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Better not to ask your employees to come to work? Issues in R&D work efficiency

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Abstract

The understanding that work is done at a workplace is a deeply-rooted social norm, including in the case of creative R&D work. We have studied Estonian creative R&D employees to find out the links between distance work and work outcomes, individual wellbeing, sleep and tiredness. It appears that those who have a distance work option perceive their work results significantly higher than those without that option. Moreover, employees that can work outside the office are happier and less tired, and they feel the constraints that work sets on their sleep habits much less than those who have to do their work at the workplace only. Although some creative R&D jobs may require the use of specific laboratories, equipment, data or teamwork, providing the distance work option appears to be beneficial overall for both the employer and the employee.

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Parem ärge paluge töötajatel tööle tulla? T&A valdkonna töökorralduse tõhususest

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Kokkuvõte

Arusaam, et tööd tehakse tööjuures on sügavalt juurdunud. Nii ka loova teadus- ja arendustöö puhul. Nagu paljude teiste aastakümnete ja -sadade jooksul välja kujunenud sotsiaalsete normide puhul, on harjumuse jõud tugev ega pruugi samas vastavuses olla tänapäeva töö iseloomu ja võimalustega. Meie uurimisrühm viis läbi Eesti loovate T&A valdkonna töötajate küsitlusuuringu. Üheks eesmärgiks oli välja selgitada kaugtöö mõjud töötajate töö tulemuslikkusele, heaolulule, unele ja väsimusele. Uurimusest ilmnas, et kaugtöö võimalusega töötajate tunnetatav töö tulemuslikkus on oluliselt kõrgem kui neil, kes peavad tööd tööjuures laua taga tegema. Seega oleks kaugtöö võimaluse pakkumine tööandja huvides, tõstmaks loovate T&A töötajate töö tulemuslikkust. Vahel tuuakse kaugtöö vastuargumendiks kontrolli puudumist töötaja tegevuse üle. Meie uurimus aga näitab loovate T&A töötajate kõrget pühendumust ka kaugtöö puhul – T&A töötajate keskmine tööpäev on pikk (ca 10 tundi), mis näib olevat vajalik selleks, et saavutada töötajat ennast rahuldavaid töötulemusi. Lisaks näitas uurimus kaugtöö mitmeid positiivseid seoseid töötaja heaoluga. Need, kellel võimalus teha tööd väljaspool kontorit, on oluliselt õnnelikumad. Samuti tunnevad töötajad, kellel paindlikkus nii töötegemise kohas kui ajas, oluliselt vähem, et nende töö häiriks nende unerežiimi. Meie uurimusest ilmnas, et kaugtöö võimalusega töötajate tunnetatav väsimus on madalam. Mõõndes, et nii mõnegi T&A valdkonna töö puhul seavad seadmete/laborite/andmete kasutamine ning meeskonnatöö vajadus kaugtööle piire, peaksid nii meie uuringu kui ka mitmete varasemate rahvusvaheliste uuringute tulemused andma tööandjatele ainet mõtlemiseks, kas on mõistlik töötajaid kindlal ajal kindlasse kohta tööd tegema kokku kutsuda.

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Why work at the workplace?

The notion of work being done at the workplace assigned to it is deeply rooted in society. Like other social norms that have evolved over decades and centuries, the tradition of “going to work” is a strong one, though it may no longer be in alignment with the needs and purpose of work. It is clear that an airline pilot, a dentist or a security guard could not do their work from home, and there are still many jobs in manufacturing, infrastructure, services and other industries where working from a distance is out of the question, in most cases because it is necessary to use specific assets or infrastructure or because of team working requirements. However there are increasingly many jobs which do not inherently require the employee to be at a specific location at a specific time, and this is also the case with many creative research and development jobs, at least as long as no special equipment or physical teamwork is required.

The effects of distance work have been extensively studied internationally. From a study of the technology sector in Belgium, Coenen and Kok (2014) find that remote work stimulates new product development. Similarly, Ollo-Lopez et al. (2010) and Gajendran and Harrison (2007) have identified a positive impact that distance work has on work outcomes. Scandura and Lankau (1997) reach a similar conclusion, explaining it as a psychological employer-employee contract, whereby employees offer better work results and increased commitment in return for flexible work options. Tan (2016) proposes that granting more freedom to employees leads to improved results for creative work. As a real life example, he

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refers to The Freedom Report by LRN¹, which suggests that a higher freedom index for companies has a positive relationship with innovative activities and longer term sustainability. There are however many studies that have found mixed results for the effects of distance work on work results.

Do creative R&D employees work better at home?

Our research team, combining economists and medical researchers from Tallinn University of Technology and our partner universities, has been investigating work arrangements in creative research and development work for applied and other researchers, engineers, product and IT developers, and other knowledge employees working in R&D. We are interested in the field of R&D in the broader context of studying the efficiency of R&D and its deployment in knowledge based economies.

We find from a study of 153 creative R&D employees in Estonia from 11 different private sector R&D organisations, IT and technology companies, banks, and research institutes, that those who have the option of working at a distance perceive their work results to be significantly higher than do those without that option (Hazak et al., 2017). This finding is in alignment with the earlier international studies noted above, suggesting that more flexibility about where work is done would be beneficial for both the employer, who will get better work results, and the employee, who will enjoy additional spatial freedom. A similar result is found by Kelliher and Anderson (2008) from their study of a UK software company, as they find a positive relationship between flexible work and better control over individual work, higher commitment, improved job satisfaction, and better work-life balance. They find that all of these elements improve the work efforts of the employee. Similarly, Baltes et al. (1999) find a positive correlation between flexible work and increased productivity, lower absenteeism, and improved job satisfaction.

Distance work has sometimes been criticised by proponents of traditional work arrangements for implying a lack of control over the employee. Who can know whether the employee who claims to be working at home is actually lying in bed or doing the gardening,

¹ <http://pages.lrn.com/the-freedom-report>

as the boss cannot check it. The findings of our study show that the creative R&D employees in our study sample are overall strongly dedicated to their work. They appear to need an average of 10 working hours per day to achieve work results that they would be satisfied with.

Do creative R&D employees feel better when working from home?

The results of our study show several positive relationships between distance work and the employee's individual well-being. Those creative R&D employees who have the option of teleworking are significantly happier than those who are not able to work at a distance. That result is in alignment with the study by Anderson et al. (2015), which finds that employees are happier, more enthusiastic and more alert on distance work days.

Moreover, creative R&D employees who can work outside the office are less tired and they feel the constraints that work sets on their sleep habits much less than do those who are only able to work at the fixed place of work. These results suggest that being able to choose where to work is not just an additional freedom but has clear links with increased well-being.

Overall, our study suggests that where assets and the teamwork requirements of work allow, it might not be a good idea to ask creative knowledge employees to come in to work, as they perform better when working from home, and they also feel better when working from a distance. Distance work appears to benefit both the employee and the employer, and the lower demand for office space may save the employer some costs as well. The specific nature of knowledge work and changes in it, along with the development of communication technologies, require a thorough revision of traditional work arrangements.

Distance work is one of the many issues in working arrangements that our research project focuses on, and working time flexibility, the duration of employment contracts and the creative intensity of work, and pay gaps are among the other important issues in the design of R&D work that warrant rethinking (see www.ttu.ee/ta2). Additionally, this study is part of an effort by the research group to investigate the institutional, individual, financial and market-related features of knowledge intensive development. We hope to facilitate the public discussion of some topical issues of R&D efficiency that may have considerable implications for socio-economic development.

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