

# Centros tecnológicos, confianza e innovación tecnológica en la empresa: un análisis económico

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## Abstract

In this doctoral thesis we have introduced the figure of the Technological Center (TC) and analyzed it from an economic point of view.

The Spanish companies have been diagnosed in the first chapter, especially the "PYMES" (Small And Medium Spanish Companies), as not being very innovative. After a brief institutional description of what a TC is and what it can contribute, its theoretical fit in the business innovative process was carried out.

Four TCs, Ikerlan, Ideko, Ascamm and CVC, are analyzed in the second chapter in order to understand the peculiarities which this institution entails and, with this, to attain two goals: a) empirical evidence on the organizational design of the TCs, the activities which they carry out with businesses and, especially, the principal components of their agreements; b) fit the figure of the TC within the literature on technological innovation.

The TC-business agreements are analyzed in depth in the third chapter by means of an analysis of contracts from the perspectives of the Transaction Costs Theory and the Property Rights Theory. The main result was that the previous theoretical frameworks should have been completed with the so-called Transactional Value Theory (Zajac & Olsen, 1993) if we wanted to understand the TC-business context.

The evidence obtained in the previous chapters does not allow us to select the principal ingredients in the TC-business agreements and formalize them in the fourth chapter. One of the principal lessons had been that in these agreements confidence could become prominent. In order to introduce it into a simple Agency model, two institutions were proposed: altruism and reputation.

Following the ideas of Rotemberg (1994) and Casadesus (1999), altruism is introduced into the objective function of the center and its impact is analyzed in the projects in terms of the efforts made, the value of the innovation and the social well-being achieved.

The arguments posed by Axelrod (1986), Kreps (1986) and Salas (1998) bring us to reflect upon the consequences of introducing a dynamic perspective into the analysis. We justify when we could appeal to the reputation as an explanation of some efforts close to the optimum and a motive for avoiding infractions of confidentiality.

In the fifth and final chapter we have known the companies which went to the TCs in search of technological support by means of empirical work with data of the ESEE (1998).

We have carried out an empirical study, with the theoretical argumentation sustained in the literature on technological change and specialized literature in technological collaborations, in which we: 1) justify the relationship between innovation and collaboration, 2) characterize the companies which collaborate technologically-speaking, and 3) trace a distinct profile among the companies which collaborate with TCs.