

NEW STRATEGIES FOR SUSTAINABLE AND INNOVATIVE REINDUSTRIALISATION

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ABSTRACT

The Industrial Economics and Local Development group at the University of Alicante has extensive experience in the analysis and design of industrial policies in the territory. The aim is to bet on industry as a strategic sector of the Spanish economy due to its high levels of wealth and quality employment creation, as well as its greater resilience in crisis situations such as the current one. All this, through innovation as a lever for development and improving the competitiveness of companies.

**INTRODUCTION**

In Spain, for decades, the weight of the industrial sector in the Gross Domestic Product (GDP) has been clearly decreasing. Specifically, it has gone from accounting for 30% of the GDP in 1975 to represent only 16% of the Spanish GDP today. During this time, the country has been specializing in sectors with little added value such as construction or tourism, especially in those coastal regions with the famous "sun and beach" model. The most striking cases are the Balearic and Canary Islands where the tourism sector accounts for 35% of the regional GDP.

This fact has meant that the successive economic crises that have occurred in recent years have affected Spain more severely than other European countries, both in terms of GDP, companies, employment, etc. Recently, the urgent need for medical equipment to combat COVID-19 has brought to light the enormous weakness of the Spanish industrial sector and its great dependence on international markets to supply products as simple to produce as medical masks.

Therefore, there is a clear need to transform the current production model, moving towards more knowledge-intensive and sustainable sectors with the ultimate goal of improving the quality of life of the Spanish people.

TECHNICAL DESCRIPTION

The group carries out its research and has deep experience and *know-how* in the following areas:

- **Industrial districts and local production systems**

The industrial district is an industrial organization model based on the concentration of small companies specialized by sector, which base their adaptation strategy to changes on productive cooperation and flexible specialization. Specifically, it addresses a range of theoretical, empirical, political and institutional aspects in relation to industrial districts, analysing the suitability of the principles of this model of productive organization for the development of certain regions.

- **Industrial policy and territory**

The industrial policy is analysed incorporating the territory as a fundamental variable in the analysis. From an empirical point of view, various experiences (national and international) of industrial policy at a regional and local level are analysed, with special

reference to the Valencian Community. Based on these empirical analyses, a consideration is made on how industrial policy is integrated into the context of local productive systems, industrial districts or clusters.

• Innovation and technological development

Innovation as an element that influences the competitive and survival capacity of many small and medium enterprises is examined. The aim is to carry out an analysis of the innovative relations that companies show with others in their geographical or sectorial environment and their relationship with external technological agents (such as technology centres) in order to observe what the basic characteristics of these relations are and to establish which aspects should be strengthened in order to obtain a higher level of competitiveness.

TECHNOLOGY ADVANTAGES AND INNOVATIVE ASPECTS

MAIN ADVANTAGES OF THE TECHNOLOGY

The members of the research group are characterised by their broad **socio-economic knowledge of Spain**, given their extensive background and experience behind a multitude of projects, books and other publications on industrial economics. Their experience in the industrial sector has been -and can be- transferred to other economic sectors (e.g. technology intensive services sector). Their **analytical capacity and integrating vision** allows them to combine advanced quantitative methodologies with innovative qualitative methodologies, always in contact with the territory. The objective would be to achieve a fluid and sustained cooperation over time between companies, university/research centres, public administrations and all kinds of entities and associations. In order to achieve a more innovative and resilient production model, it is essential to increase the transfer of knowledge from the scientific/university universe to the industrial/business universe, whether they are companies from mature sectors or from the digital sector.

INNOVATIVE ASPECTS

The group defends the need to bet on a **digitalization** that covers all the productive sectors, but especially the Industry. A clear commitment to technologies such as Artificial Intelligence, Big Data or the Internet of Things is essential in order to improve the company's products and production processes. Its competitiveness cannot be based on low labour costs. If a strong industrial fabric is desired, it is necessary to bet on knowledge. For this to happen, it will be necessary to increase the current low level of investment in R&D, which in Spain is 1.2% of GDP, of which only 56% corresponds to the private sector, while in reference countries such as the USA it reaches 73.1% or China with 77.6%.

CURRENT STATE OF DEVELOPMENT

The Industrial Economics and Local Development group is composed of 5 professors from the University of Alicante and an external professor from the University Miguel Hernández from the field of Economic and Business Sciences, specialized in Applied Economics and Local Development. Given the current economic and political circumstances, this group is faced with a great opportunity to get involved in overcoming this crisis, offering its knowledge for the development of a true innovative and sustainable reindustrialization process that contributes to the necessary transformation of the Spanish productive model. The creation of an industrial strategy is needed at national, regional and local level that is aligned with each other and that fits perfectly with the objectives and priority axes of the **European Union's Recovery Fund**. If public administrations and other entities wish to benefit from these funds, they must present projects that revolve around reindustrialization, energy reconversion or digital transformation.

MARKET APPLICATIONS

Local Administrations and other public or private entities (Business Associations, Chambers of Commerce, Technological Institutes or Clusters, etc.) may be the main stakeholders in the design of Territorial Reindustrialisation and Innovation Plans in line with the European Union Recovery Plan. The Research Group will adapt the Strategies to the characteristics and needs of the territory or sector in question, always with the aim of strengthening and guiding the business fabric in the midst of the 4th Industrial Revolution.

Some of the applied projects developed in recent years should be highlighted for their impact, such as:

- Promotion, Research and Innovation of Employment Policies from the Perspective of Territorial Development, within the framework of the "Avallem Territori" Plan in the Entities and Territories of the Province of Alicante (LABORA, Generalitat Valenciana).
- Present and Future of Valencian Industry: the Dynamics of Non-Traditional Industrial Sectors" (IVACE-Valencian Institute of Business Competitiveness, Generalitat Valenciana).
- Areas of Change and Innovation in the Valencian Community" (IVACE-Instituto Valenciano de Competitividad Empresarial, Generalitat Valenciana).
- Analysis and Socio-Territorial Diagnosis of the Municipality of Alicante (Alicante City Council).
- Carrying out of a Study to define the Strategic Lines of the Future Economy of Villena (Villena Town Council).
- The Nautical Sector in the city of Santa Pola: Diagnosis and Strategies (UMH-UA Blue Economy Chair and Santa Pola Town

Council).

- Business Innovation in Ontinyent and its surroundings (InnovatiOnt Chair of Innovation and Intelligent Territory, UA-UV).
- A New Economic Model for the Valencian Community: objectives, strategies and actions (Chair of the New Economic Model of the UA).
- Study on the characteristics of the Innovative Effort carried out in the Valencian Toy Sector (Universidad Politécnica de Valencia).
- Advice on setting up the First Market Observatory for Plastic Materials (AIMPLAS-Plastics Technology Institute).

COLLABORATION SOUGHT

- Type of client sought: Public administrations or public/private entities.
- The research group is interested in applying its know-how to projects on industrial policy and sustainable territorial development.

INTELLECTUAL PROPERTY RIGHTS

The technology is protected by the *know-how* of the research group accumulated over the years and resulting in dozens of publications: books, book chapters or conference proceedings. Most of them study topics such as industrial clusters and districts, business and tourism innovation or sustainable development. These studies are applied at different levels of the territory, from local to regional. The research group disseminates the capacities and results accumulated after years of study to students in the Master's Degree in Local Development and Territorial Innovation, which is taught annually at the University.

MARKET APPLICATION (4)

Economic Studies
Social Studies
Regional Planning
Tourism