

EXECUTIVE SUMMARY
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4.0 TRANSITION IN INDUSTRIAL SME_s

Action plans for SMEs in Gipuzkoa
Etorkizuna Eraikiz Territorial Development
Laboratory

2019-2020



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GIPUZKOA
ETORKIZUNA ORAIN

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Executive Summary

While there is general agreement that industrial small and medium-sized enterprises (SMEs) face difficulties in coping with Industry 4.0 transition, how to support them from a policy perspective remains unknown. The great weight of industrial SMEs in Gipuzkoa's economy means that, beyond the economic fundamentals, **the successful integration of SMEs in Industry 4.0 is a relevant social challenge and, therefore, requires specific policies and programmes** to prevent many of these companies from being left out of this new paradigm. **Gipuzkoa's Territorial Development Laboratory (LabDT) has been working on this challenge since 2016** and it enabled **85 SMEs to work on their action plans to tackle the 4.0 transition** between 2019 and 2020.

Within the framework of LabDT, the regional development agencies facilitate the definition and implementation of these plans in SMEs. The methodology needed to play this facilitation role has been co-generated in the **Laboratory's facilitator space** with the participation of representatives from the Gipuzkoa Provincial Council, regional development agencies and Orkestra. The institute has facilitated the action research process leading to this cogeneration, while at the same time it has worked on the action plans contained in this booklet. The systematisation of this process and the plans themselves is key to the ongoing support of the competitiveness of SMEs in Gipuzkoa.

The plans comprise the characteristics of industrial SMEs:

- The 4.0 transition of industrial SMEs depends both on the integration of 4.0 technologies and on the development of non-technological conditions that make this technological integration possible (strategic planning or training, among others).
- Investments in Industry 4.0 mainly seek to make business production processes more efficient and intelligent. Extending cyber-physical systems into the value chain is still a challenge for the vast majority. The most repeated technologies in the plans include automation, horizontal and vertical systems integration or data analysis and big data.
- The definition and implementation of these plans involve collaboration with *bidelagunak*-actors in the innovation system (mainly VET centres, technology centres and advanced service companies such as engineering or consultancy firms) – and this depends in part on the availability of aid programmes to make relevant investments.

Although many of the 2020 action plans are still in the definition phase, we can highlight several differences compared to the 2019 plans: (i) **Smaller, newly-founded** start-ups (ii) Greater interest in the **transformation of value chain relationships through Industry 4.0** (iii) Greater collaboration with **advanced services companies** (consultancy and engineering), and (iv) Greater focus on the **development of people's skills**. The action research process facilitated by Orkestra in the framework of the Gipuzkoa LabDT, which has enabled the definition of these action plans, leaves the legacy of a series of **conditions for long-term business transformation**:

- A shared **methodology** to support the 4.0 transition in industrial SMEs.
- A reinforcement of the role of **"family doctor" played by development agencies** and their involvement in fostering collaboration between actors in the regional innovation system.
- **Shared leadership** between the Gipuzkoa Provincial Council and agencies for SME competitiveness support policies.
- Appropriate conditions for **researchers to facilitate territorial development processes**.



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