Economic Benefits of Remote Work from the Employer Perspective

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Abstract. In recent years, remote work, driven by mobile technology, the availability of the Internet and the spread of COVID-19 limiting work to be done at the workplace, has become increasingly popular. Although it is very easy nowadays to do many kinds of work remotely, many companies still do not want to introduce such practices on a permanent basis. Therefore, the research aims to examine the experience of companies in remote work to identify the economic benefits of remote work as well as develop scenarios for remote work. The research methodology is based on case study analysis, comparative analysis, economic analysis and the scenario method. The results of the research revealed that potential financial savings from applying remote work practices in companies varied, depending on the specifics of the industry and jobs, as well as the funds that the company was initially willing to invest in its employees. For companies, the largest economic savings from applying remote work practices came from maintenance of premises, as well as electricity and Internet bills, while the provision of equipment to their employees accounted for the smallest proportion of preliminary cost savings. However, the main disadvantages of remote work were the difficulty of controlling employees, communicating effectively with each other and ensuring successful teamwork. Companies could introduce part-time work practices if a large proportion of the tasks could be performed remotely, yet only the companies with a high level of automation of tasks might fully switch to remote work.

Keywords: remote work, remote work scenarios.

JEL code: J64, J81, O15

Introduction

With the emergence of new types of work arrangement, e.g. remote work, in recent years, the “virtual, invisible employee who works everywhere” has become increasingly popular (Popma J., 2013). The main factors for the growing number of mobile workers are the availability of various mobile technologies and communication media, as well as the Internet (Holtgrewe U., 2014). Besides, companies have recently begun to view remote work as an opportunity to attract and retain top-level employees in business fields having a shortage of employees (Steil A. V., Barcia R. M., 2000). This topic has become especially relevant in the world today because due to the spread of COVID-19, most of the companies work remotely (Bojovic D. et al., 2020; Kawashima T. et al., 2020).

Various definitions of the term “remote work” are available in the scientific literature, e.g. the assignment of jobs to employees rather than the assignment of employees to jobs (Nilles J. M., 1998), work done by using information technology (Muhammad S. et al., 2008), work performed outside the premises of employers. Some authors define remote work only as work done from home (Baruch Y., 2000; Bailey D. E.), while others have determined how long it takes to work from home to be considered remote work (Caulfield B., 2015). According to the European Trade Union Confederation, remote work is defined as a type of work arrangement whereby the work that could also be done at the employer’s premises is regularly performed elsewhere by using information technologies (Implementation of the..., 2006). The authors of the research consider the above-mentioned definition of remote work suggested by the European Trade Union Confederation to be the basic definition, as it includes the most important elements of remote work: 1) the company has at least one employee who works outside the company’s office at least once a week or when the need arises; 2) the company has one or more remote workers who regularly work from home. Overall, the present research considers remote work to be a job in which the employee performs his/her work duties remotely from the workplace at least once a month.

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Today, it is very easy to do many jobs remotely, yet many companies are still reluctant to adopt such practices. This could be explained by the difficulty of assessing and controlling employees (Lowe J., Oliver N., 1991; Causer G., Jone C., 1996), the challenges of managing teamwork (Baruch Y., 2000; Pearlson K. E., Saunders C. S., 2001; Brodt T. L., Pyoria P., 2011; Tremblay D. G., Thomsin L., 2012) and ensuring high-quality information exchange and frequency (Fonner K. L., Roloff M. E., 2010). Although the potential benefits of remote work have been extensively analysed (Perez M. P. et al., 2002), the exact benefits are difficult to determine. First, there is disagreement about the types of work arrangement that could be attributed to remote work (due to the lack of a common definition of remote work). Second, the benefits and costs of working remotely are usually analysed by employees rather than employers. Therefore, the authors of the present research focus on the potential benefits of remote work from the employer perspective.

**Hypothesis:** The economic benefits of using remote work practices in companies vary, depending on both the specifics of the industry and the job and the company’s position on covering costs for remote workers. The research aims to examine the experience of companies in remote work to identify the economic benefits of remote work as well as develop scenarios for remote work. To achieve the aim, the following specific research tasks are set: 1) to perform a case study on the economic benefits of remote work from the employer perspective; 2) to describe the development opportunities of remote work in business.

A number of research methods were employed to do the research: monographic and descriptive for theoretical discussion and interpretation of the research results; analysis and synthesis for examination of problem elements and identification of regularities; induction for making assumptions based on individual elements or facts; deduction for logical systematization and interpretation of empirical data. Three companies implementing remote work practices were selected for a case study to further examine the opportunities, challenges and economic benefits of remote work. The research conducted semi-structured interviews with company representatives about remote work practices in the company. An analysis of secondary data available in the public arena of Latvia was also performed to obtain information on the companies selected. As a result, the data obtained were analysed and interpreted, as well as the experience of companies in relation to remote work practices was mutually compared. Economic analysis was employed to identify the costs and benefits of remote work practices implemented by employers, and a scenario method was used to identify development opportunities for companies in relation to remote work.

The present research used the following information sources: research papers from international journals, electronically available national and foreign periodicals focusing on remote work.

1. **Economic benefits of remote work for the companies selected for the case study**

Three companies operating in different fields of economic activity were selected for a case study analysis, thereby drawing conclusions on remote work practices, taking into account the specifics of the industry.

**Company A** provided insurance services and was headquartered in Estonia, with branches in Latvia and Lithuania. In total in the Baltic States, the company had 20 offices, which employed about 210 employees, of which 55 were employed in Latvia. Only the official employees of the branch located in Latvia were analysed in the present research. The company used remote work to perform such work duties as attracting new customers, consulting current customers, developing offers, meeting with customers etc. The company used e-mail, mobile phones and face-to-face meetings in the office to communicate with remote employees. Each employee planed his/her own working hours and meetings with clients. According to the expert
interview, about 60% of the total employees could use remote work opportunities. The employees hold positions such as IT specialists, product specialists, customer service personnel and managers. At the beginning of 2020, about 10% of the employees worked remotely more than once a day, and about 20% worked remotely infrequently, while the rest did not use the opportunity to work remotely or used it in emergencies. The remote work practices implemented in the company were stipulated in its guidelines for remote work and in its strategy. However, according to the expert interviewed, it was difficult for the company’s management to follow the work done by the employees working outside the office premises.

**Company B** provided outsourced services, and its core business was accounting, financial analysis, data processing, IT support and other services, as well as the provision of telemarketing and personnel management services. The company’s units were located in six countries, incl. Latvia where 200 employees were employed. About half of the employees of the company were allowed to work remotely, and they used this opportunity more than once a week. The employees who were not given this opportunity worked in a contact centre or provided telemarketing services.

Creating an effective work-life balance is one of the reasons why company employees choose to work from home. It is up to the employee to decide on which days and how often to work from home, yet this must first be agreed with the direct manager. This opportunity gives employees the opportunity to be productive and reachable even in cases when something unplanned happens – a short-term illness, the need to care for a child etc. The introduction of remote work in the company was mainly influenced by the desire to be more environment-friendly and reduce travel time to the office, as well as the desire to be flexible and enable employees to be productive even on days when they are unable to come to the office for various reasons. This type of work arrangement has improved the work-life balance of employees, as well as reduced the amount of overdue work due to their absence.

The expert from company B, like that from company A, emphasized in the interview that it was important not to increase the company’s total costs through working remotely. At the same time, one cannot forget about the work environment – it is necessary to try to maintain it pleasant and comfortable both in the office and in the virtual space. It is important to invest in the right software to ensure seamless communication between employees and with customers, as well as IT security to make working remotely easier. Company B conducted an employee home risk assessment to identify the various risks that might arise from working remotely. It is positive that the company’s management had not observed that working remotely made a negative impact on the work culture or reduced the ability to control the employees.

**Company C** provided IT support for offices and shops, as well as participated in software development and testing. It was part of an international group of companies, which was the leading motor fuel trader in the Baltic and Scandinavian countries with more than 100 years of experience. The company employed 120 people and working remotely was allowed, yet the employees were not encouraged to work outside their offices because, according to the company’s manager, the office was for work and home for leisure. The manager of the company also believed that by working in the company’s offices, the employees cooperated and communicated more with each other, thereby developing their individual skills. Besides, the company could not guarantee its employees suitable working conditions and provide an ergonomic environment if working outside the offices. However, there were some exceptions, and working remotely was allowed, e.g. during illness or under other unforeseen circumstances, if the employee was able to guarantee that the work would not interfere with the recovery process. The maximum duration an employee might spend working from home was 6 days a month, unless there was an emergency when it was necessary to do so for longer. In this case, it had to be agreed separately with the direct supervisor.
Practicing working remotely raised concerns about the company’s ability to plan its operation and set “tangible” goals.

The health of employees was very important for company C. As the expert noted in the interview, the deterioration of mental health often related to stress or personal reasons; however, if the employee worked outside the office, it was much more difficult to detect it. In order to take care of the health and wellbeing of the company’s employees, individual negotiations were conducted between its employees and managers, during which the employees could also discuss health-related problems. As regards digital development, the company representative acknowledged that more meetings and training sessions were held virtually. In addition, for the employees to be able to work remotely, access to the virtual private network was provided, thereby allowing them to securely connect to the company’s server from any location. Based on the characteristics of the companies selected for the case study, information on remote work practices was collected and presented in Table 1.

Table 1
Comparison of the companies selected for the case study with regard to working remotely

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Company A</th>
<th>Company B</th>
<th>Company C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind of economic activity</td>
<td>Insurance</td>
<td>Outsourcing: accounting and a call centre</td>
<td>IT</td>
</tr>
<tr>
<td>Kind of remote work</td>
<td>From home, from the client’s office, in public places</td>
<td>From home, from another office</td>
<td>From home</td>
</tr>
<tr>
<td>Proportion of employees in total employees who were allowed to work remotely</td>
<td>60 %</td>
<td>50 %</td>
<td>100 %</td>
</tr>
<tr>
<td>Frequency (how often employees work remotely)</td>
<td>10 % more often than once a week</td>
<td>More often than once a week</td>
<td>Less often than once a week</td>
</tr>
<tr>
<td></td>
<td>20 % less than once a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departments where working remotely is implemented</td>
<td>IT, product development, customer service, management</td>
<td>Accounting, finance, IT, personnel management</td>
<td>IT</td>
</tr>
</tbody>
</table>

Source: authors’ own compilation based on the information obtained in interviews with company representatives

As shown in Table 1, the companies implemented different practices regarding working remotely, depending on the industry the company was engaged in, as well as the specifics of the economic activity and the company’s policy on remote work in general.

To determine the economic benefits of remote work practices, the above companies were analysed in detail. It should be noted that the economic analysis did not fully take into account all potential savings by the companies, but identified only the most important ones. The amount of savings largely depends on the financial resources that the employer is willing to invest in its employees, thereby providing various additional benefits to the employees. Although not any company makes a work environment risk assessment for its remote workers, the research included such an item in the calculations based on the amendments to the Labour Protection Law, which entered into force on 7 January 2020. It should be noted that working remotely also allows employers to save on indirect costs, such as absenteeism. However, indirect costs were much more difficult to determine and therefore were not included in the case study calculation.
Rental costs. Offices are divided into three classes: A, B and C. In the research, Class B offices were chosen as the basis. According to a report on commercial premises for 2019 by the real estate company Latio, the average monthly rent on Class B offices in Riga was 9-14 EUR/m². The research assumed the rent to be 12 EUR/m². According to the Cabinet Regulation No. 343 of 6 August 2002 Occupational Safety Requirements when Working with a Display, each employee needs enough space to be able to work comfortably and easily change the working position. The research assumed the space suitable for work to be 6 m². Accordingly, the total cost of renting premises per month per employee was EUR 72.

Telephone and Internet costs. As regards Internet services, the Internet connection for business customers, which cost on average 39 EUR/month, was chosen. By choosing this kind of Internet connection, the company was provided with a router with four Internet output ports, which means that only four computers could be connected to the router to ensure maximum Internet capacity.

Equipment. This cost category includes expenses on printers, worktops, computer chairs and other office equipment. The duration of these pieces of equipment is determined by each company. The research did not take into account the cost of purchasing and maintaining information systems because when working remotely, employees also needed software to perform their duties, as well as the cost of computers for the employees, as the research assumed that companies provided this equipment to their remote employees. The useful life of equipment was assumed to be 5 years, with the exception of a computer desk (10 years). On average, the equipment cost EUR 20 per employee per month. The useful life of equipment for call centre employees was assumed to be one year, totalling around EUR 60 per employee per year.

Electricity. Based on data from the project “Odyssee – Mure” implemented under the EU research and innovation programme Horizon 2020, the average electricity consumption per employee in Latvia was slightly above 4000 kWh/year, which was due to the fast increase in the number of electrical appliances used and the spread of ICT in offices. It follows that one employee spent about 50 EUR/month on electricity.

Work environment risk assessment. In Latvia, Cabinet Regulation No. 660 Procedures for Internal Monitoring of the Working Environment stipulates that an environmental risk assessment must be performed by each employer at least once a year. The National Labour Inspectorate, in cooperation with the European Agency for Safety and Health at Work, has developed a website-based interactive tool, OiRA (Online Interactive Risk Assessment), which can be used to assess work environment risks and identify occupational safety measures. The OiRA tool is available free of charge, yet it takes time to perform work environment risk assessments. The calculations were based on the forecasted average gross earnings in Latvia by the national information agency LETA, which at the end of 2020 was 1200 EUR. Given that an assessment of work environment risks for one employee could take about an hour, for the employer it would create an additional cost of EUR 7.14 per employee per year.

Coffee and drinking water. Many companies provide their employees with drinking water and coffee in the office. About three litres of water are consumed per person per week. According to the authors’ calculations, it costs approximately EUR 3.84 per employee per month. Many coffee companies offer free rental of coffee machines if they buy large quantities of coffee. The authors estimated that the cost of providing coffee per employee is about EUR 19.37 per month.

Fruits in the office. Given that an employee consumes about 1 kg of fruits per week, it costs about EUR 5.15 per month per employee.

The aim of the authors was to identify approximate savings by an employer, assuming that all the employees work remotely. The preliminary financial savings by the companies analysed in the case study if practicing working remotely are summarized in Table 2.
Table 2 shows the approximate financial savings per employee per month and per year, as well as per employee employed in the company’s branch in Latvia per year. As shown in Table 2, the location of the office chosen affects the amount of costs – the closer to the centre of Riga, the higher the rent. The Internet and electricity costs also account for a large part of the employer’s total cost.

It could be concluded that company A has the potential to save its financial resources, and the total amount of savings per month would be approximately EUR 145 per employee. In the case of company B, only about half of its employees are currently given an opportunity to work remotely. Some of the employees work in the call centre, and the employees need special equipment to perform their duties, which the employer has so far provided only for work from the office. Unlike company A, company B has three more cost components: coffee and drinking water, parking and equipment for call centre personnel. This calculation also includes two cost components that would not bring savings for the employer if working remotely – the provision of additional equipment to call centre personnel and an assessment of work environment risks. To ensure the possibility of working remotely, company B should also purchase and provide its call centre personnel with specialized equipment suitable for performing their respective work duties from home. As shown in Table 2, company B could save almost 100 EUR more per year on coffee and drinking water than on the purchase and maintenance of work equipment per employee. The additional costs that company B would incur if an employee began working remotely would be around EUR 12 per month, which is only 5.99 % of the total current cost per employee.

Company C provides the opportunity to work remotely for its employees, yet the company prefers that its employees work from their offices. This is one of the reasons why the company strives to make the office environment as attractive as possible for its employees by providing unlimited free coffee, tea and drinking water, as well as fresh fruits in the office kitchen. All the costs that the employer could save on by

<table>
<thead>
<tr>
<th>Kind of savings</th>
<th>Company A</th>
<th>Company B</th>
<th>Company C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per employee per month, EUR</td>
<td>Per 55 employees per year, EUR</td>
<td>Per employee per month, EUR</td>
</tr>
<tr>
<td>Rental cost</td>
<td>72</td>
<td>47520</td>
<td>72</td>
</tr>
<tr>
<td>Internet cost</td>
<td>9.75</td>
<td>546</td>
<td>9.75</td>
</tr>
<tr>
<td>Equipment</td>
<td>20</td>
<td>13200</td>
<td>20</td>
</tr>
<tr>
<td>incl. equipment for call centre personnel</td>
<td>-</td>
<td>-</td>
<td>-5</td>
</tr>
<tr>
<td>Electricity</td>
<td>50</td>
<td>33000</td>
<td>50</td>
</tr>
<tr>
<td>Coffee and drinking water</td>
<td>-</td>
<td>-</td>
<td>23.21</td>
</tr>
<tr>
<td>Fruit in the office</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Parking lot</td>
<td>-</td>
<td>-</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>144.61</strong></td>
<td><strong>93873.30</strong></td>
<td><strong>202.82</strong></td>
</tr>
</tbody>
</table>

Source: authors’ calculations

Table 2
allowing its employees to work remotely are listed in Table 2. It could be concluded that the company can save the most on rental costs, as well as on Internet and electricity costs, which would amount to almost EUR 132 per month per employee or 74.87 % of the total savings.

2. Characteristics of scenarios for remote work

After summarizing the results of the case study analysis, three remote work scenarios, assessing their benefits and risks, were proposed for companies.

Scenario 1: All employees work in their offices 8 hours a day. In this case, employers do not need to allocate additional funds for assessing work environment risks at any employee’s home. It would cost EUR 7.14 per employee per year, which would amount to EUR 392.70 for company A, EUR 1428 for company B and EUR 856.80 for company C (Table 3). Under this scenario, companies have to take into account the fact that it will not be possible to save on office rent and other various bills. Besides, under this scenario, the employer does not have high risks of possible communication problems with employees and their control and difficulty in eliminating various technical problems remotely. However, it should be taken into account that in this case there are more external nuisances, especially in open-plan offices, that can reduce the productivity of employees compared with a situation where employees work from home, regardless of cases in which work at home is combined with childcare.

Scenario 2: Employees work both in their offices and remotely. Assuming that employees work half-time or 10 working days a month remotely, the employer could save on electricity bills. In this case, it should be taken into account that the employer incurs additional expenses to perform work environment risk assessments, as well as to provide employees with the equipment necessary for their work. The calculation assumed that the employer provides the employees with equipment worth EUR 600 with a useful life of 5 years. Despite the additional costs, employers can also save under this scenario: company A – EUR 9507 per year, company B – EUR 34572 per year and company C – EUR 20743 per year, which could then be used for technological modernization and introducing automation in operational processes. Such a flexible work schedule increases employee productivity and job satisfaction. Under such a scenario, work should no longer be delayed in cases employees have a mild illness, personal circumstances or other reasons that prevent the employee from coming to the office. This would also be the best option for companies that want to give their employees the freedom to make their work schedules while performing their usual on-site work.

Scenario 3: All employees work 100 % remotely. Under this scenario, Company A could save 9.18 times more financial resources than would be the case if its employees worked part-time remotely. For company B, it would be 13.22 times more and for company C – 11.15 times more. Even though the companies are able to save resources on office equipment, it should not be forgotten that the employees also need to be provided with equipment for working from home. Under such a scenario, companies need to have confidence in their employees, as it is not possible to control the work of employees so easily. In this case, employers need to set goals for their employees and define the results to be achieved rather than try to track how this is being achieved. This scenario allows employers to make the largest savings, which means that the companies have a better chance of modernizing their production processes and investing in R&D; however, it should be taken into account that this could involve fragmentation in the workforce if the employers fail to set up their own systems for engaging their employees in joint events (both virtually and in person).

A comparison of the scenarios is summarized in Table 3.
Characteristics of the remote work scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Benefits</th>
<th>Risks</th>
<th>Savings by the companies per year per employee, EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1: All employees work in their offices 8 hours a day</td>
<td>No additional expenses on assessments of work environment risks in the employee’s home, Easier to communicate with employees, More effective employee control, Easier to troubleshoot various technical problems</td>
<td>Open-plan offices have more external nuisances that could reduce employee productivity, It is not possible to save on rent and various bills</td>
<td>Company A – EUR 392.70, Company B – EUR 1428, Company C – EUR 856.80</td>
</tr>
<tr>
<td>Scenario 2: Employees work both in their offices and remotely</td>
<td>Some electricity savings, Work productivity and employee job satisfaction increase, On-site communication and employee control are also possible</td>
<td>Additional expenses on assessments of work environment risks in the employee’s home, Additional expenses on the provision of employees with equipment to work from home</td>
<td>Company A – EUR 9507, Company B – EUR 34 572, Company C – EUR 20 743</td>
</tr>
<tr>
<td>Scenario 3: All employees work 100 % remotely</td>
<td>Largest financial savings are from lower rent, electricity and other costs</td>
<td>Employees must also be provided with equipment to work from home, It is not so easy to control employees, so employers need to set clear goals and objectives for their employees</td>
<td>Company A – EUR 87 273, Company B – EUR 457 026, Company C – EUR 231 231</td>
</tr>
</tbody>
</table>

Source: authors’ own compilation based on the results of the case study analysis

An analysis of the above scenarios reveals that scenario 1 is the most suitable for companies providing no possibility to perform many or all work tasks remotely, e.g. the companies that need to serve customers in person, as well as those in which most work tasks are not yet automated and are done manually (e.g. paper work).

Scenario 2 is more appropriate for companies providing the possibility to perform many work duties remotely, yet there are some specific duties that could only be performed from the employer’s offices (e.g. for human resources department personnel). This scenario is also suitable for the companies whose owners take care of their employee satisfaction and are ready to adapt to their needs.

Scenario 3, however, is appropriate only to the companies that have the automation of tasks at a high level, thereby enabling the employees to perform their work duties remotely without any problems. It should be noted that the employees who are forced to perform their duties in this way might not be as productive and might not show as high a level of satisfaction as those who have made this choice independently. The implementation of this scenario could also be more successful at the companies in which their employees have to perform their duties individually, as group cooperation is difficult to implement in this case. Overall, it could be concluded that before switching to remote work, each company should assess whether the level of automation of tasks allows work to be done remotely, whether there is mutual trust between its supervisors and employees, and whether teamwork and employee presence is necessary.
Conclusions and proposals

1) The analysis of the case study and the companies’ experience in implementing remote work practices revealed that the potential financial savings from working remotely made by the companies varied, depending on the specifics of the industry and jobs, as well as the funds that the companies were initially willing to invest in their employees, thereby providing them with additional benefits.

2) The largest economic savings from applying remote work practices came from maintenance of premises, as well as electricity and Internet bills, while the provision of equipment and drinks to employees accounted for the smallest proportion of preliminary cost savings. However, the main challenges regarding remote work practices were the difficulty of controlling employees and ensuring effective communication and teamwork.

3) An analysis of the remote work scenarios has revealed that full-time work in offices is the most suitable for the companies providing no possibility to perform most work duties remotely. Scenario 2 involves partial remote work and is more suitable for the companies providing the possibility to perform many work duties remotely, yet there are some specific duties that could only be performed from the employer’s offices. Scenario 3, however, is appropriate only to the companies that have the automation of tasks at a high level, thereby enabling the employees to perform their work duties remotely without any problems, as well as this scenario is more suitable to the companies in which their employees have to perform their duties individually, as group cooperation is difficult to implement in this case.

Bibliography


