

# **“Naturally working business model” for the spatially balanced employment <sup>1</sup>**

## **Abstract**

The way of employment is changing. The primary and secondary sector offers less and less workplaces, shifting employment into the tertiary sector. Nevertheless, we are facing increasing rural unemployment, as the tertiary sector is based mostly around the high populated towns, but the primary and secondary sector generates unemployment in the rural areas. This trend projects a vision of a very centralized Europe, which is opposite with the efforts of regionalization. In this study we evaluate these trends, and build a generic model which can be used to create employment opportunities in the rural areas, based on the specificities of the tertiary sector.

**Keywords: regional development, telework center, rural employment**

## **Introduction**

The employment opportunities outside the cities, in rural areas have significantly decreased in the last decades. The primary sector has been mainly automated, offering much fewer workplaces than before. The globalization also led to cheaper manufacturing solutions in the eastern countries, and in Asia, so the secondary sector is also showing decreased employment capacity. The tertiary sector, the services have become dominant, and show the most reserve to soak up the unemployment. But the major market for the services are the people, so the primary site selection criteria for the service providers are the bigger cities, where an office can reach the most people. These are the large populated towns. So the people are shifted to move to the cities, reinforcing the centralization towards the cities, depopulating the rural areas. But what happens with the employment trends outside the cities...? The primary and the secondary sector were much more dominant in the rural regions, therefore the relapse of their absorption capacity in the employment caused unemployment. These trends generate a combined effect projecting us a very centralized vision, which is just opposite of the EU objectives.

Based on the EUROSTAT<sup>2</sup>, the services generate around 70 % of the EU's GDP and employment, so we can easily say, that the employer of the XXI. Century is the service sector. Understanding these, we can see that the people are shifted into the cities, depopulating the rural areas. This generates real challenge for the regional developers. The question should arise: what

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<sup>2</sup> EUROSTAT, [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Tertiary\\_sector](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Tertiary_sector)

tool do we have to manage this challenge? What can we do, to generate jobs to the people living in rural areas? What are the employment opportunities in rural areas?

The regional developers should manage this challenge today, as this trend is an irreversible process. But what tool do they have for this? Setting up a factory takes a long time, requires high investments, and offers employment only for limited, spatially enclosed area. Rural tourism has also very limited capacity solving this problem. To be honest, not too many solutions are on the horizon.

Let's evaluate the current state and develop a possible solution for the challenge.

The solution, if any, should align to the current trends, and should be naturally good, sustainable on a long term. So the solution should be a "naturally working business model", which is built on the service sector specificity, and naturally involves the rural employment, strengthen the original efforts of the service providers. We cannot make a big mistake, if we assume that service providers would like to achieve higher profit. The profit can be increased in two way: lowering the costs, and increasing the income. To build a generic model, we are evaluating the costs side, as the income factors should differ from service to service. We can state, that the highest general cost factors in the service industry are the wages, real estate related costs and communication. The raw materials in the service sector are the people and information, and the working tool is the computer. So if we can decrease these costs, then we can increase the profit. So if we build a business model, which decreases these costs, and this is somehow related to the rural employment, then we found a solution! It seems easy, as we know, that the wages and real estate costs are much lower (eg. 30% in Hungary) in rural areas, then in the cities. We disclose now the communication factor, as we assume, that it is available at the same price in all rural cities (eg. at least the mobile internet).

So a solution could be to convince service providers to employ people in rural areas, as the costs will decrease this way, and they will achieve higher profit – if we can offer them unchanged working environment in other areas, meaning that they stay together with the market to leave the income side of the profit unchanged, and the outplacng will not generate high and permanent investments.

How can we do it...? Placing out the supporting functions to the cheaper, rural regions. Into working places, which are fully compatible with the company prescriptions, and could ensure a quality of the delivery of the function without any additional high cost and unmanageable risk? These working places are called "telework centers".

## **What differentiates the telework centers?**

If telework centers are providing a working place, for employees performing an existing function, then it is a branch office, nothing new. Or? How, can we distinguish among telework centers, branch offices, field locations, and decentralized functions?

First, consider the difference between telework and field work. Based on the Framework agreement on Telework, signed by the EU member countries, “telework is a form of organizing and/or performing work, using information technology, in the context of an employment contract/relationship, where work, which could also be performed at the employers premises, is carried out away from those premises on a regular basis.” (Framework Agreement On Telework). This means, that telework is location-independent: it can be performed anywhere, at most, the same facilities available as in the primary office (and can often be performed with less sophisticated facilities). “Field work, on the other hand, is by definition location-dependent: it must be performed at a specific location because of properties intrinsic to that location (e.g., because that's where the customer is, or the equipment to be serviced, or the unit to be audited, or the activity on which data are being collected).” (Mokhtarian, 1991:16). So the first important differentiating factor of telework centers is location-independence. This means, that “the work done at a telework center should be capable of being performed anywhere there are, at most, the same facilities available as in the primary office.” (Mokhtarian, 1991:16) This location independence is our key weapon as regional developers. If we can shape the activities to be performed from telework centers, then we can define the development areas, where we want to bring the focus of the employer. We can prepare the selected regions to be ready to receive the work to be outplaced. Then standard incentives could be used to support the decision making process of the companies towards the regions wanted to be developed.

The second main difference between a telework center and a branch office or decentralized function seems to be that of organizational structure. “A telework center is characterized by the absence of a self-contained pyramidal organizational structure. Teleworking staff should report to off-site managers (except in the case where both manager and staff reduce their commutes by working at the same telecommuting center), and telecommuting managers should have at least one off-site staff person reporting to them.” (Mokhtarian, 1991:17). From a regional developer perspective this factor is not so important to us – still if the whole function is outplaced, rural employment has been established,..., despite the fact that the definition has been impaired, we have achieved increased employment.

Bagley (1994:18) categorized further the telework center as either single-employer or multi-employer. Single-employer centers may be well-suited to large organizations, especially those that already have multiple locations. Multiple-employer centers present additional coordination and security challenges, but offer low-risk opportunities for employers to try the concept, cost effective ways for small employers to participate.

It is also important, whether the established center is free for public or not. As data security, company culture, work environment are differs from company to company, we should ensure, that the working places are only used by the contracted employees, and nobody else can enter the rented area. This factor differentiates telework centers from telecenters. Publicity is the most important factor of the telecenters, as the definition states “A telecentre is a public place where people can access computers, the Internet, and other digital technologies that enable them to gather information, create, learn, and communicate with others while they develop essential digital skills.”<sup>3</sup> These differences are summarized in the table below.

**1. Figure: Differences between telework center and similar solutions**

	Not operated by the employer	Location independence	Non-public	Remote management
telework center	yes	yes	yes	yes
tele-center	yes	yes	no	yes
branch office	no	no	no	no
incubator house	no	no	no	no
industrial park	no	no	no	no

*Source: author*

## Telework center penetration in the world

Based on Obra (2002), the first urban Teleworking Centre started up in France in 1981. Subsequently, the first rural telework center got under way in Sweden and Denmark in 1985. That same year, a telework center with various employers was set up in Hawaii as a project to demonstrate public initiative.

In Hungary the first and still the only telework center was opened in the city of Örkény, which was rented by a call center within a week of its opening (Forgacs, 2008b).

**2. Figure: Telework centers**

Country	Number	Country	Number
Sweden	23	Denmark	9
Finland	49	Norway	5
Ireland	6	United Kingdom	57
Austria	5	Germany	26
Brazil	4	Australia	9
		Canada	7
Total (November, 1993)	200		

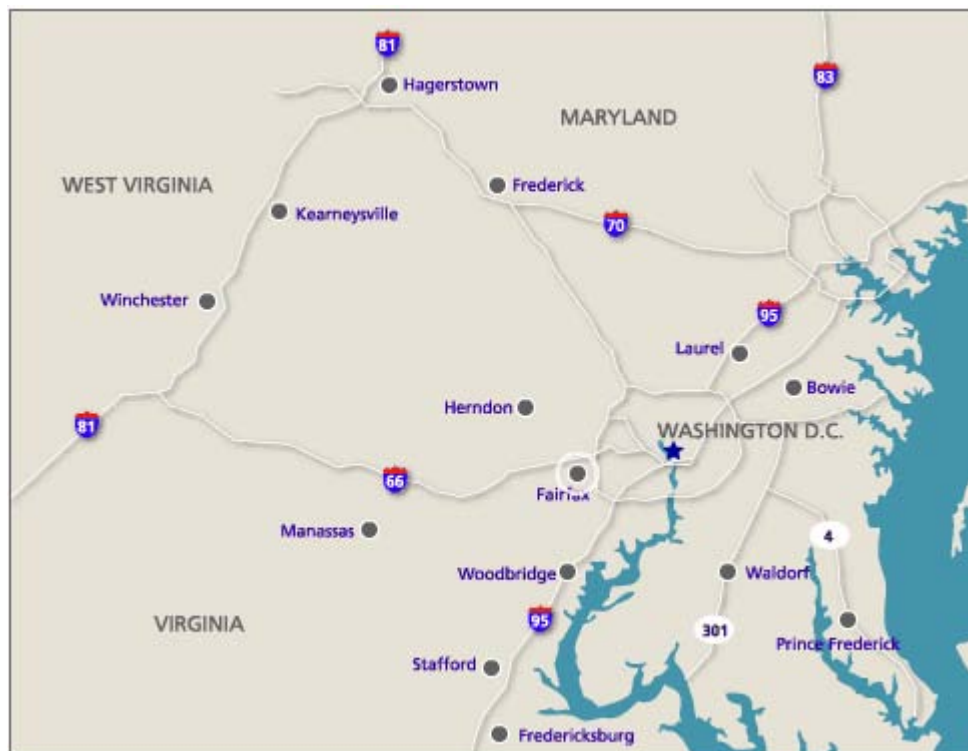
<sup>3</sup>Wikipedia, <http://en.wikipedia.org/wiki/Telecenter>

*Source: Obra (2002:791)*

USA recognized the benefits of the telework centers, and established a legal way to support the spread of them. Section 630(a) of Public Law 105-277 (Flexiplace Work Telecommuting Programs) authorized certain Executive agencies to spend a minimum of \$50,000 for fiscal year 1999, and each fiscal year thereafter, to establish and carry out a flexiplace work telecommuting program. Section 630 defines a flexiplace work telecommuting program specifically as use of the General Service Administration managed telework centers.

As the effect of this regulation, today there are 14 telework centers around Washington DC. WorldAtWork (2009) study shows, that in 2005 the 5% of the workers worked from telework centers, which increased to 8% in 2008.

### **3. Figure: Telework centers around Washington**



*Source: U.S. General Services Administration, [www.gsa.gov/teleworkmap](http://www.gsa.gov/teleworkmap)*

### **Empirical study on the willingness of the usage of telework centers in Hungary**

The survey of the empirical research was conducted in Hungary between April 15 and May 23, 2008. The sample frame was a simple random sample of companies employing at least 50 people, based on the data of the Hungarian Central Statistical Office. We used a screening questionnaire when recording the data to ensure that only companies which satisfy the research criteria could be included. The screening question was, whether they either use telework presently or they are planning to introduce it in the near future.

In order for the sample to adequately represent the companies using telework, the mathematical-statistical procedure known as weighting was applied to adjust the results. The questions for defining the distribution needed for the establishment of the base population were based upon the correlating questions from a large-sample research project behind the publication 'Info-Communication Report on Hungary,' 2008 edition, prepared by Bellresearch in May 2008. Organisations of over 50+ employees who either use telework or are considering its use — were collated on the basis of the appropriate data characterising various industries, regional differences and staff numbers. This was followed by a determination of the target group distribution using relevant regional, industry and staff factors – which was then used to weight our telephone research sample consisting of 100 interviews with companies.

After presenting the experiences and attitudes connected to telework, we examined the recognition factor of telework centers and the prevailing opinions in this type of employment. When understanding responses, one should not leave out of consideration the fact that no telework centers operate in Hungary, that is, respondents could only give theoretical answers due to the lack of practical examples. Only 18% of decision-makers at the companies included have even heard of telework centers.

Due to the low recognition factor, we conducted our examination in three steps. The first thing that interested me was to survey the managers' willingness towards opportunities of telework center employment, with today's business conditions unchanged. Due to the especially favorable effects seen in the economic development and the employment policies of rural areas, however, we have continued our research on this attitude of willingness while supposing the use of incentives directed to help telework. Phase Two surveyed free-of-charge telework center employment opportunities (meaning no office rent fee), Phase Three examined managers' willingness towards telework center employment if non-refundable assistance can be received.

Almost 12% of companies queried thought it would be possible to employ some of their newly hired staff at telework centers under identical business conditions. A further 7% of respondents said they would be willing to use telework centers if they did not have to pay office rent fee. An additional 9% would be willing to hire employers at telework centers if a non-refundable source of assistance was involved.

Altogether, almost 28% of the present telework employers show further potential for using telework centers, assuming an adequate incentive system is established.

The survey of companies that are open towards telework has shown the kinds of jobs where they could envision telework employment. Their answers support the conclusion that two-thirds can imagine data entry and data processing jobs being performed at telework centers, plus over one half thinks that colleagues providing administrative tasks as well as bookkeeping could also work at telework centers. These opinions reflected the lack of experience in Hungary, as their answers wholly lacked a reference to another, internationally widespread practice which

targets the establishment of work sites created for highly trained professionals nearer to their homes.

With the companies closed towards telework center work, we asked their main reasons for rejecting this form of employment. Over half of respondents could not give a reason why they excluded employment at telework centers when we spontaneously inserted that question into the conversation. Having provided possible answers, there was still a high rate of those who could not supply a reason for their reticence. The answers to that question revealed that about one-third of respondents cited communication difficulties, but the number was even fewer who thought it would not mean some cost savings for the company. One-fifth of respondents cited financial reasons for their reluctance towards telework center work, as such centers would be too expensive to build.

We conducted mathematical significance-evaluation to establish a few basic characteristics of companies that would apply telework either on their own initiative or as an effect of subsidies/cuts, however, most factors did not show any sharp differences between those companies open towards telework and those that were fully closed to the idea. One thing that we could establish was that companies where keeping staff was a problem would be far more open towards employing staff at telework centers.

When exploring that attitude of willingness even further, we asked respondents the following question: Suppose they could only find an expert to fill an important job that would only be willing to do it in the form of telework, what form of telework would they consider? 13% of companies said they would be willing to employ people at telework centers in such a case, and two-fifths would support home work or mobile telework (39% and 42% respectively).

## **Role of the regional developers**

How can regional developers contribute to generate rural employment opportunities using telework centers? Firstly we should remember and consider using this tool while preparing a regional development plans, strategies. Establishment of a telework center can be drive from bottom-up and top down.

Using a bottom-up approach, the rural cities, micro-regions can create an alliance developing a telework-strategy to involve employers into the regions through telework (Forgacs, 2008a). Based on the strategy they should appoint and renew an eligible real-estate in the city which is the most accessible for the residents of the region, then deliver proper training to the possible labor, and marketing for the potential employers. This preparedness as a comparative advantage can differentiate the region from the others.

The top-down approach does the previously written process from a higher level, defining eg. a country level telework-strategy, and appointing the development regions at a high level.

Using a development fund, and a proper plan, the regions can be “pushed” to establish telework centers, and the employers focus can be directed to the appointed regions (eg. grants or reliefs for the employment from telework centers).

Bagley (1994) prepared a comprehensive analysis of the telework centers, evaluating international experiences, and presenting case studies. As an attribute of the success he recognized that the most of the rural telework center has been started with at least some public sector funding, and the concept combined more than one goal. These goals were to utilize the unused free places for similar activities, like trainings, business continuity locations, occasional project works, etc. It also increases the employment safety if more than one employer rents the facilities. Anyway, it is important to plan the funding for 5 to 7 years of the operation. Remember, that the goal of such telework center is to generate employment on rural areas, not to generate high profit on the operation. Maintenance cost of a telework center are much lower, than the benefit of an employment, as each workplace generates much higher investment through the extern effect of the wages, which are spent in that region...

Based on Bagley’s experiences the key operational issues are the marketing, the location, and costs. The critical barriers to the telework center success are the cost to employers, discomfort with remote supervision, security of confidential information, unbalanced distribution of costs and benefits and the workforce equity issues.

Finally, based on Bagley’s (1994:221) experiences, here are the recommendations for the future telework center implementations:

1. Define a clear, realistic, and consistent set of goals and objectives to guide project development and to provide a standard against which telework center success or failure can be measured.
2. A thorough and aggressive plan of market research and center promotion, beginning in the implementation phase and continuing through the life of the demonstration.
3. Allow one year to 18 months to plan and implement the telework center.
4. When long-term viability of the center is an objective (as opposed to short term market research or demonstration) secure long-term financial commitments up front. Funding over five to seven years, with a business plan to achieve self-sufficiency before the end of that period, is desirable.
5. Spend time on site selection. The criteria should be in accordance with the center goals and objectives and should seek to balance high-quality center features and nearby amenities with cost considerations.
6. Provide private offices for permanent, security-minded tenant-employers. Semi-private workspaces should be acceptable to drop-in users since they will take their work home with them at the end of the day.

7. A full-time, on-site manager should be available to handle administrative, technical support and promotional activities for the center.
8. Combine multiple uses of a single facility. This combined use should make the telework center a more viable entity and have favorable community impacts.
9. Develop information, training and possibly incentives to enable non-professional and non-managerial employees to take advantage of the telework option.
10. Document and evaluate each new generation of telework center demonstrations. Much has been learned, but much remains to be discovered regarding the successful implementation of multiple-employer telework centers. It is important to determine what factors are important to all center operations and which are key only in certain situations and under certain circumstances.

## **Literature**

- Bagley, M.N. – Mannering, J.S. – Mokhtarian, P.L. (1994): Telecommuting Centers and Related Concepts: A Review of Practice. Institute of Transportation Studies
- Bangemann M. et al. (1994): Europe and the global information society. Bangemann report recommendations to the European Council. Innovatia Documentation
- Campbell, C.J. (1995): Exploring a Tool for Rural Community Development. Community Technology Centers
- Dangelmaier, W. – Kress, S. – Wenski, R. (1999): TelCoW: telework under the co-ordination of a workflow management system. Information and Software Technology, no. 41. 341–353 p.
- Forgács Tamás (2008a): Regional telework-strategy. In.: Space and Society. MTA RKK. Budapest. 2008/2. vol. 123–145. p. (hungarian)
- Forgács Tamás (2008b): Telework-center: an alternative in the rural development. The Village. Agroinform. Budapest. 2008. autumn (hungarian)
- Framework Agreement On Telework. 2002. European Commission. Brussels.
- Gomez, R. – Hunt, P. (1999): Telecentre evaluation. International development research centre
- GSA-sponsored Telework Centers. US. General Services Administration. GSA (2008.05.03)
- <http://www.gsa.gov/Portal/gsa/ep/channelView.do?pageTypeId=8195&channelId=-12950>
- Jansen, A. (1995): Rural Development Through Diffusion of Information Technology. *Scandinavian Journal of Information Systems*, Vol. 7, No. 1, pp 99–120
- Johnson, N. J.; Hershey, F. C. Telecommuting and Virtual Offices: Issues and Opportunities. *Government Information Quarterly*, vol. 19, No. 4, pp 430–431
- Latchem, C. –Walker, D. (eds.) (2001): Telecentres: Case studies and key issues. The Commonwealth of Learning, Vancouver

Mokhtarian, P. L. (1991): Defining telecommuting. *Transportation Research Record*, vol. 1305, 273–281 p.

Obra, A. R. – Cámara, S. B. – Meléndez, A. P. (2002): The economic and organizational aspects of telecentres: the Spanish case. *Technovation*, No. 22, pp 785–798

Stanek, D. M. – Mokhtarian, P. L. (1998): Developing models of preference for home-based and center-based telecommuting: Findings and forecasts. *Technological Forecasting and Social Change*, Vol. 57, No. 1-2, pp 53–74

WorldAtWork (2009): Telework Trendlines 2009. Washington.