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## The economic and organizational aspects of telecentres: the Spanish case

Ana Rosa del Aguila Obra <sup>a</sup>, Sebastián Bruque Cámara <sup>b</sup>, Antonio Padilla Meléndez <sup>a,\*</sup>

<sup>a</sup> Management Department, Faculty of Economics and Business Administration, University of Malaga (Spain), Plaza El Ejido s/n, 29071-Málaga, Spain

<sup>b</sup> University of Jaen, Jaen, Spain

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### Abstract

In this paper we present the following concept: the economic and organizational characteristics and the main aspects of the development of telecentres or telework centres, in a wide-ranging context of the use of telecommunications as an instrument to aid social-economic development of deprived rural and urban areas. To be more specific, we analyse how these Telework Centres are set up in diverse information related service enterprises aimed at other businesses or individuals. These initiatives are being subsidized by different public organisms as pilot development aid projects on an international scale. We have made an empirical study on a national scale, using 27 sample centres, from which we have obtained, amongst other things, the characteristics, economic objectives and results achieved from the initiatives that are underway in Spain or that are expected to be achieved from the setting up of these centres. Finally, we present our conclusions on the subject and list the literature used.

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### 1. Introduction—aspects of telework

In recent years, an intense debate has arisen on the possibilities that the development of ways of working from a distance, based on intensive use of telecommunications and Information and Communication Technology (ICT), could have for society in general and for organizations in particular. This situation has been favoured by the special interest shown by Public Administration in taking advantage of ICT as an instrument of development support, through grants for the installation of telecentres or Telework Centres in underdeveloped areas. In general, each country has set up diverse projects to ensure that this technology is available under better quality and price conditions<sup>1</sup> (Benítez and Padilla, 1999).

This technology can help to redistribute wealth and balance the demand for employment for socially and economically deprived areas (European Commission, 1996)<sup>2</sup>. Moreover, there is an ever increasing number of studies that consider the strategic importance of telecommunications and ICT on a sectorial and business level from a Business Management perspective (Powell and Dent-Micallef, 1997). For this reason, in this paper we concentrate on analysing the current situation of tele-

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an interorganizational United Nations project, on universal access to basic communication and information services (ITU, 1998). The initiative was put forward by Pekka Tarjanne, General Secretary of the ITU, with the aim of achieving the fulfilment of the Universal Declaration of Human Rights. This Declaration lays down the bases of factors common to all Humanity, irrespective of their differences, and states that in order that all people may enjoy equal rights, they must have access to basic information and communication services, thereby recognizing that the right to communication is a fundamental human right. Tarjanne stated that if the International Community did not intervene, there would be a danger that the world would be divided into two categories, *those rich in information and those poor in information*, which could later become an insurmountable obstacle to developing countries (ITU, 1998).

<sup>2</sup> For a description of European Union policies and action in this field and in telework, see, amongst others, Benítez and Padilla (1999).

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\* Corresponding author. Tel.: +34 952132692; fax: +34 952131293. E-mail address: apm@uma.es (A.P. Meléndez).

<sup>1</sup> In the first World Conference on Telecommunication Development, organized by the International Telecommunications Union (ITU) in Buenos Aires (Argentina), in 1994, in relation to the Resolutions and Recommendations in its Plan of Action 1994–98, the need to promote integrated development in rural zones was underlined, thereby making it possible for them to benefit from access to information resources, telematics and computer networks. In fact, in 1996, the ITU promoted

centres in Spain. They are organizations that provide ICT related services which can be seen as a type of Teleworking. Thus, we must consider the aspects of Teleworking, albeit on a general level, given that it is not a main objective of this study. Moreover, to appreciate its true dimensions, we offer some quantifications which have been made on an international level.

Regarding its concept, Teleworking consists of working in places other than those considered to be the normal workplace (spacial flexibility); remote supervision-management; intensive information related activity; intensive use of ICT; and the predominance of inter/extra-organizational electronic communication, which allows cooperation at a distance, based on the development of mutual trust. Teleworking can be considered from the teleworker contract point of view by either taking into account the employer–employee relationship or teleworking as a customer–supplier relationship. However, Teleworking can be studied from several other perspectives, which leads us to look at its concept from **different approaches**: strategic, organizational, human resource management, and economic, social, legal, political and technological aspects (Padilla, 1998b).

From a strategic point of view, we consider Teleworking to be a way of organizing work that can offer companies competitive advantages, as well as meaning technological and administrative innovation (Yen et al., 1996), a way for companies to be flexible and reduce costs. From the economic point of view, we can make reference, in general, to the assessment of costs and profits that the organization and employees will obtain from Teleworking, and, in particular, to the economic assessment of the viability of initiatives related to Teleworking, such as telecentres. In its social aspect, we take into account both the implications that this organizational model has on employees' working conditions and potential employment conflicts, as well as the relationship between Teleworking and the incorporation of the disabled into the job market. Furthermore, and as we will be able to verify later on, when we talk about telecentres, which is one of its modalities, we discover other social implications like its contribution to the development of economically deprived areas.

From a political perspective, we look at how efforts are being made in more economically developed countries to move forward in the so called 'society of information', where Teleworking is a key element, and international organisms such as United Nations, have promoted similar initiatives in developing countries (see Benítez and Padilla, 1999). As far as technology in Teleworking is concerned, we consider how organizations currently have the opportunity to use technology already available, although we are previously obliged to evaluate and recognise the organizational implications that it entails. With regard to the aspect of Human Resource

Management and Teleworking, its application gives rise to numerous, important implications (see Padilla, 1998a, whose analysis falls outside our line of work.

Finally, the organizational aspect refers to different organizational patterns which are included in the generic concept of Teleworking. Using organizational criteria, Teleworking can be divided into the following categories (Padilla, 1998a): Teleworking at home, mobile Teleworking and Teleworking Centres; Teleworking modalities which have been used since 1973, when Nilles first used the term *telecommuting*, to refer to the possibility of exchanging routine daily commuting to work for the use of telecommunications (Nilles, 1994). We do not intend to go into the diverse aspects related to teleworking, since this would distance us from our aim to characterize the types of telecentres that currently exist in Spain; although other papers which are centred on the analysis of teleworking taking into account different analytical perspectives can be consulted (see Padilla, 1998a, amongst others).

In virtue of what has been mentioned, we can say that not only is the concept not accepted, given the different modalities that exist, but there are many related lines of research, basically the following:

1. State or Public Administration: Research on existing initiatives to develop the society of information.
2. Society: Analysis of the relationships between Teleworking and transport:<sup>3</sup> and between Teleworking and social and economic development in both rural and urban deprived areas.
3. Individuals: Identification and analysis of the advantages and disadvantages of Teleworking for people.
4. Organization: Identification of organizational restructuring that makes Teleworking possible, its bearing on Business Management, the establishment of activities outside the workplace and also the new organizational models that arise with the implantation of Teleworking, as well as the organizational and economic models of new organizations linked to Teleworking, such as telecentres.
5. Technology: Analysis of the development and evolution of ICT.

In this paper we concentrate on a line of research that analyses how ICT and Teleworking can contribute to the social and economic development of rural and urban deprived areas, and to the analysis of organizational aspects (analysis of running) and economic aspects (analysis of viability) of telecentres. This is therefore

<sup>3</sup> This is one of the first lines of research developed at international level and it has a bearing on Teleworking as a factor capable of reducing traffic and pollution, using the term *Telecommuting* (Nilles, 1988, 1993, 1994, 1996). Bagley et al. (1994) are other relevant authors in this field.

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