## DEUSTO SOCIAL LAB REPORTS

## **Deusto Entrepreneurship Model**

Garbiñe Henry, Roberta Vicente, Victor Urcelay, José Luis Larrea



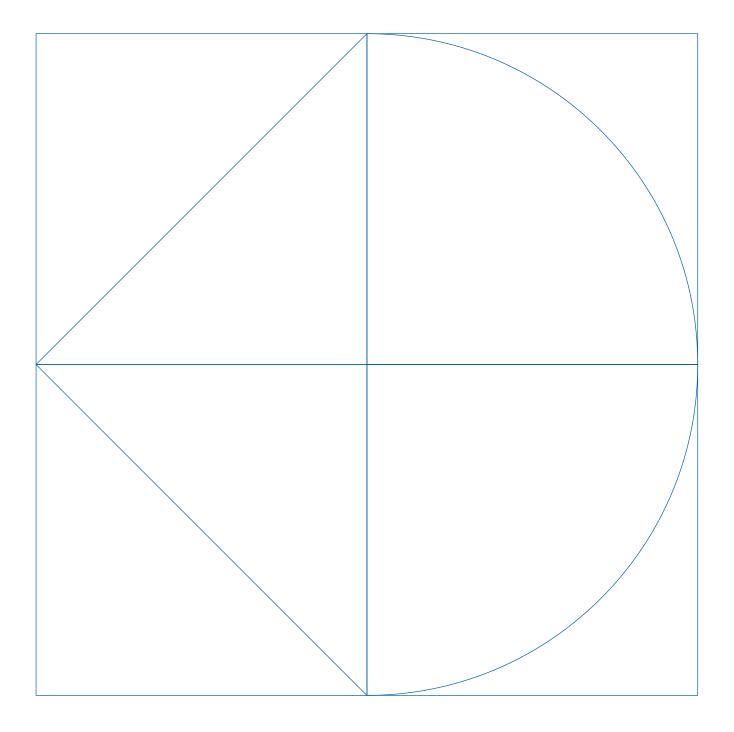
No. **1(2023)** ISSN 3020-3090 ISBN 978-84-1325-212-4



## Deusto Social Lab Reports. No. 1(2023)

## Deusto Entrepreneurship Model

Garbiñe Henry, Roberta Vicente, Victor Urcelay, José Luis Larrea



The different projects, studies and pieces of research carried out by Deusto Social Lab every year form the basis for the publication of the so-called *Deusto Social Lab Reports*.

These monographs are aimed at all the economic and social actors that make up the open cooperation ecosystem in which the mission of Deusto Social Lab operates (companies and organisations, public administration, educational institutions, social and cultural bodies, among others) and, ultimately, at society at large. Using non-academic language, these monographs showcase the transformative power of research and enable Deusto's research results to be shared with social actors. This is intended to help them meet the challenges that they face in connection with social transformation by offering them examples of good practice, as well as guidelines and recommendations that can be useful in their work.

#### Frequency of publication and format

The Deusto Social Lab Reports are published twice a year, both in print and electronically.

#### Subscriptions

There is currently no charge for submission, publication, online access or download. Hard copies are made available to key contributors and partners.

#### Copyright

The Deusto Social Lab Reports are Open Access publications published by the University of Deusto (Spain). Their contents are readily available free of charge. Users may read, search, download, distribute and reuse these contents in any medium or format only for non-commercial purposes and in compliance with applicable copyright legislation. No authorisation is required from the publisher or the author provided that the original work is properly cited and any changes to the original are clearly indicated. Any other use of its contents in any medium or format, now known or hereafter developed, requires the prior written permission of the copyright holder.

© University of Deusto P.O. Box 1, 48080 Bilbao, Spain Publications Tel.: +34-944139162 E-mail: publicaciones@deusto.es URL: www.deusto-publicaciones.es ISSN: 3020-3090 (versión impresa / printed version) ISBN: 978-84-1325-212-4 (versión impresa / printed version) Deposito Legal / Legal Deposit: LG BI 1354-2023

Printed and bound in Spain

#### DEUSTO SOCIAL LAB REPORTS. No. 1(2023)

#### **Editorial Board**

José Luis Larrea Jiménez de Vicuña, Chairman of the Advisory Board of Deusto Social Lab and member of the Governing Council of the University of Deusto.

Víctor Urcelay Yarza, Pro-Vice-Chancellor for Entrepreneurship and Business Relations at the University of Deusto and Professor at Deusto Business School.

Irene Cuesta Gorostidi, Director of Lifelong and Dual Training at the University of Deusto and lecturer at Deusto Business School. Garbiñe Henry Moreno, Director of Entrepreneurship and Innovation at the University of Deusto.

Jesús Riaño Sierra, Director of Alumni and Employment at the University of Deusto.

María Lambarri Villa, Director of the Unit for Relations with Economic and Social Actors at the University of Deusto.

José Luis del Val Román, Professor at the Faculty of Engineering and Lecturer in Executive Education at Deusto Business School.

Editorial Office María Lambarri, Editorial Manager Deusto Social Lab University of Deusto Avda. Universidades 24 48007 Bilbao Tel: +34 944 13 90 00 (ext 2107) Email: Maria Lambarri. <maria.lambarri@deusto.es> Web: http://www.deusto.es/

## Foreword

Deusto Social Lab has been launched to meet the challenges posed by society in the 21st century. Providing people with the lifelong support they need so that they can be active agents of transformation is at the heart and core of what we do at the University.

This approach involves promoting the development of the person as an agent of change and transformation throughout life, and goes hand in hand with a process of ongoing training and learning. It also considers that the desired transformation must have a purpose: we want people to be agents of change at the service of well-being, we want our society to be characterised by inclusive and sustainable well-being, in which people play a leading role.

Similarly, we recognise that knowledge does not only reside in the university. It is therefore essential to generate an ecosystem for open learning, which links the various areas of knowledge to economic and social actors. In this ecosystem, the relationship model must be based on cooperation, recognising that the worlds of business, government and any type of social organisation must work together to face the challenges that exist within the new context.

Through the Deusto Social Lab Reports, we seek to transfer and share with our entire ecosystem the results of selected projects, initiatives and studies conducted in order to contribute to addressing the new challenges faced in our society.

> Víctor Urcelay Yarza Pro-Vice-Chancellor for Entrepreneurship and Business Relations and Head of the Deusto Social Lab Initiative

Deusto Social Lab aspires to build a space for cooperative learning that fosters the co-generation of knowledge at the service of progress, while transforming the day-today work that we do. This learning space is committed to stimulus, discussion, reflection, action, recognition and dissemination, which need to be constantly developed to ensure sustained and sustainable learning processes over time. Processes that are useful and bring recognised value to society in terms of social impact.

In this context, these Reports are intended to be a sound instrument not only for dissemination, but also for stimulating and provoking a type of discussion that leads to reflection, action and the recognition of what we do, turning the process into a creative spiral that unfolds over time.

Stimulation is important in triggering any learning process and achieving cooperation in working at the service of an envisaged common future. An envisaged common future that serves to stimulate us; that lead us to share by engaging dialogue and conversation; and that demands individual and collective reflection and challenges us to take cooperative action. An action that needs to be evaluated and recognised as part of the construction of the common embodied narrative in every learning process. This is aimed at disseminating and socialising shared learning, which is the best way to stimulate a new stage of knowledge generation through learning. It involves working hand in hand with people, who are always at the core of the process.

> José Luis Larrea Jiménez de Vicuña Chairman of the Advisory Board of Deusto Social Lab

Deusto Emprende is the Innovation and Entrepreneurship Unit of the University of Deusto. Its mission is to support people throughout their lives in fostering an entrepreneurial and innovative culture inside and outside the University, so that they can be agents for economic and social change, working in cooperation with other members of the ecosystem. The Deusto Model of Entrepreneurship pursues this mission by relying on a humanistic approach that informs the values that should guide its identity and mission. We have designed nine projects to achieve four strategic transformations:

Believing in entrepreneurship Growing as entrepreneurs Creating entrepreneurial projects Engaging in inter-agent cooperation.

#### DEUSTO SOCIAL LAB REPORTS. No. 1(2023)

#### **Deusto Entrepreneurship Model**

#### INDEX

1.	INTRODUCTION		10
2.	FUTU	IRE CHALLENGES AND ENTREPRENEURIAL CULTURE	12
3.	INNOVATION AND ENTREPRENEURSHIP ECOSYSTEMS		14
	3.1.	Reference Model: Quadruple Helix	15
	3.2.	Basque innovation and entrepreneurship ecosystem	15
4.	STRA	TEGIC POSITIONING OF THE UNIVERSITY OF DEUSTO WITHIN THE ENTREPRENEURSHIP	
	ECOS	SYSTEM	17
	4.1.	Deusto 2022. Transforming our world together	18
	4.2.	Deusto Social Lab	19
	4.3.	Deusto Emprende: Innovation and Entrepreneurship Unit	19
5.	DEUSTO ENTREPRENEURSHIP MODEL		20
	5.1.	Mission	21
	5.2.	Vision	21
	5.3.	Strategic Objectives	21
	5.4.	Strategic Transformations: BELIEVE, GROW, CREATE and COOPERATE	22
	5.5.	Values underpinning the Deusto Entrepreneurship Model H4 C3 R	23
	5.6.	Projects by Strategic Transformation	27
6.	CON	CLUSIONS	31
RE	33 33		

# **1.** Introduction

'We are ready to take significant new steps in the field of entrepreneurship and place it at the centre of our educational project by incorporating it into the curriculum in all our courses'.

José María Guibert. Chancellor of the University of Deusto (2018). Universities play a key role in the **promotion of entrepreneurial and innovative attitudes** among the people who study in them and who will be tasked with building the economic and social system of our surrounding community in the near future in an increasingly competitive, technological and global market.

The University of Deusto has regarded this as within its remit since 2009, when the **Entrepreneurship Centre**, including the **DeustoKabi** incubator, **was created at the Bilbao** campus pursuant to an agreement signed with the Department of Innovation and Economic Promotion of the Provincial Council of Bizkaia. The University's commitment to this area was strengthened in 2011, when the **San Sebastian Campus incubator** was inaugurated in the **Garate Innogunea building**.

The Entrepreneurship Centre and the Social Innovation Unit were founded in 2010, and in 2017 were merged to

form **Deusto Emprende**, the Innovation and Entrepreneurship Unit. The aim was to continue to promote transversal innovation and entrepreneurship and expand the scope and potential of the target companies of both incubators, which included innovative projects in advanced services and social entrepreneurship projects.

This was the beginning of a new phase, a major step towards placing entrepreneurship and innovation at the heart of the University of Deusto's project. It was a clear statement of the University's intent to actively promote entrepreneurship and innovation among all the communities that form the University's ecosystem. In his opening speech for the 2018-2019 academic year, José María Guibert, Vice-Chancellor of the University of Deusto, affirmed: 'We are ready to **take significant new steps in the field of entrepreneurship and place it at the centre of our educational project** by incorporating it into the curriculum in all our courses'.

# **2.** Future Challenges and Entrepreneurial Culture

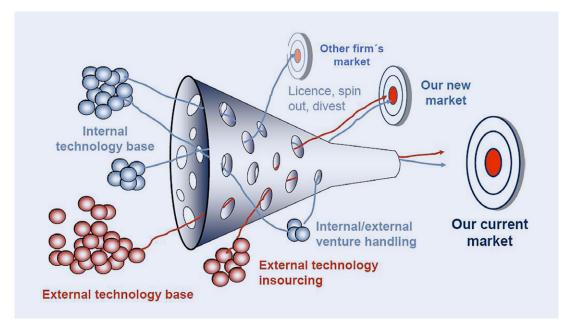


The great technological breakthroughs of our time are causing **global disruptions**. In the face of what has already been termed the **Fourth Industrial Revolution**, companies in all sectors are involved in **digitalising their businesses**, while at the same time new industrial production models are emerging, known as '**Industry 4.0**'.

**New technologies** such as Big Data, Artificial Intelligence, Blockchain and the Internet of Things (IoT) **allow companies to differentiate themselves** from their competitors by providing them with more accurate information to make decisions. As they can obtain data on their users' needs, they can study those needs and are therefore in a better position to adapt to them (ABC, 2018).

Both Knowledge and the ability to innovate and adapt are vital in a constantly changing environment. However, the way to develop an entrepreneurial and innovative culture is not through technology, but through people. Innovation requires overcoming resistance to change, as innovation involves a move away from the *status quo*. It is essential to ensure that all parties are involved in the innovation process and that a company's culture is aligned with the direction set by its leadership (Plaza López, 2018).

Innovation occurs in open collaborative environments by listening and observing those who do things differently, building relationships with customers, suppliers, technology centres, universities, companies and organisations from different sectors. Therefore, for innovation to take place, it needs to be open. As defined by Henry Chesbrough, open innovation is 'the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation' (2003). These new open environments generate opportunities for startups that manage to grow quickly and continuously thanks to their agility, speed and flexibility, thus providing a differential value compared to large firms. The most disruptive innovations usually come from startups; as large firms are aware of this, they make room for them in their business processes to absorb this innovation (Priesca, 2016).

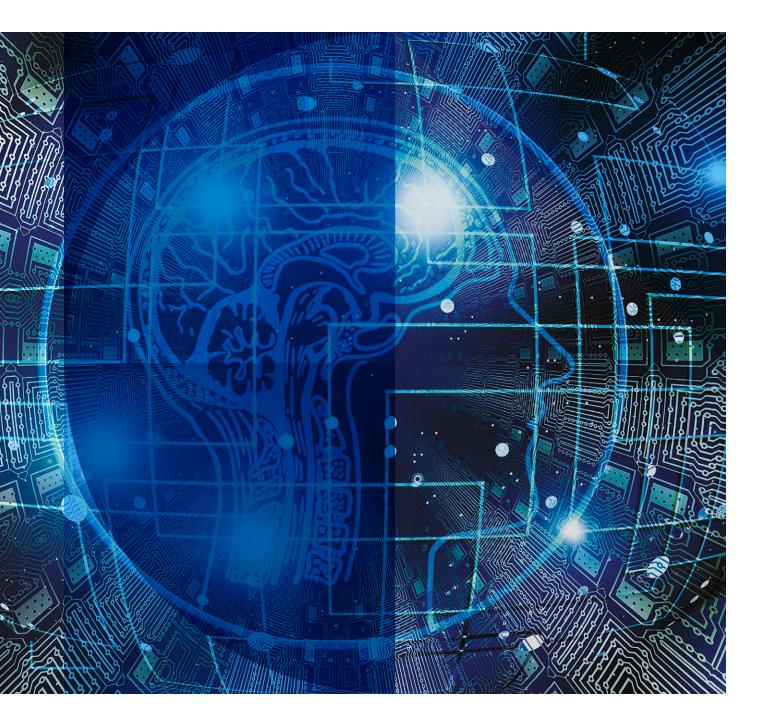


*Source:* 'Stolen with pride'. Prof. Henry Chesbrough (UC Berkeley). **Figure 1.** Conceptual framework on open innovation for Industrial R&D.

Based on an analysis of the economic and social context, a series of challenges can be identified that individuals, organisations, institutions and society as a whole need to address:

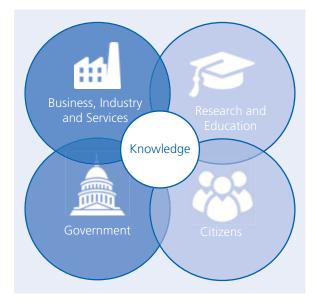
- **Globalisation**: the balance between the global and the local, new forms of relationship between states, citizens and businesses.
- **Technological development**: connectivity, accessibility, mobility, and data management and integration, all of which is fast paced.
- **Constant change**: a continuously moving environment in which change is a constant, with the ensuing need to adapt (Larrea, 2017).

# **3.** Innovation and Entrepreneurship Ecosystems



### 3.1 Reference Model: Quadruple Helix

The quadruple helix model of innovation refers to a system in which **society** joins **organisations**, **academia and government** to lead innovations that could not be achieved independently, with knowledge being the driving force of a new economic organisation. In this way, new ideas and projects emerge that would not have happened in those spheres independently (Romero Frías, 2017).



Source: Developed by the authors based on Romero Frías, 2017.

#### Figure 2. Quadruple Helix.

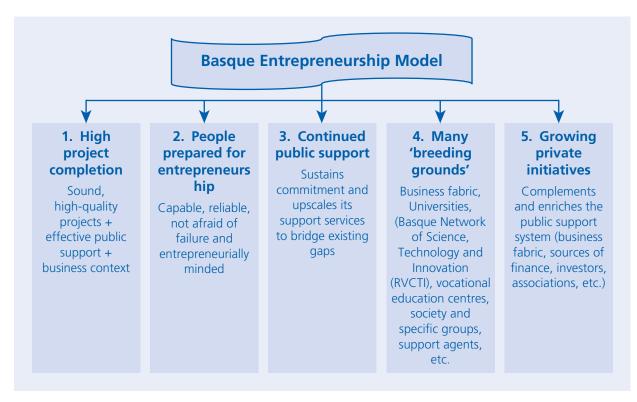
The regions of **Silicon Valley** in the US and **Cambridge** in the UK are the most representative examples of this model. Both experiences involved the concentration of small high-technology companies, many of which started as university subsidiaries run by academic staff or graduates. Their main activities are technical and technological consultancy, generating a culture of business, risk and research. The Nordic and Asian countries, in contrast, have a more institution-based model, where governments, in addition to creating conditions for technology transfer legislate and instigate far-reaching public policies to generate structural changes in production (López, Mejía, & Schmal, 2006).

### 3.2 Basque innovation and entrepreneurship ecosystem

The innovation and entrepreneurship ecosystem of a region results from the different relationships of **companies, institutions and entrepreneurs** with their academic, social, political and economic environments.

The Basque Entrepreneurship System is supported by the **2020 Inter-institutional Entrepreneurship Plan** signed by the Basque Government and the Provincial Councils to engage in joint, concerted efforts to further and improve the Basque ecosystem to support entrepreneurship. The Plan has been adapted to the new economic and legislative situation and aims to ensure the future competitiveness and sustainability of the Basque Country. It provides momentum to continue to enhance the ecosystem for supporting entrepreneurship, as well as ensuring the inter-institutional will and commitment necessary to promote entrepreneurship and intra-entrepreneurship.

The challenge of increasing the competitiveness of the Basque business fabric has led institutions to launch ambitious projects in different areas. One of them is the **promotion of entrepreneurship as a driver of transformation and innovation in organisations** through intra-entrepreneurship. These are going concerns which expand their capabilities through processes structured according to their requirements and characteristics. They do so by creating new lines of business, developing new products or services and fostering the entrepreneurial talent of the people within the organisation.



Source: 2020 Inter-institutional Entrepreneurship Plan, Basque Government.

Figure 3. Basque Entrepreneurship Model.

# **4.** Strategic Positioning of the University of Deusto within the Entrepreneurship Ecosystem



Universities are a key element in the **promotion of the entrepreneurial and innovative attitudes** of those who study in them, and who will be tasked with building the economic and social system of our surrounding community in the near future in the face of a **new relational paradigm**.

Entrepreneurship education is essential for the **development of the human capital needed for the society of the future**. An entrepreneur is not born, but made. To this end, people must engage in lifelong training in entrepreneurship (Bankinter Foundation of Innovation, 2010).

The role of universities must be directed at building **the foundations for the development of the individual. They must foster an entrepreneurial culture** working in cooperation with other agents in the ecosystem, in order to offer specialised training programmes that prepare people to lead innovation processes. The University of Deusto aims to become a **hallmark university in innovation and entrepreneurship,** in line with its mission of **service to society,** supporting people in their personal and professional development throughout their lives.

In the words of our Vice-Chancellor, José María Guibert, our vision of Deusto for 2022 is that of 'a university with its own education model that is coherent with its mission, decidedly entrepreneurial, innovative, which provides well-established dual training programmes and is in constant interaction with professional training, both face-toface and online; a travelling companion in lifelong learning' (2018).

#### 4.1

# Deusto 2022. Transforming our world together

This innovation and entrepreneurship framework and ecosystem is concurrent with the recent approval and publication by the University of the Deusto 2022 Strategic Initiative under the slogan 'Transforming our world together: People who change the world'.

This is the ambitious motivational slogan that was chosen at the World Assembly of Jesuit Universities (Bilbao 2018). It has now also been adopted by the University of Deusto as an inspiration for the 2022 Deusto Initiative: people and institutions transforming the world together.

'Together' is one of our hallmarks at Deusto. Together as a university community: students, teaching and research staff, research personnel, administration and services personnel, alumni, families, everyone sharing one and the same path as part of a single project, together with a whole universe of people, institutions, social organisations, companies, cultural agents..., forming alliances, networking. We got here together. The members of the University community want to win the future together.

'Transforming' indicates the purpose of our endeavour; transforming in order to move towards a fairer, more humane and more sustainable world. This is at the core of the university's mission and of our challenges: education, research and transfer, leadership in and a commitment to society... in order to fulfil a transforming and humanising role. We want to make a small contribution to the vital task of those who transform the world.

'Our world' invokes universality, both as an attribute of the Society of Jesus and in the sense of the *universitas* that gives it its name and purpose. Our commitment is necessarily global in scope, in a world that is interrelated and interdependent. And in addition to its global dimension it has a local dimension, that of our immediate environment. Global and local are the two faces of today's world. And we use the term 'our' because we feel that the University is part of and jointly responsible for today's world.

The University's new strategic plan draws its inspiration from **two principles** (Ignatian identity and social and environmental responsibility). These are shaped into five **institutional priorities**, which in turn lead to 11 **strategies** and 26 **lines of action**.

The University of Deusto has asserted a position that is clearly for the **promotion of innovation and entrepreneurship** during the entire education process of our students, as defined in **Axis 3 University - Business**, Line 9: Entrepreneurship and intra-entrepreneurship

#### L9. Furthering the Deusto Entrepreneurship Model and incorporating a culture of innovation, entrepreneurship and intrapreneurship into all phases of the education process

In line with the University's nature as an agent and driver of change and its commitment to contributing to economic and social development, Deusto will foster an innovative and entrepreneurial culture. This will be implemented on the basis of the Deusto Entrepreneurship Model, which focuses on all the phases of the education process and on entrepreneurs themselves. Our model applies to both those who promote their own business project and those who engage in entrepreneurial activities within an existing firm.

The University of Deusto's commitment to entrepreneurship is also reflected in its **Master Plan for Employment, Entrepreneurship and Integration into Society**, which aims to boost entrepreneurship and intra-entrepreneurship among the University community, Alumni and companies, as well as to support entrepreneurs in the initial stage at the start of their firm. Specifically, this is elaborated on in Strategic Focus Area 3: Develop an Entrepreneurship Model.

The Model aims to lay the foundations for entrepreneurship; support the setting up and launch of businesses; and strengthen the engagement of the University community, the alumni network and the financing of entrepreneurial initiatives.

This role of the University as an agent of innovation and entrepreneurship is in turn driven by the Basque Government's **Inter-institutional Entrepreneurship Plan (known as PIE by its acronym in Spanish) 2020** within Strategic Focus Area 3: Entrepreneurship Culture and Values.

The Education System approach has a clear objective: To develop an entrepreneurial aptitude and sense of initiative among all groups of students (primary, secondary, vocational training and university), fostering the lifelong training (in values, concepts, new methodologies for entrepreneurship) for all teaching staff and facilitating contact of students with entrepreneurs and business people.

### 4.2 Deusto Social Lab

Deusto Social Lab is a **strategic initiative** with a mission **to contribute to the development of the individual** as an **agent of transformation** at the service of economic and social progress, through close interaction (relationships) with economic and social agents.

This mission sets out a number of **differentiating fea**tures:

- Contributing to the (lifelong) development of the individual
- Acting as an agent of transformation (innovation)
- Engaging in close interaction (relationship) (cooperation)
- Working with economic and social partners (diversity)

The Deusto Social Lab Advisory Board is chaired by Jose Luis Larrea, and reports to the **Office of the Pro-Vice-Chancellor for Lifelong Learning and Business Relations** whose Pro-Vice-Chancellor is Víctor Urcelay. It is comprised of four units, led by the following heads:

- · Lifelong and Dual Training: Irene Cuesta
- Employment and Alumni: Jesús Riaño

- Innovation and Entrepreneurship: Garbiñe Henry
- Institutional and Social Relations: José Luis del Val

### 4.3 *Deusto Emprende*: Innovation and Entrepreneurship Unit

The Innovation and Entrepreneurship Unit of the University of Deusto, *Deusto Emprende*, is the main agent of **entrepreneurship and innovation** among the different groups that make up the University community (students, teaching and research staff, administrative and services staff, management, administration, management...) and its environment (private companies, public institutions, investment agents, technology centres, knowledge centres, social agents).

Deusto Emprende is supported by the University of Deusto Strategic Plan 2022, of the Master Plan for Employment, Entrepreneurship and Social Insertion and the Basque Government's 2020 Inter-institutional Entrepreneurship Plan (PIE).

*Deusto Emprende* has developed its own model of entrepreneurship to achieve this objective in order to perform its main task in the university ecosystem and its environment.

The Model is based on the definition by **Timmons**, whereby 'entrepreneurship is the ability to create and build something from practically nothing. It is initiating, doing, achieving and building an enterprise or organisation (...). It is the knack of sensing an opportunity where others see chaos, contradiction and confusion' (2000). It is therefore a broad definition that includes both entrepreneurship and intra-entrepreneurship within an existing organisation.

Consequently, the Deusto Entrepreneurship Model pursues the following general objectives, in line with the aforementioned strategic plans:

- Internally, to ensure that everyone in the organisation, including all the University faculties and centres, cultivates an entrepreneurial spirit.
- Externally, to contribute to the economic and social development of our surrounding community, informed by the vision of the University as a social agent and an engine for change, and to be recognised as such both nationally and internationally.

# 5. Deusto Entrepreneurship Model



## 5.1 Mission

The mission of the Deusto Entrepreneurship Model is to support people throughout their lives in fostering an entrepreneurial and innovative culture inside and outside the University, so that they can be agents for economic and social change, working in cooperation with other members of the ecosystem; thus contributing to the University's mission of service to society.

## 5.2 Vision

The long-term vision is to reach all the people who make up the relational space of the University of Deusto, providing distinctive value to all the faculties and departments of the University and contributing to the economic and social development of our surrounding community. This is informed by the vision of the University as a social agent and a driving force for change, with the aim of being recognised as such both nationally and internationally.



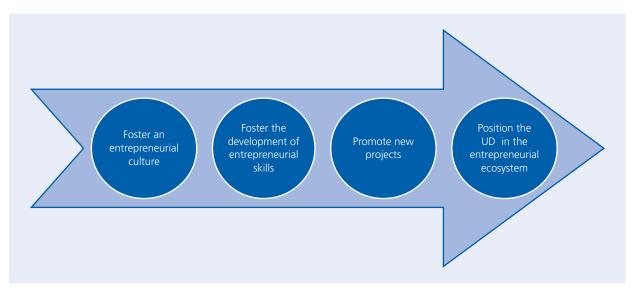
Source: Developed by the authors.

Figure 4. UD Relational Space for Entrepreneurship and Innovation.

## 5.3 Strategic Objectives

The Deusto Entrepreneurship Model aims to position the University as a leading **agent in innovation and entrepreneurship**, supporting people in their personal and professional development throughout their lives, working in cooperation with other agents in the ecosystem. The strategic objectives are:

- To foster an entrepreneurial culture
- To foster the development of people's entrepreneurial skills
- To promote new entrepreneurial projects
- To position the University of Deusto within the entrepreneurial ecosystem



Source: Developed by the authors.

Figure 5. Strategic objectives of the Deusto Entrepreneurship Model.

### 5.4 Strategic Transformations: BELIEVE, GROW, CREATE and COOPERATE

Four strategic transformations **have been** identified in order to achieve the mission and objectives. The starting point of these transformations is the individual, as individuals are crucial at the start of any change process. This aims to leverage the resources available to the University of Deusto and those provided by the innovation and entrepreneurship ecosystem.

## Transformation 1. BELIEVE IN ENTREPRENEURSHIP

We want **to foster an entrepreneurial and innovative culture** among University members and the surrounding community.

## Transformation 2. GROW AS A PERSON

We seek to **develop** people's **entrepreneurial competences and skills** to help them **become confident** and **capable** of implementing their ideas. We want to provide people with the necessary tools to **design new solutions** to existing problems through specialised training aimed at people of all profiles, using agile methodologies. This entails learning transversal competences related to innovation and entrepreneurship in **interdisciplinary teams**.

## Transformation 3. CREATE PROJECTS

We seek to support people in the **start-up and development of their entrepreneurial projects,** regardless of their stage in life.

To this end, **the Deusto Model of Entrepreneurship can adapt to the needs of each entrepreneur**, tailoring the support services to suit each stage of the project and each entrepreneur as required.

## Transformation 4. COOPERATE BETWEEN AGENTS

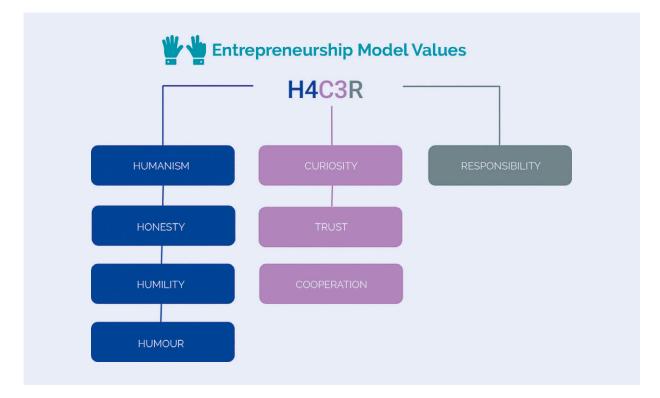
We participate in **research and co-creation** projects, working jointly with the other agents of the ecosystem at local, national and international levels. We organise and participate in **networking events and activities to build relationships among and co-create with** people and organisations.

## 5.5 Values underpinning the Deusto Entrepreneurship Model H4 C3 R

Given that we are a Jesuit University, we are clear about the *type of students we seek to produce*, in line with our calling: people who are good professionals and responsible citizens.

José María Guibert, in the document Deusto 2022, stated: 'our model is guided by the so-called Ledesma-Kolvenbach paradigm: *utilitas, humanitas, iustitia, fides*. None of these elements can stand on their own; all of them shape our educational ethos. *Utilitas* is understood to be technical competence, knowledge and skills necessary for professional performance. *Humanitas* relates to the development of all the dimensions of the individual. *Iustitia* entails being proactively concerned with the structural problems of society and engaging in solving them. *Fides* refers to searching for the whole truth as a horizon that transcends the human being' (page 3). Citizenship is intimately linked to a deeply humane approach that is brought to professional performance, with respect and concern for humanity, and not simply for the sake of profit or mundane prestige. A Deusto graduate must embody the values that imbued their education: love as service, in a selfish and indifferent world; justice, in the face of exploitation and lack of respect for the dignity of the weakest; peace, in opposition to the violence that is imposed as an instrument of the strongest or most aggressive; honesty, opposed to corruption; solidarity, in contrast to growing individualism; temperance, in opposition to consumerism and the 'culture' of the disposable; contemplation and free, voluntary provision, in opposition to pragmatism and utilitarianism (Ildefonso Camacho, 2017).

The values underlying the Deusto Model of Entrepreneurship H4 C3 R pursue the promotion of innovation and entrepreneurship from a humanistic perspective, working with honesty and humility, but also with a sense of humour to awaken people's curiosity, creating bonds of trust that lead to cooperation. All of these are aligned with the University's role to educating responsible people who contribute to the economic and social well-being of their community, in line with the 17 Sustainable Development Goals (SDGs) identified by the UN.



Source: Developed by the authors.

Figure 6. Values of the Deusto Entrepreneurship Model.

We will now explain why these values are important and how we intend to put them into practice.

#### H1: Humanism

We are committed to people and their development. We perform our work with rigour and expertise, but also taking a deeply humane approach. Gómez and Castañeda (1999) defined the Ignatian pedagogical approach as a humanistic proposal for change:

One of the main aims of the Ignatian pedagogical approach is educating 'men and women to serve others'. This implies, in the first place, rediscovering and reassessing who the human being is as a historical subject, an agent of transformation for themselves and society. The person is conceived as being called first and foremost to be transformed, for and in the commitment to life, with and for others; a commitment that must not remain in tangential or superficial situations, but must become organic and profound. This commitment aims to strike a balance between breadth and depth, quantity and quality, the universal and the particular, the social and the individual' (p. 3).

In line with this humanist proposal for change, the Model H4 C3 R aims to cultivate a climate of respect, trust and cooperation in which innovation and entrepreneurship are encouraged; enabling people's merits to prevail, respecting them all regardless of their origin and status, recognising and supporting those who make the strongest contribution.

#### H2: Honesty

We are committed to honesty, which takes the form of **transparent and ethical** practices, prioritising the truth in any situation. As Orozco Hernández (2015) argued, 'the current role of the universities entrusted to the Society of Jesus must be transmitting culture, transmitting human knowledge truthfully and in depth, in order to make the world a better place for everyone'. While being strictly attached to the truth, we must be **critical and self-critical**, speak **honestly** and act **in coherence with our values**.

### H3: Humility

We want to be people who are **approachable**, as well as willing to **learn every day**, **humbly listen to others**, and take constructive **criticism** as an opportunity to **learn** and **improve**.

As part of n a culture that encompasses intertwined cultures within it, we must redefine pluralism as a source of enrichment for everyone, because each culture approaches the truth from a different angle. Pluralism cannot mean total relativism because that destroys all possible human communication, all responsibility and finally, all ethical foundations. Genuine pluralism recognises that everyone has something to contribute, that we need to listen to each other and enrich each other. True pluralism does not question the good and the truth, but it accentuates our weakness in achieving them. Identities are not silenced but respectfully shared. This requires humility to listen to others and wisdom to openly share with them (Montes Matte, p. 9).

To do this, we must **recognise and be aware** of our own character, knowledge, abilities, strengths, weaknesses and virtues, successes and failures; we must be able to make an objective assessment of ourselves. We need to be constantly and actively willing to examine ourselves and our actions, and to listen to others in order to improve ourselves.

#### H4: Humour

Displaying a sense of humour helps to generate new ingenious ideas, enjoy ourselves and laugh, relativise life situations and have a **positive attitude** and share it with others (García-Larrauri, Manzano, Muñoz, Hernández & Cuetos, 2010).

Entrepreneurs' sense of humour encourages them to have proactive behaviour and is conducive to improving their skillset to face their challenges, including recognising problems, foreseeing consequences and being innovation-oriented. 'We must reinforce all the emotional energy of humour and affection, as these are mechanisms for energising interpersonal relations and attention to work, combining what people do and what they say with the affective and reflective aspects of each person' (Ares Parra, 2004).

In addition, current pedagogical trends advocate a more motivating and dynamic **learning environment**, emphasising the need for a more playful and enjoyable teaching approach. From this perspective, it is argued that students will be more motivated to learn if they enjoy themselves and have fun. 'Humour and laughter in education motivate inclusion and participation, friendship and fellow feeling, general relaxation and fun, and generate creativity' (Fernández-Poncela, 2012).

Based on this evidence, and in line with the Deusto Education Model of learning and transformation by using innovative teaching methods, we seek to **promote active learning** at the University of Deusto. This is put into practice through **agile methodologies** that motivate students and awaken their curiosity and interest in innovation and entrepreneurship.

#### **C1: Curiosity**

In his theory of knowledge, Lorenzo Hervás defined curiosity as 'an inherent gift of human beings that operates as a drive for knowledge and passion' (Perrone, 2009). The most **creative** and **innovative** people are characterised by having an ability for and interest in **abstract thinking** and curiosity to find **new solutions** to existing problems (Koellinger, 2008).

At the University of Deusto, we consider that **curiosity** is a **fundamental value for innovation**, as it enables people to discover ways of doing things in a different, surprising, imaginative and creative way; formulate questions that encourage them to **search for answers**; and consider different answers, while also **stimulating curiosity** in others.

#### C2: Trust

Cooperation is built on the **relationships of trust** generated in organisations, which operate at two levels. On the one hand, the **internal relational dimension** of an organisation enables cooperation by establishing relationships built on trust, shared norms, obligations and mutual recognition within the organisation (Granovetter, 1973). On the other hand, the **external relational dimension** refers to trust in the network of relationships in which the organisation itself is rooted (Tsai and Ghoshal, 1998). Building relationships of trust is essential for **fostering social relations** and sharing resources, enhancing communication and **increasing cooperation** between individuals. As a consequence, in the long term, high levels of trust can boost innovation and teamwork, as well as improving organisational functioning (Bouty, 2000).

To promote a climate that reaffirms our identity and strengthens the capacity for collective ideals and awareness, we must **cultivate attitudes of trust** in our dayto-day actions, creating **spaces for human connectivity** in the work environment and delivering what we have committed to do, in other words, fulfilling our intentions.

#### **C3: Cooperation**

Based on various studies, in particular, on the Oslo Manual (2010), different characteristics and requirements of organisations have been proposed that are considered to be innovative. Internally, suitable interdepartmental integration and cooperation is seen as a strength to be developed (Silva, 2004). With the aim of promoting innovation and enriching the University's joint value proposition, we must **promote internal cooperation** between all the people who make up the UNIVERSITY OF DEUSTO's relational space.

In the external dimension, **cooperation between uni**versities and other economic, social and institutional agents is based on whether they have complementary abilities to engage in joint actions, and on their mutually beneficial partnerships, as analysed by Sebastián (2004).

This cooperation in turn has two dimensions: *sensu stricto* or inter-university cooperation, which is characterised by the complementary nature of the interests and abilities of the institutions involved, which mainly share academic and scientific objectives. This brings benefits for both parties that translate into improved academic quality and further institutional strengthening. For its part, university developmental cooperation brings into play the principle of solidarity and the social role that universities play through capacity building and the transfer of knowledge and technologies to contribute to human development and social welfare.

At the University of Deusto, we are committed to **promoting cooperation with external agents** to foster the economic and social development of our surrounding community, together with other agents in the ecosystem.

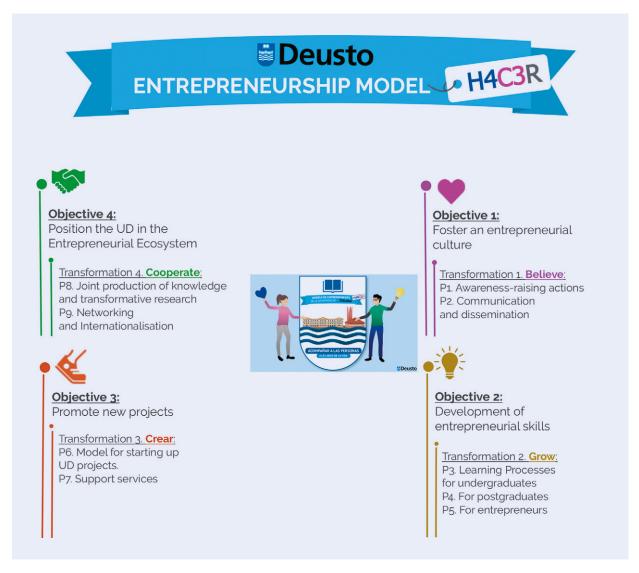
#### Responsibility

Deusto is a university that contributes to building society. The **University's Social Responsibility (USR)** was one of the strategic projects of the Deusto Plan 2018, Deusto: Service and Commitment. Under this plan, the University of Deusto strengthened its **service to society** by working more closely with different actors, promoting a critical awareness of reality, participating in social processes and modifying its own forms of organisation.

In the field of education, the mission of Jesuit universities is aimed at the education of conscious, competent, compassionate and committed people. This commitment becomes closely related to the education of the inescapable intersubjective and social dimension of responsibility. A sense of responsibility that is 'learnt' only when its deepest meaning is embodied in specific circumstances and meaningful contexts, that is, when it takes place through real-life experiences. Hence, both curricular and extracurricular activities are designed in order to highlight elements or dimensions that invoke specific aspects of responsibility among students. Developing this ability to feel and think requires narrative imagination, among other things (de la Cruz, 2016).

The University of Deusto thus takes specific steps to renew its mission of service to society, promoting **responsible and committed citizenship**, based on a deep awareness of social problems and of its ability to transform reality. 'Educating citizens committed to justice involves helping people to realise that a university degree, in addition to providing professional enhancement, entails taking social responsibility in one's performance at work and in personal life. Through education one acquires new duties as a citizen' (Secretariado para la Justicia Social y la Ecología de la Compañía de Jesús, 2014).

Values are translated into facts, in H4 C3 R .



Source: Developed by the authors.

Figure 7. Deploying the Deusto Entrepreneurship Model.

## 5.6 Projects by Strategic Transformation



Source: Developed by the authors.

Figure 8. Deployment of services and products provided (comprehensive support).

## Transformation 1. BELIEVE in entrepreneurship

#### Deusto Emprende Week (Semana Deusto Emprende)

Deusto Emprende Week is part of the Global Entrepreneurship Week at the University. Every November a series of events are held for one week simultaneously in different parts of the world with the aim of disseminating, raising awareness about and attracting people to entrepreneurship, while bringing people from very different disciplines closer together. Various entertaining, participative activities are carried out throughout the week, which have been proposed and developed by a team of students, teachers and external collaborators from the Deusto University community.

#### • Employment and Entrepreneurship Forum (Foro de Empleo y Emprendimiento)

At this annual event, Deusto alumni, together with *Deusto Emprende*, promotes direct meetings between compa-

nies and both final-year students and graduates who are looking for their first job opportunity, either as employees or on a self-employed basis. Every year companies, social and public organisations attend the event, which clearly shows that there continues to be a need for new talent, not only to attract a refreshing inflow of innovative contributions to the labour market, but also to find people who are willing to open new markets and businesses both within and outside the country.

#### • Deusto Emprende Dialogues (Deusto Emprende Diálogos)

Deusto Emprende Dialogues is an initiative to promote discussion, share points of view and talk about current issues, innovation and entrepreneurship. It encourages participants to share knowledge on a monthly basis in the form of a conversation, debate, round table, etc. on topics that concern innovation, creativity and entrepreneurship. Entrepreneurs from our spaces for the creation of entrepreneurial projects (DeustoKabi and Innogune), independent professionals and people working in large corporations, participate and share experiences and opinions that drive the growth of our entire entrepreneurial ecosystem.

## Transformation 2. Grow as a person

#### • Creaction!

This is a unique opportunity for students to have initial contact with how to develop their entrepreneurial spirit, supported by key agents who can facilitate a real space for a person's development. It is aimed at students in the first years of all degree courses from the two campuses of the University of Deusto (Bilbao and San Sebastian) and the Deusto-Egibide headquarters, promoted by *Santander Universidades*. Participants work in interdisciplinary teams (made up of people from all the university's degree courses) to develop the attitudes of the entrepreneurial person. This provides a space to create connections between the members of a very diverse group, who are eager to learn and generate changes in their environment. *Creaction!* seeks to promote identification and action steps to generate projects for change and transformation.

#### DeustoSTART I

This is a programme aimed at students in their final years of all degree courses from the three campuses of the University of Deusto. Promoted by *Santander Universidades* and the Basque Government, it aims to develop entrepreneurship and innovation skills among students. *DeustoS-TART I* is designed to make these skills more available to participants, foster their entrepreneurial intention and self-efficiency and reinforce their university education.

*DeustoSTART II* is a programme for those who want to take a further step and develop an entrepreneurial idea.

#### • DeustoSTART II

This is a programme aimed at people who have a business idea and would like to work on it. Promoted by Santander Universities and the Basque Government, it seeks to inspire, support and train people who want to engage in entrepreneurial initiatives. The DeustoSTART II training consists of weekly workshops and inspirational sessions.

This provides an excellent opportunity to start a business under the guidance of professionals who will lead and facilitate the process for the participants.

#### • Youth Entrepreneurship Programme (Programa Emprendimiento Juvenil)

This is a programme aimed at people who have a business idea and are in their final year of undergraduate, postgraduate or doctoral studies at the University of Deusto or have graduated in the previous three academic years. Promoted by the Basque Government, the Youth Entrepreneurship Programme supports the early stages of new business initiatives by providing funding for each project.

In addition to funding, the Programme includes face-toface training and individual sessions focused on advising and supporting those selected to follow the programme.

#### • Practicum Deusto Emprende (Deusto Emprende Work Placement Programme)

The *Practicum Deusto Emprende* Programme promotes work placements among undergraduate students in startups. This is an initiative supported and funded by *Santander Universidades* in partnership with *Deusto Emprende* and all the faculties of the University of Deusto. It embodies the commitment that these two institutions have to education, employability and entrepreneurship as essential factors for the development of society. The Programme drives both university entrepreneurship and the employability of students within the entrepreneurial ecosystem.

## • Dual Master's Degree in Entrepreneurship in Action (Máster Dual en Emprendimiento en Acción)

The Dual Master's Degree in Entrepreneurship in Action is a specialist degree awarded by the University of Deusto that aims to train entrepreneurs and innovators who are agile in complex environments and capable of designing new sustainable business development strategies in a globalised, ever-changing world in the new era of digital transformation.

This Programme promotes working in multidisciplinary teams, experiential training ('learning by doing') and learning methodologies such as *Design Thinking*, *Lean Start-up* and *User Experience* in order to develop innovative projects and provide new strategic solutions to real challenges, as well as an individual project of entrepreneurship or intra-entrepreneurship in an organisation.

## Transformation 3. CREATE projects

#### DeustoKabi / Innogune

DeustoKabi (Bilbao) and Innogune (Donostia/San Sebastian) are the two incubators of the Innovation and Entrepreneurship Unit that support people who want to start a business project. DeustoKabi and Innogune are currently undertaking 31 initiatives in multiple fields, aimed at all types of public.

Multiple services that facilitate the initial stages of the projects that emerge from these incubators include spac-

es, support, advice, training, a contact network, participation in activities and events, among others.

#### Crecer+

**Crecer+** is a particularly remarkable initiative aimed at using a network of investors to provide financing for entrepreneurial projects.

*Crecer*+ has more than 40 private investors. It is the only open network of generalist investors in the Basque Country which works with entrepreneurs both locally and in other regions.

*Crecer*+ brings together corporate investors, individual investors, family offices and investment groups from the Basque Country as part of a global network.

The objectives of the Crecer+ network are:

- · Identifying and devising investment-ready projects
- Closing funding rounds among members of its network
- Co-investing with international investors following an investment forum held in London
- Training on general and specific investment topics
- Creating a space accessible to entrepreneurs that they can identify as a source of funding, guidance, contacts, etc.
- Crecer+ is a member of AEBAN (Spanish networks) and EBAN (European networks).

*Crecer+* has a programme of work with each company that participates in its forums in order to prepare them to develop an investment-oriented mindset. In addition, *Crecer+* works with investors and entrepreneurs, and participates in meetings after the forums to facilitate approaches, negotiation and closing of financing.

The network has brokered more than 13 projects, with 3.5 million euros worth of investment.

## Transformation 4. COOPERATION between actors

Within the framework of cooperation, *Deusto Emprende*, the Innovation and Entrepreneurship Unit, engages in different joint initiatives, research and partnerships jointly with agents of the entrepreneurial ecosystem. This networking philosophy means that *Deusto Emprende* continues to grow and to ensure that innovation and entrepreneurship are promoted both inside and outside the university environment.

 We cooperate internally with all the faculties of the University of Deusto to carry out activities to raise awareness of innovation and entrepreneurship.

- We actively participate in various Masters and Postgraduate programmes: the Executive Master's Degree on Business Administration (EMBA) of the Deusto Business School, leading the entrepreneurship programme, as well as in other Master's programmes in the engineering faculty (Industrial Design, among others).
- At the regional level, we cooperate with the different agents of the Basque innovation and entrepreneurship ecosystem.
- BVenture: B-Venture is an event led by El Correo in partnership with the University of Deusto, Deusto Emprende. It is an event that involves conferences and workshops and also fosters meetings between entrepreneurs and investors in order to find different financing opportunities. Every year, around 25 startups are usually selected for special support and meetings are arranged between them and different investors or Business Angels. In addition, Deusto Emprende provides them with training over three weekends, totalling 35 hours. In 2020, both the event and the training sessions were held in a hybrid format due to the challenges of COVID-19. The training sessions have provided an opportunity for participants to gain knowledge about legal, financial and marketing aspects from experts in the field. They have also helped entrepreneurs to find out more about their own projects and which point they are at.

Some of the selected projects were part of the *Deus-toKabi* incubator, also located at the University of Deusto, on the Bilbao campus.

- Álava Emprende: we participate in various events organised by Álava Emprende, such as the Ekin Breakfast and the Entrepreneurship Moonshots, with the aim of promoting entrepreneurial and innovative culture in the region.
- Cita Emprende: an annual event in which start-ups that have achieved excellence in their respective fields, particularly those which stand out for their performance in digitalisation, present their vision and the aspects that are key to their success to a forum made up of executives from SMEs and other start-ups.
- Sarekin Network: this consists of the agents of the entrepreneurship ecosystem of Bizkaia. The aim of the Network is to place entrepreneurs at the centre of processes. This includes providing them with systematic, structured information about the resources and support available in Bizkaia for the development of new business projects, the search for financing, and support for the creation, setting up and consolidation of businesses. Special attention is paid to the promotion of the entrepreneurial culture.

- Deusto-Bizkaia Global Entrepreneurship Network (*Red de Emprendimiento Global Deusto-Bizkaia*): the University of Deusto and the Provincial Council of Bizkaia are responsible for designing, setting up and implementing the Deusto-Bizkaia Global Entrepreneurship Network for three years. This involves the participation of the network of universities that the Society of Jesus has around the world, starting with the Jesuit universities of AUSJAL, the Association of Universities Entrusted to the Society of Jesus in Latin America, made up of 30 universities.
- We cooperate with international institutions and are part of European and global networks under different international transformative research projects (Erasmus + and Horizon 2020).
- European Data Incubator (EDI). This is a European H2020 project consisting of an incubation programme for start-ups and Big Data SMEs in Europe. It enables start-ups to work with different Big Data companies by solving their business and social challenges. The start-ups receive services such as mentoring, spaces, workshops and up to €100K worth of funding without affecting the capital of the company. All services provided are intended to provide a solution to a Big Data challenge formulated by the company and the solution to the challenge is presented at the end to a panel of professionals who act as a jury.
- SIKE (Social Innovation through Knowledge Exchange). It is an Erasmus + project that involves 5

European regions (United Kingdom, Germany, Portugal, Croatia and Basque Country). It aims to promote innovation and social entrepreneurship at local and international level.

– REACH (Next generation data incubator). The REACH programme seeks to promote and be an incubator for multi-stakeholder data value chains (DVC). DVC is a data-driven (data-based) stakeholder business model whereby secure exchange of data takes place between parties, whether individuals or organisations, in order to create value for stakeholders.

REACH will redefine the former European Data Incubator (EDI) by addressing challenges in exchanges and re-use of data about various stakeholders in data value chains.

The main objective of REACH is to activate a cross-sectoral, multi-stakeholder incubator for data-driven solutions.

– WHY (climbing the causality ladder to understand the energy demand on the residential sector). This European project aims to improve the quality of energy system models (ESM). It also seeks to improve the operation and planning of the Energy System, focusing on energy efficiency, distributed generation, demand response and electrification of services.

Led by *DeustoTech*, *Deusto Emprende* facilitates a series of workshops throughout the project to generate new energy models.

# **6.** Conclusions



The **Deusto Model of Entrepreneurship** is a strategic commitment made by the University of Deusto in alignment with its mission, vision and values. Within this model, **the UD becomes a transformative agent** in our ecosystem by **cooperating in and** facilitating the **personal and professional growth** of people.

Having **analysed the relevant context and the origin for the need** to promote innovation and entrepreneurship, we started to **design a model** in order to clearly define the **vision** of where we want to go and how we are going to do it.

The University of Deusto **Master Plan 2022** served as a starting point. It established Developing **our own holis-tic, all-encompassing model for University-Business** relationships' as a major axis with Line 9 of action specifically stating 'Furthering the Deusto Entrepreneurship Model and **incorporating a culture of innovation, entrepreneurship and intrapreneurship** into all stages of the training process'.

Therefore, this Model is not only limited to the academic environment; rather, the aim is **to put it into practice through specific actions to generate measurable impact**. Within the model, **entrepreneurship is understood as an attitude** towards challenges that pushes us to create new solutions and solve the challenges we face, taking into account not only our context, but also other actors in our surrounding environment.

Needless to say, this is a model **based on values**. At the University of Deusto we seek to ensure that everyone in our university community has entrepreneurial and innovative skills, not only for their future employability, but also for the **future of our society**. Faced with an increasingly volatile and uncertain context, **entrepreneurial and innovative people will be the agents of change** needed to face new challenges that constantly arise.

We can say that Deusto is on its way to becoming a leading university in innovation and entrepreneurship. We are facing a **challenge of change towards a more open and innovative culture**, and as in any change process, we will **have to face internal** resistance arising from fear of the unknown and of losing the *status quo*.

In the same way that **companies are** constantly **pushed to innovate**, adapting to change, **universities cannot forget that they must do the same**, as we are **responsible for training the professionals of the future**, supporting them in the **development of transversal competences** which will be essential in their future professional endeavours.

### References

ABC. (2018, Enero 31). Del «blockchain» a la inteligencia artificial: las tendencias tecnológicas de 2018. Retrieved from https://www.abc.es/tecnologia/abci-blockchain-inteligencia-artificial-tendencias-tecnologicas-2018-2018 01302130\_noticia.html

Bouty, I. 'Interpersonal and interactional influences on informal resource exchanges between R&D researchers across organizational borders', Academy of Management Journal, 43, 2000, p. 50-65.

Chesbrough, H. Open Innovation: Renewing Growth from Industrisal R&D, 10th Annual Innovation Convergence, Minneapolis Sept 27, 2004.

de la Cruz Ayuso, C. (2016). Universidades jesuitas y responsabilidad social: una propuesta basada en la justicia solidaria. Arbor, 192 (782): a363. doi: http://dx.doi. org/10.3989/arbor.2016.782n6008

Fernández-Poncela, A. M. (2012). Riéndose aprende la gente. Humor, salud y enseñanza aprendizaje. Revista lberoamericana de Educación Superior (RIES). México. UNAM-IISUE/Universia, vol. III, núm. 8.

Fundación de la Innovación Bankinter. (2010). *El arte de innovar y emprender*.

García-Larrauri, B., Manzano, M. E., Muñoz, M. I., Hernández, M. y Cuetos, A. (2010). Claves para aprender en un ambiente positivo y divertido. Todo rueda mejor si se engrasa con humor. Madrid: Pirámide.

Gobierno Vasco. (2017). *Plan Interinstitucional de Emprendimiento de Euskadi-PIE 2020*. Bilbao: Gobierno Vasco.

Gómez Gómez, E., & Castañeda Iturbide, A. (1999). La pedagogía ignaciana. Una propuesta. Repositorio Institucional del ITESO , 3.

Granovetter, M. The strength of weak ties, American Journal of Sociology, 78, 1973, p. 1360-1380.

Ildefonso Camacho, S. (3 de Noviembre de 2017). Preocupaciones del P. General sobre las universidades jesuitas. Recuperado de Diario de la Universidad Loyola Andalucía: http://www.loyolaandnews.es/universidades-jesuitas/

Jones, G.R. y George, J.M. The experience and evolution of trust: Implications for cooperation and teamwork, Academy of Management Review, 23, 1998, p. 531-546.

Koellinger, P. (2008): 'Why are some entrepreneurs more innovative than others?' Small Business Economics, 31, 21-37.

Larrea, J. L. (2016). La innovación como factor clave de competitividad: el caso del País. Vasco. Una aproximación desde la experiencia vital. San Sebastián: Orkestra: Instituto Vasco de Competitividad.

López, M. d., Mejía, J. C., & Schmal, R. (2006). Un Acercamiento al Concepto de la Transferencia de Panorama Socioeconómico, N° 32, 70-81.

Montes Matte, F. (s.f.). La Universidad Jesuita como nuevo Proyecto Humanista. Repositorio Universidad Pontificia Comillas, 9.

Orozco Hernández, J. L. (12 de Marzo de 2015). El pensamiento ignaciano en las universidades jesuitas. Entrevista al P. Provincial Juan Luis Orozco Hernández. (J. A. Abascal Andrade, Entrevistador)

Perrone, Nicolás Hernán (2009). El mundo planetario y los admirables atributos de Dios. Curiosidad, ciencia y Fe en el Viaje Estático de Hervás y Panduro. XII Jornadas Interescuelas/Departamentos de Historia. Departamento de Historia, Facultad de Humanidades y Centro Regional Universitario Bariloche. Universidad Nacional del Comahue,

Plaza López, J. Á. (2018, Marzo 1). *Retina El País*. De La transformación digital no se logra con tecnología, sino con personas. Recuperado de: https://retina.elpais.com/retina/2018/02/28/tendencias/1519831046\_462170. html

Priesca, P. (2016, Enero). *Fundación TIC*. De Innovación como consecuencia de la transformación digital. Recuperado de: https://www.fundacionctic.org/ctic/articu-los-y-otraspublicaciones/innovacion-como-consecuen-cia-de-la-transformacion-digital

Romero Frias, E. (2017). Andalabs: conectando la innovación ciudadana en Andalucía. Universidad de Granada. doi: https://doi.org/10.33349/revistaph.v0i0.3969

San Carlos de Bariloche.Silva, J. (2004). Cuantificando formalmente los coeficientes de innovación de las empresas. Valencia: Universidad Politécnica de Valencia.

Silva, J. (2004). Cuantificando formalmente los coeficientes de innovación de las empresas. Valencia: Universidad Politécnica de Valencia.

Solidaria, U. J. (2016). Universidades jesuitas y responsabilidad social: una propuesta basada en la justicia solidaria. Arbor, 192.

Timmons, J. A. (2000). New venture creation: Entrepreneurship for the 21st Century. Boston: Irwin-McGraw-Hill

Tsai, W. Y Ghoshal, S. Social capital and value creation: the role of intrafirm networks, Academy of Management Journal, 41, 1998, p. 464-478.

Universidad de Deusto (2019). Deusto 2022. Transforming our world together.

DeustoDual DeustoEmprende DeustoAlumni