

Teleworking: myths and realities

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Abstract. In the next few years we will find enormous differences in many aspects of our lives. Old concepts will need to be revised and new ones will need to be defined. We need to find a new concept of work, a new definition of what work is in the information society, and what it should be. We must determine the full implications of this new concept of working and analyze its impact on society, organizations and individuals. In this new conception of work, teleworking is becoming increasingly more important. It is having important effects on society, individuals and organizations. New forms of working are emerging, and these have the logical consequences on individuals, organizations and society. Teleworking will bring many positive aspects, create new opportunities and offer new advantages to workers, firms and communities. But it could also bring many negative aspects and create new problems.

Keywords: teleworking, teleworking benefits, teleworking problems, teleworking framework, organizations, individuals, society, e-work

1 Conceptualizing teleworking

The concept of teleworking as working at a distance using telecommunication in order to avoid commuting appeared in the 1970s [1]. It was born out of the energy crisis and its aim was mainly to save fuel. Since the 1970s, information and telecommunications technologies have been changing constantly. This has produced the information revolution. There is no a universal agreed definition of what teleworking is. As an early approach, we may make the following broad definition:

“Teleworking involves the whole range of work activities carried out remotely from the normal expected place of work and with the intensive use of information and communication technologies”

There are many definitions about teleworking. For further definitions see Huws [2] Stanwoth and Stanwoth [3] [4]. From our perspective, three main characteristics clearly define teleworking:

- **The location of the work:** part of the working time should be spent outside a traditional office environment. This involves a new division of working time between the teleworker's home and traditional offices in the city, and possibly office branches near the teleworker's home.
- **The proportion of working time:** the teleworker should spend “the majority” of his working time away from a traditional office environment. Some workers spend most of their time at traditional offices and only rarely work off-site, thus becoming sporadic teleworkers.
- **The intensive use of information and communication technologies:** the teleworker should use information and communication technologies intensively.

2 Teleworking implications

Telework has many implications for society, the economy, organizations and individuals. We can analyze a wide range of factors, including finance, culture, law, or ethics. Financial factors are relatively easy to evaluate. But it is quite difficult to evaluate other dimensions, as a teleworker's psychological well-being or the ethical consequences of the new cultural and social values.

Here we propose a holistic framework to evaluate some of the potential impacts of teleworking. We have divided it into three main groups: individuals, organizations

and society. Among all the described factors, we find both positive and negative effects on one or more of the three groups in most cases.

2.1 The effects of teleworking on organizations

- **Improvements in productivity:** It is generally accepted that teleworking usually increases productivity [5]. There are several reasons for this:
 - Working at home, or in satellite centers near the teleworker's home, saves commuting time.
 - Working at home or in satellite centers removes many of the distractions of traditional offices e.g. coffee breaks or chats.
 - Teleworking pay agreements are often based on performance. This means that organizations do not pay for unproductive time. Even if a teleworker is paid a salary instead of for performance, the nature of teleworking means that, as there is an absence of day-to-day supervision, there is always an emphasis on output anyway.
- **Reductions in overheads:** a basic feature of teleworking is that "part or all of the working time should be spent outside the traditional office environment". This reduces overhead costs such as heating, lighting and repairs. These costs are shifted to teleworkers. Sometimes they receive allowances to cover these costs, but even so there is still a significant cost reduction for the organization. The main cost reductions, however, are in real estate, as rental payments are lower due to re-sizing, re-letting part of the existing office space to other organizations, or avoiding the expense of building an extension for newly hired workers [6].
- **Keeping highly trained and competent workers:** A company may be able to retain a worker by offering them a teleworking agreement. The worker could then decide how, when and where to do the work. This increased autonomy and flexibility may help the company to retain their highly trained and competent workers and so avoid the negative consequences of losing employees [7].
- **New sources of labor:** Telework offers many possibilities to people who cannot move far from their homes, such as parents of young children, disabled and elderly. The increased knowledge content of work removes traditional patterns of labour market discrimination, as for example physical strength. Whereas intelligence and creativity are homogeneously distributed between the sexes, between industrialized and developing countries, between persons with and without physical disabilities [8]. However, while offering an opportunity to such people, organizations may pay them lower wages because they know that it is difficult for them to find other job. In teleworking distance as well does not matter [9]. It may produce a better distribution of labour resources worldwide, but it also creates different conditions for the teleworker living in a less development country, with a

lower remuneration and inferior health and safety conditions using social dumping practices [9].

- **Organizational culture:** Corporate culture has become one of the most important assets of an organization in the last few decades. This process of building or changing an organization's values and goals requires large amounts of informal communication, which hardly exists in teleworking. It is more difficult to achieve this "shared vision" in teleworking than it is in traditional systems [10]. This could be a barrier to the implementation of teleworking program in organizations that consider corporate culture as a strategic fundamental factor for success. This barrier can be partially avoided by on-site and distance training and development, face-to-face meetings with managers and other workers, and by creating new forms of communication.
- **Managerial control:** Traditional supervising methods are based on an "over the shoulder" systems. With teleworking, however, this traditional way of monitoring worker performance is not possible. The kind of control depends on the nature of work, the status of the teleworker and the culture and tradition of the organization. There is a need to move away from traditional forms of control to judgment by results. More work should be delegated to teleworkers. Managers need to learn or improve the goal-setting process, practice empowerment and try to avoid over formalized supervision caused by the fear of losing control [11].
- **Communication:** Teleworking can create communication problems caused by lower quality and frequency. Managers need to make an extra effort to keep teleworkers informed and to include them in corporate life by reinforcing or creating intra-organizational communication systems [12].
- **Information systems security:** Information systems play a key role in teleworking [11]. Problems arise when it is possible to enter the organization's information system from everywhere. This is a security problem for confidential corporate information that requires a technical solution to avoid teleworkers, or even people from outside the organization, having access to unauthorized information [5].
- **Organization flexibility:** People working in dispersed teams can be assembled and reassembled as the needs of an organization change. Teams of workers with the best skills and experience for a particular project can be created without having to consider traditional restrictions like different countries or different time zones [5]. Teleworking is also useful for managing projects in which there are peak and troughs in the workload.

2.2 The effects of teleworking on individuals

- **Job satisfaction:** Teleworking usually enables an employee to be fully autonomous in his or her job. This greatly increases the degree of satisfaction from being self-managed, working in a home environment and job enrichment. This happens in teleworking activities that require high skills [5] (consultancy, programming or certain types of management activities). In low-skilled jobs (e.g. data entry), current information and communications

technologies allow complete control over teleworkers. Information can be continuously monitored e.g. the time required to process a document, the time the teleworker has been connected, what part of the connection time has been used to process the data, etc. This can produce the opposite effect i.e. a decrease in job satisfaction due to the routine nature of the work and over control.

- **Autonomy and flexibility:** Teleworkers manage themselves. This offers workers the freedom to choose their own times to work and rest. Any time can be accepted as working times, even night hours or weekends. Teleworking can provide a great deal of flexibility to workers with a gap in their careers, for example for maternity [13]. Flexibility depends on the type of work involved, how important it is for an organization to retain its employees, and the culture of the organization.
- **Work and home life:** Working at home implies the need for a new balance between work and home life. This may be beneficial to employees because they may be able to spend more time with their family and increase their participation in the life of the local community. But working at home can also be an extra source of problems for teleworkers in their relationships with their family and community. Teleworking requires considerable self-discipline, tolerance and the cooperation of the whole family. Working at home may bring many benefits but it could also introduce a whole range of new domestic pressures [14].
- **Time and expenses of commuting:** Telework influence in residential relocation [15]. Other advantages exist such as lower rents, being able to live closer to nature, lower travel costs, less stress and less time wasted. It prevents travel time becoming the same as work time when troughs make it necessary to work only during very limited hours [16]. But we can find as well disadvantages: commuting can provide a “psychological space” that separates work from home. Teleworking may not allow some people to make this distinction.
- **Contracts and payment:** teleworking sometimes enables firms to hire people on lower salaries [10], because they are self-employed, or due to restrictions that force some people, e.g. the disabled or parents who have to take care of their children, to work at home. Teleworking affects contracts and payment in several ways: A different way of paying taxes, extra administrative work, keeping records of expenses, etc.
- **Social isolation:** This is one of the most important problems, especially if we are talking about full-time home-based work. Traditional jobs enrich individuals with contacts and experiences outside the immediate family and community. Teleworkers find they have no opportunity to talk informally with colleagues about the latest developments or problems in their job. They feel isolated and lonely on a day-to-day basis [5].
- **Career opportunities:** We must first distinguish between two main types of teleworkers: teleworkers who are performing technical, managerial or professional activities and teleworkers who are performing lower-skilled activities e.g. clerical support workers. The first group probably has strong expectations about long-term career development, but the second group is

usually “career less occupations”. The first category is usually afraid of being marginalized from the internal career ladder of the employing organization. This kind of fear is justified because many organizations base promotion more on “visibility” than on performance [3]. Teleworkers suffer from a great lack of visibility, which can damage the development of their careers.

2.3 The effects of teleworking on society

- **New worldwide distribution of labor:** teleworking will provide wider employment and working opportunities. Where the work is done does not matter at all. New telecommunications technologies mean that a teleworker from any country in the world can work for an organization that is located in any other country. Distance is no longer a crucial factor. The social consequence is that a redistribution of the labor force may be possible without the physical movement of people. People from an area of high unemployment will have easy and cheap access to work opportunities anywhere in the world [18].
- **New industrial relations model:** if the organization of work is changing, the role of trade unions in society is also changing. There is still no clear new model of industrial relations that includes telework. The trade union view of teleworking depend on each individual union opinion [19].Some have expressed their outright opposition to teleworking because they see it as a way of exploiting the workforce. Others, with a more positive approach, have accepted teleworking as a flexible workforce. Teleworkers are clearly not so involved in union activities. Some basic principles should be considered for the emerging new industrial-relations model [3] taking into consideration some issues:
 - Teleworkers working primarily for one employer, or dependent on that employer for most of their work should have employee status for sickness, holiday, maternity, retirement and training benefits. They should have the same protection as those on-site from unfair dismissal, and the right to take part in trade union activity.
 - Teleworkers should be paid the same rates as on-site workers, including for overtime, unsocial hours and extra payments.
 - Whenever possible, teleworkers should be eligible for promotion.
- **Environmental issues:** Teleworking involves relocating the work place. This has some environmental consequences in terms of transportation patterns and pollution. Teleworking reduces the emissions of carbon monoxide [16] into the atmosphere and cuts the consumption of energy. Teleworking can also create a shift from big cities to rural areas, where quality of life may be considered to be better.

- **New economic paradigm:** We can see that there are three contemporary economic revolutions [20]. Economy is changing due to a technological revolution, a global context and new organizational forms. The productivity and competitiveness of the “information economy” are based on the generation of information and knowledge.
- **New role of government:** The Welfare State is in crisis. A new conception of the role of government in economy and society is needed to cope with new information paradigms. Governments have to take into consideration new issues:
 - Legal regulations: Many laws have never dealt with teleworking. Everyone agrees that there is a need for a revision of these laws or for a totally new legal framework for employment-related regulations, zoning, taxation, health and safety, national insurance cover in the new working environment, competence, electronic trade, equal access to information, privacy, and many other issues.
 - Education: The information society is defined as a lifelong learning society. Lifelong learning will be a keystone in the teleworking labor market. Governments should provide a favorable framework for it.
 - Facilitator: Governments play a key role in the information revolution. Technology itself does not create changes. Each nation state is responsible for promoting the use of technology, for creating and regulating telecommunications infrastructure, and for teaching its citizens how to use the new information. Governments should facilitate teleworking with suitable training programmes, promoting suitable infrastructure, and offering favorable tax policies [21], etc.

3 Conclusions

Many decisions need to be taken to adapt to new knowledge society. In this new information environment, our traditional way of working will also need to change. From the social and cultural point of view, we need a new concept, new structures for organizing work, new ways of doing jobs, new skills and new ways of life for people. Teleworking will be a keystone among the new possibilities for organizing work that technology will provide. Teleworking, as a new way of working, will affect organizations, individuals and society enormously.

We realize that we need new ways of working with the new information paradigm, but: is teleworking the right one to cope with the new environmental conditions? The answer is quite ambiguous. In fact, the best answer is “it depends”. It depends on a community's own particular situation, its values, culture, habits, telecommunications

infrastructure and legal framework. It depends on the characteristics of the organization that intends to use teleworking to organize its processes e.g. its corporate culture, the nature of its activities and its style of management. Finally, it depends on the characteristics of the person who intends to become a teleworker: character, attitude, personal and familiar situation and skills, etc .

Traditionally the financial dimension was the main one for determining whether teleworking was the right approach, but this ignored many other aspects as the ethical, the psychological, the social and the cultural impacts. We need to evaluate the net value of teleworking by aggregating all the factors of all involved agents. Generalizations about the suitability or otherwise of teleworking are impossible because of the wide range of cases and because teleworking.

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