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Regulatory Challenges of the Metaverse

RAÚL RUIZ RODRÍGUEZ

*MetaverseUA Chair
GIPLaw Research Group
University of Alicante*



INTRODUCTION

- Since Meta's 2021 shift towards the metaverse, this concept has gained global attention, with rapid growth projection (\$150 billion globally by 2030).
- **A crucial question arises:** How should these virtual environments be regulated?
 - *What rules and frameworks will govern their development and everyday use?*
 - *Do existing regulations adequately address the unique challenges of the metaverse, or are adaptations required?*



THE METAVERSE AS PART OF THE PLATFORM ECONOMY

Virtual worlds as platforms =  Decentraland



horizon
FACEBOOK

Platform providers act as **regulators and overseers**.

 How are virtual worlds regulated?

- ◆ Platform providers set their Terms & Conditions to regulate behaviour within their digital environments.
- ◆ When a user accesses a virtual world, they voluntarily agree to abide by the rules imposed by the platform.

THE METAVERSE AS PART OF THE PLATFORM ECONOMY

Legal issues and challenges:

- 1 Terms and Conditions must also be regulated and comply with **common principles**.
- 2 Terms and Conditions **cannot regulate all possible conflicts** that may arise.

In such situations, recourse must be had to relevant national and international laws...



THE DSA: CONTENT MODERATION AND USER PROTECTION

◆ **Challenges of Moderating the Metaverse → New Forms of Harmful Content:**
unlike traditional platforms (text, images, videos), the metaverse introduces:

- Verbal communication between users.
- Avatar behavior and gestures.
- Manipulation of virtual objects

◆ **Regulatory Challenge:** the **DSA** imposes strict content moderation duties but struggles with the **immersive and instantaneous** nature of virtual environments →

- **Real-time interactions** make conventional moderation methods less effective.
- Harmful behavior extends beyond text, including **verbal abuse, virtual harassment, and inappropriate avatar actions**.
- **Ex post moderation** (removing content after violations) is difficult if **interactions are not recorded**.



THE DSA: CONTENT MODERATION AND USER PROTECTION

◆ Possible Solutions & Challenges in Metaverse Moderation → Preventive Measures Being Explored

- **Personal boundaries:** Some platforms (e.g., Meta's *Horizon Worlds*) prevent avatars from standing too close.
- **Real-time user reporting:** Systems to flag and address harmful behaviors.
- **AI-driven behavior analysis:** Predicting and preventing inappropriate interactions.

◆ Challenges & Ethical Concerns

- **Privacy:** Should platforms continuously monitor users in virtual spaces?
- **Censorship:** Could AI-driven moderation over-police user behavior?
- **Discrimination risks:** Could algorithms disproportionately target certain groups?



Decentralized platforms (governed by DAOs) lack a clear legal entity, complicating enforcement.

THE DMA AND METAVERSE INTEROPERABILITY

◆ The **Digital Markets Act (DMA)** prevents dominant tech firms (*gatekeepers*) from monopolizing digital markets. A company qualifies as a **gatekeeper** if it:

- ✓ Has **≥45M monthly active users** in the EU.
- ✓ Has **≥10,000 active business users** annually in the EU.
- ✓ Generates **€7.5B+ in annual revenue** or has a **€75B+ market capitalization**.
- ✓ Controls a **CORE PLATFORM SERVICE** for **3+ years**.

◆ Within their core platform services, gatekeepers must:

- Allow **third-party app integration**.
- Ensure **fair competition**.
- Provide **non-discriminatory access** to digital markets.



THE DMA AND METAVERSE INTEROPERABILITY

Why This Matters for the Metaverse? → Interoperability Challenge:

- ◆ Most virtual worlds are closed ecosystems → Digital assets, identities, and currencies cannot transfer across platforms.
- ◆ Large companies impose restrictive conditions on third-party services.

Future Risks & Uncertainties → No metaverse platform currently qualifies as a CPS controlled by a gatekeeper, but that may be the case (e.g., Meta's Horizon Worlds, Apple's VisionOS) in the future.

⚠ Without oversight, gatekeepers might restrict competition & exert excessive control over the metaverse economy.

BUT The DMA's effectiveness in enforcing interoperability is debated, especially for decentralized metaverses with no central authority.

FINAL THOUGHTS

◆ Regulatory Challenges & Gaps

- The DSA & DMA provide important tools but **are still adapting** to the metaverse's unique challenges.
- **Key issues remain unresolved, including privacy, avatar legal status, and intellectual property protection.**

◆ Balancing Regulation & Innovation

- **Overregulation** → Could push businesses & users toward unregulated alternatives and/or stifle innovation.
- **Underregulation** → Risks a fragmented, unsafe, and monopolized metaverse.

◆ Looking Ahead: The EU's 2025 Competitive Compass

- A **simpler, lighter, and faster** regulatory framework.
- Aims to support innovation while upholding European values of fairness, safety, and competition.
- **Will this vision be realized? THE FUTURE REMAINS UNCERTAIN.**



Contact details:

r.ruiz@ua.es

www.linkedin.com/in/raúl-ruiz-rodíguez-02382b96

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Contact details:

r.ruiz@ua.es

www.linkedin.com/in/raúl-ruiz-rodíguez-02382b96

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