

IS TELECOMMUTING THE FUTURE OF BUSINESS?

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Abstract: *The phenomenon of telecommuting first appeared in the US in 1970s during the oil crisis and ever since has been on an ascending trend due to the globalisation and development of information technology. This analysis displays statistical overview of current telecommuting trends with regards to business sectors, gender, age groups and also draws attention to the benefits and challenges of such a working solution. Data provided in report conducted by Gallup shows that from 2012 to 2016, the number of employees working remotely increased from 39% to 43%. On the other hand, the matter of teleworking appears to be especially intriguing due to the recent implementation of ‘co-locating’ policies introduced by market leaders such as Yahoo, IBM, Reddit, Best Buy or Bank of America Corp. Even though those corporations used to promote telecommuting and have been developing remote approach for years, in the last few years they started reverting from that concept and promoting values such as ‘creativity’ and ‘innovation’. That is to be achieved through teamwork and sharing ideas face-to-face. The paper evaluates advantages and disadvantages of teleworking and shows the insides of IBM’s recent strategy towards flexible working agreements. The outcome shows that despite numerous benefits, the approach does not correlate with ‘Agile’ way of handling business which is becoming commonly applied in international corporations. The herein analysis was developed mostly on the literature review and on the basis of demographic and statistical data acquired from Gallup, Eurostat and particular economic institutions.*

Key words: *telecommuting, organizational performance, remote work, flexible work*

JEL codes: *J01, J80, M14*

1. Introduction

The definition of “telecommuting” was first introduced by Jack Nilles in the mid-1970s. The development of the concept is related to the oil crisis in the US when it became obvious that it would not be necessary to import oil to the United States if one in seven workers worked from home instead of commuting (Tavares, 2017). The concept has been developing ever since. Evolution of the information technology and increase in use of home computers, laptops, mobile phones and all sorts of communicators, which exploded in the 90s, opened the possibility for working without the need to commute to the office. Currently more and more companies invest in many sorts of software and technological tools in order to enable employees to work from home. It is common to use means such as virtual private network (VPN), telephone systems, instant messaging such as Sametime or Skype and cloud-based collaboration software like WebEx or Zoom.

Nilles defined both the terms of “telework” as well as “telecommuting” and even though they are very often used interchangeably there are differences between those two concepts. Nilles described “telework” as technology assisted work performed outside of an office. On the contrary “telecommuting” applies to work conducted on a regular basis from an alternative workplace, such as home, or another remote location, using information technology, but still maintaining a traditional office as well (Nilles et al., 2007). Companies start using more various terminology such as distributed work, flexible work or remote work, however it may be concluded that all of these terms share common idea and that is that work does not have to be done from the office but any location in the world. For the purpose of this paper the terms have been standardised and used interchangeably.

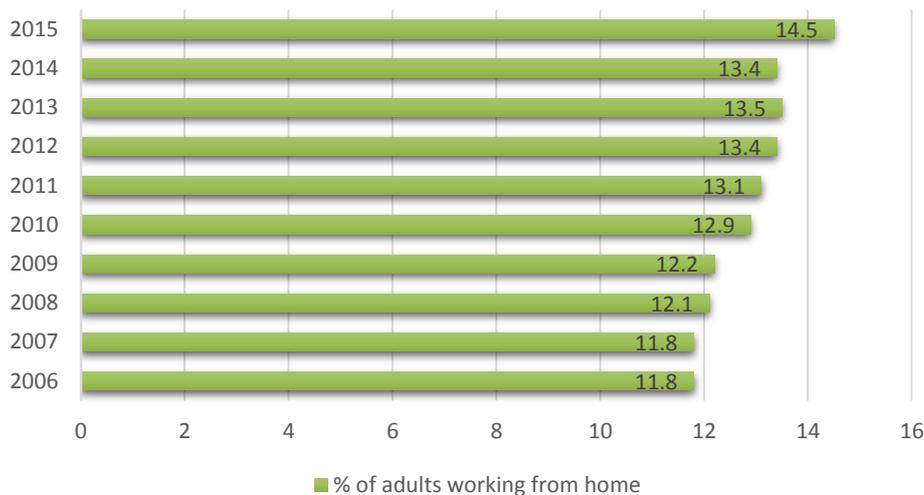
The article focuses on telecommuting trends in Europe and the United States and takes a closer look at the statistical data collected through the polls (such as Gallup or Flexjobs) or from Eurostat. Later on it outlines

advantages and disadvantages of telecommuting and at the end, presents recent changes in the telecommuting policies by the market leaders, such as IBM or Yahoo.

2. Statistical Data

Ascending trend in the number of telecommuters can be observed both in Europe and in US. In Europe percentage of adults working from home grew from 11.8% in 2006 to 14.5% in 2015. However the numbers vary significantly between the countries. The highest proportion of teleworkers can be observed in Denmark, Sweden, Netherlands and UK – 37%, 33%, 30% and 26% respectively (www3). In comparison, remote work is the least common in Visegrad group countries (Hungary – 11%, Slovakia, Poland, and the Czech Republic – 10%), Greece and Italy – only 9 and 7%.

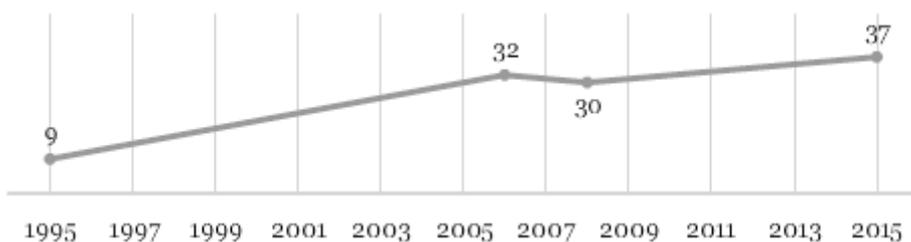
Fig. 1 Percentage of telecommuters in Europe in years 2006-2015



Source: (www1)

The number of telecommuters in US is much higher. According to the Gallup's annual Work and Education poll (www6) 37% of workers answered positively to the following question: "Have you ever telecommuted, that is, worked from your home using a computer to communicate for your job?". Results of the poll depicted on figure 2 show that the volume of people working from home has increased by almost 30% from only 9% in 1995.

Fig. 2 Percentage of telecommuters in the U.S. in years 1995-2015



Source: (www6)

Telecommuting is more common among the so-called "knowledge workers", that is highly qualified employees, usually managers and professionals. According to Gallup (www6) people with more formal education are those working from home the most often. Approximately 53% of them have obtained at least a bachelor degree in comparison to 37% of non-telecommuters with such degree (www2). Moreover, telecommuters tend to belong to upper-income group and work in white-collar professions.

Tab. 1 Telecommuters by education, income, and job type in 2015 (percentage points)

College graduate	55
Non-college graduate	26
Annual household income \$75,000 or more	52
Annual household less than \$75,000	26
White-collar profession	44
Blue-collar profession	16

Source: (www6)

Table 2 illustrates industries with the highest amount of telecommuters and depicts whether the share of teleworkers has grown or decreased in comparison to 2012. It can be observed that the percentage of remote workers has increased in most industries. The biggest rise appeared in finance, insurance and real estate sector, followed by the transportation, which is also an industry with the biggest amount of people working away from office due to the specificity of the job. Later on, manufacturing, retail, healthcare and IT noted positive difference in comparison to 2012. Those trends seem to be confirmed by the list of the top 100 companies offering remote work prepared annually by FlexJobs (www2). Top five names of 2017 are Appen – a technology services company, LiveOpps, a cloud contact center, Amazon – the world’s largest online retailer, Teletech – business process outsourcing company and VIPKID – English language-learning services company (www4).

Tab. 2 Telecommuters by industries

	2012	2016	Difference in percentage points
Finance/insurance/real estate	39	47	+8
Transportation	55	61	+6
Manufacturing or construction	34	38	+4
Retail	26	30	+4
Healthcare	31	34	+3
Computer/information systems/mathematical	54	57	+3
Law or public policy	41	43	+2
Arts/design/entertainment/sports/media	48	48	0
Community/social services	44	43	-1
Science/engineering/architecture	44	41	-3
Education/training/library	38	34	-4

Source: (www6)

The data referring to demographic distribution of teleworkers, collected by Eurostat and the Harris Poll reveals that both in Europe and US men work from home more often than women. In the European Union, on average, about 8.1% of male employees practice telework, in contrast to 5.8% of female employees (ILO, 2016). Gender differences can be partially explained by the distribution of telework among sectors and occupations. Industries with a higher incidence of telecommuting, such as engineering, real estate, finance or science, are usually a male-dominated workplace. This pattern is also visible in managerial positions or technical occupations, which are dominated by men.

3. Advantages and disadvantages of telecommuting

Most research concludes that telecommuting is beneficial both for employers and the workers. Starting from the employee’s perspective and the most apparent reasons, telecommuting helps to save a lot of time and money. First of all, it enables reduction in travel expenses - on public transportation, gas, parking or insurance. As researched by Flexjobs (www2), full time telecommuters can save over \$4000 each year and half time remote workers on average \$2677. Secondly, workers may save also on food and, as they may eat homemade meals, it influences their health as well. Flexjobs’ findings also indicate that an average a telecommuter may gain back an equivalent of 11 days per year just by saving time on commuting to work. Other benefits, less measurable though, are better work-life balance, more time for family or hobbies and self-development (Eddleston and Mulki, 2017). Moreover, telecommuters tend to be less exposed to stress or common illnesses like colds or flus. Remote work also increases chances for employment for people with disabilities who would not be able to commute to distant office location.

From employer's perspective telecommuting is also very beneficial. First and foremost, it has influence on the reduction of costs connected with real estate expenses (Burke, 2017). Businesses may keep smaller office premises and thus cut the costs without impacting the organizational performance and number of employees. Furthermore, companies can recruit talented people even from distant locations and avoid labour market saturation (Matos and Galinsky, 2015). Employees working in organisations which offer telecommuting tend to be more engaged than those who do not have such opportunity (Masuda et al., 2017). Telecommuting also increases employees' productivity. This statement has been confirmed by a number of studies, for example research conducted by ConnectSolutions in December 2015 (www5) reveals that 77% of employees reported higher productivity while working offsite, 30% admitted to accomplish more in shorter time and 24% accomplish more in the same amount of time. Survey revealed also the reasons for such spectacular performance. 86% of workers prefer to work alone and 61% admitted that loud colleagues in the office are their biggest distraction – working from home helps them to focus and achieve better results. Moreover, as researched by Gallup (www6) workers tend to log more hours at home – for example AT&T workers working from home are online approximately 5 hours per week longer than their colleagues in the office. That pattern is visible also in the sick leave absence – remote employees take fewer days off because of sickness (www6).

On the other hand, telecommuting is not free from disadvantages. Employees are exposed to risks connected with lack of labour inspection and labour protections (Noonan and Glass, 2012). They may also feel isolated and have psychosocial issues due to lack of everyday contact in the workplace. Another issue may be monitoring – from employee's perspective the increased supervision may be too sensible while on the contrary, employers could easily lose control over tasks and effectiveness of the worker who is not present in the office.

Potential advantages and disadvantages of telework are summed up in table 3.

Tab. 3 Potential benefits and challenges of telework

	Potential benefits/promises	Potential challenges/disadvantages
Society	environmentally friendly advantage for individuals with disabilities opportunity to find work regardless of geographical location reduced infrastructure stress	
Employers	lower overheads avoiding labour market saturation and possibility to find talented workers globally higher productivity of workers increased margins	security concerns potential loss of control some tasks need employee's presence at the office increased IT demands
Workers	work-life balance higher autonomy less time waste on commuting saving on commuting expenses (gas, insurance, public transportation etc.) increased job satisfaction lower stress level	dissapearance of boundaries between work and private life social isolation working longer hours, during sick leave or holidays

Source: ILO (2016)

4. Telecommuting vs. Agile

Taking into consideration all the advantages listed in the previous chapter, which surely outnumber drawbacks and challenges of telecommuting, it may occur to be quite surprising that a pioneer of remote work called thousands of their workers back to the offices. Just few months ago, in May 2017, IBM announced a new policy breaking with the model developed in the previous decades and decided to relocate their US remote workers to one of six main offices: Atlanta, Austin, Boston, New York, Raleigh and San Francisco. Affected workers were given 30 days to decide whether to move to one of those offices or leave the company.

IBM's decision is especially surprising because the company has embraced telecommuting for decades and even though they refused to comment on how many employees would be affected by such change, data from 2009 shows that at that time already (later on the number was only growing) 40% of IBM's 386 000 global

employees worked at home. Thanks to remote workers, the company managed to reduce office space by 78 million square feet and save \$100 million per year in the US (www8). IBM has been a leader of telecommuting since as early as 1980s when they had installed “remote terminals” in employees’ homes and later on developed a number of tools enabling to work efficiently from home. Dialling into a teleconference with Sametime, WebEx or Slack was a daily routine for many employees. The strategy was also very beneficial for small start-ups acquired by IBM, which did not have to relocate their workers to central offices. Those practices are long gone now.

However, IBM is not the first company which decided to make such a move. In the last several years other well-known names such as Reddit, Best Buy, Bank of America Corp and Aetna Inc. also co-located their teams to the offices. In 2013 Yahoo made headlines when the end of telecommuting policy was announced and got severe criticism. Especially the CEO, Marissa Mayer, who was pregnant with her first child at that time, was disapproved for lack of support for working parents and family life. Yahoo published a memo stating that by June 2013 all employees working remotely full time were obliged to relocate to the office or resign. Even occasional teleworkers were impacted by the changes in company’s policy, quoting the memo: "For the rest of us who occasionally have to stay home for the cable guy, please use your best judgment in the spirit of collaboration" (www10). Mayer’s aim was to make Yahoo move more quickly, focus on teamwork, collaboration and communication.

More and more popular idea, implemented by the biggest and most successful technology companies is the so-called “water cooler effect”. The term refers to the theory that face-to-face interactions and talks by the “water-cooler” during breaks increase innovation and productivity. Alex Pentland from MIT conducted a research on IT workers. Researched workers were given specially designed badges with implanted radio transceiver, a microphone, a microprocessor and a set of motion sensors. When a badge sensed another one it could measure length and tone of the conversation. Later on the data was compared with the wearers’ productivity (www9). Findings of that research were that group cohesion was a central predictor of productivity. Employees whose group cohesion was in the top third turned out to be the most productive and innovative. Their productivity increased by more than 10%. Therefore, famous Silicon Valley enterprises are obsessed with building team-spirit and face-to-face cooperation. Modern offices are designed in a comfortable and friendly way that is supposed to keep employees in the office. Free food, laundry service or inviting interiors are the means that help to achieve that (www7). Facebook went as far as offering employees a \$10 000 bonus for living in the headquarters proximity and Patrick Pichette, Google’s former CEO, in 2013 when asked about how many people telecommute to Google answered “As few as possible” (www7).

So what is the reasoning behind co-location strategy? The answer is very short – AGILE. Following the water-cooler effect and focusing on productivity, companies started implementing Agile methodology. The Agile was created in February 2001 and is described in twelve principles that drive the Agile manifesto. They are presented below, in table 4.

Tab. 4 12 principles of Agile Manifesto

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1. The highest priority is to satisfy the customer through early and continuous delivery of valuable software.
 2. Welcome changing requirements, even late in development. Agile processes harness change for the customer’s competitive advantage.
 3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
 4. Business people and developers must work together daily throughout the project.
 5. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
 6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
 7. Working software is the primary measure of progress.
 8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
 9. Continuous attention to technical excellence and good design enhances agility.
 10. Simplicity — the art of maximizing the amount of work not done — is essential.
 11. The best architectures, requirements, and designs emerge from self-organizing teams.
 12. At regular intervals, the team reflects on how to become more effective and then tunes and adjusts its behaviour accordingly.
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Source: Ambler and Holitza (2012).

The main focus of Agile was summarised by Jeff Smith, IBMs former Chief Information Officer. He claimed that the leaders need to work with the small teams, which need to be in a “location” (www7). Telecommuting seems to have been a great strategy for the 90s and 80s, but not for the 2017 when the innovation is the most essential success factor.

5. Conclusions

Telecommuting is a flexible work arrangement which is characterised by conducting the work from an alternative location, usually home. The phenomenon has been increasing worldwide during the last few decades. First it was adopted in the mid-70s in the US and boosted in the 90s of the 20th century. The article focuses mostly on the data referring to Europe and United States provided by Eurostat and Gallup poll. Statistics reveal that telecommuting is a growing phenomenon both in Europe and the U.S., however it is much more common in the United States. In 2015 percentage of people working from a remote location was equal to 14.5% in Europe and 35% in US. In both cases the growth in comparison to the previous years is very significant and is predicted to continue increasing. An average telecommuter, according to the statistical data, can be described as a male, upper-income, college graduate working in IT sector, finance or real estate.

The phenomenon of telecommuting is gaining popularity due to the number of benefits arising from working from home. The main advantage, both for employer and employee, is cost-cutting. Workers reduce travel expenses, save on eating out and save time on commuting. They have also more time for family or hobbies. Employers save on the overheads and are able to avoid labour market saturation and hire suitable employees regardless geographic location. According to the studies workers are also more productive at home and log more hours, which is another benefit for the employer.

While the telecommuting trend is generally increasing and companies are investing in offering advantageous flexible work packages, the coin also has the other side. The biggest corporations and famous Silicon Valley names are rather changing the strategy and withdrawing remote work. IBM, Yahoo or BestBuy have recently started banning telecommuting and relocated their employees back to the offices. Such an approach is supposed to increase productivity, creativity and innovation. It is backed up by the Agile methodology, commonly implemented in the corporations, theory of the “water cooler effect” and studies conducted by MIT researches.

The main goal of herein article was to answer a research question that is to examine whether telecommuting is an opportunity or threat for the business. From the study described in the paper it may be concluded that telecommuting is an opportunity for most businesses due to the economic reasons. It helps to reduce costs and increase profitability, which is the main goal for many companies. However, it is believed that for companies which base their business strategy on the innovation telecommuting is an outdated approach. Example of IBM shows that the strategy working in the 90s is not suitable in the times of innovation. In order to remain the leaders in their respective industries companies like IBM or Yahoo need to keep evolving their strategy. Telecommuting being a safe strategy for most companies could be seen as an outdated approach for such large companies. To remain in the position of leaders they need to be one step ahead of their competitors and as flexible working agreements are slowing innovation we can see a shift in their strategy. What this shift will be and whether in the near future other companies will embrace the approach of call back is most certainly a basis for future research.

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