promote development of regions and rural areas, as well as create new working places. Also one of the important aspects is that telework can be successfully done by handicapped persons.

The study carried out by the UK Department for Transport has found that teleworking reduces the commuting car mileage travelled by teleworkers by 48-77% which, taking into account some increase in domestic travel, represents an 11-19% reduction in both mileage and trips.

The existing case studies show that the impact of working at home varies depending on the amount of time spent at home and the efficiency of the economy, in which teleworking is introduced. For example, if a significant number of people worked from home more than three days a week, this could lead to energy savings of 20-50%, even with the increase in energy used at home or non-commute travel. Home-working allows employers to use or build smaller offices that require less energy to construct and maintain [18].

IV. ECONOMIC DEVELOPMENT OF BALVI MUNICIPALITY

Balvi municipality is located in the statistical region of Latgale; it takes 1045 km² and consists of 10 parishes and the city of Balvi. The municipality was created in 2009 when, in the framework of Administrative Territorial Reform, the city of Balvi, Balvi parish, Berzkalne parish, Berzpils parish, Briezuciems parish, Krisjani parish, Kubuls parish, Lazduleja parish, Tilza parish, Vectilza parish and Viksna parish joined together. It means that in the research there are data only about the period of 2009-2010.

It is possible to evaluate the economic development of Balvi municipality in comparison with other municipalities of Latgale statistical region using Territory Development Index (TDI), as well as a simplified formula of Regional Competitiveness Index (RCI) and the method of regional competitiveness evaluation worked out by the author of the article. Methods of calculation of the mentioned indices are shown in Table IV.

TABLE IV
MAIN ADVANTAGES OF WORKING AT HOME AND IN THE SWC [19], [20]

Indicators and their relative weight	Territory Development Index		Regional Competitiveness Index	
	Indicators	Weight	Indicators	
	Level of unemployment, %	0,3	Number of inhabitants	
	Revenues per person from Personnel Income Tax in municipalities' budgets, LVL	0,3	Natural increase	
	Demographic burden	0,2	Migration balance	
	Changes of population during last 5 years, %	0,2	Economically active statistical units of market sector per 1000 inhabitants	
			Revenues per person from Personnel Income Tax in municipalities' budgets, LVL	
			Level of unemployment, %	
Formula	$t = \frac{x - x_1}{s} \quad (1)$ <p>where: t – the standardized value of the territory; x – the indicator in its specific units of measurement in the territory; x₁ – the arithmetical mean of the indicator of the group of territories; s – the standard deviation, which is calculated by Formula 2:</p> $s = \sqrt{\frac{\sum (x - x_1)^2 f}{\sum f}} \quad (2)$ <p>where: f – the statistical weight, generally, a number of inhabitants</p>		$F_n = \frac{1}{N} \left(2 * \frac{f_1 - f_{\min_1}}{f_{\max_1} - f_{\min_1}} - 1 \right) + \dots + \left(2 * \frac{f_n - f_{\min_n}}{f_{\max_n} - f_{\min_n}} - 1 \right) \quad (3)$ <p>where: F_n – the subindex of regional competitiveness factors; f₁...f_n – real values of indicators; f_{min}, f_{max} – minimal and maximal values of indicators; N – a number of indicators.</p>	
Maximal, minimal values of the index	Not fixed		Values of the index are in the interval [-1;1]	

The level of economic development of municipalities of Latgale statistical region, calculated using TDI and RCI, is shown in Figure 3.

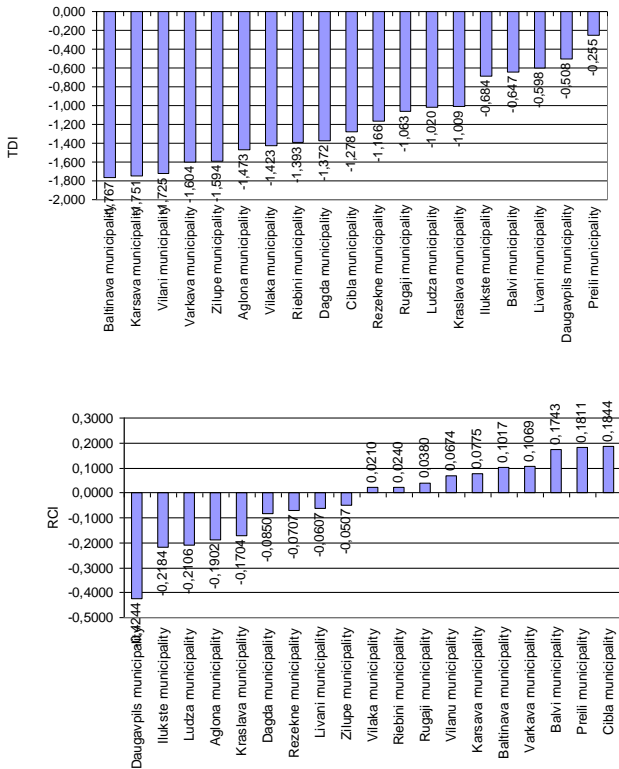


Fig. 3. TDI and RCI in municipalities of Latgale statistical region, 2010. The author's calculations based on [21], [22]

It is possible to see in Figure 3 that Balvi municipality took the 3rd place in terms of RCI, the value of RCI in 2010 was 0.1743. And, evaluating municipalities in terms of TDI, Balvi municipality in 2010 was in the 4th place, TDI value was 0.647. Balvi municipality is one of the economically developed municipalities of Latgale statistical region, but in the scale of Latvia its competitiveness is considerably lower than that of municipalities of other statistical regions.

The most developed areas of Balvi municipality, which are evaluated using indicators of RCI, are shown in Figure 4.

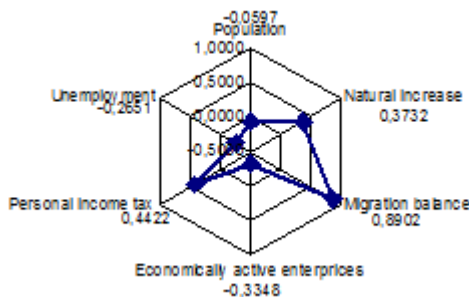


Fig. 4. The most developed areas of Balvi municipality in 2012. The author's calculations based on [21], [22]

Based on Figure 4, it is possible to conclude that the most competitive areas of Balvi municipality in comparison with other municipalities of Latgale statistical region are characterized by migration balance. In 2010 it was positive – it means that people went to the municipality more than left it. The other competitive area was revenues of municipality; the Income Tax revenues per person in 2010 were 181.7 LVL, comparatively in 2009 they accounted for 159 LVL per person. Also natural decrease in Balvi municipality was less than in other municipalities of Latgale statistical region.

However, the largest problem was a high level of unemployment; in 2009 it was 17.1%, but in 2010 it increased to 18.8%.

Development currently ensuring and decreasing factors, as well as potentially hindering and facilitating factors in Balvi municipality are evaluated using the development level / trend matrix (Figure 5).

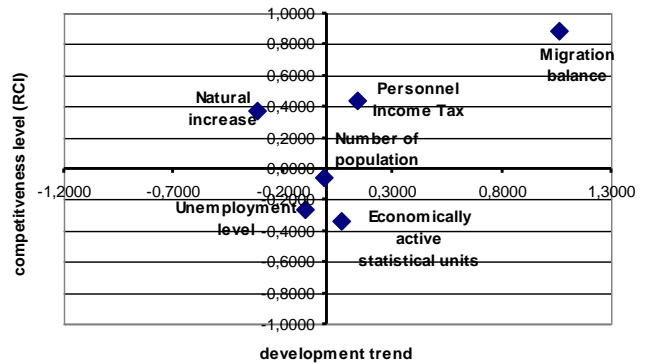


Fig. 5. Development facilitating and hindering factors in Balvi municipality, 2010. The author's calculations based on [21], [22]

It is possible to see in Figure 5 that the development currently ensuring factor in Balvi municipality is migration balance and revenues from Personnel Income Tax in municipality budgets. These indicators have values above the average and have a positive trend.

The development potentially facilitating factor is economically active statistical units of market sector, because the number of enterprises is less than average, but it has a positive trend.

Development currently decreasing factors are the high and increasing level of unemployment, as well as the small number of people, which continues to decrease.

However, the development potentially hindering factor in future will be natural decrease, because its values are above the average, but they have a negative trend.

It is possible to conclude that in Balvi municipality activities should be promoted to decrease the level of unemployment, maintain people in the municipality. Creation of smart work centres would allow increasing the development level of Balvi municipality; the new working places would be established; the level of unemployment would decrease and the income of population and consumption would increase.

Distant work enables people to combine life in a rural area with high qualified work, as well as decrease travel expenses and reduce air pollution, and, thanks to flexible timetable, it

promotes balance of work and private life. In perspective, telework will become a more frequent alternative taking into consideration the development of ICT, changes in structure of economics (transition to intellectual work) and work culture and management. This will allow for a greater degree of trust between employers and employees [23].

V. CONCLUSION AND SUGGESTIONS

Distant work or telework is seen as a new work management form, which provides flexibility and safety, increases work quality, and increases possibilities for handicapped people to take part in the labour market.

Telework must be done from home and special smart work centres.

Every kind of telework (at home or out of home) has its advantages and disadvantages from the point of view of workers and employers. Prior to choosing this modern form of working, it is necessary to evaluate financial benefits, work features and employees' personal touches.

When choosing a job in a smart work centre, employers and employees gain extra advantages, and a number of disadvantages are eliminated compared to working at home.

Balvi municipality took a considerably high place among other Latgale region municipalities in 2010 based on the values of TDI and RCI (3rd and 4th places).

The main problematic areas in Balvi municipality are the high level of unemployment and considerably small number of people, which continues to decrease. Also there is a negative trend of natural increase in the municipality. The solution to the above-mentioned problems would be the creation of smart work centre in Balvi municipality.

To promote telework, it is necessary to establish smart work centres. In such centres, the working place and ICT are available to do telework successfully. Dynamic and creative environment in smart work centres opens new opportunities to develop new contacts and promote cooperation between employers and workers, who worked at home till now.

This research has been supported by the European Regional Development Fund within the INTERREG IVC project Micropol – Smart Work Centres in Non-Metropolitan Areas (No. 1097R4).

REFERENCES

- [1] Rokasgrāmata par Eiropas sociālo partneru darba programmas 2009.–2010. gadam un Eiropas sociālo partneru pamatnolīgumu īstenošanu un ieviešanu praksē. LBAS. [Online]. Available: http://www.lbas.lv/upload/stuff/201004/rokasgramata_es_programmas.pdf [Accessed Aug 1, 2012].
- [2] J. Mears. Farther of telecommuting Jack Nilles says, security, managing remote workers remain big hurdles. NetworkWorld. [Online]. Available: <http://www.networkworld.com/news/2007/051507-telecommuting-nilles-security.html> [Accessed Aug 1, 2012].
- [3] Pamatnolīgums par teledarbu. [Online]. Available: <http://www.ddd.lv/file.php?id=53> [Accessed Aug 1, 2012].
- [4] LZA Terminoloģijas komisija. [Online]. Available: <http://termini.lza.lv/term.php?term=teledarbs&list=&lang=LV> [Accessed: July 31, 2012].
- [5] V.di Martino, L.Wirth. Telework: A new way of working and living. – Switzerland: International Labour Review, Vol.129, 1990, No.5. – 529.-554.pp. [Online]. Available: <http://www.ilo.int/public/english/support/itcom/downloads/pdf/distance.pdf> [Accessed: July 31, 2012].
- [6] H.N.Lim, A.I.J.M.Van der Hoorn, V.A.W.J.Marchau. The effects of telework on organization and business travel. [Online]. Available: <http://129.3.20.41/eps/urb/papers/0309/0309003.pdf> [Accessed: July 31, 2012].
- [7] Darbaspēka ģeogrāfiskā mobilitāte. Eiropas Savienības struktūrfondu Nacionālās programmas „Darba tirgus pētījumi” projekts „Labklājības ministrijas pētījumi” Nr. VPD1/ESF/NVA/04/NP/3.1.5.1./0003. [Online]. Available: http://www.lm.gov.lv/upload/darba_tirgus/darba_tirgus/petijumi/geografiska_mobilitate.pdf [Accessed: July 31, 2012].
- [8] About TAI. Telework Analytics International, Inc. [Online]. Available: <http://www.teleworker.com/about.html>
- [9] Zinātnieki saņem balvas par izcilību. LZA informācija. Latvijas Vēstnesis, 15.01.2004. [Online]. Available: <https://www.vestnesis.lv/index.php?menu=doc&id=83102> [Accessed: Aug 2, 2012].
- [10] I.Biezā. Informācijas kvalitāte par teledarbu Latvijas interneta tīklā – Latvijas Universitātes raksti. Ekonomika un vadības zinātne. 677.sēj., 2004. – 76.-84.lpp. [Online]. Available: <http://www.lu.lv/materiali/apgads/raksti/677.pdf> [Accessed: July 31, 2012].
- [11] Eiropas Parlamenta un padomes lēmums Nr. 1336/97/EK (1997. gada 17. jūnijs) par vairākām pamatnostādņēm attiecībā uz Eiropas telekomunikāciju tīkliem. Eur-Lex – Piekļuve ES tiesību aktiem. [Online]. Available: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997D1336:LV:NOT> [Accessed: Aug 2, 2012].
- [12] Smart work centre overview. Connected and sustainable work. Connected urban development. [Online]. Available: http://www.connectedurbandevelopment.org/connected_and_sustainable_work/smart_work_center/ [Accessed: July 31, 2012].
- [13] M. van de Sanden. Smart Work Center. An Innovative and sustainable solution. [Online]. Available: <http://www.slideshare.net/connectedurbandev/swcs> [Accessed: July 31, 2012].
- [14] R.Versteegh. Smart Work Centers: Improve collaboration and productivity while reducing ecological footprint. [Online]. Available: <http://www.slideshare.net/Ray1961/cisco-smart-work-center> [Accessed: Aug 2, 2012].
- [15] 'Smart work' could be key to green growth. EurActiv.com. [Online]. Available: <http://www.euractiv.com/infosociety/smart-work-key-green-growth-news-502498>
- [16] A.Vīdnerē. Attālinātais darbs. [Online]. Available: <http://nekrize.lv/attalinatais-darbs/> [Accessed: July 31, 2012].
- [17] L.Ažele, S.Šķēle. Teledarbs un attālinātais darbs: priekšrocības un trūkumi, 2010. [Online]. Available: http://open.lv/uploads/openmind/l.azele_s.skele.pdf [Accessed Aug 1, 2012].
- [18] The Climate Group. SMART 2020: Enabling the low carbon economy in the information age. [Online]. Available: http://www.smart2020.org/assets/files/02_Smart2020Report.pdf [Accessed Aug 1, 2012].
- [19] Reģionu attīstība Latvijā 2009. – R: VRAA, 2010. – 172 lpp.
- [20] I.Judrupa, „Latvijas reģionu konkurētspējas novērtēšana”, Ph.D.dissertation, Dept.Econ., Riga Technical University, Riga, Latvia, 2011
- [21] Reģionu attīstība Latvijā 2010. – R: VRAA, 2011. – 171 lpp.
- [22] Latvijas Centrālās Statistikas pārvaldes datu bāze. [Online]. Available: www.csb.gov.lv [Accessed Aug 1-8, 2012].
- [23] K.Stūrmanis. Seminārs un mācību vizīte Igaunijā 22.-24.05.2012. Projekta „Micropol – attālinātā darba centri ārpus metropoļu reģioniem” īstenošanu. [Online]. Available: <http://zlb.lv/?p=266#more-266> [Accessed Aug 8, 2012].

Ilze Judrupa. Education: 2011 – Promotion Thesis “Evaluation of Competitiveness of Regions in Latvia” was defended to qualify for the degree of Doctor of Economics.
Working experience: From 2011 onwards – RTU, FEEM, Institute of National and Regional Economics, Department of International and Regional Economics, ASSISTANT PROFESSOR; 1997-2011 – RTU, FEE, Institute of National and Regional Economics, Department of International and Regional Economics, ASSISTANT, LECTURER.
Research interests: regional economy, competitiveness, the EU structural funds, system dynamics models, telework. Address: Kalnciema Str. 6–521, Riga, Latvia. Phone: 29355228. E-mail: ilze.judrupa@rtu.lv

Ize Judrupa. Attālinātā darba centrs – Balvu novada ekonomiskās attīstības līmeņa paaugstināšanas iespēja

Raksta mērķis ir izpētīt attālinātā darba būtību un noteikt attālinātā darba un attālinātā darba centru priekšrocības un trūkums, kā arī noteikt Balvu novada ekonomiskās attīstības līmeni salīdzinot ar citiem Latgales statistikas reģiona novadiem, izmantojot Teritorijas attīstības indeksu un Reģiona konkurētspējas indeksa vienkāršoto formulu. Pētījumā tika noteikti Balvu novada ekonomisko attīstību veicinošie un kavējošie faktori, kā arī potenciāli veicinošie un kavējošie faktori, izmantojot ekonomiskās attīstības līmeņa / tempa matricu. Pētījuma gaitā tika izmantotas tādas pētniecības metodes kā analīze un sintēze, salīdzināšana, grafiskā metode, statistiskās metodes datu apstrādei. Balvu novadā notiek iedzīvotāju aptauja, lai uzzinātu iedzīvotāju viedokli par attālinātā darba nepieciešamību novadā. Pētījumā tika izmantoti ārvalstu un Latvijas autoru pētījumi par attālināto darbu, kā arī Eiropas Savienības likumdošanas akti par attālinātā darba attīstību Eiropā. Balvu novada attīstības līmeņa noteikšanai tika izmantoti VRAA aprēķini un Centrālās Statistikas pārvaldes datu bāzes. Attālinātais darbs ir darba organizācijas forma, kas nodrošina elastību un drošību, paaugstina darba kvalitāti un produktivitāti, ļauj darba tirgū iesaistīties arī cilvēkiem ar kustību traucējumiem. Attālināto darbu var veikt gan no mājām, gan strādājot attālinātā darba centrā. Katram attālinātā darba veidam ir savas priekšrocības un trūkumi, kas jāņem vērā, izvēloties strādāt šo darbu. Lai veicinātu attālinātā darba attīstību liela nozīme ir tieši attālinātā darba centru izveidei. Šādos centros ir nepieciešamās telpas un informācijas un komunikācijas tehnoloģijas, lai iedzīvotāji varētu sekmīgi strādāt attālināti. Dinamiskā un radošā vide attālinātā darba centros paver jaunas iespējas darbinieku un darba devēju sadarbībai, salīdzinot ar darbu mājās. Balvu novads ieņem salīdzinoši augstu vietu (3.-4.vietu) pārējo Latgales statistikas reģiona novadu starpā ekonomiskās attīstības ziņā. Balvu novada ekonomiskās attīstības galvenās problēmas ir saistītas ar augsto bezdarba līmeni, salīdzinoši nelielo iedzīvotāju skaitu, kas turpina samazināties, un negatīvo dabisko pieaugumu. Attālinātā darba centra izveide Balvu novadā ļautu atrisināt šīs problēmas – samazinātos bezdarbs, jo rastos jaunas darba vietas novadā, palielinātos iedzīvotāju ienākumi un patēriņš.

Илзе Юдрупа. Удалённое рабочее место – возможность повысить уровень экономического развития в области Балви

Целью статьи является исследование сущности удалённой работы и определение преимуществ и недостатков центров удалённой работы, а также определение уровня экономического развития области Балви по сравнению с другими областями Латгальского статистического региона, используя формулу Индекса Территориального развития и упрощённую формулу Индекса Региональной конкурентоспособности. В ходе исследования были определены факторы, которые способствуют или препятствуют экономическому развитию области Балви, а также потенциальные факторы, которые способствуют или препятствуют экономическому развитию, при этом использовалась матрица уровня / темпа экономического развития. В ходе исследования были использованы такие методы исследования как анализ и синтез, сравнение, графический метод, статистические методы обработки данных. В области Балви проводится опрос жителей, чтобы узнать их мнение о необходимости развивать удалённую работу в области. Статья основывается на исследованиях зарубежных и латвийских авторов об удалённой работе, а также на законодательстве Европейского Союза о развитии удалённой работы. Чтобы определить уровень экономического развития области Балви, были использованы расчёты Государственного Агентства Регионального Развития и базы данных Центрального Статистического Бюро. Удалённая работа является формой организации труда, которая обеспечивает эластичность и безопасность, повышает качество работы и продуктивность, позволяет вовлекаться в рынок труда людям с инвалидностью. Удалённую работу возможно вести из дома и в центре удалённой работы. У каждого вида удалённой работы есть свои преимущества и недостатки, которые надо учесть при выборе такой формы занятости. Чтобы способствовать развитию удалённой работы, значительную роль играет основание центров удалённой работы. В таких центрах есть необходимые помещения, информационные технологии и средства коммуникации, чтобы жители могли успешно делать удалённую работу. Динамическая и креативная среда центров удалённой работы раскрывает новые возможности сотрудничества между сотрудниками и работодателями по сравнению с работой из дома. Область Балви занимает сравнительно высокую позицию (3-е – 4-е место) среди остальных областей Латгальского статистического региона по уровню экономического развития. Главными проблемами являются высокий уровень безработицы, сравнительно небольшое количество жителей, которое продолжает уменьшаться, и негативный натуральный прирост. Основание центра удалённой работы позволит решить эти проблемы – снизится безработица и повысятся доходы населения.