**Telefónica**

# Digital education

TRANSFORMATION HANDBOOK

2022

# Transformation is in
# our DNA

The public health and economic crisis triggered by COVID-19 has focused our minds on the need for **a swifter economic and social transformation** – the only way we can count on a full recovery and get back on track for growth.

We believe that **digitalisation is key** to making this transformation possible. Technologies such as 5G, cloud storage, cybersecurity, AI, big data and IoT will be game-changing — as demonstrated by our extensive catalogue of solutions, applications and use cases. Our capacities and experience make us the perfect partner for businesses and local authorities as they take on the digital challenge.

We stand for a **fair, inclusive and sustainable digital transformation**. Our mission is to harness technology for people and planet, lightening the environmental load and offering our clients solutions that get them working more efficiently and sustainably.

# Digital education:
## critical for economic and social transformation

Providing employees with IT training and digitalisation helps both employees and companies to evolve, grow and adapt to today's changing world.

Hybrid classrooms and collaborative tools create a ubiquitous learning experience, facilitating a move towards a more equal and inclusive form of education.

Universal connectivity in classrooms enables access to digital resources and a hybrid method of learning. It also allowed learning to continue during lockdown.

# How we are
# revolutionising
## education

## DATA UNIVERSITY BBVA

### AI DRIVEN TRANSFORMATIONAL PLAN FOR EMPLOYEES

Design and launch of a transformational plan for technical and business employees in the eight nations where the bank operates. Offering seven different itineraries with a level test to verify existing skills and suitability to the programme. Project KPI monitoring.



## UNIVERSITAT JAUME I

### BOOSTING COMMUNICATION AND COLLABORATION INSIDE AND OUTSIDE THE CLASSROOM

This is a collaboration and videoconferencing solution integrated within the university's digital ecosystem, based on Google services.



## NEBRIJA UNIVERSITY

### HYBRID CLASSROOMS TO DRIVE TRANSFORMATION

Classroom project that combines face-to-face and remote environments. Based on redefining the classroom, the use of new devices, collaborative tools and digital content, with a strong focus on cybersecurity.

# How we are
# revolutionising
## education

## MIGUEL HERNÁNDEZ UNIVERSITY

### BOOSTING COMMUNICATION AND COLLABORATION INSIDE AND OUTSIDE THE CLASSROOM

Implementation of Google collaboration tools at Miguel Hernández University, which have made it possible to guarantee academic continuity for all students regardless of their format, whether face-to-face, online or hybrid.

## IE UNIVERSITY

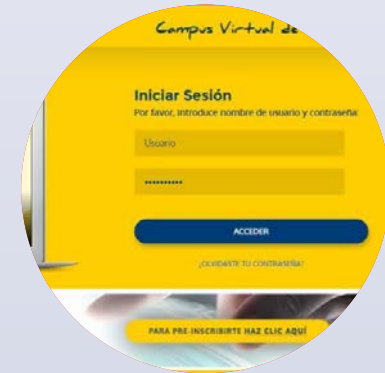### 5G AND VIRTUAL REALITY APPLIED TO EDUCATIONAL INNOVATION

This project combines VR technology with edge rendering and 5G connectivity, to give students remote access to an interactive multi-user virtual classroom. Students can use a low-cost VR device to access IE University seminars on its Segovia campus building, which is of significant architectural interest.

## CORREOS

### HIGH AVAILABILITY TRAINING PLATFORM

This training platform is based on eLearning and is fully adapted to its client's needs and the constant shift in e-learning models.

Marco Antonio Bonilla | **BBVA**
**Executive Director Advanced Analytics**

*"The most amazing thing about working with Telefónica Tech (formerly LUCA) is that they are so much more than a partner, they are part of our team. They are 100% committed to our goals and we have created a continuous improvement process so that we can review and improve our programmes every three months. They certainly have a great team, from project management to teachers, with metrics that help us to measure and improve the success of the project."*

Francesc Esteve | **Universitat Jaume I**
**Chancellor's Commissioner for Digital Transformation**

*"The Google for Education Enterprise environment has been key to the continuity of teaching and learning processes throughout lockdown."*

Miguel Larrañaga Zulueta | **Instituto Empresa**
**IE University Vice-Rector for Student Affairs and Professor**

*"The possibilities offered by Telefónica's education technology are immense. In the future, the learning environment that can be developed with 5G will offer students and teachers some incredible immersive experiences, which will absolutely revolutionise teaching processes. In fact, we have already started working on this at IE University, but their development in the short and medium term will definitely be a turning point for the educational world, on every level."*

## TESTIMONIALS

What our clients say...

Federico Botella Beviá | **Miguel Hernández University**
**Vice-Chancellor for Information Technologies**

*"The UMH has teamed up with Telefónica to launch its learning platform on Google Cloud, with the aim of generating open-access audiovisual resources, available to access from anywhere around the world."*

Cristina Villalonga Gómez | **Nebrija University**
**Director of Nebrija Global Campus**

*"For Nebrija University, hybrid face-to-face teaching is part of our commitment to embrace a model based on educational innovation. We have not only transformed our learning spaces and environments, but we have also worked on redefining our methods, promoting new educational experiences and creating a programme to improve people's digital skills."*

Tomás Manso Mayoral | **Correos**
***Chief Learning Officer***

*"Correos is currently in a transition phase and we needed a strategic digital training partner, with the right integrity and customer focus, and Telefónica provided that. They share our goals and challenges as a member of our team, they know our culture and help us to take it further, they provide us with the latest trends to make the digital learning experience more effective and more impactful, helping our professionals to develop new skills that will allow us to face the challenges of the future."*

# Data University BBVA

**BIG DATA**  **AI**  **VISUALIZATION TOOLS**  **SQL**

Global partners of the project since 2018. The Data University started out with a pilot course in June 2018, with two training programmes. Over the course of more than three years, we have now equipped more than 2,000 people in seven different countries and three different organisational roles, with new data analytics skills using our five training programmes. Our current average NPS is 65, which is an improvement of 20 points since we started.

## CANDIDATE ASSESSMENT

A process for assessing entry requirements for technical programmes, to check whether an employee is suited to a particular course and to ensure that the group is at the same level. Automated process design.

## PROGRAMME DESIGN AND DELIVERY

Design of different itineraries (syllabus, methodologies, exercises...) on an ad hoc basis, to suit the client's needs. Training sessions with our own team of trainers in different locations, in a physical or virtual classroom. Primarily practical methodology, aligned with the client's technology.
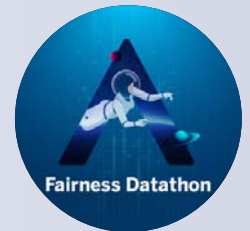
## SUPPORT AND GAMIFICATION

Post-programme coaching plans where each student is assigned a use case, then works with a mentor to transfer what they have learnt into their own workplace. Datathons and challenges as a competition to promote data culture.

## CONTINUAL MONITORING

Dashboard de KPI en el que seguimos la evolución de los principales indicadores y el detalle de desempeño de cada curso, con especial hincapié en la satisfacción del empleado.



**Fairness Datathon**

# Universitat Jaume I:
## boosting communication and collaboration inside and outside the classroom

**CLOUD**

Technology is a transformative feature that will help us advance towards a more equal and inclusive form of education. Telefónica is helping educational centres in the digital transition, offering cloud solutions that help boost collaboration and communication among students as well as between students and teachers.

Google's collaborative work and videoconferencing tools have enabled us to design active learning experiences, which are ideal for teaching the key skills required in the 21st century. These tools also integrate with the university's own digital ecosystem, improving communication and productivity, and ensuring the identity and privacy of the university community.

## TECH SOLUTION

A set of digital tools for teachers and students at the Universitat Jaume I that allows them to work online or offline, at any time and on any device. It also allows virtual connection through video calls and messages, so that they can communicate outside university.

## BENEFITS

- Increased teacher productivity thanks to the removal of manual management, enabling them to use their time more efficiently.
- A crucial solution to ensure students can continue to learn during lockdown.
- Guarantees the workloads, identity and privacy of the entire educational community.

# Nebrija University:
## hybrid classrooms to drive educational transformation

**CLOUD**   **WiFi**

We are helping Nebrija University in its digital transformation towards a model that ensures a more accessible, personalised and secure form of education. We have launched an innovative hybrid classroom project, which combines face-to-face and remote environments. However, the process of digitalising a school goes way beyond the classrooms. Another major challenge has been digitalising content to make it more accessible to students, allowing them to study in depth at any time. In order to achieve fully digitalised classrooms, we had to redefine the whole concept of the classroom, as well as bringing in new devices, collaborative tools and digital content, along with cybersecurity. The success of the project depended on involving the entire educational community, resulting in the university winning two top-level awards: the Blackboard Catalyst Awards, in the Leading Change category, and the Magisterio Award for the Education Leaders 2021.

## TECH SOLUTION

Our solution makes classrooms much more than just a physical space. New hybrid classrooms and digitalisation make learning faster and more accessible. They also allow remote students to be present in the hybrid classroom, via monitors located in different areas of the room.

## BENEFITS

- Hybrid classrooms facilitate active online participation, via video and voice or chat, for all learners in both face-to-face and remote settings.
- This is a comprehensive experience that provides these services end-to-end.
- In order to ensure activities run smoothly at the university, there is a support service that assists students and teaching staff at all times.
- The project has resulted in 4,500 direct beneficiaries, more than 120 transformed spaces and more than 400 hours of learning for teachers and students.

# Miguel Hernández University:
## transforming collaboration spaces

**CLOUD**

At Telefónica, we are promoting digitalisation in universities and are helping them in their transformation, so that they can make the most of cloud solutions and adapt the way they teach to the new digital reality. At the same time, it is important to manage this new digital ecosystem in a simple and efficient way, establishing virtual learning dynamics, strengthening the role of teachers and deciding which new tools should be provided to both students and teachers in order to achieve this goal.

The implementation of Google collaboration tools at Miguel Hernández University, have made it possible to guarantee academic continuity for all students regardless of their model, whether 100% in-person, online or hybrid.

## TECH SOLUTION

A set of digital tools for teachers and students at Miguel Hernández University that allows them to work online or offline, at any time and on any device. It also allows virtual connection through video calls and messages, so that they can communicate outside university.

## BENEFITS

- Flexible, easy, safe and scalable environment.
- A crucial solution to ensure students can continue to learn during lockdown.
- Guarantees the workloads, identity and privacy of the entire educational community.

## FURTHER INFORMATION

**Website:** Miguel Hernández University.

# IE University:
## 5G and virtual reality applied to educational innovation
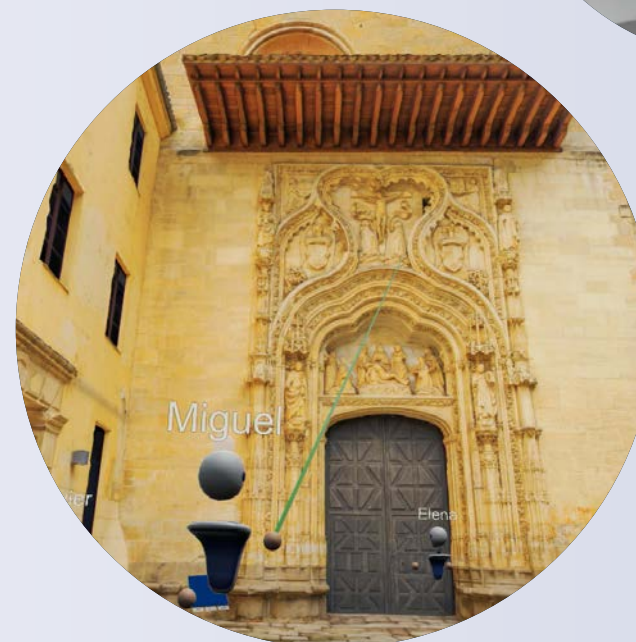
**5G**   **EDGE COMPUTING**   **VR**



5G technology provides the required capabilities for mass mobile access to eLearning platforms, making educational resources accessible to both students and trainers, wherever and whenever they need them. It also provides the basis for introducing innovative technologies such as mixed and virtual reality to the field of education, creating new experiences that will fuel the current paradigm shift taking place in education. In this use case, thanks to VR technology with edge rendering, we have developed an application that uses 5G connectivity to enable access to an interactive multi-user virtual classroom, where IE University can give online seminars on its Segovia campus building, which is of significant architectural interest. VR has enabled the creation of innovative teaching resources, such as the generation of hyper-realistic 3D spaces that recreate the main entrance, the cloister and the chapter house of the subject building, where students and teachers can move around freely during the seminar.

## TECH SOLUTION

Edge computing and 5G provide the low latency and computer capacity needed for VR rendering to take place entirely over the network, removing the need for VR headsets from this processing requirement. This means students can use their own mobile phone with a 5G connection and a much more affordable cardboard VR headset.

## BENEFITS

This is a new tool for teachers that allows immersive learning, boosting academic performance and enhancing interactions with students, overcoming the distance between them. It makes education more accessible from low-end VR devices, combined with the student's 5G mobile phone, without compromising on the quality of the experience.

## FURTHER INFORMATION

**Video:** Applying 5G and edge computing to education.

# State Post Office
## (Sociedad Estatal Correos y Telégrafos)

**CLOUD**  **LMS**

For the last 18 years, Telefónica Educación Digital has worked as a partner to offer our skills to this leading logistics company in Spain, as it undergoes a process of transformation, training its professionals in new digital skills for its new businesses. During this time, we have implemented a continuously evolving eLearning training environment, which is fully adapted to both its client's needs and ever evolving online learning models. The spirit of constant innovation applied to this project has allowed the training platform to evolve in terms of functionality and infrastructure, and in the last year it has served more than 150,000 participants, who have taken an average of more than five courses. Equally, the services provided by the Learning Office to support the client's administration team, the Student Service Centre, the design of internal communication campaigns and the promotion of training events and certification of content, have all enhanced the experience of students and tutors, achieving a high level of engagement and a high rating of the eLearning training service.

## TECH SOLUTION

High-availability Learning Management System in SaaS mode, with the capacity to service high training volumes at specific times and with a low response latency.

## BENEFITS

- Digitalisation of the training process.
- Automation and robotisation.
- Speeds up the training process.
- Elimination of distance as a barrier: accessible from any device, such as PC or delivery staff PDA.
- Boosts interaction between tutors and pupils.
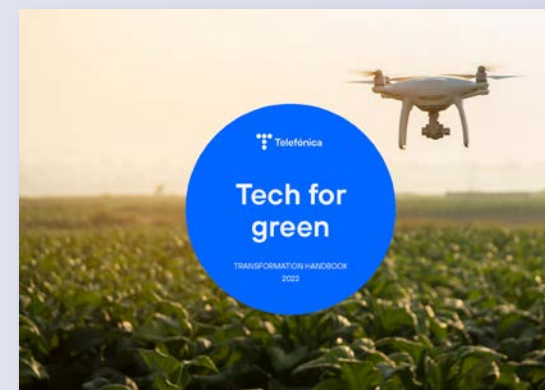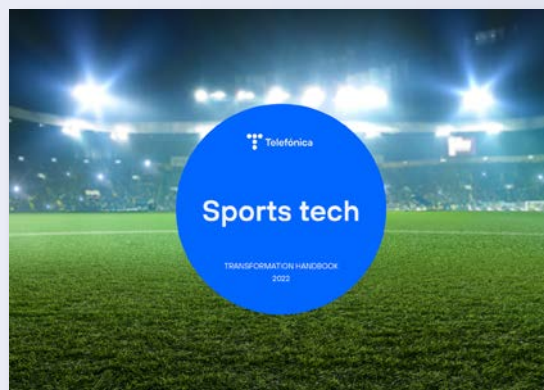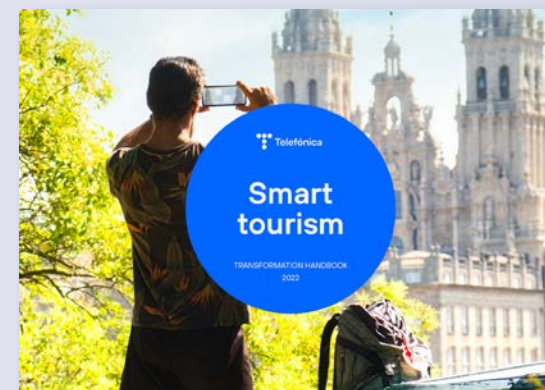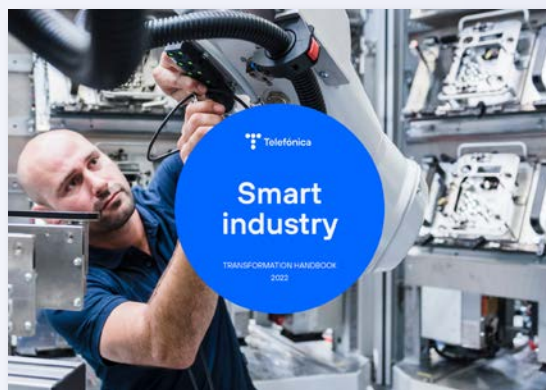
# Other cases from the sector

The digitalisation of schools with equipment, hybrid classrooms and collaborative tools, helps to boost the education sector, elevating it to new heights.

## WPP
## CAMPUS DIGITAL



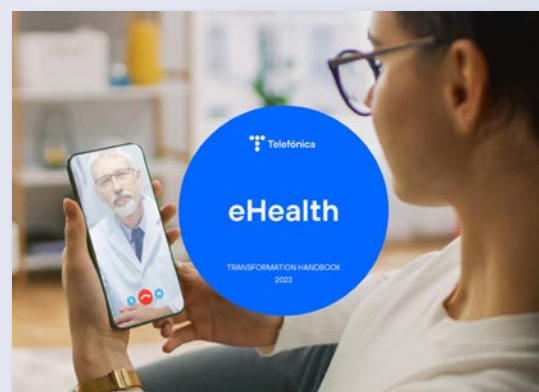WPP Spain's new offices have accelerated the process of transformation started in 2019. With help from Telefónica and our technology, they have come a long way with their audiovisual solution and multimedia environment. The whole project is of the highest quality and keeps sustainability at its heart. This is demonstrated by its Breeam certification with the seal of excellence, which Telefónica's work also contributed to achieving.

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