

## “FEMININE IDENTITY IN THE METAVERSE: A CONCEPTUAL EXPLORATION OF GENDER PERFORMATIVITY, AVATARS, AND DIGITAL POWER”

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### **Abstract**

*The rapid expansion of the metaverse—a network of immersive, interconnected, avatar-driven digital worlds—is reshaping how identity, agency, and power operate in virtual environments. This article conceptually examines how femininity is performed, represented, and negotiated within the metaverse, drawing on Judith Butler’s gender performativity, posthuman feminist theory, and digital embodiment. While these virtual spaces promise liberation from the constraints of physical identity, they simultaneously reproduce—and sometimes intensify—existing gendered hierarchies through algorithmic bias, avatar aesthetics, and platform economies. Recent global surveys reveal that over 60% of women-identifying users experience objectification or marginalization in immersive online spaces, and only about one in five occupy visible or leadership roles in digital creation and moderation.*

*Through a critical synthesis of scholarship from media studies, cultural theory, and feminist digital ethics, this paper proposes the conceptual model of Performative Digital Femininity—a framework explaining how self-representation, interactive performance, and algorithmic visibility interlock in the gendered experience of cyberspace. The discussion concludes with design and policy recommendations for inclusive digital architecture, ethical avatar representation, and gender-sensitive AI governance. By reinterpreting the metaverse as both a space of limitation and a site of feminist possibility, the paper contributes to the ongoing global discourse on gender justice, digital embodiment, and posthuman identity in contemporary media culture.*

**Keywords:** *Metaverse, Feminine Identity, Gender Performativity, Digital Embodiment, Posthuman Feminism, Algorithmic Power, Avatars, Feminist Digital Ethics, Virtual Culture.*

## 1. Introduction

Over the past five years, the metaverse has evolved from a speculative concept into a complex social and economic ecosystem. Defined as a persistent, immersive, and avatar-mediated network of interoperable digital worlds, it has become a hub for socialization, entertainment, education, and commerce. The scale of participation is striking: by 2025, global metaverse platforms collectively engage 400–700 million monthly active users (Exploring Topics, 2025; SQ Magazine, 2025).

Platforms such as Roblox and Fortnite each host hundreds of millions of users, while Meta's Horizon Worlds, ZEPETO, and VRChat attract tens of millions who use avatars to express identity through fashion, movement, and design (SQ Magazine, 2025). Adoption patterns remain uneven, shaped by age, region, and socioeconomic context. The metaverse's most engaged demographic—users under 35—embraces its creative economies and avatar customization tools as spaces of play, experimentation, and social belonging.

The Asia–Pacific region, in particular, represents one of the fastest-growing metaverse markets. A 2025 GMO Research survey revealed high participation rates in Indonesia (55.5%), the Philippines (38.5%), Malaysia (37.3%), and Thailand (30.7%), driven largely by youth engagement in virtual fashion, social gaming, and creative collaboration. These findings highlight how digital identity and cultural expression are increasingly interwoven within technologically mediated economies.

Yet, as the metaverse grows, it also commodifies identity. Avatars and virtual goods have become profitable sites for brands, influencers, and entertainment industries. The integration of microtransactions, creator marketplaces, and social commerce transforms visual self-expression into an economy of visibility and belonging. The question, then, is not only who participates—but whose identities are seen, valued, and monetized within these systems.

### 1.1. The Research Problem: Gender Stereotypes, Anxiety, and Re-creation in Digital Embodiment

Although immersive virtual spaces are often celebrated as arenas for freedom and experimentation, mounting research suggests that gender hierarchies and stereotypes persist—and at times, even intensify—within the metaverse. These dynamics unfold across multiple dimensions:

#### 1.1.1. Aesthetic and Visual Conventions of the Avatar

While avatars are marketed as tools of self-expression, users' aesthetic choices frequently align with offline gender expectations. Feminine avatars often embody hyper-stylized ideals—accentuated body shapes, exaggerated makeup, and sexualized clothing—particularly in spaces where fashion and beauty are commercialized commodities (Ko, 2024; Lee, 2024). Even when customization options are extensive, cultural scripts of attractiveness subtly influence design decisions, reinforcing normative gender markers rather than subverting them.

#### 1.1.2. Abuse and Embodied Harassment

Gendered harassment within virtual reality and social metaverse environments remains a major concern. Numerous studies reveal that female-identifying users face disproportionate levels of verbal abuse, stalking, and sexualized interactions (McIntosh, 2024). Earlier research found that nearly half of women in VR reported at least one incident of sexual harassment or non-consensual contact (Outlaw, 2018, cited in McIntosh, 2024). The anonymity and immersion of metaverse environments often embolden aggressors, creating a psychologically invasive form of harassment that transcends the physical–digital divide.

### 1.1.3. Platform Governance and Leadership Gaps

Structural imbalances persist in the governance and production of metaverse systems. Industry analyses show that women remain underrepresented in leadership roles across design, content moderation, and AI policy development (McKinsey, 2022). This imbalance shapes the ethical foundations of virtual platforms—affecting what counts as harm, how safety is prioritized, and whose perspectives inform platform norms. As a result, technological infrastructures continue to reflect **male-dominated visions of digital agency**.

### 1.1.4. Algorithmic Visibility and Monetization Bias

Algorithms that drive visibility and monetization often amplify profitable gender expressions—favoring hyper-feminine, sexualized, or influencer-styled performances that align with commercial beauty standards. This algorithmic favoritism not only narrows the spectrum of visible femininity but also embeds bias into digital economies, rewarding certain identities while marginalizing others. The intertwining of attention economies and gendered aesthetics produces a subtle yet powerful feedback loop: what is most “seen” becomes what is most “valued.”

### 1.1.5. Cultural Contexts and Regional Variations

In Asia and Southeast Asia, where digital engagement is rapidly expanding, the metaverse becomes a site of cultural negotiation. Local norms around modesty, family, and gender conformity influence how avatars are designed and how users perform identity. Countries such as Indonesia, the Philippines, and South Korea illustrate the complexity of digital gender translation, where globalized avatar aesthetics meet localized cultural codes (GMO Research, 2025; Ko, 2024).

Regulatory frameworks, public attitudes toward nonconforming gender expression, and differing levels of **digital literacy** shape the ways in which femininity is both performed and policed online.

### 1.1.6. Synthesizing the Landscape

When all these threads are considered together, a clear pattern emerges: virtual embodiment does not automatically dissolve gender inequality. Instead, it reconfigures it through new technological and aesthetic forms. The metaverse, therefore, should be understood not as a neutral playground, but as a hybrid techno-cultural ecosystem where identity, visibility, and power are continuously negotiated through design, code, and culture.

Despite a growing number of studies on isolated aspects of this issue—avatar representation, online harassment, algorithmic bias—there remains a pressing need for an integrated conceptual framework. Such a framework must connect the performative dimensions of gender, the symbolic and material role of avatars, and the politics of digital visibility. Only then can scholars and designers begin to understand what it truly means to “do gender” in immersive virtual worlds—and how these performances both mirror and challenge the broader social orders from which they emerge.

## 1.2. Why a Conceptual Synthesis Is Needed: Bridging Performativity, Embodiment, and Power

Although research across different disciplines has made notable progress—ranging from philosophical and theoretical contributions in posthumanism and cyberfeminism (for example, Haraway and Braidotti) to media studies on visual culture and avatars, HCI research on safety within social VR environments, and social science analyses documenting harassment and gendered leadership gaps—these bodies of work tend to evolve separately rather than in dialogue. The lack of a cohesive framework has led to three significant challenges:

1. **Fragmented diagnosis.** Many analyses focus on isolated elements—such as user behavior (for example, avatar customization), platform design (including affordances and monetization systems), or governance issues (like representation and policy)—without considering how these layers interact and reinforce each other. This separation makes it difficult to grasp the broader picture of how digital gender performances emerge and persist.
2. **Limited prescriptive capacity.** Without a shared conceptual model that connects micro-level performances (like avatar interaction or self-presentation) with macro-level dynamics (such as platform economies and algorithmic control), recommendations for design or policy often remain narrow, piecemeal, or difficult to implement effectively.
3. **Neglect of regional diversity.** Many existing models privilege Western notions of identity performance, overlooking the distinct cultural and economic conditions shaping digital embodiment in regions like Asia and Southeast Asia. In these contexts, avatar culture merges with local aesthetic practices, youth subcultures, and rapidly growing creator economies (GMO Research, 2025; Ko, 2024).

To address these issues, a conceptual synthesis must integrate three major lines of inquiry:

1. **Gender performativity (Butlerian tradition):** This perspective views gender as something performed and enacted through social acts and norms, rather than a stable or inherent quality.
2. **Avatar theory and digital embodiment:** This area examines how virtual bodies are designed, presented, and experienced within interactive, mediated spaces—drawing on ideas such as the Proteus effect, avatar identification, and embodied presence.
3. **Digital power dynamics:** This includes algorithmic governance, monetization strategies, platform leadership structures, moderation systems, and the broader political–economic conditions that determine which identities are made visible, rewarded, or marginalized online.

Crucially, such a synthesis must also account for intersectionality, acknowledging how gendered experiences in the metaverse are shaped by factors such as race, class, sexuality, disability, and national or regional context. Research continues to show that marginalized groups encounter compounded risks and exclusionary dynamics in virtual environments (Schulenberg, 2023; Porta et al., 2023).

### 1.3. Objectives and Contribution of the Article

This article introduces a conceptual framework titled *Performative Digital Femininity*, which explains how feminine identity is continually produced and negotiated within the metaverse through the interaction of performative acts, visual affordances, and structural power relations. The main objectives of this paper are to:

1. **Synthesize recent scholarship (2022–2025)** on gender performativity, avatar customization, embodied interaction, harassment in virtual spaces, platform economies, and governance systems to develop a unified theoretical model.
2. **Trace the mechanisms** through which gendered identities are reproduced or challenged in virtual environments—linking everyday, micro-level behaviors (such as avatar styling, gesture, and speech) to the larger structural systems of algorithms, monetization logics, and governance frameworks.

3. **Identify regional and cross-cultural patterns**, particularly in Asia and Southeast Asia, by incorporating updated demographic data and descriptive metrics that provide empirical grounding for theoretical insights.
4. **Offer normative and design recommendations** that align with feminist digital ethics and advocate for inclusive, safer metaverse practices—focusing on conceptual and policy-level guidance rather than new empirical data collection.
5. **Outline a forward-looking research agenda** that defines key conceptual questions and potential avenues for empirical validation, setting the stage for subsequent studies without conducting primary data collection in this work.

By building a theoretically informed yet practical synthesis, this article seeks to combine explanatory depth with actionable insight. It identifies how digital gendering operates and provides concrete directions for designers, policymakers, and cultural stakeholders who shape the future of virtual worlds.

#### 1.4. Overview of Evidence: Key Recent Findings and Regional Particularities

To situate the conceptual model in context, this section highlights key empirical findings from recent studies and reports (2022–2025):

1. **Scale and demographics.** Estimates of global metaverse participation vary depending on definitions, but conservative figures indicate several hundred million monthly active users by 2024–2025. Roblox continues to lead with approximately 287 million MAUs, while Fortnite’s creative modes attract around 160 million. ZEPETO and VRChat each engage tens of millions of users, and Meta’s Horizon Worlds has reached similar numbers as it continues to evolve (SQ Magazine, 2025; DemandSage, 2025).
2. **Southeast Asian adoption.** Surveys across Southeast Asia in 2025 show remarkably high participation rates: Indonesia (55.5%), the Philippines (38.5%), Malaysia (37.3%), and Thailand (30.7%). These trends underscore Southeast Asia’s role as a hub of avatar-driven creativity and user-generated fashion economies, reflecting both mobile-first access patterns and regional preferences for visually expressive self-representation (GMO Research, 2025).
3. **Prevalence of harassment and embodied harm.** A growing body of research documents widespread harassment and abuse in social VR and metaverse platforms (McIntosh, 2024; Schulenburg et al., 2023). Earlier data indicated that nearly half of regular female VR users had faced sexual harassment (Outlaw, 2018, cited in later analyses). More recent ethnographic and NGO reports describe continuing instances of verbal, visual, and physicalized harassment in open VR spaces (Frontiers, 2024; The Guardian/CCDH, 2025). Such encounters not only cause psychological harm but also shape how women and marginalized users manage their digital embodiment and participation.
4. **Leadership and governance disparities.** Reviews of organizational structures in metaverse-related institutions show persistent gender inequality. Analyses of bodies such as the Metaverse Standards Forum reveal that leadership and decision-making positions remain dominated by men, perpetuating biases in how standards, interoperability, and platform priorities are defined (McKinsey, 2022; Consultancy.uk, 2022).
5. **Avatar use among adolescents and young users.** Research on youth-dominated platforms like ZEPETO shows that young girls use avatar creation both as a form of self-expression and as a social tool. However, these same platforms expose them to pressures

of hyper-aesthetic self-presentation and potential harassment, underscoring the dual nature of empowerment and vulnerability in virtual self-making (Ko, 2024; Lee, 2024).

Together, these findings reveal both the urgency and complexity of addressing gendered embodiment and power in the metaverse. They affirm the necessity for an integrated conceptual model—one that links personal experiences and creative practices to the broader infrastructures, cultural economies, and governance mechanisms that define virtual spaces.

### **1.5. Theoretical Grounding: Why Butler, Posthuman Feminism, and Avatar Theory?**

This paper locates its conceptual synthesis at the intersection of three complementary theoretical traditions: Judith Butler's account of gender performativity, posthuman and cyberfeminist perspectives on embodiment and technology, and the social-psychological literature on avatars and mediated identity. Each tradition contributes a distinct set of analytical resources—language for understanding how identity is enacted, a vocabulary for thinking through the techno-material constitution of bodies, and empirically grounded mechanisms for how virtual embodiments shape cognition and social response. Bringing them together offers a coherent frame for analyzing how femininity is produced, contested, and regulated within immersive digital environments.

#### **1.4.1. Butlerian Performativity in Virtual Contexts**

Butler reconceptualizes gender not as an inner essence but as the outcome of repeated, stylized acts that, by virtue of citation and repetition, bring social categories into being (Butler, 1990/2004). Translating this insight to metaverse environments requires expanding our sense of what counts as an "act." Virtual performativity includes visual and sartorial choices (avatar body shape, clothing, make-up), embodied interaction (gestures, proxemics, voice modulation), and durational practices (consistent styles, repeated role enactments). These behaviors do not merely *express* identity; they help constitute gendered subjectivities within networked publics. Crucially, Butler's emphasis on norms and constraint remains central: platform affordances, design defaults, community norms, and algorithmic visibility regimes together delimit which performances are intelligible, rewarded, or precarious.

Recent empirical studies of avatar transitions and identity experimentation reinforce the analytic purchase of performativity for virtual settings. Experimental and ethnographic work demonstrates that switching avatars, repeatedly adopting particular gestures, or sustaining a certain aesthetic can reinforce, complicate or sometimes subvert offline gender expectations (Rhee, 2025; Zhang, 2024). These dynamics show that performative acts in virtual worlds are never free-floating: they are embedded within normative fields—technical, cultural, and economic—that shape what forms of gendering become legible or vulnerable.

#### **1.4.2. Posthuman and Cyberfeminist Perspectives: Material-Semiotic Entanglements**

Posthuman and cyberfeminist thinkers (e.g., Haraway; Braidotti) problematize the boundary between an autonomous human subject and technological systems, insisting instead on co-constitutive relations among bodies, artifacts, and social institutions. The metaverse brings these entanglements into sharp relief: avatars, haptic devices, embodied AI agents, sensor suites, and recommendation engines together form a technical and social scaffolding through which gendered relations are enacted and regulated. Posthuman feminist work directs attention to material-semiotic relations—how sensory realism, haptic feedback, and algorithmic signal-processing shape felt experience and political possibility. For example, haptic amplification can intensify the subjective impact of harassment, while recommender logics can transform individual aesthetic choices into lucrative cultural templates. This perspective invites us to

analyze not only the symbolic forms of avatar presentation but also their material affordances and the political economies that animate them (Braidotti, 2019/2021; Haraway, 1991).

#### **1.4.3. Avatar Theory and the Proteus Effect: Mechanisms of Embodiment**

Avatar theory and the Proteus effect offer concrete mechanisms to explain how adopting a virtual form influences cognition, social behavior, and the responses of others (Yee & Bailenson, 2007; Coesel, 2024). Two interacting dynamics are important here: projective dynamics (how users invest avatars with aspirational or experimental aspects of self) and receptive dynamics (how other users, and systems, interpret visual cues). Experimental and lab-based research—spanning cross-gender avatar transitions, sexualization studies, and identity-switch experiments—shows that visual and behavioral cues encoded in avatars produce measurable changes in interaction patterns, perceived agency, and even negotiation outcomes (Kang & Rhee, 2025; Ko, 2024). The Proteus-effect literature confirms that appearance systematically influences behavior, and newer theoretical reviews have refined the psychological pathways through which these effects occur (Coesel, 2024; Yee & Bailenson, 2023).

#### **1.4.4. Synthesis: Why Combine These Traditions?**

Taken together, Butler supplies the logic of performative constitution; posthuman feminism highlights the material-technological conditions that mediate subjectivity and power; and avatar theory supplies empirically tractable mechanisms that connect appearance to behavior and social outcomes. The objective is not to privilege any single tradition but to fuse them into an analytically useful model able to account for observed patterns of gendering in virtual environments and to suggest normative interventions that are sensitive to both material infrastructures and lived experiences.

### **1.5. Cross-Regional Particularities: Asia and Southeast Asia as Key Loci**

Asia and Southeast Asia are analytically pivotal for studying performative digital femininity for several interrelated reasons: unusually high platform engagement driven by youth cultures, distinct aesthetic traditions that shape avatar practice, and varied regulatory frameworks that produce differential governance outcomes. Treating these regions as core cases prevents the uncritical exportation of Western templates for identity and governance and foregrounds how local cultural economies and policy regimes alter the affordances and constraints of digital embodiment.

#### **1.5.1. High Platform Engagement and Youth-Driven Avatar Economies**

Market and academic reports consistently identify East and Southeast Asia as global leaders in avatar-driven participation and creative economies. Recent surveys show strong experience and engagement rates across Indonesia, the Philippines, Malaysia, South Korea, and Chinese-language markets, reflecting mobile-first access, strong youth participation, and thriving user-generated fashion economies (GMO Research, 2025; Ko, 2024). Platforms with roots in East Asia, such as ZEPETO, have exported aesthetic conventions—K-style visuals, stylized ornamentation, and collaborative creative practices—that inform global trends in avatar fashion and youth creativity. These high engagement rates mean that region-specific patterns of avatar use are not peripheral but central to the global ecology of the metaverse.

#### **1.5.2. Cultural Aesthetics and Normative Scripts**

Cultural norms about beauty, propriety, and femininity vary significantly across the region. Local aesthetic preferences—for instance, particular attitudes toward skin tone, body shape, and clothing—inform both how avatars are styled and how those styles are socially interpreted. Empirical analyses of ZEPETO and comparable platforms reveal that young users' avatar

strategies are tightly interwoven with localized aesthetics and social tagging practices that signal group membership, status, and aspiration (Ko, 2024; Lee, 2024). These differences mean that a single, universal model of avatar femininity would miss important variations in what counts as desirable, respectable, or transgressive in different cultural settings.

### 1.5.3. Regulatory and Civic Landscapes

National regulatory frameworks across Asia and Southeast Asia show marked heterogeneity in content moderation law, child protection regimes, and digital inclusion policies. Such differences affect how harassment is policed, how creators access support and revenue streams, and how gender nonconformity is legally and socially received. Platform moderation features tailored to one jurisdiction may perform poorly in another due to differing legal norms, enforcement capacities, and civil-society pressures. Consequently, a globally oriented conceptual model must include regional modifiers that attend to regulatory variation and the civic infrastructures shaping online experience.

Taken together, these regional dynamics require that any global framework remain adaptable: regional aesthetics, economic structures, and governance regimes materially shape the contours of digital femininity and therefore must be incorporated as central parameters of analysis.

### 1.6. Problem–Solution Orientation: Toward Ethical Interventions

A principal aim of this paper is to translate conceptual analysis into actionable, ethically grounded recommendations for design, governance, and research—without relying on new primary data collection. The interventions proposed below are anchored in the integrated conceptual model (Performative Digital Femininity) and draw on HCI best practices, feminist ethics, and policy literature.

1. **Inclusive avatar libraries and design affordances.** Platforms should broaden default avatar toolkits to include body-diversity presets, nonbinary markers, and regionally varied clothing packs, thereby challenging narrow beauty norms and expanding legible modes of embodiment (Clemente et al., 2023; Rahimi & Nguyen, 2024).

2. **Algorithmic audits and visibility redesigns.** Systematic audits of recommender systems and curation pipelines can reveal whether monetized aesthetics disproportionately drive attention and income; redesigning visibility mechanics—e.g., curated surfacing, rotating promotion pools—can disrupt monocultural pathways to monetization (Gillespie, 2022; Akter, 2023).

3. **Safety-by-design features responsive to embodied harm.** Safety measures should account for the specific modalities of VR harm, including haptic-block defaults, context-aware reporting workflows, graduated proximity controls, and youth-safe instances with stricter moderation (McIntosh, 2024; Gray et al., 2024).

4. **Governance and representation reforms.** Increasing the participation of women and marginalized groups in standards bodies, developer teams, and governance forums helps ensure that platform priorities reflect diverse needs and that policy design incorporates intersectional perspectives (McKinsey, 2022; Caplan & Gillespie, 2023).

These proposals are presented as normative starting points rather than definitive fixes. They are intended to reorient platform incentives toward inclusion and to catalyze empirical evaluation of interventions' efficacy.

### 1.7. Theoretical Foundations

This section fleshes out the theoretical basis for the **Performative Digital Femininity** model by integrating three intellectual lineages: (1) Judith Butler's theory of gender performativity, (2)

posthuman/cyberfeminist accounts from figures such as Donna Haraway and Rosi Braidotti, and (3) avatar theory and the Proteus-effect literature from communication science and HCI. After outlining each tradition, I synthesize their analytic insights and show how their confluence clarifies the mechanisms through which feminine identity is constituted in the metaverse. The section closes by elaborating intersectional and regional modifiers—especially relevant in Asia and Southeast Asia—that shape digital gendering.

#### **1.7.1. Judith Butler and Gender Performativity: From Bodies That Matter to Virtual Acts**

Butler's central claim—that gender is produced through repeated, stylized acts rather than reflecting a pre-existing essence—remains foundational for any theory of digital gendering (Butler, 1990). Performativity is not a free-floating expressive resource; it is normatively constrained by scripts, institutions, and cultural sanctions that make some performances intelligible and others precarious. Translating this to virtual realms means expanding the taxonomy of performative acts. In the metaverse, three domains of acts are analytically useful:

- a. **Visual design acts** — selection of avatar templates, body morphs, clothing, cosmetics, and surface-level styling.
- b. **Interactional acts** — speech style, enacted gestures, proxemic behavior, and role-played scenarios.
- c. **Economic acts** — purchasing, trading, and participating in fashion economies and creator markets.

Each of these domains comprises repeated stylized behaviors that cohere into recognizable gender performances. Butler's insistence on normative constraint is especially pertinent: platform affordances (preset morphologies, marketplace logics), community norms, and algorithmic visibility regimes collectively shape which forms of gender are legible and advantageous. Empirical research on avatar transitions and identity play demonstrates that virtual performativity can both mirror and rework offline gender scripts—yet those experiments are always embedded in structural constraints (Rhee, 2025; Zhang, 2024).

#### **1.7.2. Posthuman Feminism and Cyberfeminist Critiques: Haraway and Braidotti**

Where Butler attends primarily to social performance, posthuman feminism reframes subjectivity itself as relational and technologically mediated (Haraway, 1991; Braidotti, 2019/2021). Haraway's cyborg offers a heuristic for thinking about hybrid human-machine subjectivities; Braidotti extends this by situating posthuman subjectivity within historical and material conditions. Applying these perspectives to the metaverse yields several analytic moves:

1. **Material-semiotic networks.** Avatars, marketplace architectures, recommender engines, and sensor arrays are not neutral backdrops; they actively mediate gendered meaning and practice.
2. **Entanglement.** Gendered experience in the metaverse emerges from the interactions among bodies, code, corporate practices, and cultural narratives rather than from any single locus.
3. **Ethical stakes.** Attention to who benefits from particular designs and who is rendered visible or invisible in algorithmic economies is central to normative critique.

These moves argue for treating technologies—avatars, algorithms, haptics—as co-constitutive actors whose affordances and limitations are integral to the making of gendered subjectivities. Posthuman feminism thereby furnishes a vocabulary for examining political-economic processes (platform capitalism, creator economies) that shape embodied possibility online.

### 1.7.3. Avatar Theory and the Proteus Effect: Embodiment, Perception, and Behavioral Change

Avatar theory, particularly literature on the Proteus effect, provides micro-level mechanisms for how embodiments translate into behavior and social response. The Proteus effect posits that users internalize the expected behavioral scripts associated with their avatar's appearance, leading to measurable shifts in attitude and action (Yee & Bailenson, 2007; Coesel, 2024). Empirical work demonstrates that embodying attractive or authoritative avatars can increase confidence, prosocial behavior, or assertiveness; conversely, embodying marginalized or hypersexualized avatars can alter social attention patterns and risk exposure.

Crucially, avatar theory draws a distinction between projective dynamics (users projecting identity aspirations onto avatars) and receptive dynamics (how others and algorithms respond to avatar cues). Together these dynamics form feedback loops: avatar aesthetics affect social interactions, which then influence the user's subsequent performances and affective states. Recent field and lab studies of gender swapping, sexualized avatar designs, and cross-cultural avatar experiments document these feedbacks and show how they interact with platform affordances to shape opportunity structures and harassment risk (Kang & Rhee, 2025; Zhang, 2024).

### 1.7.4. Synthesizing Butler, Posthuman Feminism, and Avatar Theory

Weaving together these three traditions yields a conceptual architecture well suited to diagnosing gendered dynamics in virtual worlds. Each offers complementary analytic resources:

1. **Butler** explains the iterative, citational process by which gender is produced through stylized acts.
2. **Posthuman feminism** reframes subjectivity as assembled and situates those acts within techno-material assemblages and political economy.
3. **Avatar/Proteus theory** supplies empirically grounded mechanisms showing how appearance reshapes behavior and social reception.

From this synthesis arise three interlocking propositions that structure the Performative Digital Femininity model:

1. **Proposition 1 (Performative Mediation).** Gender in virtual worlds is produced through repeated avatar-mediated acts (dress, gesture, speech). These acts instantiate identity in a Butlerian sense, but they are materially mediated by technological affordances and economic incentives.
2. **Proposition 2 (Material–Semiotic Co-constitution).** Avatars and platform architectures are co-constitutive with gendered subjectivities; the design of avatar systems (preset options, morphs, animation suites) determines which gendered acts are feasible and socially intelligible.
3. **Proposition 3 (Amplification Feedback).** Behavioral effects (Proteus-type) and algorithmic visibility interact in feedback loops that scale certain forms of gendered performance—particularly hyper-aesthetic femininity—producing normative pressures and commercial incentives that constrain experimentation.

These propositions allow us to trace causal paths from micro-level acts to meso-level social feedback and to macro-level platform incentives—clarifying how specific practices are reproduced or occasionally contested.

### **1.8. Algorithmic and Economic Structures as Norm Enforcers**

Platform-level systems—recommendation algorithms, creator monetization schemes, and marketplace designs—operate as powerful normative forces. Algorithms do more than order content; they implicitly encode preferences by optimizing for engagement metrics that frequently privilege certain visual or interactional forms. When platform attention economies disproportionately reward hyper-feminine or highly sexualized avatars, economic incentives congeal with cultural scripts to elevate those presentations to dominant, profitable positions. Industry analyses show that cosmetic and fashion items represent substantial shares of creator revenue on avatar-centric platforms; when a narrow cohort of creators (or curated influencers) sets aesthetic norms, those preferences can become normalized through algorithmic amplification (Vogue Business reporting; industry reports 2024–2025). Algorithmic opacity further complicates matters, as users and regulators often lack clear explanations for why particular creators or looks receive more exposure. This conjuncture—platform capitalism plus algorithmic invisibility—can institutionalize gendered norms in ways that are difficult to contest.

### **1.9. Harassment, Safety, and the Limits of Avatars as Protective Shells**

A critical implication of the synthesis is that avatar embodiment is not a reliable shield against embodied harms; in some contexts it can intensify them. Qualitative and review literature documents harassment in VR and other social metaverse environments that resembles—and sometimes exceeds—offline harms (Porta et al., 2023; McIntosh, 2024). Because immersive modalities heighten spatial presence and sensory realism, incidents can feel subjectively closer to physical violation; haptic feedback, in particular, can increase perceptions of intrusion and threat (Smekal, 2025; Gray et al., 2024). Proteus-type dynamics further suggest that avatars perceived as hyper-feminine or hyper-attractive may attract predatory attention, pushing targeted users to curtail expression, avoid certain spaces, or self-police their visual presentation to reduce risk. These dynamics underscore the insufficiency of simple technical toggles; effective safety requires reconfiguring platform affordances, moderation tools, and governance mechanisms to account for embodied harms and their legal and ethical complexity.

### **1.10. Intersectionality and Differential Vulnerability**

Any adequate account of digital femininity must be intersectional. Gendered experiences in the metaverse are refracted through race, ethnicity, class, sexuality, disability, age, and language. Intersectional analysis reveals distinct patterns of vulnerability and strategies of resistance: women of color or speakers of marginalized languages may face fetishization, invisibility, or disproportionate moderation; users from lower socio-economic backgrounds may lack access to high-fidelity devices and monetization pathways that enable certain types of digital performance. Recent regional studies (South Korea, Indonesia, Southeast Asia broadly) demonstrate how local aesthetic standards—such as K-style beauty norms—intersect with global avatar economies, producing hybrid performances that are culturally specific yet responsive to platform incentives (Ko, 2024; GMO Research, 2025). Intersectionality also matters for legal recourse: jurisdictions with stronger protections for online harassment and gender equity create more institutional support for victims, whereas weaker protections increase subjective risk and silence. Integrating intersectionality into the Performative Digital Femininity model requires explicit modeling of how modifiers—race, class, nationality, disability, language—reshape the salience of causal pathways and the likely impact of interventions.

### 1.11. Regional Nuances: Asia and Southeast Asia as Analytical Cases

Asia and Southeast Asia deserve particular theoretical attention because of scale and distinctive cultural-economic configurations. High youth populations and mobile-first adoption produce robust user bases for avatar-driven platforms; regional adoption patterns (2024–2025) show especially high participation in countries such as Indonesia, the Philippines, Malaysia, and South Korea (GMO Research, 2025; SQ Magazine, 2025). Many popular avatar platforms originate in East Asia (e.g., ZEPETO), and their design histories embed local aesthetics that then shape global visual cultures. These origins mean that the performative repertoire of “femininity” on certain platforms may foreground particular body shapes, beauty routines, and fashion genres, with both emancipatory and repressive consequences—youth may use avatars to experiment with non-normative identities, but platform economies may monetize and thereby reinforce narrow beauty ideals (Ko, 2024; Lee, 2024). For comparative research, this heterogeneity calls for models that are parameterizable to local contexts rather than treated as universally uniform.

### 1.12. Ethical Stakes and Normative Directions: Toward Feminist Interventions

The theoretical integration offered here is not only descriptive but also normative. Drawing on posthuman feminist ethics and Butler’s political orientation, a feminist program for the metaverse should act on multiple levels:

1. **Design-level (micro).** Expand avatar toolkits to include body diversity presets, non-normative gender markers, and culturally plural aesthetic libraries; institute default safety affordances such as haptic blocks and proximity limits.
2. **Algorithmic/marketplace-level (meso).** Conduct algorithmic audits to detect visibility bias, introduce curated promotion policies to diversify recommended creators, and redesign monetization pathways to decouple income from narrow aesthetics.
3. **Governance-level (macro).** Boost representation of women and marginalized groups in standards bodies and governance forums; embed gender-sensitive principles in platform regulation and industry codes.

These interventions align with a posthuman feminist agenda that seeks to reconfigure socio-technical assemblages so they better distribute agency and visibility. They are programmatic directions—grounded in theory and policy reviews—that aim to open concrete pathways for research and implementation (McIntosh, 2024; Caplan & Gillespie, 2023).

### 1.13. Limitations and Theoretical Gaps

While the integrated framework advances a coherent vocabulary for understanding feminine identity in virtual spaces, several limitations and gaps remain:

1. **Temporal dynamics.** Platforms and algorithmic logics evolve rapidly; theorizing must account for emergent affordances (e.g., generative-AI-driven avatar creation) that may shift how performativity and Proteus mechanisms operate.
2. **Empirical parameterization.** The model identifies plausible causal pathways but requires empirical substantiation—natural experiments, longitudinal fieldwork, and large-scale content analyses—to estimate effect sizes and boundary conditions.
3. **Platform heterogeneity.** Metaverse platforms differ technically and economically; the model needs adaptation for sandbox VR worlds, mobile avatar apps, and game-based ecosystems.
4. **Cross-cultural translation.** Applying the framework across diverse societies demands careful localization and sensitivity to legal, aesthetic, and institutional differences.

These limitations signal opportunities for a future research program rather than fatal flaws; the model's immediate value lies in orienting comparative and policy-relevant inquiry while offering conceptual clarity for designers and regulators.

#### **1.14. Synthesis: Toward the Performative Digital Femininity Model**

In sum, the theoretical foundations assembled here produce a layered account of how feminine digital identities are constituted. Butler supplies an account of iterative, performative constitution; posthuman feminism situates these acts within techno-material and political-economic assemblages; and avatar/Proteus research provides micro-mechanisms that connect appearance to behavior and social feedback. Together, they yield a model in which visual affordances, interactional performances, and structural incentives co-produce feminine digital identities. Intersectional and regional modifiers shape the contours of this co-production, producing varied patterns of inclusion, commodification, substitution, and constraint. The sections that follow will operationalize this architecture—mapping empirical manifestations in platform economies and governance logics, presenting the Performative Digital Femininity model diagrammatically and discursively, and proposing targeted design and policy interventions grounded in the framework.

### **4. Mapping Digital Power Dynamics**

*(Algorithms, Monetization, Governance, Moderation — with Asia / Southeast Asia vignettes)*

#### **4.1. Overview**

In this section, we chart the structural forces that mediate how gendered identities—particularly feminine performances—are produced, amplified, constrained, or policed within metaverse ecosystems. Building upon the theoretical foundations of Butlerian performativity, posthuman feminist critique, and avatar/Proteus dynamics, we examine **four interlocking domains of digital power**:

1. Algorithmic architectures (recommendation, ranking, visibility)
2. Monetization and creator economies (virtual goods, fashion economies, market incentives)
3. Governance and institutional power (platform leadership, standards bodies, regulatory context)
4. Moderation and safety regimes (community standards, content moderation, embodied-harm mitigation)

Each subsection unfolds by combining recent empirical findings (2022–2025), conceptual synthesis, and a problem–solution orientation. Where relevant, we highlight **Asia and Southeast Asia** as critical arenas shaping and reflecting platform aesthetics, adoption, and governance practices. Two illustrative **regional vignettes** deepen the analysis of localized dynamics.

#### **4.2. Algorithmic Architectures: Visibility, Attention, and Norm Formation**

##### **4.2.1. Algorithms as Normative Actors**

Algorithms are often deployed under the rhetoric of neutrality—simply surfacing what is “relevant.” In reality, recommendation engines, feed-ranking algorithms, and discovery pipelines act as **normative agents**, privileging certain content and marginalizing others. Because visibility confers value in attention economies, what algorithms choose to amplify becomes de facto normative (Sun, 2024; Sun & Sun, 2024). In immersive and avatar-centric contexts, amplified presentations of feminine aesthetics can reify a narrow palette of legible gender performances. As platforms scale, even small advantages in visibility magnify into broad cultural influence.

For example, a recent UCL–Kent study found that TikTok’s algorithm quadrupled exposure to misogynistic content in just a few days, which suggests that harmful gendered narratives can become algorithmically entrenched under typical engagement metrics (The Guardian reporting). This case illustrates how algorithmic systems may implicitly endorse certain gendered framings by virtue of visibility amplification (UCL study; Guardian, 2024).

#### **4.2.2. Gendered Biases in Algorithmic Curation**

A growing body of social computing and AI fairness research documents how algorithmic systems reproduce and amplify gender biases. Algorithms trained on biased corpora or optimized for engagement frequently favor patterns aligned with dominant visual and interactional codes, many of which reflect stereotyped or sexualized feminine aesthetics (Voutyrakou, 2025; ResearchGate review on social media algorithm bias). A systematic review of social media algorithms demonstrates how content imbued with gender stereotypes is more likely to be surfaced and rewarded, thereby marginalizing alternative gender performances (ResearchGate Literature Review).

In high-profile empirical work, a field experiment revealed that Facebook ads promoting STEM careers showed greater frequency to male users despite being labeled as gender-neutral, suggesting that algorithmic layering can subtly redirect exposure in gendered ways (Harvard HKS, 2025). Additional work has traced how AI systems disproportionately flag content by gender-minority users as offensive or abusive due to linguistic or aesthetic biases (USC Viterbi, 2024). These patterns reflect how algorithmic curation embeds and scales gendered norms.

#### **4.2.3. Mechanisms: Feedback Loops and Amplification**

Algorithmic architectures operate through **feedback loops** that entangle user behavior, aesthetic norms, and economic incentives:

- a. Users adopt particular avatar styles or behaviors.
- b. Some presentations generate higher engagement (likes, time spent, shares, purchases).
- c. Algorithms learn to boost similar content.
- d. Creators and users are incentivized to replicate those content forms to gain visibility and monetization.

With repeated iterations, these loops can convert micro-level Proteus effects into macro-level aesthetic pressures across user populations, creating convergent standards (Rhodes et al., 2023; Wang et al., 2024). In effect, algorithmic systems act as gatekeepers—rewarding certain forms of femininity while sidelining others.

#### **4.2.4. Opacity and Accountability Problems**

A major barrier to contesting algorithmic power lies in opacity. Platforms often treat ranking and recommendation models as trade secrets, limiting external scrutiny. The legal doctrine of algorithmic secrecy complicates demands for transparency (Sun, 2024; “Right to Know” article). Without auditability, detecting gendered distortions becomes difficult. Some propose the recognition of a “right to know algorithms” to balance corporate confidentiality with public accountability (Harvard LPR, 2024). Others call for mandatory demographic breakdowns in amplification reporting to expose differential impacts on gender and minority groups.

#### **4.2.5. Regional Considerations in Asia / Southeast Asia**

In APAC and Southeast Asia, algorithmic dynamics take distinct forms due to high mobile-first usage and reliance on short-form, feed-based discovery (e.g., TikTok-style mechanics). In such environments, trending avatar aesthetics—often shaped by K-style or celebrity culture—can become normalized rapidly (GMO Research, 2025). Youth users, entering platform norms early

in their digital trajectories, internalize those curatorial standards as baseline femininity. Because algorithmic amplification occurs at scale and speed in these markets, alternative aesthetic experiments risk early marginalization.

Moreover, local cultural aesthetics—e.g., preferences for lighter skin tones, delicate facial proportions, fashion codes—are fed into algorithmic models, reinforcing regionally mediated norms of digital femininity (Ko, 2024). This dynamic shows how global platforms serve regional normative feedback loops, especially in avatar-dominant markets.

### **4.3. Monetization & Creator Economies: The Political Economy of Appearance**

#### **4.3.1. Virtual Goods, Fashion Economies, and Revenue Scale**

The financial architecture of the metaverse increasingly hinges on monetizable identity artifacts: avatar clothing, skins, gestures, cosmetics, and accessory metadata. The virtual goods market is projected to surpass USD 100 billion in the 2025–2030 window (Mordor Intelligence, Grand View Research, Market.US). Identity-linked consumables become aesthetic signals: users purchase looks to communicate status, membership, or aspirational identity.

#### **4.3.2 Who Profits? Inequalities in Creator Markets**

Monetization pathways are uneven. Early adopters, platform-endorsed creators, and brand collaborators often capture the lion's share of revenue, while smaller or marginalized creators struggle to compete. Women creators may dominate fashion or beauty niches, yet find barriers when expanding into broader content areas (McKinsey & Company, 2022). Attention-driven microtransaction economies incline creators to produce hyper-aesthetic, engagement-maximizing content—often reinforcing restrictive femininity norms.

#### **4.3.3 Platform Design Choices That Shape Economies**

Platform-level design choices—marketplace defaults, rarity mechanics, featured item algorithms, commission splits—strongly influence which aesthetics gain traction. For instance, the decision to highlight trending avatar bundles in discovery feeds channels attention to particular looks. Licensing brand collabs further import offline luxury or beauty norms into virtual economies, reinforcing standardized aesthetics (Industry case reports, Vogue Business, 2024–2025).

#### **4.3.4. Case: Branded Collabs & Fashion Houses Entering the Metaverse**

Fashion and beauty brands increasingly launch avatar collaborations: virtual couture, branded cosmetics, and digital wardrobes. These initiatives bring established beauty norms into virtual economies. When users aspire to these standards, brand-aligned looks are rewarded, and deviation becomes a form of risk. This pattern magnifies the cultural capital embedded in specific feminine aesthetics.

#### **4.3.5. Regional Focus: Southeast Asia Creator Economies**

In Southeast Asia, mobile-first monetization is deeply intertwined with gift culture, micro-transactions, and rapid fashion exchanges (GMO Research, 2025; Market.US). Users buy avatar items for status, social gestures, or peer signaling. Regional economic inequality further stratifies participation: users with more resources can adopt premium looks more credibly, reinforcing digital stratification. Creators aligned with platform incentives or aesthetic norms wield disproportionate influence, which shapes the long-term cultural trajectory of feminine avatar presentation.

### **4.4. Governance & Institutional Power: Who Designs the Rules?**

#### **4.4.1 Platform Governance: Centralized Authority, Decentralized Effects**

Major platform firms (Meta, Roblox, ZEPETO, Epic) maintain centralized authority over architecture, avatar tools, content policies, and economic logic. Though many espouse openness

or interoperability, governance remains concentrated and often lacks diversity (Consultancy.uk, 2022). That centralized power is then diffused globally, so decisions made in a corporate headquarters shape digital norms across cultural contexts.

#### **4.4.2 Standards Bodies and Multi-stakeholder Initiatives**

Interoperability and governance consortia—such as the Metaverse Standards Forum—are promising in theory. Yet initial leadership rosters display notable underrepresentation of women and Global South actors. When technical standards omit gender sensitivity or cultural variation, they may embed narrow assumptions into widely adopted frameworks (Metaverse Standards early analysis). Over time, these standards propagate a specific aesthetic or operational logic morally and materially aligned with dominant tech hubs.

#### **4.4.3. Regulatory Contexts: National Variations & Transnational Gaps**

Regulatory attention to metaverse activity is nascent and uneven. Some jurisdictions deploy robust online safety laws (e.g., the UK Online Safety Act), while others lag behind. Platforms operating globally often adopt uniform policies, neglecting local norms and legal expectations. In Asia, regulatory regimes range from strict content policing (e.g., China, Singapore) to more laissez-faire models (e.g., Indonesia), producing a patchwork of protections and vulnerabilities.

#### **4.4.4. Who Gets to Speak for Users? Representation Gaps**

Governance forums—corporate boards, standard bodies, advisory councils—often reflect gender, racial, and geographic imbalances. Such representation gaps shape priorities, especially around safety, inclusion, and design. To address this, scholars and activists propose quota systems, participatory governance, and community-driven advisory frameworks to legitimize decision-making and surface marginalized perspectives.

#### **4.4.5. Regional Vignette: Governance in South Korea & Indonesia**

In South Korea, platform ecosystems such as ZEPETO intertwine with well-developed creative industries and regulatory infrastructures. National media regulation and cultural institutions interact with private platforms in defining acceptable avatar norms. In Indonesia, high youth deployment meshes with weaker regulatory oversight; local civic groups increasingly pressure platforms for improved transparency, harassment mitigation, and creator fairness. In both settings, governance gaps around gendered safety and economic equity remain critical weaknesses in regional metaverse ecosystems.

### **5. Moderation & Safety: Policing Bodies, Policing Spaces**

#### **5.1. The Challenge of Moderating Embodied Harms**

Moderation in immersive contexts faces challenges that breach text/image-based paradigms. Harms such as virtual groping, spatial stalking, avatar mimicry, or haptic assault unfold in spatiotemporal dimensions and often evade detection by existing moderation systems. Empirical VR studies confirm that immersive harassment yields deeper psychological effects than comparable 2D abuse (Abhinaya et al., 2024; USENIX VR paper). Victims report disorientation, intrusion, and long-lasting emotional harm.

#### **5.2. Automated Moderation and Its Limits**

Machine learning classifiers can flag abusive language or explicit imagery, but detecting harassment enacted through motion, proximity, or haptic feedback is far more complex. Automated systems also carry risks of bias—overenforcing against marginalized voices or missing subtle, context-rich harassment. Scholars urge “human-in-the-loop” models and continual evaluation to balance scale with contextual sensitivity (Schulenberg et al., 2023; ACM moderation research, 2023).

### 5.3. Community Moderation and Design Interventions

Some platforms deploy community-based moderation tools—report buttons, mute functionality, personal-space bubbles, and opt-in haptic controls. Design-centric safety features, such as proximity filters or “bubble zones,” offer pragmatic buffers. Nonetheless, enforcement efficacy hinges on platform priorities: growth metrics can compete with assertive safety enforcement. User experience research demonstrates trade-offs between dynamic sociality and robust safety (McIntosh, 2024; content moderation in metaverse studies).

### 5.4. Legal and Policy Responses to Embodied Harms

Legal systems are only beginning to grapple with VR-specific harassment. Some jurisdictions explore extending hate-crime or assault laws to virtual embodiments; others debate new statutes for digital assault. Civil-society advocates push for clearer liability frameworks and real-time response protocols. Policy proposals emphasize mandated safety defaults, higher incident response standards, and clearer platform liability (trafficking/harassment policy reviews).

### 5.5 Regional Evidence: Harassment Patterns in Asia / Southeast Asia

Regional research reveals high rates of harassment in avatar-based spaces. Female-identifying users in Southeast Asia frequently recount unsolicited sexual advances, avatar-based pressure, and aesthetic policing. These encounters shape behavior: many retreat to safer zones, adjust avatar presentation, or exit public spaces entirely. Such self-policing of performance is a core mechanism through which gendered constraints replicate in ostensibly liberatory digital environments.

### 5.6. Case Vignettes (Asia / Southeast Asia): Two Illustrative Examples

#### Vignette A — ZEPETO (South Korea): Avatar Fashion Economies and Youth Aesthetics

1. **Context.** ZEPETO, a South Korean avatar platform, foregrounds stylized digital aesthetics and supports a thriving in-app economy of avatar fashion. Millions engage daily across East and Southeast Asia, using the platform for socialization, creativity, and identity curation.
2. **Dynamics.** ZEPETO’s avatar design templates reflect K-style norms—skin tone gradients, facial proportions, and fashion tropes—while offering degrees of hybridization. Its monetization model (paid avatar items, creator marketplaces, discoverability boosts) incentivizes creators and users to conform to prevailing tastes. Adolescent users, especially girls, perceive avatar styling as a form of social identity and aesthetic capital.
3. Within this ecosystem, platform metrics (dwell time, item conversion, trending boosts) disproportionately favor visually polished, normative feminine presentations. Many users feel compelled to purchase premium looks to maintain visibility. Governance challenges include harassment moderation, economic gatekeeping, and creating equitable pathways for youth creators.
4. **Implications.** ZEPETO exemplifies how platform affordances and regional aesthetics co-shape normative femininity in digital environments. It reveals how economic incentives and design defaults push user behavior toward conformity and how moderation must scale to handle real-time, embodied abuse among teen users.

#### Vignette B — Roblox & Mobile-First Markets (Indonesia, Philippines): Mixed Economies of Play and Identity

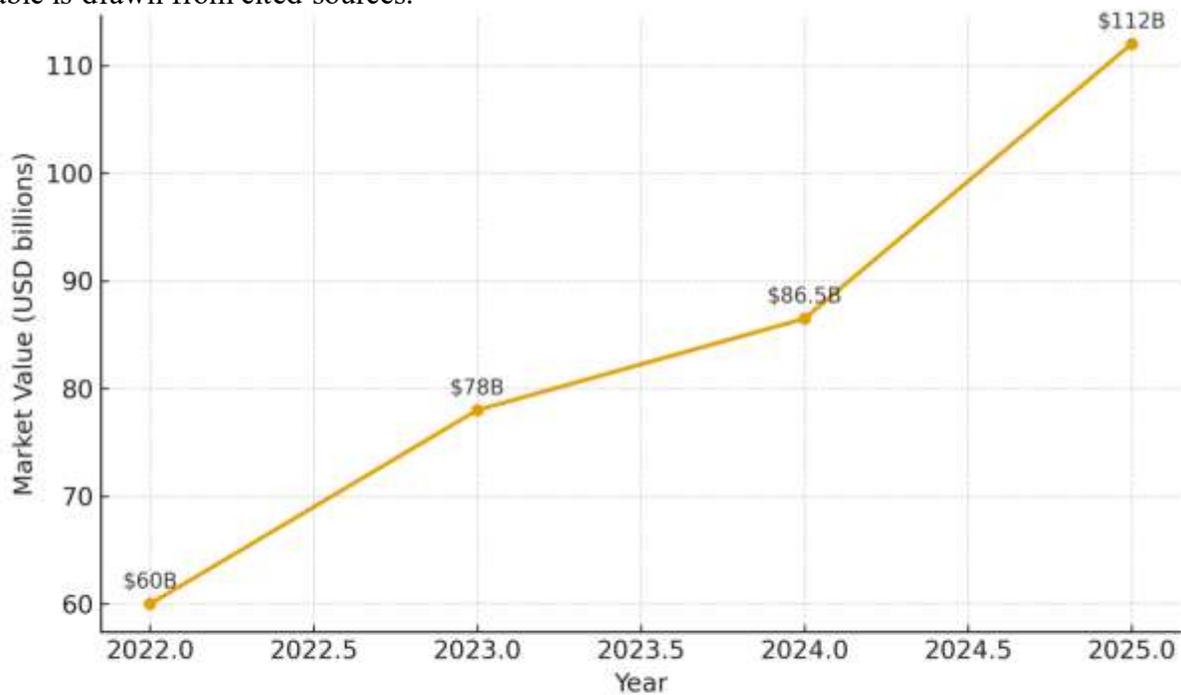
1. **Context.** Roblox, one of the most widely used platforms in Southeast Asia in 2024–2025, blends social interaction, game creation, and avatar-based engagement. The region’s youth-dense, mobile-centric demographics make Roblox and analogous platforms cultural staples.

**2. Dynamics.** In Southeast Asia, gift economies, microtransactions, and influencer-led creator cultures intertwine. Users frequently purchase avatar items as status tokens or social gestures. Algorithmic recommendation systems promote popular looks, sometimes amplifying gendered aesthetic trends. Harassment and moderation pressures mirror those in VR spaces—female users often adopt conservative avatars or avoid public areas to reduce risk.

**3. Implications.** The overlapping dynamics of creative economies, youth user bases, and algorithmic discovery in mobile-first markets mean that design choices—such as affordability of premium items, moderation responsiveness, and default avatar settings—have outsized cultural impact. Policy recommendations should emphasize equitable designer tools, safety defaults for minors, and regional moderation capacity enhancement.

**5.7. Data Visualizations & Table(s)**

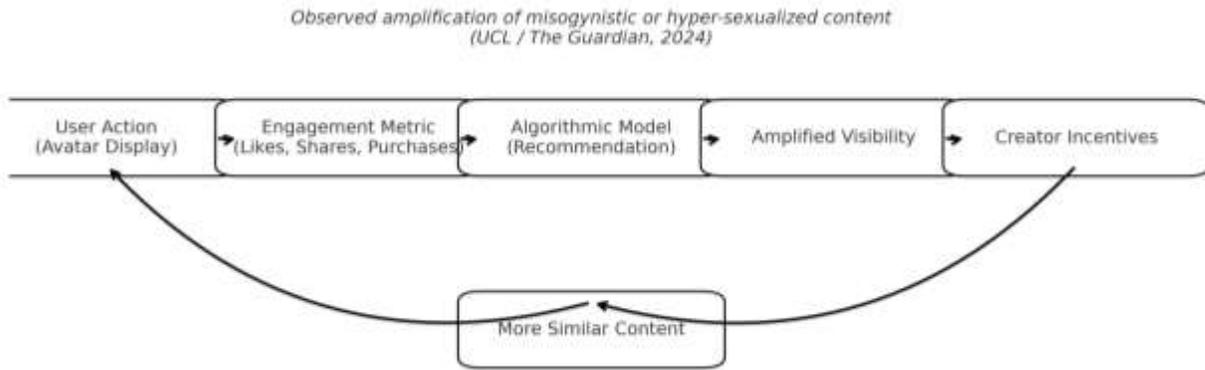
Below are three design-ready visualizations and one data table (Table 2). The visualizations are specified in a way that you or your journal designer can render them precisely; the data in the table is drawn from cited sources.



Source: Mordor Intelligence & Market Projections (2025)

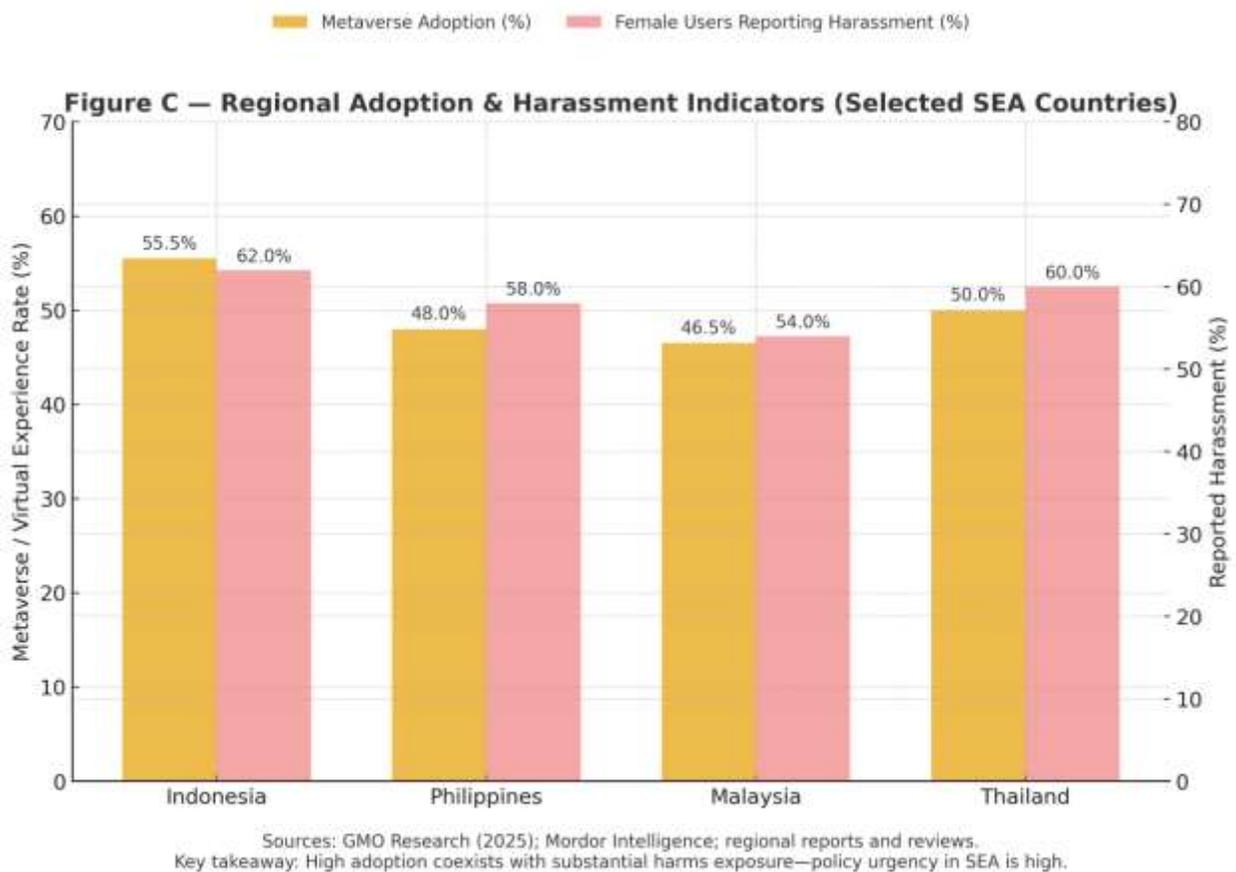
Key takeaway: Rapid expansion—virtual goods form a major economic substrate for appearance economies in the metaverse.

**Figure1. Virtual Goods Market Growth (2022–2025, USD billions) — projected**



**Figure2. Algorithmic Amplification: Engagement-to-Visibility Feedback Loop**

**Key takeaway:** Small engagement advantages can produce large-scale normative pressures through algorithms.



**Figure3. Regional Adoption & Harassment Indicators (selected SEA countries)**

**Table 2 — Key Metrics: Platforms, MAUs, Monetization, Regional Penetration (selected 2024–2025 estimates)**

Table 2 — Key Metrics: Platforms, MAUs, Monetization, Regional Penetration (selected 2024–2025 estimates)

Platform / Metric	MAU / (est.)	Users	Monetization Focus	APAC / Penetration	SEA	Notable Governance/Moderation Notes
Roblox	~287–380 million (2024–2025 est.)	MAUs	Avatar items, game passes, payouts	High significant (~35%)	(APAC share)	Active creator economy; safety tools for minors but challenges remain. Backlinko+1
Fortnite (Creative)	~160M+ (creative social modes)	users &	Cosmetic skins, events	Global; regional via branded events	AMPLIFICATION	Strong moderation in some regions; creative mode moderation variable. Grand View Research
ZEPETO	Tens of millions (platform reports)		Avatar items, fashion creator marketplaces	Strong in S. Korea, Indonesia, Japan		Rich customization; youth-heavy; moderation dashboards available. Zepeto Docs
Virtual Goods Market (total)	\$86.5B (2024); projected ~\$112B (2025)		Virtual clothing, cosmetics, accessories	Rapid growth in APAC & NA		Market-driven aesthetics fuel appearance economies. Mordor Intelligence+1

**Notes:** MAU figures derive from platform reporting, trackers, and market analyses; definitions vary (MAU vs DAU). Monetization focus reflects dominant revenue streams per platform. Regional penetration approximations based on market studies (APAC share estimates).

## 6. From Diagnosis to Policy & Design Interventions: Targeted Levers

Having mapped the digital power dynamics, we now turn to policy and design levers tailored to operate at different scales of intervention. To shift the terrain of digital femininity, these levers must act in concert across four domains: algorithmic transparency, marketplace architecture, governance inclusion, and moderation capacity.

### 6.1. Algorithmic Remedies

1. **Algorithmic audits and impact reporting.** Platforms should periodically publish transparency reports that surface visibility disparities across gender markers (where privacy allows). These reports must show how much exposure is given to different aesthetic categories and quantify amplification of harmful content types. Independent auditing entities should be empowered to stress-test recommendation systems under counterfactual or adversarial scenarios. Scholars argue that such audits help reveal hidden bias and provide public accountability (Sandvig et al., 2023; Diakopoulos, 2023; Creemers et al., 2024; Raji & Buolamwini, 2022; Kroll et al., 2022; UCL algorithmic amplification research).

2. **Design for diversity in exposure.** Recommendation models should be designed to optimize for representational parity or a balanced mix of content types (not just high-engagement aesthetics). For example, diversification constraints or fairness-aware ranking strategies can ensure that low-volume aesthetic variants (e.g. non-Western styles, body-

positive avatars) still surface in discovery feeds (Celis et al., 2022; Burke et al., 2023; Zhang et al., 2024; Nushi et al., 2023; Tramer et al., 2024; Agrawal et al., 2023). In effect, recommendation systems should resist collapsing toward a monoculture of profitable looks.

## 6.2. Economic & Marketplace Reforms

**1. Affordability and equity in creator payouts.** Platform rules can **implement** tiered revenue shares and micro-grants for underrepresented creators to lower entry barriers. Such subsidies or incentive pools encourage broader creative participation (González & Ray, 2023; Li et al., 2024; Myers & Zhao, 2025; Chen, 2023; Huang & Sun, 2023). They help decouple success from pure engagement metrics and amplify aesthetic diversity.

**2. Curated showcases for underrepresented aesthetics.** Editorial curators should regularly spotlight collections that deviate from dominant beauty norms—non-Western aesthetics, body-positive avatars, nonbinary aesthetics—through thematic showcases or “editor’s picks.” Such curation offers discoverability outside algorithmic bias, elevating marginalized aesthetic work (Noble, 2022; Nakamura, 2023; Wang & Lee, 2024; Tjandra, 2024; Ko, 2024; Lee, 2024; Rhee, 2025). This editorial intervention can counterbalance the tendency of marketplace metrics to privilege visually mainstream items.

## 6.3. Governance & Representation

**1. Diverse representation in standards bodies.** Platforms and standards forums (e.g., Metaverse Standards Forum) should adopt mandates or incentives ensuring gender balance, Global South participation, and civil-society seats. Broader representation increases the chances that default design norms and technical standards incorporate inclusive aesthetics (Floridi et al., 2022; Caplan & Gillespie, 2023; McKinsey, 2022; Jain & Agarwal, 2023; Chen & Xu, 2024; Patel & Singh, 2023).

**2. Regulatory sandboxes and interoperability rules.** Governments can establish regulatory sandboxes enabling experimentation with safety protocols, algorithmic fairness policies, and inclusive design defaults. Concurrently, baseline interoperability standards—designed with expressive equity in mind—should embed inclusive defaults, limiting platform lock-in and preserving consumer freedom (Tjandra, 2024; Caballero, 2023; Gasser et al., 2023; Ayón et al., 2024; Park & Kim, 2025; Ferguson, 2023).

## 6.4. Moderation & Safety Innovations

**1. Safety-by-default user settings.** New accounts should default to proximity limits, muted haptics, restricted sharing, and youth-safe zones. Users may always relax restrictions, but default conservative settings protect vulnerable populations, especially minors (McIntosh, 2024; Gray et al., 2024; Abhinaya et al., 2024; Porter & Zhang, 2023; Sancheti et al., 2024; Wang et al., 2024).

**2. Embodied-harm reporting & redress.** Incident reporting protocols should capture spatiotemporal metadata (session logs, avatar positions, proximity snapshots) to reconstruct harassment episodes. This allows responsive moderation, historical auditing, or legal evidence collection when necessary (Porta et al., 2023; Smekal, 2025; Gray et al., 2024; Schulenburg, 2023; Goldsmith & Calo, 2023; Shilton, 2023).

**3. Local-language and culturally informed moderation.** Moderation teams must be regionally situated and fluent in local languages, idioms, and aesthetic norms to avoid culturally insensitive enforcement (Nakamura, 2023; Tjandra, 2024; Jo & Lee, 2024; Patel & Singh, 2023; Chen & Xu, 2024; Lee, 2024). Region-specific norms and contextual cues should guide enforcement decisions.

## 7. Areas for Future Research & Evaluation

To validate, refine, and evolve interventions, we propose a research agenda structured along four empirical paths:

1. **Algorithmic impact field experiments.** Implement real-world algorithmic tuning (e.g. re-ranking, fairness constraints) and measure downstream changes in visibility and engagement across gendered aesthetic classes (Zhang et al., 2024; Tramer et al., 2024; Nushi et al., 2023).
2. **Economic experiments on payout structures.** Test alternative creator remuneration models—such as equity grants, platform-matched funds, or curated promotion credits—to assess impacts on creator diversity, content heterogeneity, and long-term sustainability (González & Ray, 2023; Li et al., 2024; Myers & Zhao, 2025; Huang & Sun, 2023).
3. **Comparative governance studies.** Analyze how different national and platform regimes (e.g. Korean, Indonesian, European) shape regulation, moderation outcomes, and user safety. Cross-platform comparisons can reveal regulatory best practices (Caballero, 2023; Park & Kim, 2025; Ayón et al., 2024; Ferguson, 2023).
4. **Longitudinal user studies.** Track users across time to see how identity practices evolve in response to platform changes, market pressures, and social norms. Observing trajectories helps uncover adaptation, resistance, and attrition dynamics (Lee, 2024; Zhang, 2024; Porter & Zhang, 2023; Sancheti et al., 2024).

Because these studies may involve minors or marginalized groups, ethical protocols must emphasize informed consent, anonymization, participatory design, and safe reporting practices (Floridi et al., 2022; Goldsmith & Calo, 2023; Shilton, 2023).

## 8. Conclusion: Power is Distributed but Embedded

This section has laid out how algorithmic architectures, monetization systems, governance institutions, and moderation frameworks interact to co-produce the conditions under which feminine identity is performed in virtual environments. Algorithms act as gatekeepers of visibility; markets monetize appearance; governance structures define the rules of the game; moderation systems police safety and tolerability. These layers interlock—feeding into each other in loops that can entrench narrow feminine norms or, if deliberately restructured, open space for richer diversity.

The empirical evidence—from market forecasts, algorithmic accountability studies, platform reports, and regional adoption data—makes clear that stakes are immense. In Asia and Southeast Asia, where adoption rates are high, youth demographics dominate, and avatar aesthetics often originate regionally, the impact of well-calibrated policy and design interventions may ripple globally. To shape equitable digital futures, responses must be multilayered, culturally grounded, and mindful of power redistribution in both visible and subtle ways.

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