

Navigating the Blue Ocean: How Telkom Indonesia Can Swim in the Emerging Space Economy

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BACKGROUND & OPPORTUNITY

The global space economy has evolved from government-led missions into an integrated USD 630 billion ecosystem in 2023 comprising a USD 330 billion backbone (satellite manufacturing, launch operations, communications, and Earth observation) and USD 300 billion reach (terrestrial applications such as logistics, precision agriculture, and disaster monitoring) with a projected growth to USD 1.8 trillion by 2035 at 9 % CAGR (World Economic Forum & McKinsey, 2024). Despite Indonesia’s strategic advantages an equatorial position, the planned Nusantara Constellation, and Biak Spaceport private-sector participation remains below 5 % of national space investment, leaving the upstream ecosystem nascent and regulatory clarity underdeveloped (BRIN, 2024). This gap presents a blue-ocean opportunity for Telkom Indonesia to lead as a Space Digital Value Chain Integrator (SDVCI) through public-private partnership, capturing 10–15 % of ASEAN’s USD 10–15 billion space-enabled market while competitors like Starlink and OneWeb dominate satellite broadband and Earth observation services.

Keywords: Space Economy; Strategic Management; SWOT Analysis; PESTEL Analysis; IFE-EFE Matrix

PROPOSED SOLUTION

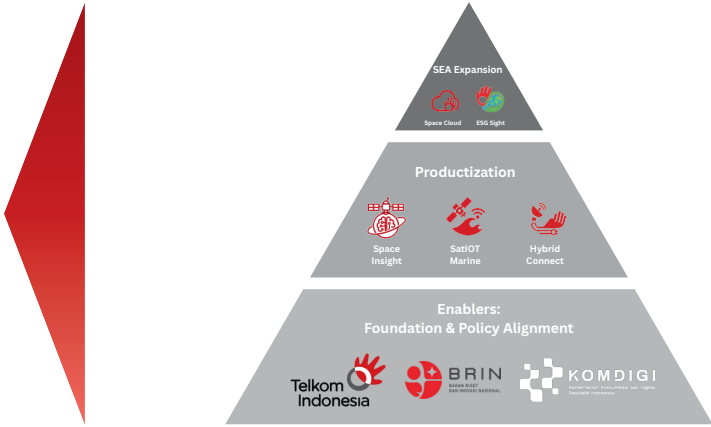
Over 70% of the projected USD 1.8 trillion global space economy by 2035 is expected to be generated from downstream activities including data, analytics, connectivity, and applications rather than from satellite manufacturing or rocket launches. In Southeast Asia, Deloitte (2025) projects an additional USD 100 billion in GDP by 2030 through the adoption of space-enabled services, particularly in agriculture, maritime operations, and sustainability analytics.



A combined PESTEL–SWOT–IFE/EFE analysis confirms that Telkom’s external environment and internal resources are highly conducive to entering the downstream space economy. Telkom IFE-EFE score of 3.31 suggests that the external environment is favourable, as long as Telkom can navigate regulatory uncertainties. The combination of these scores places Telkom in an “aggressive growth” quadrant of the IE Matrix (David & David, 2017), implying that the company should actively invest in market expansion through innovation and strategic partnerships.

The proposed solution recommends that Telkom evolve into a **Space Data Value Chain Integrator (SDVCI)** a role that positions the company not as a manufacturer or launcher, but as the orchestrator of space-based digital services. This model envisions Telkom as the connector between orbit, cloud, and enterprise applications. The proposed solution will come into 3 stage :

1. Stage I (2025–2026): Foundation and Policy Alignment
2. Stage II, by 2027–2028, Telkom should start productizing its capabilities
3. Stage III (2029–2030): Regional Expansion and Ecosystem Integration



EXPECTED IMPACT

The **SDVCI** strategy will not only redefine Telkom Indonesia’s corporate trajectory but also accelerate Indonesia’s transformation into a leader within the **ASEAN** region for a data-driven space economy. Economically, it creates scalable and profitable **new revenue streams**, that indicate a **3–4% increase in Telkom Group’s consolidated revenue (PT Telkom Indonesia, 2024)**, accompanied by a **6–8% rise in EBITDA**; institutionally, it bridges the gap between public policy and private sector implementation through Digital productivity improvements, Employment and skill development, and Fiscal efficiency; technologically, it enhances national sovereignty in space data; and socially, it promotes digital inclusion and environmental sustainability. **Through the SDVCI model, Telkom and BRIN can collaboratively demonstrate that the true value of the space economy resides not in launching rockets, but in empowering societies through the data they provide.**

LIMITATION & ORIGINALITY

- Telkom’s model monetizes sovereign Earth observation analytics (SpaceInsight), SatIoT for 500,000+ vessels, and ESG-compliant climate monitoring, **projecting Rp 4.5–5.5 trillion corporate revenue and Rp 15–20 trillion GDP impact by 2030**
- This study **focuses on a conceptual three-stage SDVCI framework and financial projections based on secondary data and internal Telkom benchmarks; primary field trials, satellite-launch cost validation, regulatory impact assessments, stakeholder acceptance, geopolitical risks in ASEAN consortium formation, and long-term ESG data accuracy remain beyond scope and require further empirical validation through pilot programs and multi-year monitoring.**

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