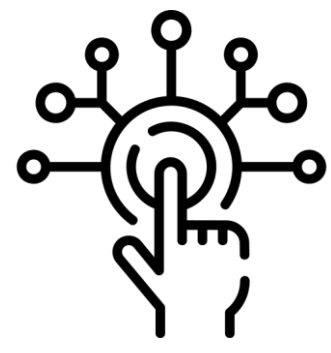


DATA RESEARCH

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2nd EDITION



What Makes You Trust Digital Data Wallets? The Role of Platform Mechanisms on Trust Formation

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INTRODUCTION

- 84% of users lack control over their personal data, indicating a crisis of trust and a systemic imbalance between consumers and authorities [1]. Privacy-enhancing technologies were developed in response to these difficulties [2]. Digital data wallets are advanced privacy-enhancing technologies that provide a user-centric solution by combining decentralized data storage and secure identity management [3].

- Digital data wallets are a relatively new technology, making it important to understand how users form initial trust. Although trust is known to be key for adopting privacy-enhancing technologies [4], little is known about how it develops specifically in the case of digital data wallets.

Hence, our study aims to answer the following questions:

- What factors drive trust in digital data wallets?
- How do these factors influence trust in different targets?
- How do risk perceptions impact these relationships?

To answer the research questions, we adopted a mixed-method approach [5] and developed the research model based on the network of trust model [6]. The goal of this strategy was to deliver outcomes that aligned with users' needs and preferences.



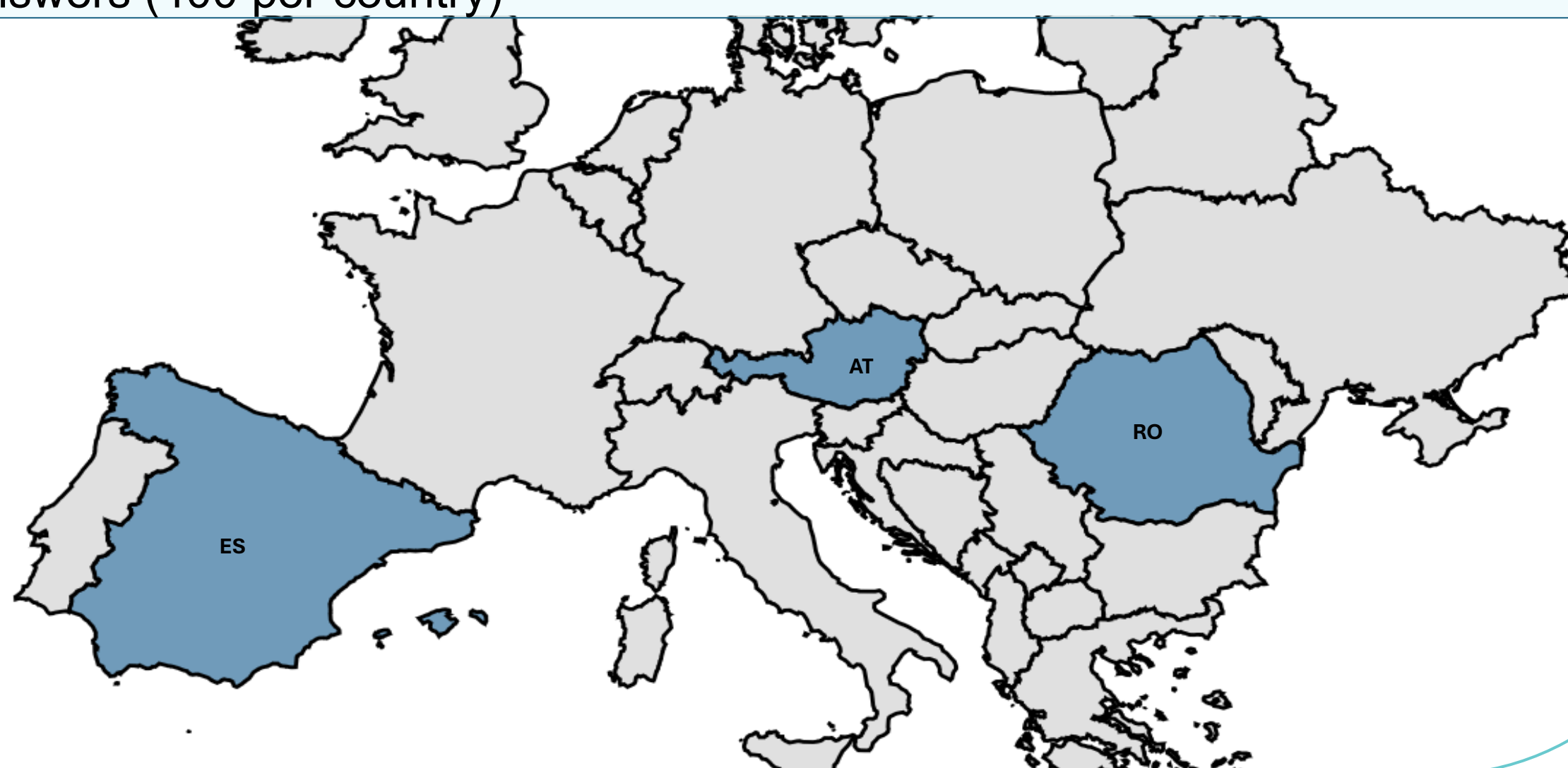
METHODS AND MATERIALS

Mixed-method approach

- Qualitative study: To identify antecedents to different trust targets
 - 30 interviews in Austria (Central), Romania (Eastern), and Spain (Western)
 - Open coding methodology

Research model

- Quantitative: To test the research model and examine risk perceptions
 - Online questionnaire (Austria, Romania, Spain)
 - 1200 answers (400 per country)



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RESULTS & DISCUSSION

1. Qualitative study

"Such a tool is more useful. If I were to use it, the factors that would influence its use would determine its utility."
(Interviewee 11);

Performance expectancy

"If my friends or parents or someone told me that it was very good, I would use it as the truth."
(Interviewee 14);

Social influence

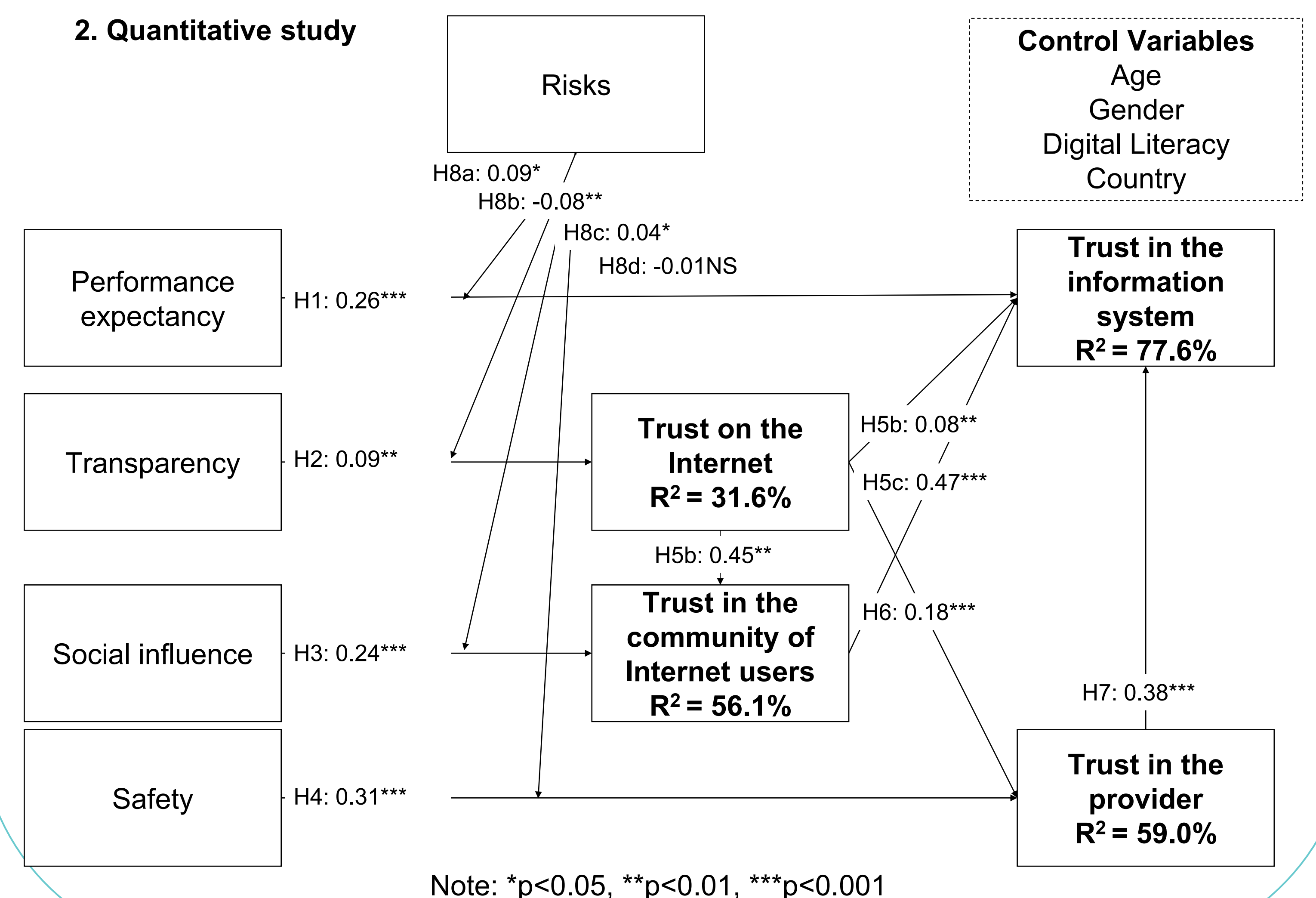
"I think transparency goes together with trustworthiness. To be able to trust, I also want to understand how my data is handled."
(Interviewee 21);

Transparency

"I would definitely before giving any money to that company, I would need to do my research, is it safe, is it reliable, is it a scam, or not?"
(Interviewee 2).

Safety

2. Quantitative study



CONCLUSION

Based on qualitative and quantitative studies, we developed and tested the research model that integrates user requirements, system design, and broader social influences to explain trust formation in digital data wallets.

We identified four key antecedents of trust, specifically, performance expectancy, transparency, social influence, and safety. Each enhances a specific trust target:

Performance expectancy → **Trust in the information system**

Transparency → **Trust on the Internet**

Social influence → **Trust in the community of internet users**

Safety → **Trust in the provider**

Risks moderated key relationships. For high-risk users, performance expectancy and social influence more strongly influenced trust, highlighting digital wallets as useful privacy tools and the importance of social cues. In contrast, transparency had a weaker effect, suggesting it's insufficient alone to build trust in high-risk contexts.

Theoretically, the study contributes to the development of trustworthy online identity infrastructures and enriches the theoretical understanding of trust in digital data wallets.

Practically, the study can be used to build trust relationships between digital data wallets and users.

ONLINE
VERSION

