



## ABSTRACT

### **Project “Autonomous Stores: Sociotechnical Infrastructures, Imaginaries and Data Governance” is financed by FCT**

Lisbon, 07/May/2023 - The “Autonomous Stores” project ([www.autonomoustores.net](http://www.autonomoustores.net)), which aims to explore the sociocultural and technological transformations of so-called autonomous stores, i.e. without people and based on computer vision and AI, was funded by FCT - Foundation for Science and Technology under reference 2022.02730.PTDC.

#### **Project Abstract**

In 2018, the global giant Amazon opened the first “Just Walk Out” store in Seattle. The media depicted it then, as it still does now, as the shop of the future and the future of shopping (Wingfield 2018; Walton 2022). In 2021, Portugal’s largest retail chain opened ‘Continente Labs’, a self-described autonomous store. With their emphasis on automation and autonomy these stores seem aligned with longstanding imaginaries where information and connectivity are cherished as symbols of smartness, progress and innovation at the service of convenience and consumption.

Although depicted as ‘autonomous’, these stores are best understood as vast socio-material infrastructures comprising an assemblage of carefully configured spaces, materials, technologies (AI, machine learning, machine vision, internet of things, etc), people, and knowledges. Besides positing the same risks as other information and communication technologies (ICTs), such as data protection, security and privacy, these shops pose additional questions of infrastructural agency, power, artificial intelligence, continuous surveillance, tracking, and behavior experimentation and manipulation.

The core goal of this project is to examine how autonomous stores are discursively and materially constituted, maintained and used. We seek to examine the worlding practices (Haraway 2016) of these infrastructures to ask what worlds they produce, transform and reify, and with what implications. To do so we investigate two complementary issues:

(1) identifying and examining the sociotechnical imaginaries that animate, drive and justify the development and regulation of these sites; as well as the discourses, assumptions — about humans, technology and their desirable relationships — that materialize in their infrastructures;

(2) examining the situated material-semiotic assemblages and practices through which autonomous shops are implemented, maintained and used; as well as the underlying understandings of autonomy and agency. Here, we focus our analysis on 'Continente Labs' where we have already conducted an exploratory interview with the store manager.

The project is based on a combination of Science and Technology Studies (STS), Media Studies, ICT Studies, critical infrastructure studies, feminist technoscience and design.

Led by a multidisciplinary team, the project is an important contribution to our collective reflection on present and future urban and technological transformations.

**For more information, visit: [www.autonomoustores.net](http://www.autonomoustores.net)**

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