High-Tech Centers: a Weapon Against Offshoring

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Ever since 2002, Spain has been affected by the reduced production activity of the multinationals operating in the country: Ford, General Motors, Pirelli, Lear, Samsung, Valeo, Gates, Autotex, Sanyo, Braun, DuPont, Mercedes-Benz, among others, have made considerable cuts or even shut down their subsidiaries in Spain. The closing of these plants has meant the slashing of thousands of direct and indirect jobs in a wide variety of sectors, from the automobile industry to textiles, as well as electronics, home appliances and cosmetics.

The common argument for the closures is that the plants operating in Spain are no longer competitive; it is often cited that regions such as Eastern Europe, China and South Asia offer cheaper labor.

The question many executives and business owners ask themselves is: Are there any strategies for curbing this process? Is it possible to boost Spain's competitiveness, and turn the country into an attractive destination for direct foreign investment?

Most experts point to training and the accumulation of specialized know-how as the solution to the problem. But in order for that strategy to be successful, incentive must be given so that production processes start making intensive use of advanced technological applications.

The environment is key: if there can be a combination of an efficient technological infrastructure with a highly sophisticated value chain, then companies will likely value the potential profitability and attract new business activities.

This is the approach adopted by the Generalitat of Catalonia with i2CAT and the Escuela Técnica Superior de Ingeniería Industrial de Barcelona (ETSEIB), which are promoting a project called "Anella Industrial." The project's purpose is to provide incentive for building a platform of advanced technological applications, while banking on technology as a source of value. The pilot phase has been aimed at Catalonia's industrial automotive plant, due to the particular risks of offshoring currently affecting the sector and its importance within the economic structure. The initial investment of 630,000 euros has made it possible for companies to get plugged into a powerful broadband network that reaches speeds of 100Gbps, letting them transmit powerful software applications

capable of performing sophisticated engineering calculations and large-scale simulations.
In addition, the structure provides access to: two supercomputing centers that are capable of even more powerful simulation calculations, the IDIADA crash-test and certification circuit, and the Formula 1 circuit in Montmeló.

This array of infrastructures presents countless possibilities still waiting to be explored. For instance, in the long term, advanced simulations and studies in aerodynamics could be done, using the so-called "wind tunnel." This would end up turning Catalonia's automotive complex into an industrial point of reference for European research and development in automobile-related engineering disciplines.

Nonetheless, it should not be forgotten that all of the infrastructure-based innovation projects must overcome a number of challenges. Beyond the purely technical issues, the project must have sufficient visibility, avoid excessive bureaucracy and develop a suitable management model.

By getting past these hurdles, the Anella Industrial project will confirm that technology investment constitutes a beneficial endeavor, not only in the automobile industry, thanks to the modernization of its structure of production and the new possibilities generated, but also for the economy of the entire country. The technological ring could produce a virtuous cycle of new investments, new jobs and, from a government standpoint, tax revenues from companies and their new employees, and the consequent increase in internal demand. Such exponential returns would affect the country as a whole, with profitability far exceeding the project's initial investment.