

Research on Telework in Slovenia

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Although a lot of research on telework has been done, most of it has been carried out in USA and EC countries. Until today there have been no studies on telework in Slovenia. This paper presents the results of a study of telework in Slovenia carried out in 1997. The paper also compares telework between Slovenia and other European countries.

1 Introduction

Information and communication technology provides organisations with a new flexibility as regards where, when and how work is performed, which gives rise to a number of new organisational forms and new ways of performing work [16,19]. Through the implementation of electronic information systems, the structure, procedures and content of office work are changing. Increased attention is now being paid to a new form of work known as telework. Telework allows spatially and organisationally decentralised office work, with work results being sent back electronically via communication networks. This has only become possible in the last few years through the developments in the areas of distributed information systems, office automation and telecommunications [13].

In the 70's some authors had high expectations when they believed that "all Americans could be homeworkers by 1990" [11]. A decade later others stated that "by the year 2000 approximately 40% of the employees in the US will be teleworkers". The latest estimate is that in many development countries 10%-15% of the workforce will be teleworking to some degree by the end of the century [15].

In 1990 there were 2 million teleworkers in US, in the year 1994 7.8 million and the estimations in the year 1994 were that in 2001 there will be 30 million teleworkers [2].

Different surveys [1,6] have shown that telework is slowly penetrating into Europe as well. According to the results of surveys in 1994 the number of teleworkers in the five largest European Community countries was approximately 1.1 million by the time. Extrapolating this figure to the whole Europe gives a total of 1.25 million teleworkers. In terms of absolute numbers of teleworkers, the United Kingdom had the most with 560 000, followed by France with around 215 000 teleworkers, Germany with 149 000, Spain with 102

000 and Italy with 97 000 teleworkers.

Telework is being introduced slowly step by step. In most cases, first the combination of working in the company and working at home is being practised. At first teleworkers are working at home for an average of 4.2 days per month, after a year or two for about 8 days per month [3,17,20].

Because of the benefits the interest in telework is growing among employers and employees. Benefits to employees are: saving on time, money and effort in commuting to work, better concentration at work, flexible working hours, better balance between work and family life. Telework enables taking care of young children, elderly or disabled relatives and allows into employment people unable to work in the traditional way, such as disabled or handicapped people. The main advantages to employers are: increased productivity, better office space utilisation, reduced overhead expenses, reduced travel costs, reduced electricity, food and other costs [9,10,18].

Of course telework has its drawbacks as well. Employers are concerned about data security and loss of control. Some are concerned about the legal rights and normal protection in law that employees are afforded [7]. Telework may increase the cost of living for the teleworker (home office heating and power, food, ...) [8]. Teleworkers may not be keen on carrying out their own typing, filing, and other routine office functions. Some teleworkers may miss the social interaction of the workplace. The feeling of belonging to a team that is working for a common goal may be lost [4].

In the paper we discuss the methodology used in our research, the instrument, data collecting and results. In the end we show some results of the Empirica survey [12] carried out in 1990 in 14 European companies parallel with results of our survey carried out in 1997 in 15 Slovenian organisations and give an conclusion.

	Need for flexible working hours				Worry for promotion and career			Importance of personnel contacts		
	High	Medium	Low	No need	Yes	No	Don't know	High	Medium	Low
People, who are interested in telework	25%	43%	19%	13%	14%	42%	44%	57%	40%	3%
People, who are not interested in telework	13%	29%	33%	25%	21%	17%	62%	83%	13%	4%

	Saving on effort in commuting				Loss of review of what's going on in company			
	Very high	High	Medium	Low	Completely	Partly	No	Don't know
People, who are interested in telework	6%	16%	46%	32%	10%	72%	15%	3%
People who are not interested in telework	0%	8%	29%	65%	42%	45%	0%	13%

Table 2: Telework affected by psychological and sociological factors

When the results are analysed according to company size, next trend comes to light: the greater the size of a company, the more interest is in telework. That holds for France, Germany and United Kingdom but not for Italy [12].

We wanted to find out how company size affects telework in Slovenia. We predicted that company size does not affect interest in teleworking and test showed that on the risk level 0.05 we can accept our prediction.

In the end we show some results of the Empirica survey [12] carried out in 1990 in 14 European companies parallel with results of our survey carried out in 1997 in 15 Slovenian organisations.

3 Results of teleworking surveys in different European countries

One of the questions we were interested in was "why were companies interested in introducing telework". This is of course a question with two sides, that of the employer and the employee, since telework can only take place when there is sufficient convergence of interest for both parties to agree to it.

We turned to the employer's side. There is in fact a wide range of reasons companies might have for considering the introduction of remote work. We identified six common motivations: increased productivity, reduced commuting costs, reduced central office's costs, flexibility in working hours, employment of the disabled and retention of scarce skills. In Table 3 we are showing the importance of these reasons to managers in Slovenia in 1997 and to managers in other European countries in 1990.

As it can be seen from the table these reasons are very important to managers from Slovenian companies. It is hard to say why but it may be due to the fact that Slovenia is a small country with a population of 2 million which became independent in the year 1991. In the transition to a market economy and private ownership, most larger companies have disintegrated and managers of these smaller companies want to make a good use of the telework possibilities in order to gain bigger competitive advantage. Increased productivity and flexibility of working hours are for our managers the most important reasons for introducing telework.

Communication is a particularly important component of distance working, so the employees were asked about the use of communication media. Table 4 summarises the results.

We can see that employees in Slovenia spend a lot of time on telephoning and meetings. What I think might be worth considering.

Table 5 shows the proportion of work done at home or outside normal working hours by gender. We can see that the majority do perform some of their work in the evenings or at weekends. That goes for Slovenian and other European companies. In Slovenia there are more men than women who do a part of their work at home or outside their normal working hours. In other European countries in the 1990 there were more women than men.

In table 6 we are showing interest in telework of men and women in different European countries.

As we can see employees in Slovenian companies show very high interest in telework. Slovenia has not been independent for a long time and maybe employees are now looking for new chances to succeed.

	Slovenian companies (1997)			Other European companies (1990)		
	Important (%)	Unimportant and no answer (%)	Rank order	Important (%)	Unimportant and no answer (%)	Rank order
Increased productivity	87	13	1	36	64	2
Reduced commuting costs	71	29	4	29	71	3
Reduced central office's costs	75	25	3	29	71	3
Flexibility in working hours	83	17	2	29	71	3
Employment of disabled	71	29	4	14	86	4
Retention of scarce skills	52	48	5	43	57	1

Table 3: Companies' reason for introducing telework

		No use (%)	Once a week (%)	Several times per week (%)	Once a day (%)	Several times a day (%)
	Slovenia 1997	7	1	5	2	85
Telephone	Europe 1990	46	3	19	8	24
	Slovenia 1997	93	3	3	0	1
Teletex	Europe 1990	98	2	0	0	0
	Slovenia 1997	98	2	0	0	0
Videotex	Europe 1990	99	1	0	0	0
	Slovenia 1997	60	7	14	4	15
E-mail	Europe 1990	84	3	6	5	2
	Slovenia 1997	37	27	17	8	11
Postal service	Europe 1990	29	7	47	11	6
	Slovenia 1997	62	17	11	6	4
Courier	Europe 1990	69	21	7	2	1
	Slovenia 1997	18	2	15	5	60
Meetings	Europe 1990	25	45	27	3	0

Table 4: Employees' use of communications media

4 Conclusion

There are only few companies already practising telework, but a lot of them are thinking about introducing it. Although the US is currently the leader in this process, interest in the rest of the world, particularly Europe, is accelerating. Interest in telework is seen also in Slovenia. In the empirical research among Slovene organisations carried out in summer 1997, we found out that managers and employees are interested in telework. We found out that technology needed for telework is not the basic problem in introducing telework and that almost all of potential teleworkers have their own for teleworking needed equipment. The survey also showed that technological factors and the content and way of work performed within a specific working place determine its suitability for telework and that telework is strongly affected by psychological and sociological factors. We also found out that managers are sometimes troubled by the idea facing the prospect of managing a team of remote workers and they know that their tasks will partly change and that also the way of control and way of policy making will change.

Managers are also concerned about employment contracts, most of them think that it would be necessary to legally define the working conditions of teleworkers and clearly state the unique responsibilities of both parts.

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			None	Up to 1/3	Half	At least 4/3
		n	24	31	0	0
	Slovenia 1997	%	44	56	0	0
		n	18	53	12	2
Female	Europe 1990	%	21	63	14	2
Male		n	34	85	8	8
	Slovenia 1997	%	25	63	6	6
		n	11	7	10	3
	Europe 1990	%	35	23	32	10

Table 5: Proportion of work done at home or outside normal working hours by gender

	Interested (%)		Not interested or not possible (%)		Do not know (%)	
	Male	Female	Male	Female	Male	Female
Slovenia 1997	83	78	10	18	7	4
Germany 1990	9	8	88	87	3	5
France 1990	13	15	84	82	3	3
United Kingdom 1990	22	23	75	72	3	5
Italy 1990	12	10	87	89	1	1

Table 6: Employees interest in telework by gender in European countries

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