LADYVERSE: EMPOWERING HER REALITY
"TRUST, INCLUSIVITY, IMPACT: DRIVING DIGITAL INCLUSION AND GLOBAL COMPETITIVENESS THROUGH THE NEW AI REALITY"

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1. PROJECT OBJECTIVES

Women-led MSMEs represent one of the most significant yet underserved segments of Indonesia's economy. According to the Ministry of Cooperatives and SMEs (2023), women manage approximately 64.5% of Indonesia's 64.2 million registered MSMEs, making them the primary drivers of cultural and economic innovation at the grassroots level. However, a structural gap persists between their current 'semi-digital' operational status and the requirements for true global competitiveness. Existing empowerment models centred on basic social media and e-commerce have reached their limit, the next frontier requires a paradigm shift from transactional platforms to immersive digital infrastructure.

Ladyverse is a pioneering hybrid metaverse initiative designed to bridge this digital gender divide and propel Indonesian women-owned micro, small and medium enterprises (MSMEs) onto the global stage. Ladyverse is a secure, high-fidelity infrastructure that ensures women lead the future of a sovereign and inclusive global economy. It addresses systemic deficiencies in existing digital frameworks like disparities in access to technology, complex technical frameworks, and limited representations within these frameworks by turning the current 2D experiences for e-commerce to unlimited 3D immersive environments. We are shifting away from rudimentary skills and tools to create a safe, immersive and open digital ecosystem. With VR/AR technology, we hope to bridge the gap between women in the digital landscape and access the global market in an equitable way.

Unlike traditional e- commerce platforms, Ladyverse offers a unified, interactive 3D environment that elevates Indonesian cultural goods through premium, high-tech showcases resonating with international audiences. The program strategically aligns with SDG 5 (Gender Equality), SDG 8 (Decent Work and Economic Growth), and SDG 9 (Industry, Innovation, and Infrastructure). The program focuses on addressing barriers to digital proficiency, market access, and economic access. It addresses these by proposing an operational two-way metaverse platform for “digital twins” of creative products, which mix virtual assets with curated physical displays reaching different audiences across Indonesia.

TARGET GROUP

Ladyverse targets womenpreneurs MSMEs operating in the creative and artisan sectors across Indonesia, from Bandung, Yogyakarta, and Denpasar. These businesses possess significant creative potential and local agility but lack the advanced digital infrastructure to scale internationally. The programme focuses on three specific sub-groups: Cultural**,** Social Commerce Users**,** Regional Leaders. Beneficiary selection will be conducted through a structured digital-readiness audit, ensuring participants possess the minimum prerequisite digital literacy for meaningful engagement with the Ladyverse platform.

TOPIC AREAS

Ladyverse demonstrates that when women are given the keys to advanced digital infrastructure, they do not merely participate in the economy they lead its transformation from conventional to immersive, and from local to global.

Women's Leadership: Digital Pioneers

Ladyverse dismantles traditional gatekeeping by positioning womenpreneurs as architects of the Web3 frontier. Through strategic governance of their own virtual spaces and technological leadership in VR/AR, Indonesian women move from passive users to digital thought leaders who drive transformation within their regional collectives.

Economic Independence: Borderless Financial Agency

The platform secures financial autonomy by enabling women to scale beyond domestic economic cycles. By establishing a 'digital corridor' to global markets, building high-fidelity asset portfolios through digital twins, and lowering capital barriers to export, Ladyverse democratises global trade and empowers womenpreneurs to maintain full financial control.

Women in Industry: Reimagining the Creative Sector

Ladyverse elevates traditional crafts into Creative Industry 4.0 by integrating 3D digitisation and virtual showrooms into female-dominated sectors. This model promotes sustainable industrial growth by reducing physical waste and travel, while fostering bilateral synergy that merges Indonesian artisanal skill with international digital standards.

METHODS OF IMPLEMENTATION

A Participatory Framework

The programme follows a participatory, needs-driven approach, transforming partners from passive beneficiaries into active stakeholders in planning and evaluation. By scaling metaverse technology to match each MSME's specific capacity, the project ensures realistic workloads and targeted outcomes.

Technical Innovation: The Ladyverse Platform

The core innovation is Ladyverse, a web-based 3D environment optimised for accessibility across standard mobile and desktop devices. Enhanced with 3D Scanning and Augmented Reality (AR), the platform delivers two key capabilities: High-Fidelity Virtual Showrooms, Real-World Contextualisation.

CORE CONCEPT

The current global digital landscape faces deep-rooted issues, including biased algorithms, widespread exclusion, and a growing technology gap that sidelines grassroots innovators. Ladyverse aims to change this path by tackling these problems and providing an integrated system built on technological trust, intentional inclusion, and significant global economic impact. The application uses predictive AI algorithms to supply women entrepreneurs with analyses of international consumer trends, linking traditional artisanal practices with global market needs. Ladyverse is a movement to ensure the next generation of the internet is built with a "Lady First" mentality regarding safety, equity, and opportunity. The Core Idea: "Empowering Her Reality" means that a woman's digital experience should be a safe extension of her aspirations. Instead of adapting to a male-dominated tech culture, the tech culture adapts to her.

The Vision: Transform Indonesian women MSMEs from local craftspeople into global digital innovators by leveraging the metaverse as a springboard for sustainable forward-looking economic development.

Its tagline operates through two semantic layers:

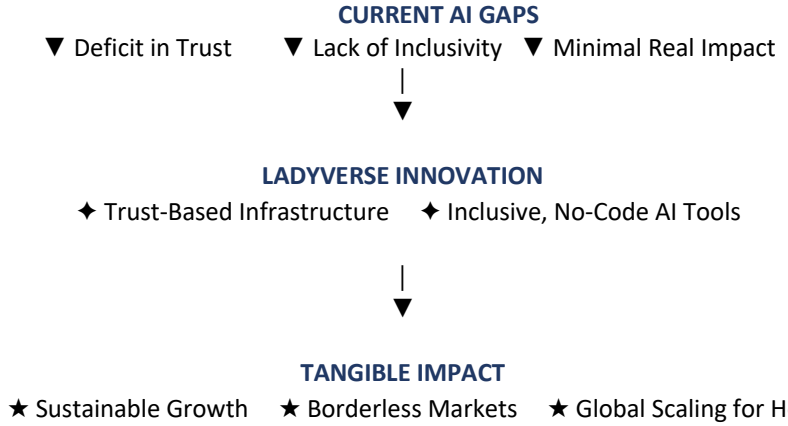
- Technological Reality: This shifts the context for female MSMEs from basic two-dimensional online text and images to interactive three-dimensional digital models.
- Socio-Economic Reality: It acknowledges the physical, domestic, and geographic barriers often faced by women entrepreneurs. An immersive metaverse platform improves their conditions, enabling local operations alongside global competition.

Key functionalities include:

- MSMEs Product Digitalization: Achieved through three-dimensional scanning and augmented reality model creation.
- Metaverse Exhibition Development: An accessible virtual space that removes the need for specialized hardware.
- Digital Literacy Mentorship: Helping MSMEs grasp modern marketing methods and interactive technologies.

VALUE PROPOSITION

- Democratizing Digital Innovation: Straightforward and affordable access to AI-driven AR/VR tools that address the 32% digital adoption gap among Indonesian MSMEs, allowing women entrepreneurs to move beyond traditional limits.
- Immersive Consumer Engagement: Improved product visualization via high-fidelity three-dimensional replicas that convert static e-commerce into dynamic interactive experiences, increasing global market competitiveness.
- Borderless Global Reach: Virtual exhibitions free from geographic constraints through accessible metaverse hubs that connect local businesses with international consumers.
- Inclusive, Human-Centered Design: A people-focused method that incorporates gender inclusivity and reduces physical, domestic, and geographic barriers for women entrepreneurs using predictive AI insights and mentorship programs.



Trust: Ladyverse solves the issues of opacity in existing tech systems by establishing an AI architecture in which women start-ups control the entire ownership and protection of digital property. This is especially important, as it offers ease in a process that is quite complicated and creates a platform for the technology for all, it promotes consistent trust in digital solutions to technology, entrepreneurship and consumers across the globe.

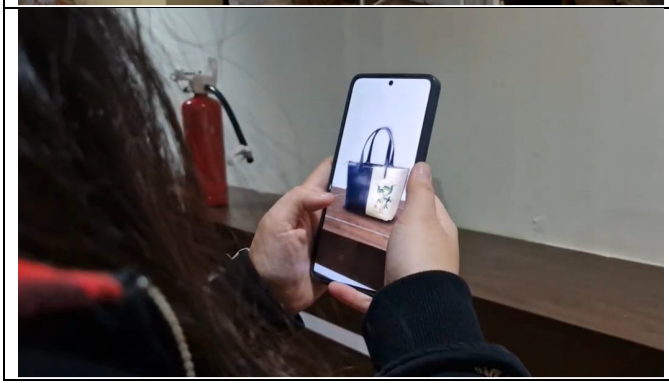
Inclusivity: The platform is working hard to tackle the tech-gender divide through its no-code AI system. With systems that automate 3D rendering procedures and make spatial computing universally available, it is redefining the advanced technology we have seen today as an equalizing force; it is not something which has happened mostly to the few.

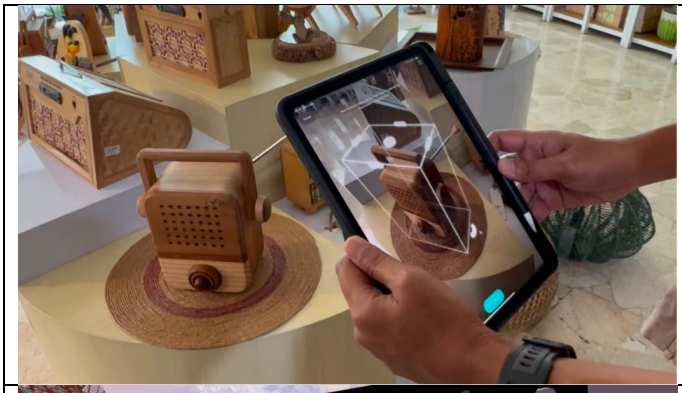
Scale: Transforming the traditional 2D market into an immersive 3D reality, Ladyverse imitates new developments in this area of industry. It lets women entrepreneurs break free from their own geographical limitations and in the process gain a large market presence globally. By doing so, Ladyverse uses technological advances to success in real life.

PROFILE

THE PLATFORM EMPLOYS a multi-layered system that transforms static product catalogs into interactive digital assets by combining decentralized storage with generative modeling techniques. Layverse integrates metaverse platform development, capacity-building programs for small and medium enterprises, cultural curation, and public exhibitions. Its core feature is a next-generation metaverse platform that utilizes VR/AR-based scanning and high-resolution three-dimensional modeling of artisanal products and cultural artifacts. A key component involves the digitization of MSMEs products through high-resolution LiDAR scanning, photogrammetry, and material-capture processes. Using Hyperscape on Meta Quest devices, the scanning applies Gaussian Splatting methods to create spatial scenes that enhance rendering quality while preserving visual realism. These technical methods, which require specialized equipment, processing pipelines, and expertise often unavailable to conventional MSMEs, thereby increase the initiative's value as a grant-supported benefit. Furthermore, interactive video mapping installations boost audience engagement by linking the digital solution with real-world users. These installations combine custom motion-graphic assets, multi-projector calibration, sensing technologies, and real-time media servers to merge physical and virtual environments. Visitors can engage with creative products through immersive projections of near real-time events, interact with VR/AR interfaces, and experience narrative visualizations based on spatial activities.

Womenpreneurs MSMEs drive regional economic growth in Indonesia but face structural barriers, often referred to as "glass ceilings," that limit their progress. Operating mainly in creative and beauty sectors, these enterprises demonstrate strong creative potential and local adaptability; however, most lack the advanced digital infrastructure needed for global scaling. Ladyverse addresses this "digital maturity gap" by assisting womenpreneurs in transitioning from conventional social media-based commerce to metaverse-enabled environments through real-time product advisory services. The strategic objective is to convert this local creativity into a global leader in next-generation digital twins and virtual commerce solutions.

	Moving From A Physical Shop To An Online Storefront
	Augmented Reality on the MSMEs Device

	3D Scanning MSMEs Product
	Metaverse Exhibiton
	Team Developer

Executive Summary

Ladyverse transcends conventional e-commerce or basic digital exhibitions. It serves as a transitional platform converting two-dimensional MSMEs operations by women into a dynamic three-dimensional global marketplace and collaborative ecosystem. Leveraging artificial intelligence's inclusive capabilities, it removes geographical barriers and offers women entrepreneurs worldwide an integrated space for digital growth. The initiative combines the New AI Reality paradigm with inclusive design frameworks. Through augmented and virtual reality alongside AI, it redefines “Reality” for womenpreneurs, building a digital ecosystem rooted in trust and highlighting women-led innovation's role in fostering an equitable, borderless global economy.

Implementation in Indonesia’s MSMEs sector has advanced digital transformation via AR features, three-dimensional scanning, and web-based metaverse exhibitions enabling interactive visualizations and global

reach. This success stems from collaboration among Telkom University researchers, partners, and womenpreneurs, supported by structured workflows and curated resources for an inclusive, sustainable ecosystem.

Future plans include expanding MSMEs participation, diversifying immersive technologies with mentorship programs, and positioning Ladyverse as the leading Immersive Hub for Womenpreneurs in the Asia-Pacific through alliances with GSMA and regional institutions. It creates a virtual space that completely removes physical distance and democratizes access, placing her product in a global, immersive market.

Biography:



Lia Yuldinawati, S.T., M.M., Ph.D

Since 2008, Lia Yuldinawati has been a dedicated permanent lecturer at the Faculty of Business Economics, Telkom University. Her leadership journey began as Assistant Manager of the Visual Communication Design Study Program. She then advanced to become Manager of the Corporate Secretary, demonstrating her strategic acumen. In 2013, Lia was appointed Vice Dean of the Faculty of Business Economics, where she played a pivotal role in enhancing academic excellence and fostering innovation. In 2019, Lia's responsibilities expanded further when she was promoted to Director of the Secretariat and Strategic Planning, where she contributed significantly to the university's organizational development. Since 2020, she has served as the Director of the Strategic Partnership and International Office until 2025. While her previous role focused on building global bridges between Telkom University and the international academic community, her appointment as Director of the University Expansion Program in 2026 shifts her focus inward. In this executive capacity, she is charged with driving the university's future strategy scaling its physical footprint, pioneering next-generation medical disciplines, and leading its digital ecosystem transformation.

Women are still disproportionately underrepresented in tech-related occupations, notwithstanding notable advancements. Lia feels passionately that women remain underrepresented in many areas of the telecom industry, including in leadership positions and technical roles. Lia takes a part in the community to address this gender gap, to provide more opportunities for women to enter and advance in the field, including through training, mentoring, and networking programs. As the sole woman leading male-dominated programs in telecommunications a field still largely male-driven Lia's achievements stand out. Her ability to lead, coordinate, communicate, and strategize across sectors, while collaborating with global companies, highlights her exceptional leadership.

Since 2015, Lia has also served as a coach, dedicating over 1,000 hours to mentoring small businesses and empowering women entrepreneurs (womenpreneurs) in Indonesia. In several women's associations in Indonesia, such as the Wife Women Organization for the Indonesian Ministry of Foreign Affairs in Germany, the National Crafts Council (Dekranasda), the Indonesian Women Entrepreneurs Association (IWAPI), Lia as a mentor and trainer on women entrepreneurs. Her dedication has contributed to the growth and success of countless women-led enterprises.

Lia was also recognized as the one of The Empowered Women in Indonesia, a woman who has made significant contributions in the fields of education and technology. Lia's efforts have a positive impact on economic productivity, environmental sustainability, social welfare and community development.
Lia has exceptional excellent leadership, advocacy for diversity, and a strong network. She is a hard-working person with academic and professional success. She has a strong personal brand and positive interactions with various global communities. Highlight their efforts in championing gender equality, supporting female talent, or creating opportunities for women in technology.

Lia believed that women of all backgrounds, faiths, and beliefs contribute significantly and extraordinary ways to their local communities and society at large. We need women's opinions, ideas, and experiences in order to create a genuinely global workforce capable of addressing the opportunities and problems that lie ahead.

Fostering creativity, innovation, and sustainable growth requires recognizing the distinctive contributions of people from a variety of backgrounds.

A summary of her key publications and professional achievements is detailed below:

Supporting Materials:

- https://orgs.telkomuniversity.ac.id/telkom-university-menerima-dua-apresiasi-mitra-dts-2021-dari-kominfo/
- https://www.obsessionmediagroup.com/e-mag/wo/103-ns-8w2r5h/
- https://issuu.com/techbros.io/docs/fin_e-magz_6th_edition_june_2023_-_eng
- https://www.linkedin.com/posts/telecominfraproject_womenintech-womenshistorymonth-diversity-activity-7046390470951751680-IYRD?utm_source=share&utm_medium=member_desktop
- https://www.detik.com/jabar/berita/d-8174249/perempuan-berprestasi-di-asia-pasifik-itu-bernama-lia-yuldinawati

Supporting Video:

- https://youtu.be/MoVvrWdw2d0?si=mgjNnmkbC8xrk4f1
- https://www.youtube.com/watch?v=liHpjxUjRPI
- https://www.youtube.com/watch?v=ofWPFXxeInk
- https://www.youtube.com/watch?v=aQXzwc96Wuo
- https://www.youtube.com/watch?v=U9REND7AflE