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Home-based telework in France: Characteristics, barriers and perspectives

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ABSTRACT

The aim of this article is to explain the gap between high social expectations, particularly in terms of reducing commuting frequency, increasing productivity and improving work-life balance, and the reality of home-based telework. We use three French databases which give information about employers but also employees. We highlight that telework is not only a fairly restricted phenomenon but also one that lacks impetus; it is mainly an informal working arrangement. The main reasons raised by both employees and employers are the uncertain advantages coupled with immediate disadvantages. The conclusion examines different contextual factors that could alter this cost-benefits dilemma and foster the development of home-based telework.

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0. Introduction

Telework can broadly be defined as work conducted from a location other than the conventional work site whilst connected to the firm's computer systems by means of information and telecommunications technology (ICT). However in practical terms there is no common, clear-cut definition of telework and its measurement in that it covers a variety of different situations in terms of technology used, location, contractual arrangement and intensity in time (Allen et al., 2003; De Graaff and Rietveld, 2007; Feldman and Gainey, 1997; Haddon and Brynin, 2005; Shieh and Searle, 2013). This explains the gap between the figures reported by various surveys (Felstead and Jewson, 2000; Kraut, 1989).

Initially (from the 70s to the 90s) telework was primarily defined as home-based telework *i.e.* work performed by employees during paid hours in an alternative fixed worksite (primarily the homeplace or a satellite office generally located close to the homeplace) approved by the employer. The aim of such form of work is to decrease the individual (stress, fatigue, etc.) and collective (congestion, air pollution, etc.) burden of daily commuting: hence in this framework teleworking and telecommuting are almost synonyms. Self-employment is generally not taken into account because the idea is to define as teleworkers only the people who work (regularly or not) from a fixed location situated outside the premises of their employer.

For fifteen years the definition tends however to enlarge and telework encompasses two other categories: firstly nomadic work and secondly home-based work performed outside working hours (Qvortrup, 2002). Nomadic (or mobile) workers are

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those working beyond home and office: on trains, at motorway service stations, in the departure lounge of the airports, in a temporary office space, in the premises of a client, etc. (Delaplace et al., 2014; Gareis, 2003; Hislop and Axtell, 2007; Lyons and Urry, 2005; Tremblay and Thomsin, 2012; Vilhelmson and Thulin, 2001) in relation with the development of mobile ICT, especially portable computers and mobile phones. However some studies include salaried employees working at customer sites in the category of nomadic teleworkers (Neirotti et al., 2013) despite the fact that off-site work is, and always has been, inherent to the occupations concerned (engineers, maintenance technicians, sales representatives. . .) and is then not necessarily related to ICT use. The third category of teleworkers can be named overtime teleworkers (Schweitzer and Duxbury, 2006) and is composed of the people who work from home outside the normal working hours (early in the morning, late at night, during the week-end, etc.). These different practices of teleworking are however still poorly measured especially because travel surveys only allow identifying home-based teleworkers and not the other categories.

These three categories of telework do not follow the same trends. In addition they do not meet the same social expectations. While nomadic work and overtime home-based telework are increasing (Noonan and Glass, 2012), home-based telework has become a never ending promise, its future always just around the next corner (Pliskin, 1997). Since the 1970s, numerous reports have predicted its rapid expansion. In 1971, AT&T thus asserted that in 1990 all Americans would be teleworkers (Huws, 1984). The widespread diffusion of home-based teleworking practices has, however, remained an unkept promise (Pliskin, 1997). Despite a stagnant growth rate, home-based telework nevertheless continues to be the object of periodic promotional campaigns that still promise its imminent 'take-off' due to the strong social expectations associated with it: it is expected to increase employee well-being by reducing travel-related fatigue, providing a less stressful work environment and a better balance between work and family life (Baines and Gelder, 2003; Di Martino and Wirth, 1990; Tremblay, 2002; Wheatley, 2012). It is also expected to allow companies to make considerable savings through lower real estate costs and productivity gains (Matthews and Williams, 2005). Finally, the public authorities expect home-based telework to reduce the social costs of commuting: a reduction in transport costs, pollution and urban congestion (Helminen and Ristimäki, 2007; Peters et al., 2004; Mokhtarian et al., 2004; Schwanen and Dijst, 2002). These expectations are reinforced by advances in remote communications technology and increasing environmental constraints.

The aim of this article is to analyze the current characteristics of home-based teleworking in France and the conditions and barriers to its future development as a formal or an informal practice (depending on whether it is formalized or not in the employment contract). The originality of this work is that it is based on three data sources: the first is the most recent national household travel survey (2008) which records home-based teleworkers and allows us to characterize them in terms of occupation, location and travel behaviour. The two other surveys have been made by the authors on a representative sample of 1294 SMEs and on a representative sample of 2000 employees in order to compare employers' and employees' attitudes toward teleworking as an actual or potential, formalized or not, working arrangement.

The paper is divided into four sections and a conclusion. The first section provides an international literature review on home-based teleworking. The second section presents the definition of home-based teleworking used in this research and the three data sources. Section three presents the results which concur in emphasising the low penetration rate of formal teleworking practices, the growth of informal teleworking arrangements, the characteristics of employee categories concerned and the concentration of teleworkers in Paris. Section four establishes that telework is not only a fairly restricted phenomenon but also one that lacks impetus and examines the reasons for this from the point of view of both employees and employers: uncertain advantages coupled with immediate disadvantages. The conclusion summarizes the main results and examines different contextual factors that could alter the choices made by the agents concerned.

1. Literature review

The aim of this literature review is to firstly provide an overview of the practice of home-based teleworking in Europe and in the USA, and secondly to identify the factors that are favourable or unfavourable to its practice and that will be tested in the French context in the empirical part of the paper.

1.1. A limited practice

Even if one considers only home-based teleworkers it is very difficult to gather precise statistics about telework in industrialized countries because on the one hand there is no common definition (De Graaff and Rietveld, 2007; Noonan and Glass, 2012), and on the other hand there is a clear lack of national data on the subject. The differences regarding the definition of home-based teleworking concerns especially the taking onto account of self-employed or not, of informal arrangements or only formal arrangements with the employer, of irregular telework *versus* only telework performed on a regular basis, of part-time telework *versus* only full-time telework and finally on including or not work performed during evenings and weekends.

However the different available studies suggest that home-based teleworking is a quite limited phenomenon which moreover seems to increase very slowly (Rasmussen and Corbett, 2008). Note that in most studies only formal teleworking (based on contractual agreements with the employer) is taken into account which is a clear limitation because some studies suggest that informal teleworking (*i.e.* informal arrangements between the employer and the employee which do not appear

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