

Canal de Isabel II and its Foundation dedicate a workshop to artificial intelligence: a technology that is as promising as it is worrying

- Every day we create 2.5 exa bytes¹ of data, and 90% of the existing data in the world were created in the last two years
- Artificial intelligence is a technology that allows us to take advantage of that growing torrent of information, and it presents amazing opportunities, as well as similar risks

05JUN19 – Coinciding with the celebration of World Environment Day, Canal de Isabel II and Fundación Canal held the second edition of the Innovation Day, which brought together innovation, water and business experts, and on this occasion, revolved around artificial intelligence.

Over the last two years as much data has been generated worldwide as there are since the beginning of history, a vital fact that has led to the rise of AI. The volume of data being generated by devices of the *Internet of Things* is rapidly multiplying. Artificial intelligence (AI) and machine learning systems extract the generated information and analyse its contents.

AI creates machines capable of imitating, or even improving, the mental abilities of humans in terms of reasoning, comprehension, recognition and, potentially, creativity. All of this changes the rules of the game in various fields and sectors. Therefore, it is essential to understand and take advantage of this technology in order to guarantee advances towards better economic development and a fairer, more humane and prosperous society. AI is already present in numerous sectors in society. And in the water sector it has great potential to make infrastructure work with maximum technical and economic efficiency, to detect consumption patterns and to make predictions, among others.

The *Innovation Day*, led by actress and stand-up Virginia Riezu, was aimed at professionals from R&D+I, the water sector, the field of infrastructure, engineering, public administrations, and the general public.

¹ 2,500,000,000,000,000 bytes

Press release

Eva Tormo, managing director of Fundación Canal, kicked off the day emphasising the importance of World Environment Day and the positive impact Artificial Intelligence is having on environmental issues: "Today we have millions of data in order to combat and mitigate the effects of climate change". Furthermore, she highlighted the fundamental role of AI that is "very present in all industrial and professional sectors, as well as in the daily lives of all citizens".

Meanwhile, **Rafael Prieto**, executive vice-president of Canal de Isabel II, emphasised Canal's "supporting" role for the city of Madrid in matters of innovation: "Innovation has formed a part of Canal de Isabel II from its conception and it is a key piece within the company's Strategic Plan. From the beginning, Canal de Isabel II has been, and is, a large water company but also a large telecommunications company". Prieto concluded by reflecting upon the existence of AI, which "would not be possible without human intelligence and Canal de Isabel II stands out by having the best possible technical and human resources".

The day was divided into two sessions, morning and afternoon. **During the morning session, aimed at the professional sector**, the possibilities of AI, both in the water sector as well as in general, were discussed. For this, there were expert presentations from Canal Isabel II, Jaime Flores; as well as other nationally and internationally recognised entities with extensive experience in the application of AI in the water sector, such as: Jaime Castillo (Global Omnium) and Raúl Navas (BuntPlanet).

To focus on the potential of AI from a broader professional scope, Asunción Gómez, member of the Group of Wise Men on AI and Big Data of the State Secretariat for the Information Society and Digital Agenda, participated; and Álvaro Barbero, two-time finalist of the "Texata" Big Data Analytics worldwide competition.

During the afternoon session, aimed at the general public, the most important aspects of AI in our daily lives were highlighted. The session began with the showing of the RTVE documentary on artificial intelligence, "El cazador de cerebros - Inteligencia artificial", that addresses the benefits and threats of AI.

Subsequently, representatives from organisations such as QUIBUM and the Complutense University of Madrid reflected upon what we should know about the AI present in our daily lives. Following on from the documentary, they analysed what are the main positive and negative aspects derived from the current and future use of artificial intelligence. Some participants were: Andoni Alonso (Complutense University of Madrid), renowned philosopher specialising in technology; Angel Alberich (Quibim), founder of a start-up specialising in AI and medical diagnoses that's present in 14 countries; and Concha Monje, robotics researcher and senior lecturer at Carlos III University of Madrid.

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Canal de Isabel II was founded more than 165 years ago to supply water to the city of Madrid. It employs more than 2500 people working daily to provide a service to more than 6 million people in the region. It is an innovative company, a leader in its sector, and internationally recognised for its management of the integrated water cycle. It is a public company in the share capital of which the public entity Canal de Isabel II is represented with 82.4% of shares, the City Council of Madrid with 10% and another 110 Autonomous Community of Madrid city councils with 7.6%.

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