

# GASTROENTEROLOGY IN THE AGE OF ARTIFICIAL INTELLIGENCE: EVALUATION OF THE PERSPECTIVE OF DOCTORS AND MEDICAL STUDENTS ON THE ACCEPTANCE AND INTEGRATION INTO CLINICAL PRACTICE

Joaquim Nunes, **VÍTOR RAPOSO**, Pedro Ferreira



Políticas públicas para la salud:  
perspectivas desde la economía y la sanidad



**HELLO!**

*I am Victor Raposo*

I work at the Faculty of Economics,  
Coimbra University

I'm a researcher at CeBER and  
CEISUC/CIBB



**Joaquim Nunes**

FEUC/MSc Management and  
Health Economics  
CEO Olympus Medical Products Portugal



**Pedro Ferreira**

Full Professor, FEUC  
Director of CEISUC/CIBB



---

## OUTLINE

- Background
- Aim
- Methods
- Expected results
- Progress and next steps...



*It's an ongoing project...*

---

## BACKGROUND

---

- AI is a powerful and disruptive area with the potential to transform the practice of medicine
- The AI in gastroenterology is still at an early stage, mainly due to doctors' poor recognition of the advantages of computer-aided detection (CADe) and, consequently, the lack of claims for this technology as an indispensable auxiliary tool

## **Assess the knowledge and acceptance of AI as an aid to healthcare professionals**

- Gastroenterologists with different levels of experience (beginner, intermediate and specialist)
- Medical students as future potential gastroenterologists in the Portuguese NHS and the private healthcare sector

---

## METHODS

---

- Semi-structured interviews to listen to the professionals and draw their profiles
- Questionnaires will be used to identify the acceptance of this technology and success factors for adopting it
- The evaluation will cover the analysis of perceptions of the practical usefulness of AI in gastroenterology, exploring the reasons behind resistance or acceptance by doctors at different stages of their careers
- It will also try to understand medical students' perceptions of the integration of AI in the context of future gastroenterology practice

---

## EXPECTED RESULTS

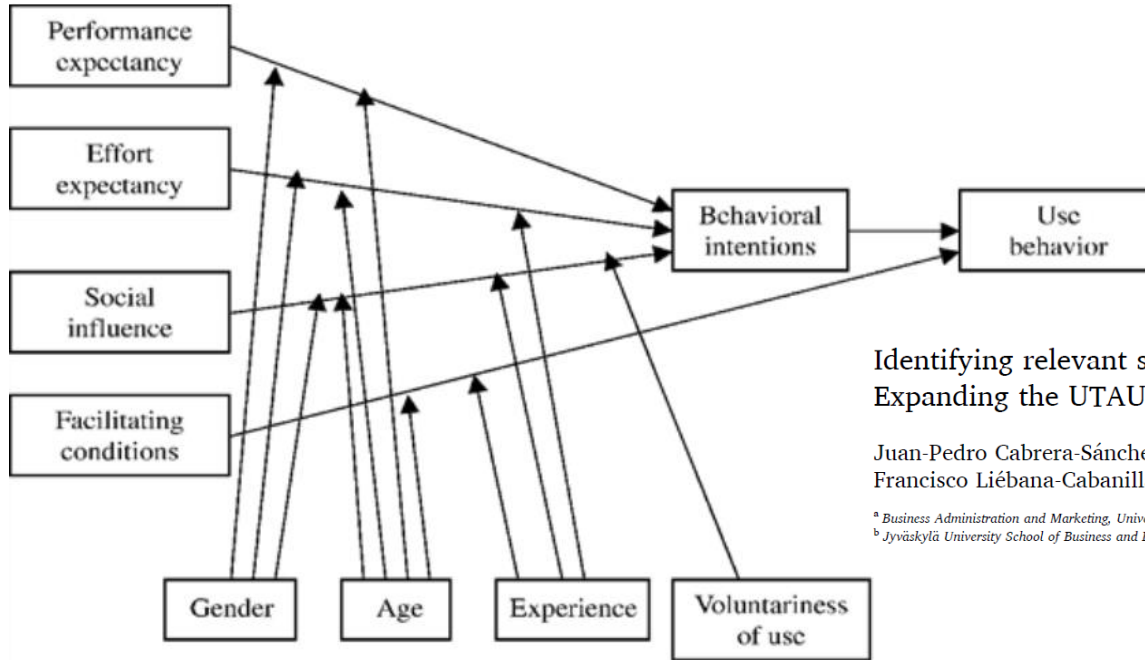
---

- We hope to provide a comprehensive and informed view on the acceptance of AI in gastroenterology, identifying potential strategies to improve the adoption and effectiveness of these tools in clinical practice
- This work seeks to contribute to the scientific literature and medical practice, facilitating the transition to a scenario where AI is perceived as a valuable technology in pursuing excellence in gastrointestinal medical care

## TECHNOLOGY ACCEPTANCE

- Theory of Reasoned Action – TRA
- Theory of Planned Behavior – TPB
- Technology Acceptance Model – TAM
- Diffusion of Innovations Model
- Unified Theory of Acceptance and Use of Technology – UTAUT (Venkatesh et al., 2003)

# UTAUT MODEL



Identifying relevant segments of AI applications adopters –  
Expanding the UTAUT2's variables

Juan-Pedro Cabrera-Sánchez<sup>a</sup>, Ángel F. Villarejo-Ramos<sup>a</sup>,  
Francisco Liébana-Cabanillas<sup>a</sup>, Aijaz A. Shaikh<sup>b,\*</sup>

<sup>a</sup> Business Administration and Marketing, University of Sevilla, Spain

<sup>b</sup> Jyväskylä University School of Business and Economics, P.O.Box 35, FI-40014, University of Jyväskylä, Finland



**THANKS!**

*Any questions?*

You can find me at:

`vraposo@fe.uc.pt`