

# **THE SPACE ECONOMY: FROM GOVERNMENT MONOPOLY TO INFRASTRUCTURE MARKET**

**WHY COMMERCIAL SPACE IS THE NEXT GREAT INFRASTRUCTURE BUILD**



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**A DEEP DIVE INTO MARKET STRUCTURE, COMPETITIVE DYNAMICS, AND THE FUTURE OF SPACE INFRASTRUCTURE**

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# EXECUTIVE SUMMARY: THE SPACE ECONOMY INFLECTION

For sixty years, space was the exclusive domain of governments: expensive, capital-intensive, and strategically isolated. That era is ending.

The commercial space economy has reached an inflection point. Three convergent forces are reshaping the industry: (1) technical feasibility has proven, reusable rockets work reliably, and satellite constellations operate continuously; (2) market demand is structural and accelerating—defense modernization, data analytics, manufacturing—creating non-cyclical revenue streams; and (3) the unit economics have inverted, shifting from "who can afford to launch" to "who can afford NOT to."

The space industry is transitioning from a capital-intensive government project to an infrastructure market. Like electricity, telecommunications, or aviation before it, space infrastructure will eventually be taken for granted—and the value will accrue to those who build the platforms that others depend on.

This transition creates a distinct investment opportunity. The winners are not pure-play launch providers (commoditizing) but rather the companies building vertical-integrated infrastructure stacks: orbital computing, persistent Earth observation, autonomous re-entry capability, and defense architecture. These companies are capturing non-compete advantages that will be difficult for incumbents to disrupt.

India's position in this transition is unique. Strategic autonomy mandates, government procurement certainty, regulatory liberalization, and world-class engineering talent have created an environment where Indian space companies can compete globally while serving structural domestic demand.

This report analyzes the space economy through the lens of market structure, competitive dynamics, and the long-term trajectory of capital flows. Our thesis: the space economy will transition from government-driven to infrastructure-driven markets, with winners consolidating defensible positions in specific layers (launch access, in-space infrastructure, data services, and defense systems). Indian companies are well-positioned to dominate this transition.

# I. THE MACRO CONTEXT: WHY SPACE NOW

Understanding the commercial space opportunity requires first understanding what has changed. For decades, space was prohibitively expensive and strategically marginal to most industries. Today, space is becoming essential infrastructure.

Three macro trends are driving this transition:

## 1.1 Defense Modernization & Strategic Autonomy

Global defense spending is rising and geopolitical tensions are accelerating military modernization cycles. Autonomous systems (drones, counter-drones), persistent Earth observation, and secure satellite communications are no longer optional capabilities—they are strategic necessities.

For India, this dynamic is particularly acute. Border security challenges, asymmetric threats, and the strategic imperative of sovereignty create urgent demand for domestically controlled space capabilities. India cannot depend on foreign satellites for critical intelligence or communications. This creates a structural tailwind for Indian space companies serving defense applications.

The defense modernization cycle is counter-cyclical. Unlike commercial markets that contract during recessions, defense spending persists and often expands during geopolitical tension. This characteristic makes defense-focused space companies' recession-resistant.

Global C-UAS (Counter-UAS) market is projected to grow from \$45B (2024) to \$66B (2030). Satellite-based persistent surveillance, communications, and electronic warfare capabilities represent multi-billion-dollar procurement categories in every major military budget.

For Indian defense agencies, the imperative is clear: build sovereign space infrastructure rather than depend on foreign allies. This policy shift has accelerated procurement cycles for domestic providers.

## 1.2 Data Democratization & Real-Time Intelligence

For decades, satellite data was expensive, rare, and restricted to governments and large corporations. Today, satellite constellations are generating petabytes of data daily, and the bottleneck has shifted from data collection to data processing and application.

This shift creates an opportunity for software-defined companies that can convert raw satellite feeds into vertical-specific intelligence: precision agriculture, disaster response, insurance underwriting, supply chain visibility, and strategic asset monitoring.

The economics of this layer are fundamentally different from launch or satellite operations. Ground processing of satellite data achieves 75-85% gross margins because software scales. Customer acquisition is cheaper (land-use companies, insurance firms, and government agencies have clear use cases). Retention is higher (locking in customers with proprietary workflows).

As satellite launch costs decline and constellation size increases, the scarcity shifts to the application layer. Companies that can reliably convert Earth observation data into actionable intelligence will capture

disproportionate value. This is why venture capital is increasingly flowing to data analytics companies (Planet Labs, Maxar, ICEYE) rather than satellite operators.

India's data democratization opportunity is unique: a massive agricultural sector (1.4B+ people dependent on crop yields), disaster-prone geography, and strategic asset monitoring needs create urgent demand for Earth observation services. Indian data companies can serve this domestic demand while expanding internationally.

### **1.3 In-Space Manufacturing & The Frontier Economy**

Microgravity enables manufacturing processes impossible on Earth. Fiber optics, pharmaceuticals, advanced materials, and semiconductors can be produced in orbit with material properties unavailable through terrestrial manufacturing.

NASA projects the space manufacturing market will exceed \$1 trillion by 2050. While that timeline seems distant, the venture capital market is already pricing in this opportunity—billions are flowing into startups developing on-orbit manufacturing platforms, microgravity pharmaceuticals, and materials science companies.

The bottleneck today is access: cost-effective launch, reliable on-orbit processing environments, and—critically—cost-effective return of products to Earth.

Traditional satellite re-entry is destructive. Manufacturing products require safe, intact return. Autonomous re-entry vehicles that can repeatedly retrieve manufactured goods represent critical infrastructure for the emerging in-orbit manufacturing economy.

India is uniquely positioned in this space (pun intended). ISRO has extensive re-entry experience. Indian engineers are cost-efficient and innovative. Government support for space manufacturing R&D is increasing. Early-stage Indian companies are building autonomous re-entry capability that will be essential infrastructure for global microgravity manufacturing.

This opportunity is frontier-stage. Early entrants will establish defensible positions in the re-entry and retrieval infrastructure that the entire industry depends on.

## II. MARKET STRUCTURE: HOW VALUE FLOWS IN SPACE

Understanding competitive dynamics in space requires understanding the structure of the market. Space infrastructure operates in distinct layers, each with different unit economics, competitive dynamics, and capital requirements.

Winners in each layer have fundamentally different characteristics. The temptation is to view space as a single market. It is not. It is a set of distinct, vertically-layered markets where value flows in opposite directions depending on where you operate.

### 2.1 The Launch Layer: Commoditization & Cost Compression

Reusable rockets have fundamentally altered the economics of space access. SpaceX's Falcon 9 launches reliably at \$60M+ per mission. RocketLab offers small-lift Electron at lower cost for smaller payloads. Blue Origin is preparing New Glenn. Relativity Space is 3D-printing rockets to push costs even lower.

The fundamental dynamic: launch is commoditizing.

This has two implications. First, launch capacity is no longer scarce. Any company with capital can secure reliable launch access. Second, competing on launch is a capital-intensive, low-margin business where only the largest, most efficient operators can survive.

This industry structure resembles trucking or shipping: necessary, competitive, and not particularly profitable for most participants.

For investors, the lesson is clear: pure-play launch providers are poor investment targets unless they have unique technical advantages (point-to-point hypersonic transport, lunar landers, etc.). As a general-purpose service, launch is moving toward commodity pricing and slim margins.

The implication for the space economy is actually positive: Launch commoditization makes the overlying layers—satellite operations, data processing, manufacturing—economically viable. When launch is expensive and unreliable, nothing else works. When launch is reliable and increasingly cheap, infrastructure applications become attractive.

This is where value creation is shifting.

### 2.2 The Infrastructure Layer: Where Capital Pools

Above the launch layer sits the infrastructure layer: satellites, on-orbit processing, communications systems, power generation, and manufacturing platforms.

This layer is capital-intensive and typically operates government and commercial satellite constellations for data collection and communications. Examples include Starlink (SpaceX), Project Kuiper (Amazon), Kuiper's terrestrial competitors, and various Earth observation operators.

The unit economics here are different from launch. Large capital deployment up-front (satellite manufacturing, launch, and operations) yields recurring revenue streams (per-GB data service revenue, per-

minute communication service revenue). The math can work, but profitability requires scale and high utilization.

Winners in the infrastructure layer have several characteristics: (1) capital efficiency—minimizing satellite cost through manufacturing innovation and reuse; (2) government anchor customers—providing revenue certainty while commercial markets develop; (3) differentiated technology—offering capabilities competitors cannot replicate; and (4) network effects—where more satellites create more valuable services for customers.

India's space sector is seeing entrepreneurial entrants in the infrastructure layer: companies building satellite constellations for Earth observation (Sisir Radar), orbital computing platforms (TakeMe2Space), and manufacturing return vehicles (Inbound Aerospace). These companies combine ISRO partnership access, government procurement demand, and technical innovation to compete in a layer that previously required multi-billion-dollar capital pools.

The Indian advantage here is structural: government partnerships reduce capex burden, sovereign demand guarantees early revenue, and cost-efficient engineering enables competitive deployment timelines and unit economics.

## **2.3 The Data & Applications Layer: Where Margins Live**

Above the infrastructure layer sits the data and applications layer: the software, analytics, and services that convert raw satellite data into business outcomes.

This is where the best economics live.

Planet Labs doesn't make money primarily from launching satellites. It makes money from selling Earth observation analytics and insights to agriculture, insurance, mapping, and defense customers. The margins are high (75-85% gross), customer retention is high, and the capital intensity is low compared to the infrastructure layer below.

Similarly, defense applications—counter-UAS, strategic surveillance, tactical intelligence—represent the layer above raw satellite data where customers will pay premium prices for integrated hardware and software systems that solve specific problems.

The applications layer has several favorable characteristics: (1) software scales—incremental revenue requires minimal incremental cost; (2) customer lock-in—vertical-specific workflows create switching costs; (3) lower capital intensity—compared to satellite operations; and (4) recurring revenue—customers pay subscriptions for ongoing services rather than one-time product purchases.

For Indian companies, this layer offers attractive opportunities because market entry doesn't require owning a constellation. Converting public or partner satellite data into vertical-specific services creates value without massive capital deployment.

Companies focused on the applications layer—particularly those with government anchor customers—can achieve profitability and unit economics far superior to infrastructure-layer companies. This is where venture capital is increasingly concentrated.

### **III. THE INDIAN ADVANTAGE: SOVEREIGN CAPABILITY & REGULATORY TAILWINDS**

India's position in the global space economy is unique. A combination of strategic necessity, regulatory support, and technical capability is creating an environment where Indian space companies can compete globally while serving structural domestic demand.

#### **Strategic Autonomy Mandate**

India's government has made sovereign space capability a strategic priority. For defense, communications, and Earth observation, India cannot depend on foreign satellite systems. This creates non-negotiable domestic demand.

This is not cyclical procurement. This is multi-decade strategic policy. Regardless of government changes or budget cycles, India's defense and intelligence agencies will continue investing in domestic space capabilities. For space companies, this means guaranteed government procurement at premium pricing while they build commercial customer bases. These de-risks early-stage companies and provides runway to reach profitability.

Compare this to the U.S. market where commercial space companies competed for government contracts against established defense contractors. Indian space companies have the advantage of being domestic providers in a market where foreign alternatives are politically and strategically rejected.

#### **Regulatory Liberalization & Policy Support**

India's Department of Space has systematically reduced barriers to private sector participation. The Satellite Telecom Policy 2021 liberalized licensing for private satellite operators. Foreign Direct Investment (FDI) is allowed at 100% in space manufacturing. Customs duty exemptions apply to space-grade components. ISRO actively partners with private companies through cost-sharing models.

This policy environment is among the most startup-friendly globally. India's government has learned from the U.S. experience and is intentionally replicating the conditions that enabled SpaceX: clear regulatory frameworks, government partnerships, and technology preference for domestic solutions.

For entrepreneurs, this means faster approvals, lower regulatory friction, and access to government infrastructure (ISRO facilities, launch vehicles, spectrum allocation). The difference this makes is material. A space startup in India can move faster and with less regulatory burden than equivalents in most other countries.

#### **Technical Capability & Cost Efficiency**

India has deep space expertise. ISRO has successfully executed complex missions: lunar landings (Chandrayaan), Mars orbiters (Mangalyaan), manned spaceflight programs (Gaganyaan). This isn't theoretical expertise—it's proven execution track record.



Additionally, Indian engineering talent is world-class and cost-efficient compared to Western alternatives. A team of IIT graduates building space technology in Bangalore costs a fraction of an equivalent team in Silicon Valley or Europe, while delivering equivalent technical quality.

This cost advantage is material. Satellite manufacturing, software development, and systems engineering can be executed more capital-efficiently in India. As launch costs commoditize, the relative advantage of cost-efficient engineering increases.

For investors, this means Indian space companies can operate with leaner burn rates and better unit economics than Western competitors—a critical advantage in a capital-constrained venture market.

## **IV. THE COMPETITIVE LANDSCAPE: MAPPING THE WINNERS**

Within the space market structure, we can map the emerging competitive landscape. Several distinct sub-markets are forming, each with different competitive characteristics and where different companies are positioning themselves as potential long-term winners.

The following analysis identifies where capital is flowing, what competitive dynamics are emerging, and which companies are building defensible positions.

### **4.1 Launch & Access Infrastructure**

This layer is consolidating around a few major players: SpaceX (dominant in large-lift), RocketLab (small-lift), and emerging competitors (Axiom, Blue Origin). Competition is on cost, reliability, and launch frequency.

The winner dynamics here are clear: capital intensity favors consolidated players. Smaller launch providers will struggle as costs compress and launch becomes commoditized. The market will likely support 2-3 global players and several regional specialists.

For Indian companies, the strategic question is whether to build independent launch capability or leverage partnerships. Currently, most Indian space startups use ISRO's launch vehicles or international partners rather than building proprietary launch infrastructure. This is the correct choice: pure-play launch is a poor business for venture-backed companies.

The exception: companies with unique launch niches (point-to-point hypersonic transport, on-demand small-sat launch) or extreme cost advantages. These remain potential opportunities, but the general trend is consolidation and margin compression in launch.

### **4.2 In-Space Computing & Infrastructure**

A new market is forming around in-space computing: edge processing for satellite data, orbital manufacturing support, and on-orbit services.

The key insight: satellite constellations generate petabytes of data daily. Downloading all data to ground for processing creates bandwidth bottlenecks and latency limitations. Processing data in-orbit—at the edge—solves both problems and enables real-time decision-making for time-sensitive applications.

This market is nascent globally. Axiom Space is building crewed orbital modules. Sierra Space is developing Dream Chaser for cargo return. Orbital Reef and Axiom are competing on commercial space station concepts. But the specific application of in-orbit computing for satellite data processing remains relatively underdeveloped.

TakeMe2Space is positioning itself in this emerging layer with OrbitLab—an orbital computing platform. The thesis is straightforward: satellite operators and Earth observation companies will demand in-orbit processing capability. Whoever builds the most capable, reliable, cost-effective platform will capture significant value.

The competitive advantages here are technical (building reliable orbital computing systems) and customer relationships (designing systems that satellite operators and Earth observation companies want to use). Neither advantage is permanent, but first-movers with solid execution can establish meaningful positions.

For Indian companies, this is an attractive layer: requires less capital than satellite operations, benefits from government anchor customers (ISRO and defense agencies), and offers defensible technical differentiation.

### **4.3 Earth Observation & Data Services**

The Earth observation market is segmented by sensing technology and application domain.

Optical Earth observation (traditional cameras) is mature and increasingly commoditized. Planet Labs operates a constellation of ~150 optical satellites. Resolution and revisit rates have improved dramatically while costs have declined. Optical imagery now serves agriculture, mapping, insurance, and disaster response applications globally.

Synthetic Aperture Radar (SAR) is less commoditized. SAR penetrates clouds and operates day-night, providing all-weather persistent surveillance. SAR data is more expensive to collect and process than optical, but applications justify the premium: military intelligence, port monitoring, agricultural monitoring in monsoon regions, and disaster response.

Currently, L-Band SAR constellations (optimal for environmental monitoring) are operated by a few players: Maxar (SAOCOM in partnership with Argentina), and emerging operators. The market for L-Band SAR data is under-served relative to demand.

Sisir Radar is building India's first private L-Band SAR constellation. The strategic positioning is clear: L-Band SAR data is valuable and under-supplied. Government agencies have dedicated budgets for Earth observation. International customers (allied nations, commercial partners) will pay for high-resolution SAR imagery.

The competitive advantage is primarily first-mover within India's market and technical capability to build and operate L-Band SAR satellites reliably. Unlike launch (commoditizing) or optical imaging (saturated), L-Band SAR remains differentiated.

The risks are execution (satellite manufacturing and orbital deployment are complex) and market timing (customers must build use cases before data is available). But the underlying demand is structural: persistent Earth observation is essential for defense, agriculture, and disaster response globally.

### **4.4 Defense & Counter-Threats**

Counter-UAS (C-UAS) is one of the fastest-growing segments in defense technology. Drone threats are asymmetric, evolving, and increasingly central to modern warfare. Every military is racing to develop counter-drone capabilities.

The competitive landscape here includes established defense contractors (Raytheon, Elbit, Leonardo) and emerging startups. The market remains relatively un-consolidated, which creates opportunity for innovative entrants.

Competitive advantage in C-UAS comes from several sources: (1) software-defined systems that adapt to evolving drone threats; (2) multi-sensor integration (radar, RF, optical) for detection and tracking; (3) rapid fielding and platform agnostic deployment; (4) integration with command & control systems.

Armory is building software-defined C-UAS technology with emphasis on multi-platform compatibility and rapid deployment. The initial positioning is India-focused, serving defense agencies and critical infrastructure protection. The competitive advantage is in software architecture and Indian market knowledge.

For Armory, the trajectory is clear: establish market position in India (where government procurement demand is urgent), then expand to international allied markets (Quad framework: India, Australia, Japan, U.S.) where Indian solutions for ally nations are strategically preferred.

The C-UAS market is large (\$45B+ projected by 2030) and structurally growing. Companies that establish sovereign positions (particularly in allied nations) and prove effective capabilities will capture significant value.

## **4.5 Manufacturing & In-Orbit Services**

In-space manufacturing is frontier-stage. The fundamental bottleneck is currently not manufacturing capability—it's reliable, cost-effective product return from orbit.

Inbound Aerospace is building autonomous re-entry vehicles specifically for this use case. The thesis: as on-orbit manufacturing capabilities mature (Axiom, Orbital Reef, NASA Factories in Space programs), the critical missing infrastructure is safe, intact product return.

Re-entry is technically challenging (thermal management, guidance accuracy, impact survivability). It's also capital-intensive (each vehicle costs millions to develop). This creates high barriers to entry and defensible positions for early entrants.

Inbound's competitive advantage is technical (proven team, IIT background) and positioning (partnering with government and emerging on-orbit manufacturing platforms). The risks are execution (autonomous re-entry vehicles must work reliably) and market timing (on-orbit manufacturing must mature before return services are valuable).

But the underlying opportunity is real. If in-space manufacturing represents a \$1 trillion market by 2050 (as NASA projects), then re-entry infrastructure companies are positioned to capture critical value. Early entrants that prove reliability will have defensible moats.

This is a longer-term opportunity than the other applications discussed, but the potential is substantial.

## **V. THE NEXT DECADE: WHERE THE SPACE ECONOMY IS HEADING**

Understanding where the space economy is heading requires thinking through the trajectory of several converging trends. The next decade will see fundamental shifts in where capital flows, which segments become profitable, and which companies build defensible long-term value.

### **The Consolidation of Access**

Launch and basic orbital access will continue consolidating around 2-3 dominant global players and several regional specialists. This is inevitable given capital intensity and winner-take-most dynamics.

The implication: Launch costs will continue declining (improved reusability, competition, iteration) until they approach marginal cost. For high-volume launch customers (mega-constellations), this trend is favorable. For pure-play launch providers without scale, margin compression is existential.

The optimistic case: Launch commoditization continues, costs approach \$50M+ for full Falcon 9 cargo or lower for smaller vehicles. The pessimistic case: Overcapacity in launch leads to aggressive price competition and consolidation as smaller players exit.

Either way, launch becomes infrastructure—reliable, affordable, boring. And boring infrastructure is actually good for the overlying economy because it removes the constraint that previously limited space applications.

### **Constellations as Utilities**

Satellite constellations (Starlink, Project Kuiper, and others) will transition from venture capital plays to infrastructure utilities. This mirrors the history of telecommunications—from speculative ventures to regulated utilities with predictable cash flows.

For constellations serving communications (broadband internet), the transition to utility status is already underway. For constellations serving Earth observation, the transition will occur as data becomes standardized and pricing commoditizes around "Earth observation as a service."

This transition is not negative for investors—utilities generate substantial cash flows. But it suggests that mega-constellation operators will eventually trade at mature multiples similar to telecommunications or power companies, not venture capital multiples.

For Indian space companies, this creates both opportunity and constraint. Opportunity: government demand for constellation services is massive (broadband to remote areas, strategic observation). Constraint: competing against well-capitalized incumbents (SpaceX, Amazon, Google) requires either differentiation (specialized sensing, lower cost) or government support (procurement preference, subsidies).

Indian constellation operators will likely emerge but will remain smaller than global mega-operators. Strategic positioning in niches (L-Band SAR, specialized sensing, India-optimized services) will be critical.

## **Data & Intelligence as the Core Economy**

Where venture capital value will concentrate in the next decade is in the data and intelligence layers. Software-defined services that convert satellite data into business outcomes will command venture capital valuations and multiples.

This aligns with broader software industry trends: high margins, recurring revenue, scalability, and customer lock-in. Companies that build vertical-specific workflows (agriculture, insurance, supply chain, defense) will capture the value.

For Indian companies, this is the most attractive layer of the space economy. Lower capital intensity, government procurement demand, recurring revenue models, and defensible technical differentiation create venture-scale opportunities.

The next decade will see Indian data analytics startups reaching \$1B+ valuations by converting Earth observation and satellite data into solutions for domestic and export markets. These companies will dwarf the infrastructure layer in number and potentially in aggregate value.

## **On-Orbit Manufacturing: From Frontier to Viable**

The 2030s will see on-orbit manufacturing transition from experimental to viable. Fiber optics manufactured in microgravity will reach commercial scale. Pharmaceutical compounds impossible to synthesize on Earth will be produced in orbit and returned profitably.

This transition requires several enablers to converge: (1) reliable on-orbit manufacturing platforms (Axiom, Orbital Reef, NASA programs); (2) cost-effective product return infrastructure (autonomous re-entry); (3) regulatory frameworks (FAA, international); and (4) manufacturing partners willing to accept production timelines and costs of space manufacturing.

By 2030, these enablers will be largely in place. By 2035, space-manufactured products will generate meaningful revenue (\$100M+/year) across leading companies. By 2040, the market will likely exceed \$1B+/year, still minuscule relative to \$1T+ projections, but material enough to justify continued investment.

For companies in infrastructure (manufacturing platforms, re-entry vehicles, power systems), the next decade is build-out phase. Revenue will be modest but growing. But early entrants that prove reliable systems will lock in defensible positions.

## **Defense & Geopolitics: The Secular Tailwind**

Geopolitical tensions are unlikely to abate in the next decade. If anything, strategic competition between major powers will intensify. This creates a secular tailwind for defense space companies.

Counter-UAS capabilities, satellite communications, persistent surveillance, and space-based missile warning systems will receive growing budget allocations across every major military. For Indian defense companies particularly, the tailwind is structural—India's defense modernization is long-term strategic policy.

Companies that establish defensible positions in India and allied markets (India-Australia-Japan-U.S. Quad framework) will have significant revenue certainty. Unlike commercial markets that fluctuate with business cycles, defense spending expands during geopolitical tension.

The next decade may see accelerated military technology adoption due to regional conflicts or security incidents. This could accelerate timelines for defense space companies by years.

## **Capital Flows & Exit Dynamics**

Where capital is flowing and where exits happen will shape the space economy in the next decade.

Currently, venture capital is concentrated in: (1) imaging and Earth observation companies; (2) launch services; and (3) space infrastructure (communications, on-orbit services). Some venture is flowing to defense applications and emerging technologies.

Over the next decade, we expect capital concentration to shift toward: (1) data analytics and software services (highest margins, venture-scale returns); (2) defense applications (secular demand, government funding); and (3) in-orbit services (selective focus on infrastructure bottlenecks).

Pure-play launch companies are likely to see reduced venture funding as the market consolidates. Mega-constellations may face scrutiny as regulatory frameworks tighten and competition intensifies. But data analytics, defense, and infrastructure services will see accelerating capital flow.

Exit mechanisms will also evolve. Early exits (Series B-C acquisitions by larger space companies or strategic buyers) will be common. Some companies will reach IPO scale. Government procurement and partnerships will provide alternative paths to scale and profitability.

For Indian space companies specifically, exit timing will be critical. As the Indian space sector matures, strategic acquisitions by global space players will accelerate—particularly for companies with proven technologies and market traction.

## VI. CONCLUSION & INVESTMENT IMPLICATIONS

The commercial space economy is transitioning from a capital-intensive government project to an infrastructure market. This transition creates a distinct investment opportunity for those who understand market structure and competitive dynamics.

Winners in the next decade will be companies that (1) build defensible positions in less-commoditized layers (data services, defense, infrastructure); (2) serve structural demand (defense procurement, Earth observation, manufacturing); (3) leverage geographic or regulatory advantage (India's sovereign capabilities, allied nation preferences); and (4) demonstrate path to sustainable profitability rather than perpetual runway dependency.

The companies best positioned to capture this opportunity are vertically-integrated infrastructure builders. TakeMe2Space is building orbital computing infrastructure that satellite operators and Earth observation companies will depend on. Sisir Radar is establishing a differentiated Earth observation layer with L-Band SAR capability unavailable from other Indian providers. Armory is building the defense architecture that militaries globally are demanding. Inbound Aerospace is developing the manufacturing infrastructure that the emerging in-orbit economy will require.

These companies do not compete on commodity dimensions (cost of launch, raw satellite performance). They compete on defensible technology, customer lock-in, and strategic positioning in layers where value will concentrate.

The space economy is moving from "Can we do it?" to "Who will own this infrastructure that everyone else depends on?" The answers to that question are being determined right now. Companies that answer credibly will generate extraordinary returns over the next decade.

India is uniquely positioned in this transition. Strategic autonomy mandates create persistent government demand. Regulatory liberalization attracts global capital and talent. Technical excellence enables competition at global scale. And geographic positioning in a strategically important region creates expansion opportunities across Asia and allied markets.

The inflection point is now. The space economy is transitioning from an exclusive government domain to a commercial infrastructure market. For investors, entrepreneurs, and companies positioned correctly in this transition, the next decade offers exceptional opportunities to build and capture significant value.



## APPENDIX: SOURCES & METHODOLOGY

This report synthesizes research from primary company sources, government data, and published market research:

- [1] SpaceX: Falcon 9 reusability data, Starlink constellation specifications
- [2] U.S. Space Force: Space review and military modernization guidance
- [3] India Department of Space: Private Space Policy 2021, budget allocations
- [4] ISRO: Annual reports, partnership frameworks
- [5] MarketsandMarkets: Counter-UAS market projections (\$45B-\$66B 2024-2030)
- [6] Planet Labs: Earth observation business model and market analysis
- [7] NATO: Military modernization and technology roadmaps
- [8] NASA: Space manufacturing economy projections (\$1T+ by 2050)
- [9] Company websites: TakeMe2Space, Sisir Radar, Armory, Inbound Aerospace
- [10] News archives: Financial Express, Economic Times, SpaceNews, Reuters

### Methodology Notes:

Market size estimates are derived from published research reports and extrapolated using historical growth trends. Revenue projections for portfolio companies are based on (1) known customer traction, (2) market TAM sizing, (3) realistic market share assumptions, and (4) comparable company trajectories.

Risk assessments are qualitative, reflecting technical execution risk, market adoption risk, competitive risk, and capital intensity. Competitive analysis reflects publicly available information about competitor capabilities and positioning.

All forward-looking statements in this report involve material risks and uncertainties. Actual results may differ substantially from projections based on unforeseen technical challenges, market changes, regulatory shifts, or competitive dynamics.