



XTIC
EXPERIENTIAL TECHNOLOGY INNOVATION CENTRE

A perspective on **South Korea's Metaverse Strategy**



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Executive Summary

South Korea's Metaverse Strategy, part of the Digital New Deal 2.0 is among the world's most ambitious national blueprints for immersive technology development. It defines the metaverse as a 'digital new continent,' a strategic domain for economic, cultural, and industrial expansion. Aiming to secure the fifth-largest metaverse market share by 2026, the plan targets training 40,000 professionals, fostering 220 companies, and developing 50 global best-practice projects.

The strategy is organized around four key pillars:

- 1) creating a world-class metaverse platform ecosystem,
- 2) training key talent for the metaverse era,
- 3) nurturing specialized corporations to lead industry growth, and
- 4) building an exemplary, ethical, and legally sound metaverse world. This structure integrates industrial policy with social inclusion and ethical oversight.

Korea's core strengths include state and industry coordination, advanced digital infrastructure, and cultural export capacity. Its leadership in 5G, gaming, and K-content provides a robust base for metaverse expansion. Initiatives such as the Metaverse Hub in Pangyo and the Metaverse Social Innovation Center foster innovation and inclusion. Ethical principles emphasizing fairness, inclusion, and diversity reinforce public trust.

However, potential weaknesses include over-centralization, regulatory rigidity, and limited flexibility for startups. The emphasis on infrastructure occasionally overlooks social and psychological dimensions of digitalization. Talent shortages and reliance on public investment may constrain scalability.

Opportunities lie in global collaboration, export of immersive cultural content, and leadership in ethical governance. The metaverse supports Korea's digital inclusion agenda, bridging regional divides and enhancing citizen participation. By

participating in global policy dialogues, Korea can help shape the international regulatory environment for the metaverse.

External threats include geopolitical competition, cybersecurity risks, and volatile tech markets. Yet Korea's adaptive governance, public-private partnerships, and investment ecosystem provide resilience.

South Korea's metaverse strategy benefits from advanced digital infrastructure and strong state and industry coordination, but its technology intensive model may limit accessibility for emerging economies. Broader participation from the Global South will depend on affordable platforms, skills transfer, and adaptable deployment frameworks.

In essence, South Korea's metaverse vision combines innovation, ethics, and national competitiveness. It positions the country as a pioneer in building a human-centered, secure, and creative digital future balancing growth with responsibility.

Introduction

The eXperiential Technologies Innovation Center (XTIC) is established by IIT Madras, one of India's premier institutes. XTIC has recently constituted a committee to draft India's Metaverse Policy: the Metaverse India Policy and Standards (MIPS) Committee. This initiative brings together international standards agencies and various stakeholders to foster a global Metaverse that is pervasive, open, and inclusive.

The MIPS forum does not directly produce standards or policies. Instead, it coordinates resources and identifies needs to support the development of standards and policies within relevant organizations. This collaborative approach of all the stakeholders ensures that the evolving Metaverse ecosystem benefits from comprehensive and well-aligned guidelines.

MIPS has recently been very active in contributing to new standards in ITU as part of few study groups in the field of Metaverse.

MIPS committee was tasked to analyse Metaverse policy of various other countries before formulating our own. In this process, MIPS is creating our perspective on China's Metaverse policy to understand its vision and approach in depth. This will help us gain insights that can guide the drafting of a well-grounded Metaverse policy for India. We have several of our members from the MIPS committee that have contributed in creating this perspective.

The committee referred the definition and analysis of Metaverse from the ITU standards committee [1].

The committee analyzed the policy of South Korea published by the Ministry of Science and ICT (South Korea) [2].

South Korea's Metaverse Strategy is one of the focal points of the country's broader 'Digital New Deal 2.0' initiative, representing one of the most comprehensive and future-oriented digital transformation blueprints in the world. The strategy positions the metaverse not merely as a technological platform but as a



'digital new continent' a space where culture, economy, and society converge through immersive innovation. With ambitions to become the fifth-largest metaverse market globally by 2026, South Korea's approach integrates industrial policy, social inclusion, technological innovation, and ethical governance. It aims to nurture 40,000 metaverse professionals, foster 220 metaverse service providers, and develop 50 global best-practice models.

This national strategy is spearheaded by the Ministry of Science and ICT (MSIT) and supported by the Korea Metaverse Alliance, a consortium of over 200 organizations, including tech companies, universities, and government bodies.

Summary or Highlights of South Korea's Metaverse Policy (ref[2])

1. National vision: To establish an open, safe, and globally competitive metaverse ecosystem.
2. Led by the Ministry of Science and ICT (MSIT) with strong inter-ministerial collaboration.
3. USD 186.7 million allocated under the Digital New Deal 2.0 for metaverse development.
4. Formation of the Metaverse

Alliance with over 1,000 industry and research participants.

5. Creation of regional metaverse academies to train 40,000 professionals by 2026.
6. Promotion of K-culture and entertainment exports through immersive experiences.
7. Strong focus on safety, ethics, and inclusive governance frameworks.

Please refer to Appendix B for a listing of some Korea Metaverse Alliance members.

The plan reflects South Korea's strengths in digital infrastructure, content creation, and public-private collaboration. It is also aligned with the government's vision for a 'hyper-connected society' one that uses digital platforms to enhance competitiveness and address societal challenges.



Why did we study the strategy in detail and create our perspective?

This commentary is not an academic exercise but considered a very practical tool. It helps us in India as policymakers, businesses, and researchers understand global approaches to the Metaverse, compare strategies, and develop stronger and more context-appropriate policies in their own settings.

What we in India learn from the strategy:

- We learn, adapt, and improve policy and strategy design in our own contexts.

- It helps us identify best practices (what works well). South Korea's policy gives us an excellent indication of how to integrate social values and ethical governance into a tech policy.
- As policies are not "one size fits all", we in India can ask ourselves "what can we adapt to our context". India might learn from South Korea's public-private collaboration and their strengths in digital infrastructure and content creation.
- To provide insights for future international cooperation,



especially within the European Union and other global forums.

- It helps us identifying Gaps and Risks for our own policy.

Below is a detailed perspective that looks at its strengths, challenges, opportunities, and vulnerabilities.

Strengths

South Korea's metaverse strategy stands out for its institutional coherence, technological depth, and cross-sectoral integration. Its greatest strength lies in the state's proactive coordination across ministries and industries. Unlike market-driven ecosystems, Korea's approach blends state guidance with private-sector dynamism, ensuring that the metaverse develops within a regulated yet innovative framework.

The plan's integration into the broader 'Digital New Deal 2.0' framework ensures policy continuity and funding support. By explicitly linking the metaverse to national economic growth and digital innovation, the government has positioned it as a key lever for post-pandemic recovery and industrial restructuring. This synergy between policy vision and industrial strategy differentiates South Korea from many Western economies, where metaverse initiatives are fragmented and largely corporate-driven.

Technologically, South Korea enjoys one of the most advanced digital infrastructures globally, including 5G penetration, high-speed broadband, and strong gaming and entertainment industries. The strategy capitalizes on these foundations by supporting the development of 'wide-open metaspaces,' 'hyper-realistic media,' and 'digital humans', core technologies that underpin immersive experiences. This emphasis on technological self-reliance also aligns with Korea's innovation policies in AI, blockchain, and XR (extended reality).

Please refer to Appendix A for a listing of some leading XR companies.

Institutionally, the creation of a 'Metaverse Hub' in Pangyo and its planned expansion into four super-regional areas provides a scalable model for regional innovation. These hubs serve as incubators for startups, talent development, and public-

private collaboration, creating distributed centers of excellence across the nation. These hubs are located in the following locations:

1. Incheon Metropolitan City (Songdo / Incheon Free Economic Zone)
2. Seoul (Metaverse Seoul & Seoul Startup Hub)
3. North Gyeongsang Province (Metaverse Convergence Industry Cluster)

Culturally, Korea's vibrant entertainment sector and its 'Hallyu' (Korean Wave) provide a powerful foundation for metaverse content development. The government's support for metaverse-based K-pop, tourism, and cultural exports reinforces its soft power and global brand. By fusing culture, creativity, and technology, South Korea effectively positions itself as a leader in the global digital content economy.





Challenges

Despite its strong policy coherence and infrastructure, the South Korean metaverse strategy faces a few challenges. One key concern is the risk of over-centralization. While government coordination is a strength, excessive regulatory oversight could limit market responsiveness and innovation. The emphasis on top-down policy design may limit basic creativity and entrepreneurial flexibility, traits critical to metaverse success.

Another challenge lies in the fragmented governance of digital ethics and intellectual property (IP). Although the strategy proposes establishing ethical guidelines and a legal reform roadmap, operational clarity is still required. Well-defined protocols are required for compliance without ambiguity for digital asset ownership, copyright, and privacy protection, metaverse enterprises.

Talent shortage also poses a structural challenge. While the government plans to train 40,000 experts, the current educational ecosystem may not produce sufficient interdisciplinary professionals who combine skills in software

development, design, and digital ethics. The Metaverse Academy and Metaverse Convergence Graduate School are promising steps but will require time to achieve scale and relevance.

The strategy is reliant on public investment and raises sustainability concerns. The success of metaverse hubs and R&D programs will depend on consistent private-sector engagement.

Korea's intense focus on technological excellence sometimes overshadows socio-psychological aspects of digital life. Concerns about mental health, digital addiction, and social polarization in virtual spaces are to be adequately addressed. As the metaverse becomes a public sphere, balancing innovation with social well-being will become increasingly essential.

Measurable goals / metrics will have to be defined, else it will be hard to track progress and hold stakeholders accountable.

Metaverse Capacity Index (MCI) can be defined. MCI refers to various frameworks and initiatives designed to evaluate, measure, or index the

development, adoption, and infrastructure capabilities of the metaverse defined.

Defining other indices may be necessary as well.

The Whitepaper that XTIC published last year [3] refers to three different Metaverse Indices:

- 1) Ethical Metaverse Index that includes interoperability, content moderation and privacy,
- 2) Responsible Metaverse Index that includes global connectivity, particularly to the global south, innovation and creativity, diversion and inclusivity, and sustainability,
- 3) Transparent Metaverse Index that includes trustability and platform governance.

While South Korea's metaverse policy is ambitious and well resourced, its reliance on high end infrastructure, public investment, and advanced talent ecosystems creates entry barriers for the Global South. High costs, skills gaps, and limited low cost adoption pathways risk restricting meaningful participation by emerging economies.

Opportunities

South Korea's metaverse initiative presents substantial opportunities to lead global digital transformation and economic innovation. Its integration into the Digital New Deal aligns the strategy with green, inclusive, and resilient development goals. The metaverse can act as a catalyst for cross-sector innovation, linking ICT, manufacturing, culture, and education into a cohesive ecosystem.

One key opportunity lies in industrial diversification. The metaverse can serve as an engine for new business models that merge real-world production with virtual experience. Sectors such as education, healthcare, tourism, and manufacturing can utilize digital twins, virtual collaboration, and immersive learning platforms to enhance productivity and user engagement.

Internationally, Korea's strategy provides a template for digital governance that balances innovation with ethics. Its focus on self-regulation, fairness, and inclusion



aligns well with emerging frameworks such as the EU's GDPR and AI Act. This regulatory compatibility enhances Korea's potential to influence global standards in data privacy and virtual identity management.

Economically, the government's plan to foster 220 metaverse service providers and attract global investment can stimulate entrepreneurship and job creation. By connecting domestic firms with global markets through the K-Metaverse Network, Korea can export its technological and cultural assets, reinforcing its leadership in Asia's digital economy.

Socially, the metaverse strategy supports digital inclusion. Initiatives

such as the Metaverse Social Innovation Center aim to use immersive technologies for social welfare, healthcare, and education. This aligns with Korea's long-term goal of reducing digital divides and creating a participatory, citizen-centered digital society.

From a business perspective, the emphasis on metaverse Hallyu content and global cultural exchange creates opportunities for creative industries, start-ups, and SMEs. Korean companies can expand beyond domestic entertainment markets into immersive experiences for global audiences, increasing export potential and brand influence.

Vulnerabilities

The external environment poses few vulnerabilities to South Korea's metaverse ambitions. Chief among these is geopolitical tension and technological competition. As global digital ecosystems become arenas of strategic rivalry, Korea's dependence on foreign semiconductors and cloud infrastructure could expose it to vulnerabilities in supply chains and data security.

As global corporations such as Meta, Microsoft, and Tencent race to dominate the metaverse space,

Korean firms may face competition in scale and capital. Domestic platforms might be overshadowed by global incumbents.

Cybersecurity and digital safety also remain critical challenges. The strategy's ambition to create interoperable, decentralized platforms increases the risk of data breaches, identity theft, and cyber fraud. Although Korea has strong cybersecurity frameworks, the complexity of metaverse ecosystems anywhere introduces new attack vectors that should be handled.

Ensuring inclusive design and accessibility will be essential to achieving nationwide participation in metaverse-based services.

Finally, global economic instability could affect investment flows and market confidence. As the metaverse requires sustained capital and R&D investment, any downturn in the global tech sector could slow Korea's progress. The government will need to balance fiscal requirements with innovation stimulus to sustain long-term growth.

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Appendix A

Well-known XR / AR / VR / mixed-reality companies in South Korea

1. Samsung Electronics	14. LetinAR Co., Ltd.
2. SK Telecom	15. Miragesoft
3. LG Uplus	16. Looxid Labs
4. Kakao Corp.	17. VRISM
5. FXGear	18. Coxspace
6. EVR Studio	19. Mediafront
7. VA Corporation	20. iINTER VR
8. Thirteenth Floor Corp.	21. ELROIS
9. Maxst Co., Ltd.	22. Z-emotion
10. Marvrus	23. SKoneC Entertainment
11. DoubleMe	24. Reality Reflection
12. TSP XR	25. Addus Technology
13. BlueprintLab	

Appendix B

Some leading companies/organisations in the Korea Metaverse Alliance Consortium

1.	SK Telecom Co., Ltd.
2.	KT Corp.
3.	LG Uplus Corp.
4.	Hyundai Motor Company
5.	Naver Corporation (via Naver Labs)
6.	Kakao Entertainment Corp.
7.	CJ ENM Co., Ltd.
8.	Lotte World Co., Ltd.
9.	MAXST Inc.
10.	Raontech Co., Ltd.
11.	Samsung Electronics Co., Ltd.
12.	Shinhan Bank
13.	KB Kookmin Bank

14.	Cheil Worldwide Inc.
15.	SM Entertainment Co., Ltd.
16.	MegaStudyEdu Co., Ltd.
17.	GIANTSTEP Inc.
18.	Korea Mobile Internet Business Association
19.	Bundang Seoul National University Hospital
20.	VRTCT Inc.
21.	Hanryu Bank Co., Ltd.
22.	Woori Bank Co., Ltd.
23.	Nexon Co., Ltd.
24.	Netmarble Corporation
25.	SM Cultural Universe Corp.



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