

# Chapter 4

## Enhancing E–Orientation Platform Usage via the Metaverse: An Extended TAM Approach for Moroccan University Students

**Rachida Ihya**

 <https://orcid.org/0009-0009-2098-9657>

*Faculty of Sciences Ben M'Sick, Hassan II University, Casablanca, Morocco*

**Mohammed Ait Daoud**

 <https://orcid.org/0000-0002-8627-4429>

*Faculty of Sciences Ben M'Sick, Hassan II University, Casablanca, Morocco*

**Tarek Ihya**

 <https://orcid.org/0009-0001-7263-3478>

*Faculty of Sciences Ben M'Sick, Hassan II University, Casablanca, Morocco*

### ABSTRACT

*This chapter seeks to foster e-orientation platform acceptance among Moroccan students within the context of the evolving Metaverse. The authors focused on the Faculty of Sciences Ben M'Sick, employing meta-analytic methods to gather quantitative data through a student questionnaire survey. The analyses, performed using Python, revealed that perceived ease of use, usefulness, quality, and trust significantly impact the intention to use an e-orientation platform in the Metaverse. These insights guided the authors to design an extended technology acceptance model (TAM) specifically tailored to e-orientation platforms in the Metaverse, aiming to meet the needs and expectations of students, parents, and guidance counselors. The study underscores the potential of the Metaverse in addressing the inherent challenges of e-orientation systems and highlights the importance of user perception in the effective design and acceptance of e-orientation platforms.*

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## 1. INTRODUCTION

The evolution of Information and Communication Technologies (ICT) has catalyzed a transformation in how we approach educational guidance and counseling. One major shift is the emergence of the “E-orientation” concept, which has transitioned traditional academic and professional orientation from an in-person process to an online one, using various digital tools. This movement aligns with the needs and preferences of young individuals who demand modern, innovative tools to facilitate their educational choices and aid in strategic development (Boulahcen, 2005).

One such innovative tool currently gaining considerable attention in the field of ICT is the metaverse. Although not a novel concept, the metaverse had a significant surge in popularity and interest when Mark Zuckerberg announced Facebook’s Metaverse project in October 2021. This announcement stimulated intense curiosity among educators, students, and researchers, who saw the potential of the metaverse to enhance the social aspects of learning and teaching, creating immersive and interactive virtual environments (García-Pazo, Lopez, Coll, Moreno, & Brogi, 2023; Ripka, Tiede, Grafe, & Latoschik, 2020; Wiederhold, 2022).

The term “metaverse” combines the prefix “meta”, signifying transcendence, with “universe”, referring to a virtual environment parallel to and interconnected with the physical world (L.-H. Lee et al., 2021). It represents an ecosystem that fuses both physical and virtual worlds, facilitating immersive experiences, collaboration, and interactive social experiences. This fusion creates a new paradigm that could dramatically reshape the e-orientation landscape.

However, implementing the metaverse and other ICT tools in the e-orientation process presents unique institutional and methodological challenges. At an institutional level, the requirement for training to master these innovative tools may not be fully acknowledged or supported by major education stakeholders like the Ministry of National Education. This gap in support and perception can hamper the successful integration of these tools into the e-orientation system.

Methodologically, the validation of information contained within these digital platforms presents another hurdle. Current e-orientation platforms may overwhelm students with an abundance of information, leading to potential misdirection in their orientation choices. With scant validation studies conducted on these platforms, the relevance of the information they offer remains uncertain, adding to the complexity of the orientation process (Abouhanifa, Benmadani, Khalfaoui, Hanini, & Kabbaj, 2008).

Today, the current research on the acceptance of Moroccan electronic guidance systems are relate to the “Meta-model of e-orientation platforms” and “Modernization of a domain e-orientation meta-model” (Guerss et al., 2015; zahra, Mohammed, Khadija, Mohammed, & Abdelouahed, 2015). However, a few research that focused on the acceptance prediction model for the electronic guidance systems has been conducted before (Ihya, Aitdaoud, Namir, Guerss, & Haddani, 2020; Ihya, Namir, Elfilali, Guerss, & Daoud, 2019; Ihya, Namir, Filali, Daoud, & Guerss, 2019).

Our research aims to address these challenges by developing an extended Technology Acceptance Model (TAM). The TAM is designed to predict and explain the usage intentions of e-orientation platforms, incorporating variables such as perceived usefulness, perceived ease of use, and intent to use. We aim to extend this model to include factors such as socio-demographic and social aspects, system and information quality, experience, risk, and other significant variables affecting platform acceptance.

In our study, we specifically focus on enhancing the user experience and acceptance of e-orientation platforms through the integration of the metaverse. We believe that the immersive and interactive features

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