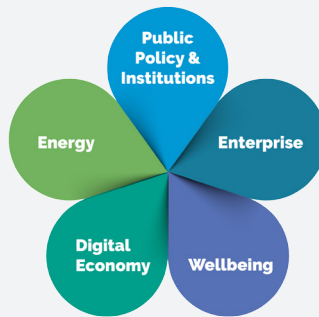


Orkestra is a research institute committed to improving the competitiveness and territorial development in the Basque Country.



Created by the University of Deusto, it currently operates in five areas of knowledge.

TRANSFORMATIVE RESEARCH

Analyses, reflects, assesses, proposes

The institute promotes transformative research. It mainly develops projects together with other actors across the territory. In this way, it aims to generate knowledge to solve specific problems.



IT CREATES SCIENTIFIC KNOWLEDGE

43 
publications
and papers.

13 
supervised
doctoral **theses**.


IN CONTACT WITH THE EXPERT ACADEMIC COMMUNITY AND REGIONAL ACTORS

39 
participated in events
as experts, as well as the
organization of 12 events


Expert training in
competitiveness.

257 
quotes in the
media.

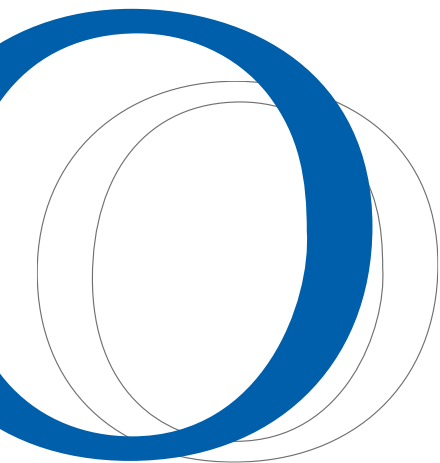
TO TRANSFORM

43 
projects in 2018, in collaboration
with 39 institutions and
companies.

14,000 
accesses to our
diagnostic tools.

6,500 
downloads of reports and
documents.

ANNUAL REPORT 2018



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1 ORKESTRA – BASQUE INSTITUTE OF COMPETITIVENESS

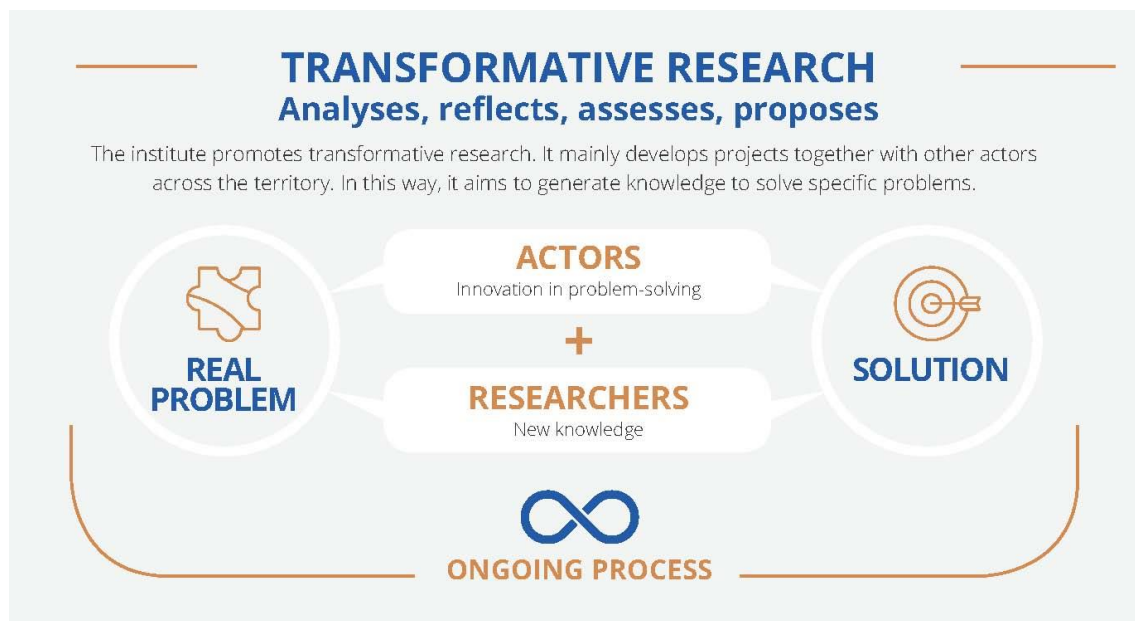
Orkestra - Basque Institute of Competitiveness is a research institute that develops reflection and change processes within the framework of the competitiveness challenges being faced in the Basque Country, in a context of growing global complexity. The Institute was the result of a strategic commitment made by the university, public administrations and Basque firms, convinced that the creation and transfer of knowledge on competitiveness are essential for the territory's future.

Agent of change through research

Orkestra strives to be an agent of change who, through research, may give rise to competitive improvement and economic development of the Basque Country and, in doing so, ensure the wellbeing of its citizens. Likewise, it seeks to be an international reference point in the creation of new knowledge on competitiveness and territorial development.

The Institute's activities are pursued within the framework of their differential value, which lies in carrying out transformative research that is not just confined to making proposals for change, but to form part of these change processes alongside other actors in competitiveness – thus constructing innovative solutions to specific problems (see Figure 1).

Figure 1: Orkestra Model



Source: compiled by authors

A University of Deusto project

Orkestra was constituted on 10th March 2006 as a University Development Unit of the Deusto Foundation, with a view to becoming a centre of reference in the study of competitiveness and territorial development.

The Deusto Foundation fosters and promotes research at the University of Deusto. It is a scientific technological agent that forms part of the Basque Network of Science, Technology and Innovation (RVCTI).

The University of Deusto was founded in 1886 by the Society of Jesus and has over 12,000 students. These students are distributed among six faculties: Deusto Business School (DBS); Social and Human Sciences; Law; Engineering; Psychology and Education; and Theology.

The Institute, whose head offices can be found on the University of Deusto campuses in both Bilbao and Donostia-San Sebastián, focuses its activity mainly within the Basque Country.

A people-based project

Orkestra is made up of a team of individuals with technical expertise related to the knowledge and transversal areas pursued by the Institute. They are professionals whose values include their commitment to transforming the territory, institutional loyalty, and providing a critical view and flexibility when orienting their activity to the challenges being faced by competitiveness.

The staff at Orkestra as at 31st December 2018 include: Mikel Albizu Echevarria, María del Henar Alcalde Heras (PhD), Roberto Álvaro Hermana (PhD), Mari Jose Aranguren Querejeta (PhD), Ainhoa Arrona Etxaniz, Amaia Azpiazu Anduaga, Aitziber Barrio Barañano, Megan Leanne Briggs, Patricia Canto Farachala, Mariana Carnelli Garbarino, Idoia Egaña Uranga, Aitziber Elola Ceberio (PhD), Miren Estensoro García (PhD), Jorge Fernández Gómez (PhD), Susana Franco Rodríguez (PhD), Ibon Gil de San Vicente Izaga, Bartholomeus Petrus Kamp (PhD), Lorea Larrabeiti Araukua, Miren Larrea Aranguren (PhD), Macarena Larrea Basterra (PhD), Usue Lorenz Erice, Edurne Magro Montero (PhD), Jaime Menéndez Sánchez, Noel Martín Muñiz Rodríguez (PhD), Asier Murciego Alonso, Mikel Navarro Arancegui (PhD), Mercedes Oleaga Páramo, Elsa Patús Echezarreta, Carla Peletier Espiga, Maite Reizabal Arregui, Eduardo Sisti (PhD), Etorne Ugalde, Carme Vallverdu Vergé, Raquel Vázquez Salazar, James Ralph Wilson (PhD), Agustín Zubillaga Rego (PhD) and Amaia Zumeaga Hurtado.

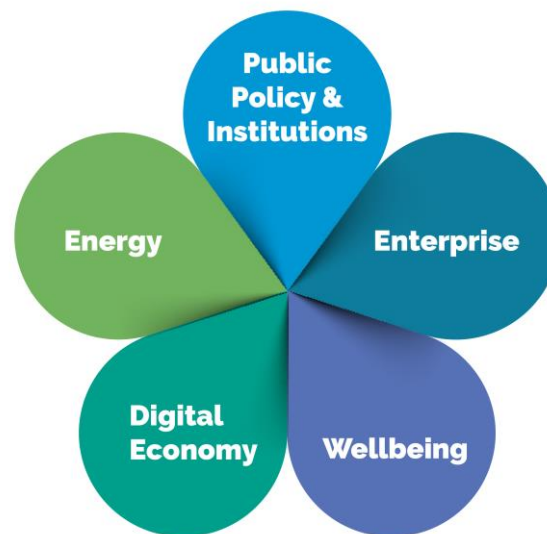
Other professionals and associated researchers who offered support to different research areas are: Nagore Ardanza, Francisco Albuquerque (PhD), Pablo Costamagna (PhD), James Karlsen (PhD), Kevin Morgan (PhD), Juan Carlos Malet, Francisco Olarte (PhD) and Jabier Retegui (PhD).

In 2018, the following people also actively collaborated with Orkestra: Francisco Carrillo, Aureliu Sindila, Oiane Díaz, Guillermo Rebollo de Garay, Ana Carolina Iga, Pello López de Munain and Laiene Etxebarria.

2 PROJECTS

The Institute's activities are developed within the framework of their strategic value, which involves acting as a link between research par excellence and its implementation to improve competitiveness together with public administrations, firms and civil society. This process is fostered at Orkestra by what are known as *Transformative Research Labs* (see Figure 2). These *labs* include activities in fields that are critical to the competitiveness in the Basque Country, which facilitate connections and collaborative work while creating a favourable environment for transformative research.

Figure 2: Transformative Research Labs



Source: compiled by authors

Orkestra provides the society with knowledge, ideas and a transformative drive. It works to transfer specialised knowledge to agents involved in competitiveness and creates capacities for development and wellbeing. To this end, it fosters research projects in knowledge areas within the Research Labs. Likewise, Orkestra conducts training activities that enable the knowledge created within the different research projects to be transferred, contrasted and applied. The projects within each lab pursued in 2018 are:

[Wellbeing Lab](#)

The Wellbeing Lab conceptualises and measures key aspects related to the wellbeing of individuals and assists firms, the government and other agents of the territory in ensuring they influence and serve as a tool to make advances in its improvement.

The following projects were worked on during the 2018 academic year:

- Alignment of policies with Sustainable Development Goals(SDGs)
- Characterising innovation strategy in the Bidasoa region

- Demographic and social complexity: new models for collaboration and employability
- Assessment of Etorikizuna Eraikiz social policies
- Process for building a Gureak Model communication strategy
- X-ray of the labour market in Gipuzkoa
- Shared value for the development of Bizkaia

[Digital Economy Lab](#)

Apart from acting as a way of speeding up social transformation, the digital revolution has a direct impact on both companies and on the productive fabric. The Digital Economy Lab pinpoints and creates knowledge on the challenges being faced in the Basque Country in order to pursue proper development of the digital transformation in companies in particular and society in general.

These are the projects worked on during 2018:

- DESI Euskadi
- DESI Navarra
- Mercados y plataformas digitales
- Transformando la pyme en digital

[Enterprise Lab](#)

The Enterprise Lab studies strategies and company behaviour in order to understand and meet the challenges being faced by companies of different sizes and features in terms of their competitiveness. Research and work are carried out with firm and other actors within the system in order to analyse these challenges and improve responses to them.

Work was undertaken on the following projects during 2018:

- As-Fabrik
- Belaunaldi
- Creando las bases para el compromiso empresarial en Gipuzkoa
- Crecer+
- Enraizando Araba
- La servitización como facilitadora de la economía circular y sus implicaciones financieras
- Observatorio económico financiero de la empresa vasca
- Segmentar-servitizar-escalar

[Energy Lab](#)

The Energy Lab creates knowledge on energy challenges and their implications for the Basque Country and in the global sphere. It fosters this work with a constructive critical view and contributes to energy debates in order to provide knowledge to help with decision-making by both public and private actors. In 2018 the Energy Lab focused on two main challenges: energy transition and its implications, and sustainable mobility.

The projects include:

- Adaptación de la infraestructura energética de la CAPV al cambio climático
- Autoconsumo eléctrico
- Calidad del aire. Situación en España y escenarios a futuro para la CAPV, Madrid y Barcelona
- El sector de la energía en Chile
- Emisiones de CO₂ y economía circular en la CAPV
- Fiscalidad energética en Francia
- Jean Monnet Network on Atlantic Studies
- La transición energética en Francia
- Las redes inteligentes y el papel del distribuidor de energía eléctrica
- Precios de la energía en Francia y Alemania
- Situación actual del mercado mayorista de gas natural en España
- The oil & gas value chain: a focus on oil refining

[Public Policy and Institutions Lab](#)

The Public Policy and Institutions Lab focuses its attention on the system of actors and governance relations highlighted by collective strategies that are promoted to achieve a sustainable level of territorial competitiveness. Research and work are carried out together with other actors within the system to analyse and improve institutions, governance and public policies.

Work was carried out on the following projects during 2018:

- Bilbao Next Lab
- Bizkaia Orekan
- Clusters 3
- Competitiv'eko
- Competitiveness Observatory
- Diagnóstico de Competitividad
- Etorbizuna Eraikiz: Gobernantza & Laborategia
- FP como impulsor estrategia RIS3: Navarra, Castilla la Mancha & La Rioja
- FP y KIBS en Bilbao
- HEZ-IN
- InterC Digital
- Manumix

[Training projects](#)

Training projects seek to foster collaboration with the University of Deusto and provide value to stakeholders from the Institute by sharing and socialising the knowledge created.

Training activities during 2018 focused especially on University of Deusto programmes, mainly linked to the Deusto Business School and to the Deusto International Research School (DIRS).

As well as teaching in different degree courses promoted by the university, Orkestra also collaborated in the following programmes:

- Master's Degree in Competitiveness and Innovation and MOC course
- Master's Degree in International Business
- Dual Master's Degree in Entrepreneurship in Action
- PhD in Business and Territorial Competitiveness, Innovation and Sustainability

Likewise, classes were also given in programmes outside of the DBS, such as: Lucerne University (Switzerland), the Cluster Competitiveness Group (Kazakhstan), the University of British Columbia (Canada) and the University of Agder (Norway), among others.

Furthermore, customised training was also promoted in the Institute's areas of specialisation:

- Study Visit to the Basque Country from Paraíba (Brasil)
- Study Visit to the Basque Country IESDE (Puebla, México)
- Study Visit Welsh Delegation. Government and Food cluster representatives

3 SCIENTIFIC REPORT

Through its projects, Orkestra creates scientific knowledge on critical factors of competitiveness that affect the Basque Country in areas such as Public Policies, Business, Wellbeing as well as in sectors such as Energy and the Digital Economy.

Orkestra is at the cutting edge of knowledge; it creates knowledge on the determining factors of territorial competitiveness, contrasts the knowledge created in the academic world, and seeks to assist in the qualification of new researchers.

3.1 Publications

Orkestra generates scientific knowledge that seeks to pursue cutting edge knowledge on the competitiveness of territories.

3.1.1 Scientific papers published in high-impact journals

- ▣ Alcalde-Heras, H., Aragón-Amonarriz, C., Iturrioz-Landart, C. (2018). SME Ambidexterity during Economic Recessions: the Role of Managerial External Capabilities. *Management Decisions*. (ISI/Scopus)
- ▣ Aranguren, M.J., Magro, E., Navarro, M., Wilson, J. R. (2018). Governance of the territorial entrepreneurial discovery process: looking under the bonnet of RIS3. *Regional Studies*. DOI: 10.1080/00343404.2018.1462484. (ISI/Scopus)
- ▣ Arrona, A., Zabala-Iturriagoitia, J.M. (2018). On the study and practice of regional innovation policy: the potential of interpretive policy analysis. *Innovation: the European Journal of Social Science Research*. DOI: 10.1080/13511610.2018.1528141. (Scopus)
- ▣ Estensoro, M. (2018). Vocational Education Training Centres in local development strategies: the case of Goierri. *Ekonomiaz*, 94 (2). (Scopus)
- ▣ Jiménez-Bermejoa, D., Fraile-Ardanuya, J., Castaño-Solisb, S., Merinoc, J., Álvaro-Hermanad, R. (2018). Using Dynamic Neural Networks for Battery State of Charge Estimation in Electric Vehicles. *Procedia Computer Science*, 130, p. 533-540. (Scopus)
- ▣ Kleibrink, A., Magro, E. (2018). The making of responsive innovation policies: varieties of evidence and their response in the Basque Country. *Palgrave Communications*, 4: 74. DOI: 10.1057/s41599-018-0136-2. (Scopus)
- ▣ Larrea, M. (2018). Changing universities through action research: the dilemma of scope in pluralistic environments. *Action Research*. <https://doi.org/10.1177/1476750318757851>. (ISI/Scopus)
- ▣ Magro, E., Wilson, J.R. (2018). Policy-mix evaluation: governance challenges from new place-based innovation policies. *Research Policy*. DOI: /doi.org/10.1016/j.respol.2018.06.010. (ISI/Scopus)
- ▣ Merino, J., Veganzones, C., Álvaro-Hermana, R., Fraile-Ardanuy, J. (2018). Electrical machines-based multi-disturbance device for testing distribution grid technologies. *International Journal of Electrical Power & Energy Systems*, Vol. 99, pp. 57-68. ISSN 0142-0615, DOI:10.1016/j.ijepes.2017.12.030. (ISI/Scopus)
- ▣ Navarro, M. (2018). Presentation. *Ekonomiaz*, 94 (2). (Scopus)
 - Navarro, M. (2018). Aurkezpena. *Ekonomiaz*, 94 (2).
 - Navarro, M. (2018). Presentation. *Ekonomiaz*, 94 (2).

- ▣ Navarro, M., Retegi, J. (2018). Vocational Education Training Centres in the context of the challenges associated with RIS3: the case of Navarre. *Ekonomiaz*, 94 (2). (Scopus)
 - Navarro, M., Retegi, J. (2018). Vocational Education Training Centres in the context of the challenges associated with RIS3: the case of Navarre. *Ekonomiaz*, 94 (2).
 - Navarro, M., Retegi, J. (2018). Lanbide Heziketako ikastetxeak RIS3aren erronken aurrean. Nafarroako kasua. *Ekonomiaz*, 94 (2).

3.1.2 Scientific papers published in other journals

- ▣ Álvarez Pelegry, E., Larrea Basterra, M. (2018). Energy in Chile: challenges and opportunities. *Energy Notebooks*, October, No. 56. ISSN: 1698-3009.
- ▣ Arrona, A., Estensoro, M., Larrea, M., Sisti, E. (2018). When collaborative development meets New Public Governance: the case of the Etorikizuna Eraikiz Territorial Development Lab in Gipuzkoa. *European Public and Social Innovation Review*, 3 (1).
- ▣ Canto, P., Costamagna, P., Eizagirre, A., Larrea, M. (2018). The challenges facing co-generation in the search for social impact of the university: a case of constructing an area of dialogue through action research. *European Public and Social Innovation Review*, 3(1).
- ▣ Casado, U., Larrea Basterra, M. (2017). Determining factors in the price of electricity in Spain. *Spanish Statistics*, 59 (194), 119-149. (published 2018)
- ▣ Larrea Basterra, M. (2017). Energy poverty in the European Union and the United Kingdom: the case of England. *ICADE journal*, N. 102, September-December 2017. ISSN 1889-7045. (published 2018)
- ▣ Larrea Basterra, M., García, A. (2017). The iron and steel industry in Spain and its future. *Economía Industrial*, 406. (published 2018)
- ▣ Larrea, Miren (2018). Paulo Freire in action research for territorial development: a reflection based on practice in the Basque Country. *Reflexão e Ação*, 21(1), 179-196. DOI: 10.17058/rea.v26i1.11773

3.1.3 Books and Reports

- ▣ Álvarez Pelegry, E., Bravo, M., Jiménez, B., Mourao, A., Schultes, R. (2018). *The Oil and Gas value chain: a focus on oil refining*. Orkestra Notebooks 2018/46.
- ▣ Álvarez Pelegry, E., Bravo, M. (2018). *The Oil Industry Challenges and Strategic Responses*. Orkestra Notebooks 2018/47. (External collaboration)
- ▣ Álvarez Pelegry, E., Larrea, M. (2018). *Energy in Chile: a test bench for energy strategies and transitions*. Orkestra Notebooks 2018/37.
- ▣ Álvarez-Pelegry, E., Menéndez Sánchez, J., Bravo López, M. (2018). *Air quality: the situation in Spain and future scenarios for the Basque Country (CAPV), Madrid and Barcelona*. Orkestra Notebooks, 2018/38.
- ▣ Álvaro, R., Larrea, M. (2018). *Energy transition in France*. Orkestra Notebooks 2018/44.
- ▣ Álvaro, R., Larrea, M., Álvarez Pelegry, E. (2018). *Electricity self-consumption*. Orkestra Notebooks 2018/39.
- ▣ Costamagna, P., Larrea, M. (2018). *Facilitative Actors of Territorial Development. A social construction based approach*. Bilbao: Deusto University Press.
- ▣ Fernández, J. (2018). *Current situation regarding the wholesale natural gas market in Spain*. Orkestra Notebooks 2018/40.

- ▣ Gil de San Vicente, I., Murciego, A., Sisti, E. (2018). *Economic/financial report and credit risk of Basque companies*. Orkestra Notebooks 2018/36.
- ▣ Larrea, J.L. (2018). *Challenges facing competitiveness in terms of well-being and social cohesion*. Orkestra Notebooks 2018/35.
- ▣ Larrea, M., Álvarez Pelegry, E. (2018). *The energy sector in Chile: a global view*. Orkestra-Alberto Hurtado University.
- ▣ Navarro, M. (dir.). (2018). *Vocational training in Navarre: towards a new centre model and the challenge facing dual vocational training*. Madrid: Bankia Foundation by Dual Training. ISBN: 978-84-697-3651-7. ISBN 9788409028849.
- ▣ Navarro, M. (2018). *The provision of technical services by Vocational Education Training Centres in the Basque Country: the Tkgune experience*. Orkestra Notebooks 2018/45.
- ▣ Orkestra (2018). *The Basque Country Competitiveness Report 2018*. Bilbao: Deusto Publications. Basque Institute of Competitiveness-Deusto Foundation. ISBN: 978-84-16982-68-4.
- ▣ Orkestra (2018). *The Basque Country Competitiveness Report 2018*. Bilbao: Deusto Publications. Basque Institute of Competitiveness-Deusto Foundation. ISBN: 978-84-16982-70-7.
- ▣ Orkestra (2018). *Euskal Autonomia Erkidegoko Lehiakortasunari buruzko 2018eko txostena*. Bilbao: Basque Institute of Competitiveness-Deusto Foundation. ISBN 978-84-16982-69-1.
- ▣ Zubillaga, A. (2018). *The digital economy and society in the Basque Country*. Orkestra Notebooks 2018/34.
- ▣ Zubillaga, A., Ardanza N. (2018). *Digital entrepreneurship in the Basque Country*. Orkestra Notebooks 2018/42.

3.1.4 Book chapters

- ▣ Álvarez, E., Menéndez, J., Larrea, M. (2018). Energy alternatives for passenger transport in the European Union. In Sodupe, K., Molina, G. (eds) *Governance for a sustainable energy system* (pp. 521-552). UPV, Economía y Empresa 17.
- ▣ Arrona, A., Larrea M. (2018). Soft resistance: Balancing relationality and criticality to institutionalise action research for territorial development. In K. Bartels & J. Wittmayer (eds.) *Action Research in Policy Analysis: Critical and Relational Approaches to Sustainability Transitions* (pp. 135-152). London: Routledge. (high-impact journal)
- ▣ Estensoro, M., Franco, S. (2018). From Individual to Shared Leadership in Arauco, Chile: Elements of an Emergent Process. In S. Montero y K. Chapple (eds.) *Fragile Governance and Local Economic Development: Theory and Evidence from Peripheral Regions in Latin America*. London: Routledge. (high-impact journal)
- ▣ Karlsen, J., Larrea, M. (2018). Regional innovation system as a framework for the co-generation of policy: an action research approach. In Isaksen A., Martin R., Trippel M. (eds) *New Avenues for Regional Innovation Systems - Theoretical Advances, Empirical Cases and Policy Lessons*. Springer, Cham Switzerland. (high-impact journal)
- ▣ Larrea Basterra, M. (2018). The European emission law market. In Sodupe, K., Molina, G. (eds) *Governance for a sustainable energy system* (pp. 327-361). UPV, Economía y Empresa 17.
- ▣ Larrea Basterra, M. (2018). La Industrial competitiveness in light of energy costs. In Huerta, E., Moral, M.J. (eds) *Innovation and competitiveness: challenges facing Spanish industry* (pp. 381-403). Madrid: Funcas.

3.1.5 Working Papers

- ▣ Navarro, M. (2018). ¿Unitary or multi-functional Vocational Education Training Centre? Literature journal. *Orchestra Working Paper Series in Territorial Competitiveness 2018-R01(CAS)*

3.2 Academic papers

- ▣ Ainhoa Arrona. *Winter School on Public Policy – participation in the Summer School*. "Regional policy capacities and the role of policymakers for RIS3: insights towards understanding and tackling Smart Specialisation Strategies' implementation problems". Autrans, France, 08/01/2018
- ▣ David Jiménez-Bermejo, Jesús Fraile-Ardanuy, Sandra Castaño-Solís, Julia Merino and Roberto Álvaro-Hermana. *SEIT 2018 - The 8th International Conference on Sustainable Energy Information Technology*. "Using Dynamic Neural Networks for Battery State of Charge Estimation in Electric Vehicles". Porto, Portugal, 08/05/2018
- ▣ Miren Larrea. *Latin American Studies Association*. "Paulo Freire y la dimensión crítica de la investigación acción para el desarrollo territorial". Barcelona, 23/05/2018
- ▣ Eurne Magro, Jesús M. Valdaliso. *Regional Studies Annual Conference*. "Regional Resilience and Policy: What is it First? Insights from the Basque Country". Lugano, Switzerland, 04/06/2018
- ▣ Bart Kamp. *CBIM*. "Assessing the commercial chances of machine tool builders to supply advanced services among their industrial clients: a Transaction Cost Economics perspective". Madrid, 18/06/2018
- ▣ Jabier Retegi, Bart Kamp. *12th International Conference on Industrial Engineering and Industrial Management*. "Análisis de los efectos de la eco-innovación en empresas industriales". Girona, 12/07/2018
- ▣ Miren Larrea, Ainhoa Arrona. *ECPR General Conference*. "Integrating the policy perspective in action research through deliberative policy analysis: lessons learnt in the Basque Country". Hamburg, Germany, 22/08/2018
- ▣ Eurne Magro, Javier Garcia, Matias Ramirez, Elvira Uyarra. *Triple Helix Conference*. "Which is the role of universities in regional transformative change? The case of Colombia". Manchester, UK, 04/09/2018
- ▣ Arantza Zubiaurre, Eduardo Sisti. *28th International RESER Conference*. "Regional Innovation System evolution and the increase of Knowledge Intensive firms. A Comparative Study in Madrid, Barcelona and Bilbao, Spain. Gothenburg", Sweden, 20/09/2018
- ▣ Miren Estensoro, Miren Larrea, Kevin Morgan. *SMARTER Conference on Smart Specialisation and Territorial Development*. "Multi-level Governance of Smart Specialisation Strategies: Making it Work". Seville, 27/09/2018
- ▣ Miren Larrea, Miren Estensoro, Eduardo Sisti. *Coping with the future: Business, Work and Science in the Age of Digitalisation and Sustainability*. "The Contribution of Action Research to Industry 4.0. policies: bringing empowerment and democracy to the economic efficiency arena". Kristiansand, Norway, 09/10/2018
- ▣ James Karlsen, Miren Larrea. *Regional Innovation Policies 2018 (RIP2018): Responsible innovation and regional development - Expanding the research agenda*. "How policy can enhance the transformation of University towards the third mission: A case study from a transformation process in the Basque Country". Bergen, Norway, 11/10/2018
- ▣ Miren Larrea, Miren Estensoro, Eduardo Sisti. *Regional Innovation Policies 2018 (RIP2018): Responsible innovation and regional development - Expanding the research agenda*. "Action research for Industry 4.0. policy: democratization and digitalization hand in hand". Bergen, Norway, 12/10/2018

- 📄 Emily Wise, James Wilson, Madeline Smith. *RSA Winter Conference*. "Evidencing the Benefits of Cluster Programmes – Towards a Framework of Effects". London, UK, 15/11/2018
- 📄 Mercedes Oleaga, Raket Vázquez. *44th Regional Study Meeting*: "Creating opportunities in cultural and creative industries in the city of Vitoria-Gasteiz". Valencia, 21/11/2018
- 📄 Bart Kamp. *ICBS 2018. 7th International Conference on Business Servitization (ICBS 2018)*. "Assessing the commercial chances of machine tool builders to supply advanced services among their industrial clients: a Transaction Cost Economics perspective". Lisbon, Portugal, 22/11/2018
- 📄 Arantza Zubiaurre, Eduardo Sisti. *ICBS 2018. 7th International Conference on Business Servitization (ICBS 2018)*. "RIS and territorial servitization: a quantitative approach from the KIBS in Spain". Lisbon, Portugal, 22/11/2018
- 📄 Mari Jose Aranguren, Edurne Magro. *2018 MOC Faculty Workshop - Research Day*. "The Role of Universities in Regional Competitiveness Policy-Making". Boston, USA, 10/12/2018

3.3 PhD theses

In addition to generating knowledge on territorial competitiveness, various researchers have tutored PhD theses during 2018 in fields related to of the different knowledge areas, including:

- 📄 Susana Franco is directing the thesis by Mikel Albizu, researcher at Orkestra, titled "Factors that foster employment via the local sphere of activity".
- 📄 Henar Alcalde is directing the thesis by Gerardo Amunarriz, titled "Foundation of the categories for organizational innovation processes to change the care model of a long term care environment".
- 📄 James Wilson is directing the thesis by Ainhoa Arrona, researcher at Orkestra, titled "The contribution of Action Research and policy learning to innovation policy governance and to its analysis: learnings from Gipuzkoa Sarean".
- 📄 Miren Larrea is directing the thesis by Patricia Canto, researcher at Orkestra, titled "Research Institutions as Change Agents for Territorial Development: An Analytical Framework on Responsible Research Communication".
- 📄 Henar Alcalde is directing the thesis titled "Assessment of modes of innovation: A Mexican regional experience", which is being prepared by Francisco Carrillo.
- 📄 Henar Alcalde is directing the thesis titled "Assessment and solutions regarding financial constraints in the wake of advanced industrial servitization practices", which is being prepared by Ibon Gil de San Vicente.
- 📄 Edurne Magro is directing the thesis by Maria Carmen González Becoechea, titled "Innovation Agencies: the lost link in the chain of the STI policies?".
- 📄 Bart Kamp is directing the thesis by Abbas Haddadzadeh, whose provisional title is "The Role of Innovation Support Programs in FDI Spillover to Developing Countries, the Case of Iran".
- 📄 Edurne Magro is directing the thesis by Ana Carolina Iga, titled "Designing Smart Specialization Strategies for Developing Regions: Two Latin American Cases".
- 📄 Edurne Magro is directing the thesis by Esther Novo, titled "Key factors influencing success in collaborative projects: the case of European innovation policy".

- ▣ Susana Franco is directing the thesis by Mercedes Oleaga, researcher at Orkestra, titled "Invisible key society of competitiveness".
- ▣ James Wilson is directing the thesis by Iñigo Ruiz de Apodaca, researcher at Orkestra, titled "The role of intermediate territorial agents in fostering a circular economy driven by local development".
- ▣ Miren Larrea is directing the thesis by Amaia Zumeaga, researcher at Orkestra, titled "Sustainable Transition of Socio-economic Models: An Approach to Action Research as the Strategy for Change".

Apart from directing the above, researchers at Orkestra took part in different PhD thesis committees in collaboration with other universities.

4 A SHARED PROJECT

4.1 Partners

Since the time it was established, the Institute has proved to be a successful case of public/private cooperation. It has the support of both public and private entities of reference, which give the project stability. The public administrations, firms and institutions that actively take part in Orkestra through essential collaboration to help pursue its activities are:



As well as taking part in the governing bodies of Orkestra, these entities work with the Institute in areas of research and on specific projects.

4.2 Other collaborations

Orkestra is a project with vocation to work, together with its stakeholders, to economically develop the Basque Country and establish international networks. As such, Orkestra promotes projects with a range of entities other than the partners mentioned above, to help pursue different activities and projects. These entities are:

- Basque Trade
- Bilbao Ekintza
- European Commission
- La Caixa Foundation
- Regional Government of Navarre
- Innobasque
- European Union-ERDF
- Bidasoa Activa
- Bizkaia Beaz
- Aquitaine Euskadi Navarre Euroregion
- Regional Government of Castile-La Mancha
- Gureak
- Basque Institute of Finance
- Bihartean
- Bizkaia Seed Capital
- Bankia Foundation
- Regional Government of La Rioja
- Ihobe
- Tecnalia

Beyond the projects, the Institute promotes education through training. The main channel for this include the different collaborations carried out with the University of Deusto, especially those linked to the Deusto Business School. Other specialist training programmes were also promoted during 2018 with universities such as:

British Columbia University, IESDE School of Management, SPRU - University of Sussex and University of Adger.

5 GOVERNING BODIES

Orkestra is structured around an organisational model that seeks to represent and, where possible, reconcile the interests of the different stakeholders involved in improving competitiveness - thus making it possible to achieve the Institute's own goals.

5.1 Board of Directors

The representation, governance and administration of the Institute are attributed to the Board of Directors, due to the conferring of powers by the Foundation's Board.

The members of Orkestra's Board of Directors, which is a collegiate and corporate body, responsible for the administration of the Institute, held 3 ordinary meetings during 2018 (2nd February, 1st June and 29th November). In the course of these meetings, work was carried out on renewing the Statutes, the Honorary Board of Directors was founded, the current Strategic Plan was monitored, and the economic/administrative management was reviewed for the current year.

The Board of Directors at the end of 2018 is as follows:

Chairman of the Board of Directors

- Ignacio M^a Echeberria Monteberría. President of Indumetal Recycling, S.A.

Vice-Chairman of the Board of Directors

- Alberto García Erauzkin (representative of Euskaltel). Chairman of Euskaltel.
- Emiliano López Atxurra (representative of Petronor). Executive Chairman of Petronor.

Members of the Board of Directors

- Ainhoa Aizpuru Murua (representative of the Provincial Council of Gipuzkoa). Deputy of Economic Development, the Rural Environment and Territorial Balance.
- Jesús Alberdi. Member of the Governing Board of the University of Deusto.
- Andrés Arizkorreta. President of CAF.
- Patxi Calleja (representative of Iberdrola). Regulation Manager at Iberdrola Spain.
- Álvaro de la Rica. Dean of the Faculty of Economic and Business Sciences at the University of Deusto.
- M^a Pilar García de Salazar (representative of the Provincial Council of Alava). Vice Deputy General and Provincial Councillor for Economic Development and Territorial Balance.
- Estibaliz Hernández Laviña (representative of the Basque Government). Deputy Minister for Technology, Innovation and Competitiveness.
- Jon Larrinaga Apraiz.
- Ivan Martén. Senior Partner & Managing Director of the Boston Consulting Group.
- Imanol Pradales (representative of the Provincial Council of Bizkaia). Provincial Councillor for Economic Development.

- ▣ Xabier Sagredo (representative of the BBK Foundation). President of the BBK Foundation.
- ▣ Víctor Urcelay. Secretary of the Board of Directors. Vice-Rector for Entrepreneurship and Continuing Education at the University of Deusto.

Substitute Members of the Board of Directors

- ▣ Garikoitz Agote (representative of the Provincial Council of Gipuzkoa). General Director of Economic Development.
- ▣ Unai Alaña Díaz de Guereñu (representative of Iberdrola). Head of Normative Analysis.
- ▣ José María Bilbao Intxaurreaga (representative of the Provincial Council of Bizkaia). Deputy General Director of Business Development and Innovation.
- ▣ Xabier de la Torre Larrabide (representative of the BBK Foundation). Technical Secretary.
- ▣ Javier Hernando (representative of the Provincial Council of Alava). Director of Economic Development.
- ▣ Iosu Madariaga (representative of the Basque Government). Director of Technology and Strategy, Vice-Ministry for Technology, Innovation and Competitiveness.
- ▣ Natxo Molinos (representative of Euskaltel) Strategy and Corporate Development Manager.
- ▣ Pilar Urruticoechea (representative of Petronor). Lawyer.

During 2018 the following ceased to be members of the Board of Directors: Guillermo Ulacia and José Ignacio Goirigolzarri. The Institute wishes to thank both for their effort, dedication and contributions made to the project.

5.2 Advisory Board

The Institute's Advisory Board, which conducts its advisory work in the knowledge areas via the *Competitiveness Observatory* project promoted by SPRI, is made up of international experts in the area of competitiveness, thus ensuring its excellence. The Advisory Board stayed in contact throughout the academic year and held a face-to-face meeting on 9th October at which it monitored the knowledge creation processes underway at Orkestra, the Institute's scientific production, and adopted the organisational model in order to achieve its goals.

The Advisory Board was made up of the following members as at 31st December 2018:

- ▣ Christian Ketels, PhD. (Chairman), Institute for Strategy and Competitiveness (ISC), University of Harvard (USA). Chief Economist at the Boston Consulting Group (BCG).
- ▣ Francisco Javier Álvarez de los Mozos, Assistant Director at Alboan.
- ▣ Karen Maguire, Advisor. Centre for Entrepreneurship, SMEs, Local Development and Tourism for the Organisation of Economic Organisation and Development (OECD).

During 2018 José Luis Curbelo ceased to be a member of the Advisory Board. The Institute wishes to thank José Luis Curbelo for his effort, dedication and contributions made to the project.

5.3 Honorary Recognition

Honorary Chairman

Orkestra recognises the work carried out to promote the Institute by naming the following as Honorary Chairmen:

- Michael E. Porter. Institute for Strategy and Competitiveness, University of Harvard.
- José Luis Larrea. Member of the Governing Board at the University of Deusto.

Honorary Board

Orkestra has set up an Honorary Board to give recognition to individuals for their contribution to regional competitiveness and for those who have played a key role in promoting it. The Honorary Board is currently made up of:

- Jon Azua. President of Enovatinglab.
- José Luis Curbelo. Chairman and CEO of Cofides.
- José Ignacio Goirigolzarri. Chairman of Bankia.
- Guillermo Ulacia. President of Femetal.