Library & Technology

IE Library as a tool in the digital transformation of education's Reinvention and Research

IE Library belongs to IE University / IE Business School, where it helps to access and reinvent Higher Education. IE is a Spanish innovative education institution that makes an impact on education, offering a technology-based learning ecosystem, training the leaders of tomorrow to make positive change through innovation, global vision, an entrepreneurial mindset and a unique focus on the humanities.

Artificial Intelligence, Bots & Robots as library assistants for research

With the vision to unify Research and state-of-the-arts technologies, IE Library is currently involved in a project that includes humanoid robots, such as the famous robot Pepper. Starting with the guide Qubits, created by the Library to orientate researchers, this will serve as a base for the creation of a last generation Bot that will unites voice, text and holograms. This will feed the humanoid robot, which will end up behaving as a library assistant.

<u>First phase of the project, Qubits</u>: a value-added service that enables ease of access and use of specialized information contained in the electronic resources IE Library subscribes to, and offers a quality user-oriented service seeking to satisfy user needs and expectations. Bearing in mind IE Library 's objective of supporting teaching, learning and research towards academic excellence, qubits aims to provide answers to the most frequent information requests. Within its firm commitment to support research and knowledge generation, IE Library has collected specialized information in specific qubits areas to enable fast and easy information retrieval. IE Library supports IE community members to access the labor market through qubits' areas of Business & Co., Sectors, Finance, Law and Tax, Entrepreneurship and Family Business, and Careers.

The current trend is a multimedia world, we want not only to read information, we want to experience it, see it, hear it, touch it ... We have detected this need and it is what makes us move to the next phase of the project in which our guide becomes a last generation Bot.

<u>Second phase of the project, Bot</u>: We are working on the migration into the bot of all the information that our guide has, since this is the closer technology that covers the demand of our users. This technology aimed to answer simple questions, and we need to provide consistent answers to complex questions that a researcher may have, this is the biggest challenge we are currently facing.

This phase centered on the Bot, directly addresses the demand of IE Library users, offering simple voice access from a mobile device. It provides a solution to their needs of a fast and reliable answer in their hands, solutions here and now, quickly and easily, wherever they are, all around the world.

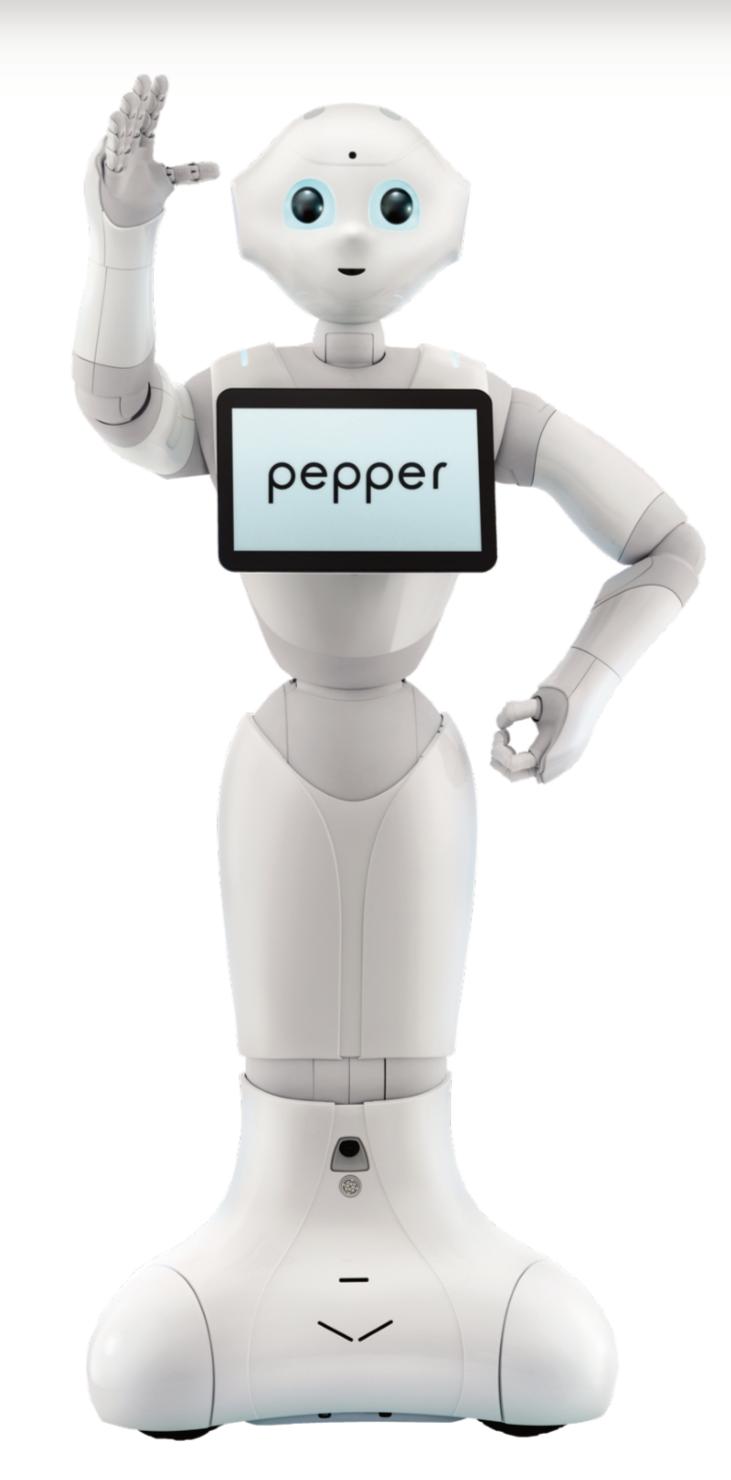
The final phase, a humanoid robot: Once the bot is settle, and working, we will move on to the final part of the project: artificial intelligence, which will consist of implanting it in a humanoid robot.

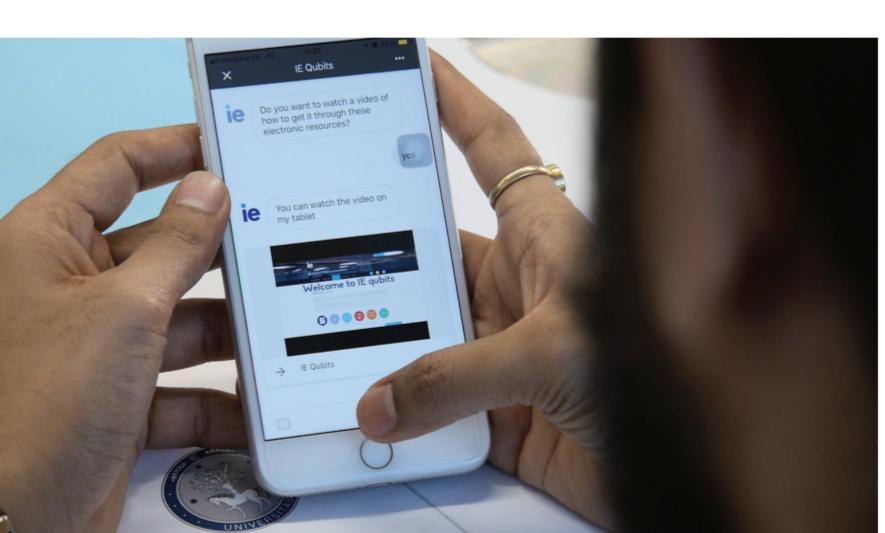
Pepper, the robot, works with voice and a touchable screen that provide results and facilitates access to information. Our goal is to find new ways to visualize and reach the data such as holograms and this kind of futuristic trends, which will be soon part of our lives.

This robot will be the "front row" for the first information demand. IE University / IE Business School, is a pioneer in maximizing the potential of technology applied to the learning experience, and this robot, being both effective and attractive to the user, responds perfectly to this institution leitmotiv.

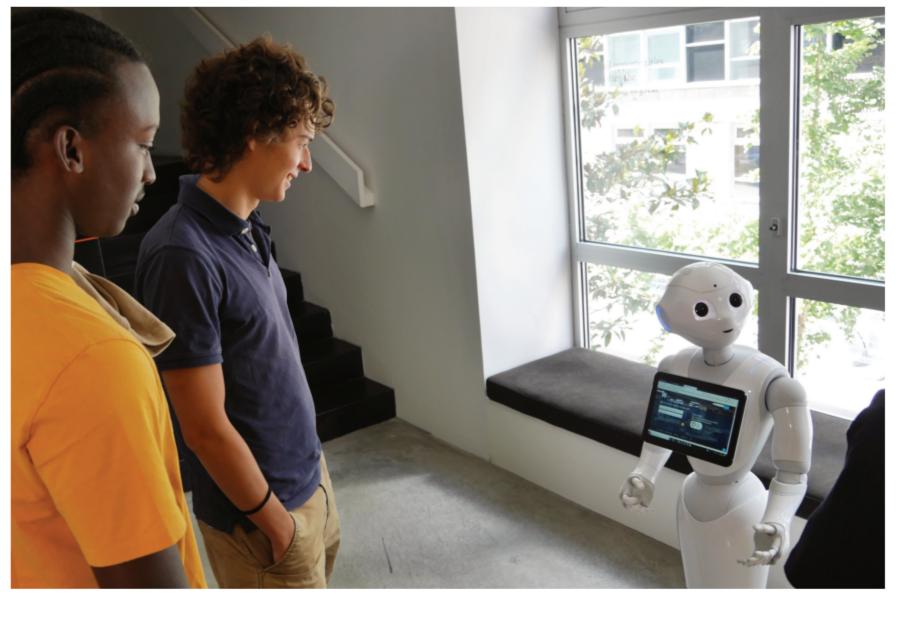
In addition to this, the robot will also free the librarian from certain tasks, allowing them to develop deeper research skills that can help the researcher in more complex situations.

This project also gives us a technological and cutting-edge solution for our future situation within our institution. In 2020 IE University will expand its campus to a skyscraper of almost 40 floors, and where the IE Vertical Library will encompasses every corner of the building. These peculiarities demand an extra help from the librarian, for what will resort to humanoids.







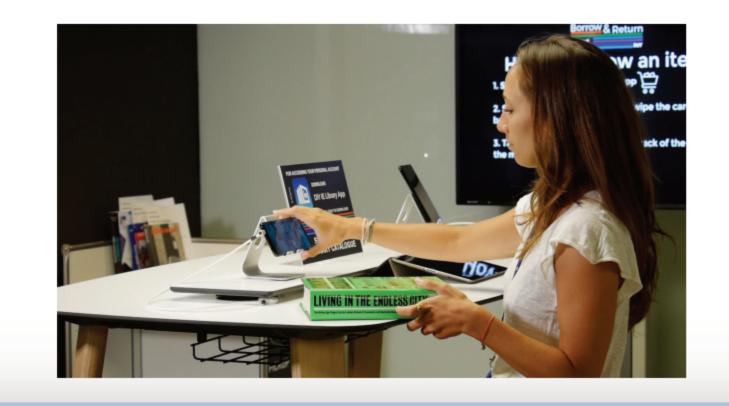


Diy IE Library APP

Along with the purpose of enhancing the access to the research with technology, IE Library has developed the concept of Vertical Library, where the physical space of the library expands beyond the traditional facilities. The library accompany users wherever they are, physical or technological spaces, from a building to different means of transport, the street, parks... on their mobile, in their own hand. Within this framework, we have created a unique APP through which the user can control its own circulation and more: the DiY IE Library APP. This app allows users to manage loans, holds and fines. They can borrow, renew and return items, make pending payments, access the full catalog and all the e-resources, and thus so making possible to read or to listen the full text of the documents wherever the user is...

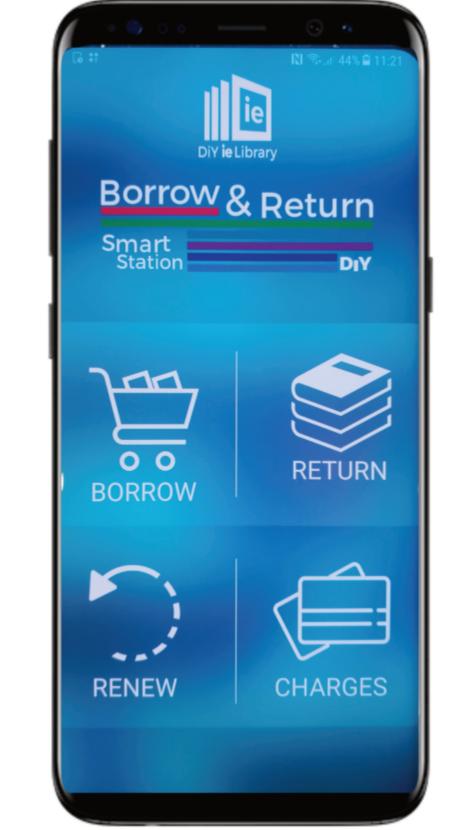
Take IE Library with them wherever they go, 24/7.

Facilities: <u>Smart Station</u>. The physical space of the library has changed with the incorporation of a specific area that hosts the Smart Station. A zone with a design table equipped with two last generation mobiles that have the app installed (to be used in case the user doesn't want to download it), iPads to check the catalog, and a couple of trolleys to return the books on loan, and the pick up the books on hold, plus a smart TV with instructions.









Virtual and Immersive reality, Camification

This commitment with technology leads the library towards the complexion of more projects that involves tech related to virtual reality.

Immersive Reality consists of the immersion in an artificial environment where the user feels just as immersed as they usually feel in consensus reality. It combines the real image with dynamic 3D elements to create scenes you can enjoy in 360 °, or you can move and continue to see different images. Immersive reality is virtual, in real time, live, and without devices. No helmets, cables, glasses or green screens are necessary.

Used for exhibitions and presentations, the immersive experience increases the ability to receive, understand and retain the message. The speaker can enter a digital environment and interact with 3D virtual elements, allowing both the speaker and the audience to be immerse in it.

Gamification: We have a corner for gamification in the library, IE Tag Beats, formed by a large touch screen TV, a Kinect and some foot prints on the floor in front of the screen. IE Tags Beat is an experience of sensory immersion, using gestural actions. This "game" allows access to the IE Schools electronic resources through the different types of documents, databases, e-books, electronic magazines, websites, newspapers and media, etc., mainly the ones most used by IE users.





