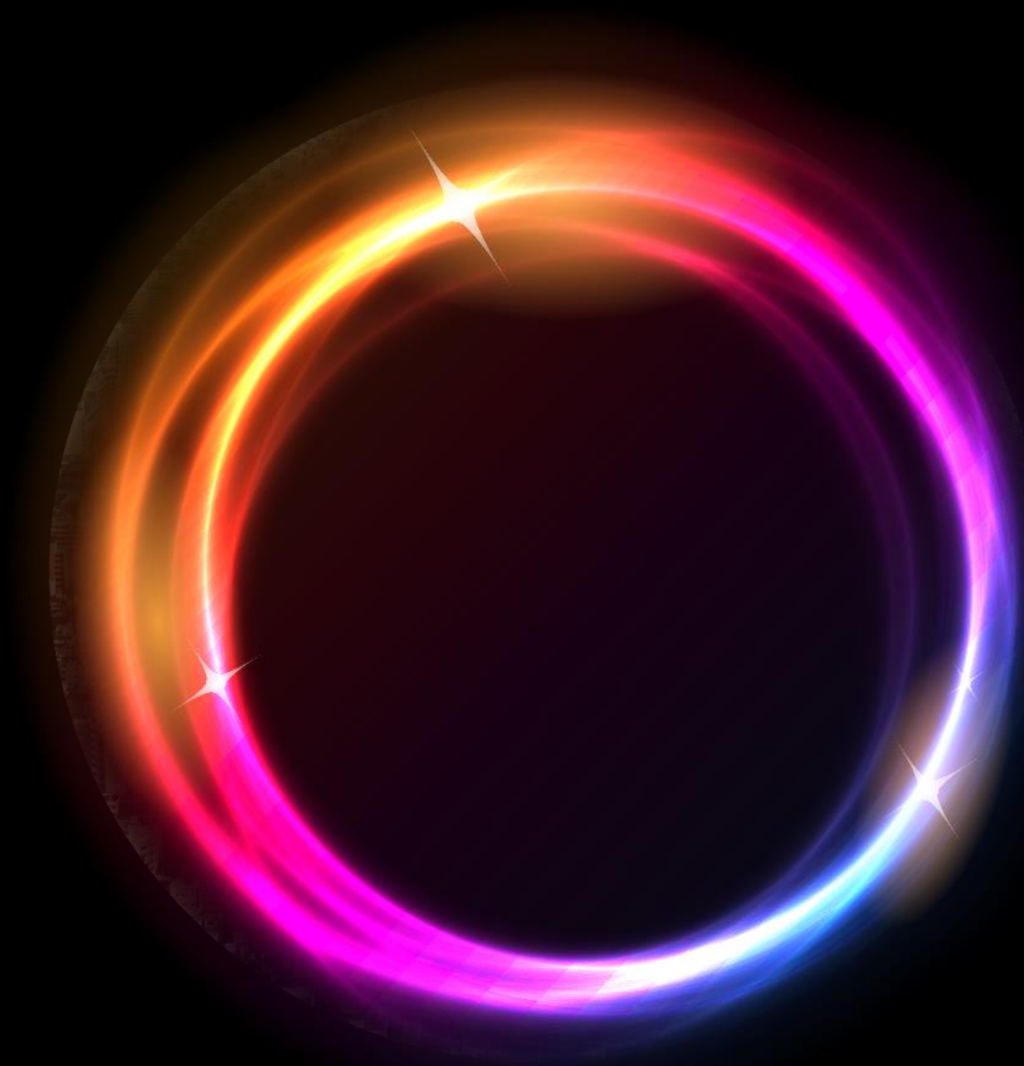


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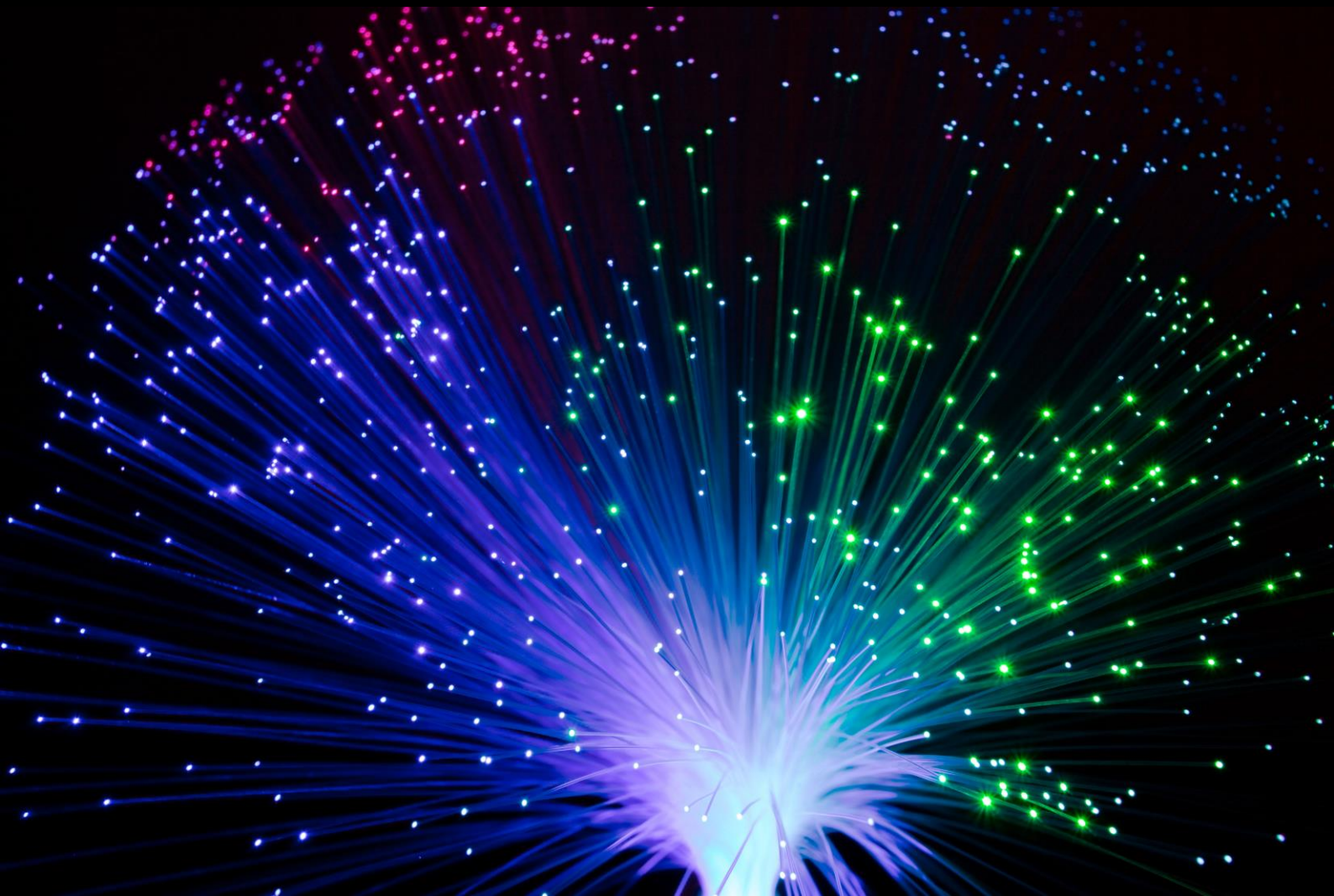
From Alignment to Action:

Rethinking U.S.-Japan Space
Business Cooperation

Deloitte Tohmatsu Space and Security
January 2026

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Executive Summary

Ready, Steady, Action!

Challenges of Action

The global space economy has surpassed \$600 billion annually and continues to expand rapidly, driven by government space programs and commercial space enterprise ranging from satellite constellation developments to space data applications and launch services. Both the United States and Japan are central players in this transformation. At the government level, their cooperation is robust: from decades of collaboration on the iconic International Space Station to Japan's critical contributions to NASA's Artemis program, bilateral space relations are stronger than ever.

Yet this political alignment has not translated into equally strong commercial outcomes. Despite shared capabilities and political trust, U.S.-Japan space business collaboration remains underdeveloped. Previous explanations often emphasized regulatory obstacles such as ITAR, CFIUS, and differing security standards and procurement regimes. While they serve as critical components of the cross-border space business development and therefore generally require continual regulatory change reflecting the current geopolitical environment and

relationship with allies, findings from this Deloitte Tohmatsu's independent preliminary study—based on interviews and surveys of 15 professionals from 12 space firms across both countries—suggest that the more decisive barriers are cognitive, cultural, and organizational.

This preliminary study highlighted four themes:

- Japanese firms' strong preference for extensive risk mitigation creates negotiation fatigue for their U.S. counterparts but ensures exceptional reliability once contracts are signed.
- U.S. companies tend to evaluate partnerships primarily based on commercial and operational value, whereas some Japanese companies place excessive expectations on political-level alliances to drive U.S.-Japan commercial collaboration.
- While Japan's space policies are clear and ambitious, their short-term objectives and implementation often requires more information (and decisions), delaying business decisions and sometimes creating motivational frictions with U.S. partners.

1

Perceptions
of Risk

2

Expectations
on Politics

3

Clarity
of Implementation

4

Commitment to
Make Changes

- Institutional barriers like ITAR and CFIUS are challenging but manageable; the deeper problem is whether both Japanese and U.S. firms have the internal resources, compliance capacity, financial stamina, and leadership commitment to sustain cross-border ventures.

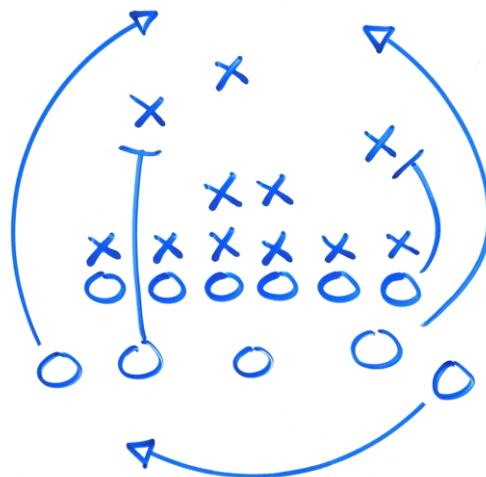
From a business strategic standpoint, the relatively small scale of Japan's space sector—both government and commercial—diminishes its perceived value to American firms, despite the presence of clear and coordinated space policy visions between the two governments. However, market size alone does not fully account for the limited engagement. These preliminary findings underscore the need for deeper cross-cultural understanding and a shift in organizational and individual mindset to bridge the gap between national-level policy alignment and firm-level collaboration.

As such, regulatory reform alone will not close the gap. What is required is a dual strategy: while both government can continually reshape the tangible regulatory environments to create more business friendly cross-border ecosystem, we also need investment in human capital and cultural literacy to bridge cognitive divides, and the creation of institutional platforms

that can sustain collaboration. Cross-cultural training, international business bootcamps, and executive exchanges can strengthen individual capacity, while initiatives such as a U.S.–Japan space business accelerator programs can create structured opportunities for co-development, co-procurement, and co-service (i.e., entry into third-country markets).

Ultimately, the pathway to deeper U.S.–Japan space business collaboration depends on more than technology or treaties. It requires aligning organizational capabilities with political ambition and equipping professionals with the skills and trust needed to overcome subtle but powerful cultural and cognitive barriers. As some experts asked, Japan may need to decide whether it wants to be a leader or a guest in the emerging space ecosystem as such decision will form Japan's next plays in space domain.

By addressing these challenges through structured capability development and targeted bilateral programs, both countries can realize the full potential of their strategic alliance—not just in diplomacy and exploration, but in building a competitive, resilient, and mutually beneficial space economy.



01 Introduction

Space Markets are Growing

The global space industry has undergone profound transformation over the past decade. Once dominated almost exclusively by government agencies, it has become a dynamic commercial ecosystem characterized by rapid innovation, private capital investment, and expanding downstream markets. According to the Space Foundation (2025), the global space economy surpassed \$613 billion in 2024, reflecting a 7.8% year-on-year increase, with projections of sustained growth as satellite constellations, launch services, and space-based data markets expand further.

Not surprisingly, the United States is the dominant actor in the global space economy in terms of size, accounting for nearly half (\$300 billion) of worldwide activity. The American space sector benefits from a unique combination of robust private investment, advanced technological capacity, and strong government demand, particularly through National Aeronautics and Space Administration (NASA), the Department of Defense, and emerging initiatives like the Space Development Agency. U.S. commercial firms lead in launch services, satellite manufacturing, and downstream applications, and a wide range of small satellite operators driving both cost reduction and market expansion. As a result, the U.S. not only serves as the largest national space market but also sets many of the technological and business standards shaping global competition.

USD), supported by both government procurement and a rapidly diversifying private sector (World Economic Forum, 2024). Over the past decade, more than 100 startups have entered the Japanese space industry, expanding into areas such as Earth observation, satellite communications, launch services, and space situational awareness (SPACETIDE, 2025). Building on decades of government-led initiatives—ranging from the H-IIA/B and H3 launch programs to Japan’s critical contributions to the International Space Station (ISS) and Artemis program—the country is now positioning itself to become a hub for innovation and international collaboration. Japan is increasingly viewed as a partner capable of bringing distinctive strengths to global space ventures.

U.S.-Japan Government Cooperation in Space

At the government-to-government level, U.S.–Japan cooperation in space is robust and expanding. Since the late 1980s, Japan has been a critical partner in the ISS program, operating the Kibo laboratory module and contributing logistics services. More recently, Japan has become a key participant in the NASA-led Artemis program, pledging contributions to the Gateway lunar outpost and committing to provide cargo and habitation systems. The U.S.–Japan agreement to deliver a Japanese astronaut to the lunar surface stands as a testament to the enduring friendship and the robust technological trust between the two

U.S.-Japan diplomatic achievements in space	Initial Meeting/ Sign Years
Japan-U.S. Comprehensive Dialogue on Space	2013
Japan-U.S. Space Security Dialogue	2022
Framework Agreement between Japan and U.S. for Cooperation in the Exploration and Use of Outer Space	2023
GPS Cooperation	2001

Figure 1. Examples of U.S.-Japan Government-level Milestones
Source: Ministry of Foreign Affairs of Japan, 2025

Japan also has established itself as a highly capable and trusted player in the global space economy, with strengths spanning advanced engineering, robotics, satellite technology, and exploration systems. Japan’s domestic space market reached approximately JPY 4 trillion (about \$26 billion

countries (NASA, 2024).

Institutional frameworks reinforce this alignment. The Japan–U.S. Comprehensive Dialogue on Space and the Japan–U.S. Space Security Dialogue provide structured mechanisms for policy and security

coordination. In 2022, the two governments signed the Framework Agreement for Cooperation in the Exploration and Use of Outer Space (Ministry of Foreign Affairs of Japan, 2025), which lays the groundwork for expanded bilateral and multilateral engagement in civil space collaborations. These developments underscore the political trust and strategic vision that underpin the U.S.–Japan space alliance in national security, civil, and commercial space realms (Figure 1).

The Problem

Despite this favorable government to government alignments, commercial cooperation between U.S. and Japanese space companies remains limited. Few joint ventures or sustained industrial partnerships have materialized, and Japanese firms face difficulty in integrating into U.S. commercial supply chains, or vice versa.

A common assumption is that regulatory barriers—such as the International Traffic in Arms Regulations (ITAR), reviews by the Committee on Foreign Investment in the United States (CFIUS), and differences in cybersecurity protocols—are the primary reasons why U.S.–Japan space business collaboration remains limited. These frameworks undoubtedly impose real constraints, but can they fully account for the lack of sustained commercial outcomes? Or, as recent academic and industry analyses suggest (Horowitz & Johns, 2023; Johnson & Miller, 2023; Tada, 2025), are these formal constraints only part of the story? This study takes up the question of whether the deeper obstacles are instead rooted in cultural, organizational, and psychological dynamics—the informal but powerful factors that shape how firms perceive risk, make decisions, and engage with prospective partners.

Purpose of the Study

This preliminary study seeks to clarify why commercial U.S.–Japan space collaboration lags behind government-level alignment (for methods and limitations of the study, see the Appendix). Drawing on interviews with professionals from space companies in both countries, it highlights the less visible but more influential barriers: divergent business customs, cultural expectations, and organizational practices. By uncovering these dynamics, the paper aims to inform both policymakers and industry leaders on how to strengthen bilateral space business ties and unlock the potential of a partnership that is already strong at the government level.

The following analysis presents the key takeaways from our study, drawn from interviews and survey data with U.S. and Japanese space business professionals.

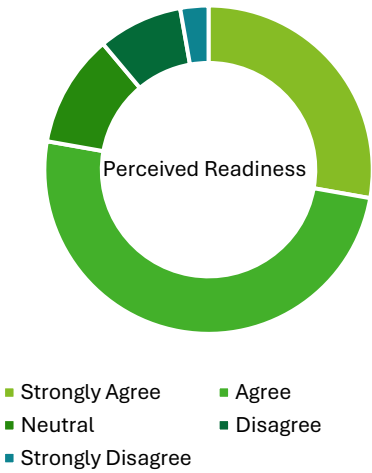


02 Are We (Truly) Ready?

Perceived Readiness versus Limited Resources

To begin our journey to explore the hidden, informal barriers in U.S.–Japan cross-border space business development, the survey conducted for this study revealed an important tension between perceived readiness and practical capacity. On the one hand, more than 75% of Japanese respondents reported that their companies had conducted market research of the U.S. space industries, identified potential export goods or services, and established relationships with local sales, engineering, or legal partners to tap into the U.S. market (Figure 2). On the surface, these findings suggest a high level of preparedness and a deliberate effort to position themselves for cross-border business opportunities.

Figure 2. Perceived Readiness of Japanese Space Firms to Tap into the U.S. Space Market

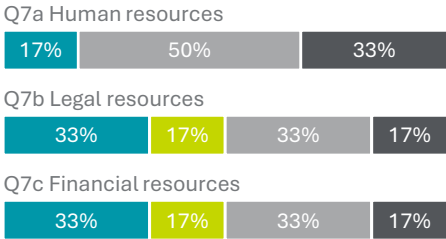


Source: Aggregated survey results for questions 1 to 6.

Yet when asked about the availability of internal resources to carry out these plans, over 50% of respondents expressed concern about their ability to follow through. Specifically, firms highlighted shortages of dedicated personnel, limited financial bandwidth to sustain lengthy cross-border business development cycles, and gaps in compliance expertise to navigate complex regulatory processes. In other words, Japanese companies may know *what* needs to be done, but remain uncertain about whether they can marshal the organizational

resources to actually do it (Figure 3).

Figure 3. Resource Availabilities to Actually Executing Ideas



Source: Survey results for questions 7a, 7b, and 7c.

This tension helps explain why U.S. counterparts often encounter hesitation or delays when engaging with Japanese partners. From the outside, Japanese firms appear ready—armed with market research, identified partners, and export goals. But from within, resource constraints and risk-averse corporate cultures temper that readiness, creating a potential disconnect between strategic intent and operational execution.

Rethinking the Hidden Causes

When discussing why U.S.–Japan space business collaboration has not kept pace with the government-level alignment, regulatory explanations are often raised first. Yet American space companies interviewed for this study emphasized that such barriers, while challenging, are not decisive deal-breakers. Other international partners face similar frameworks yet manage to succeed in entering U.S. programs.

Instead, the study revealed that the primary obstacles lie in cultural, organizational, and psychological differences between U.S. and Japanese firms. Divergent attitudes toward risk, contrasting expectations of partnership value, and differing reliance on government policy signals all create friction. American professionals expressed strong interest in collaborating with Japanese firms but noted that these non-regulatory differences often slow down, complicate, or even prevent viable partnerships. Presented below are the four key insights drawn from the study.

Finding 1:

Risk Aversion and Negotiation Friction

American firms consistently noted that Japanese partners often approach potential collaborations with a preference for exhaustive risk mitigation before action. Proposals and negotiations frequently involve highly detailed requests for clarification on technical, legal, and contractual points—even those considered tangential by American business practices, such as extensive questions about U.S. government policies.

From the U.S. perspective, this style creates negotiation fatigue and slows the pace of decision-making. American space companies tend to prioritize moving quickly into implementation to win profits, favoring minimal upfront agreements that establish baseline terms and then refining details progressively over the course of collaboration. In contrast, Japanese firms tend to prefer securing comprehensive clarity before committing, reflecting a broader cultural emphasis on minimizing uncertainty.

However, American interviewees also highlighted the positive side of this diligence: once Japanese firms commit to a partnership, they demonstrate exceptional reliability, thoroughness, and execution discipline. This duality—frustrating in negotiation but dependable in delivery—characterizes the U.S. view of Japanese space partners.

As Japan's space sector diversifies into more commercial ventures, firms are still at the stage of adapting to the faster, more risk-tolerant dynamics of international markets. A question the Japanese government and industry may confront is whether they aspire to be a leader or merely a guest in the emerging space ecosystem. While the answer will vary case by case, addressing such question is pivotal for muddling through the complex and often burdensome processes of cross-border business development.

Implication 1:

Successful collaboration will require mechanisms that balance the contrasting risk cultures, preserving Japanese diligence while enabling more agile and timely decision-making.

Finding 2:

Business Value vs. Political Alignment

Several American professionals emphasized that business value—not geopolitical alignment—drives partnership decisions. While U.S.–Japan political relations are strong and provide a favorable context, American firms do not automatically prioritize Japanese partners for that reason alone.

From the U.S. standpoint, collaboration depends on whether Japanese firms bring unique technological, operational, or commercial value to their supply chain. Their



Japanese perspectives help contextualize this behavior. Many Japanese firms remain influenced by a legacy of government-led procurement, where projects are carefully scoped and risk is borne largely by the state.

advanced engineering and high-quality manufacturing are well respected, but such qualities must be framed within concrete business cases—cost savings, performance gains, or market expansion opportunities.

Some Japanese stakeholders, however, assume that alliance politics create an expectation or preference for U.S. firms to partner with them. This mismatch leads to disappointment when partnerships do not materialize on the basis of political goodwill alone.



Implication 2:

To compete effectively for U.S. partnerships, Japanese companies must present compelling business propositions, highlighting specific advantages they bring beyond the shared alliance context.

Finding 3:

Ambiguity in Policy Implementation

American firms generally view Japan's national space policies and strategies as ambitious and forward-looking. Initiatives such as the Space Strategy Fund and expanded defense-related investments are seen as positive signs of growth. Yet, interviewees also noted that these policies often lack clarity in implementation, leaving uncertainty about how—or when—they will translate into actionable programs for industry.

A recurring pattern is that Japanese firms defer business decisions until clearer signals emerge from their government, while Japanese officials in turn hesitate until alignment with U.S. policy is confirmed. This circular “waiting game” creates delays and undermines confidence among U.S. partners seeking timely engagement.

From the Japanese perspective, this caution stems from a desire to align with government direction, particularly in a sector historically dominated by public procurement (i.e., the cornerstone to mitigate an uncertainty and

risk). Yet for U.S. companies, it signals indecision and creates difficulty in justifying investment or partnership to their boards or investors.

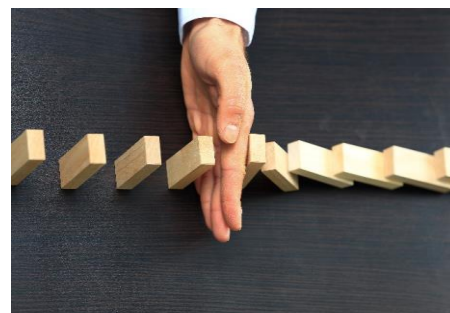
Implication 3:

More transparent and actionable policy signals from Japanese Government would enable U.S. firms to factor Japanese partners more confidently into long-term business strategies.

Finding 4:

Overcoming Institutional Barriers

Institutional barriers—such as ITAR, CFIUS, or differing cybersecurity standards—are frequently cited in public debates. Yet American companies interviewed in this study stressed that these frameworks are challenging but manageable. With sufficient preparation, legal guidance, and process discipline, U.S. firms have successfully collaborated with partners worldwide, including in heavily regulated sectors.



The real challenge is whether both U.S. and Japanese companies possess the organizational readiness to navigate these requirements. This includes having legal expertise, compliance infrastructure, and the financial stamina and leadership commitment to sustain lengthy approval processes. Without such capabilities, even technically excellent firms may self-select out of opportunities, perceiving regulatory barriers as “hard stops” rather than procedural hurdles.

Japanese professionals themselves acknowledged this gap. Many recognized that while their companies conduct market research on the U.S. industry, they often lack actionable knowledge about regulatory compliance and contracting mechanisms. This creates a “known unknowns” problem,

where firms are aware of challenges but do not have the mechanism to address them.

Implication 4:

Japanese firms need to institutionalize regulatory compliance and cross-border contracting functions—through dedicated offices, budgets, and strategic outsourcing—to build the organizational capacity required for meaningful participation in U.S. space supply chains.

So, Are We (Truly) Ready?

Taken together, these insights raise the central question: is the U.S.–Japan space business relationship ready to accelerate in line with global industry trends and political ambitions?

The evidence suggests that while there is clear technological potential and strong political will, readiness is hampered by differences in business culture and organizational practice. American firms are

interested to work with Japanese partners but often encounter negotiation friction, unclear policy signals, and limited organizational readiness for regulatory challenges.

At the same time, Japanese firms bring distinctive strengths—precision engineering, excellence in quality, reliability in contract schedule, and a growing base of innovative startups. These qualities, combined with greater adaptability and stronger market engagement, could make Japanese companies indispensable partners in U.S. supply chains.

Readiness, therefore, depends not on rewriting regulations but on addressing the human and organizational dimensions of collaboration. Without these changes, the U.S.–Japan space business partnership risks continuing as a “latent potential” rather than a fully realized commercial alliance. In addition, Japanese government and firms may

be required to make a strategic decision: whether to act as a leader or a guest in particular space systems—a choice that will shape its role with U.S. partners but also Japan’s position in the broader international space marketplace.



03 The Way Forward

It's Time to Make Actions

This study highlights a persistent gap between political alignment and business execution in the U.S.–Japan space relationship. Regulatory frameworks such as ITAR or CFIUS are not insurmountable; the real impediments lie in business cultures, organizational readiness, and cognitive asymmetries.

From the U.S. perspective, Japanese partners are respected for their technological excellence and reliable business partners, but are often perceived as overly risk-averse, slow to act, and constrained by ambiguous policy-implementation environments. From the Japanese perspective, American firms' tolerance for uncertainty can feel hasty, and the heavy demands of regulatory compliance in the U.S. can appear daunting.

These differences do not imply incompatibility. On the contrary, they suggest that U.S. and Japanese firms bring complementary strengths to potential partnerships—diligence and technological excellence on one side, agility and scalability on the other. To unlock this complementarity, both governments and industries must invest in building the capabilities, trust, and platforms needed to translate alignment into business outcomes.

The following “next play” ideas are proposed to move beyond identifying barriers toward designing actionable mechanisms for collaboration.

In reality, the challenges identified reflect a mix of consciously recognized issues and more subtle or underestimated differences. As such, a one-size-fits-all solution is ineffective. Instead, targeted communication strategies and issue-specific research efforts should be aligned with the findings.

That said, we also recognize the practical constraints of limited time and budget in addressing each issue individually. To that end, we propose two institutional approaches that can simultaneously address multiple challenges through more integrated and efficient efforts.

Next Play Option 1:

Foster Mutual Understandings

One major implication of the study is the need to improve mutual understanding of business cultures and psychological perspectives in order to build a shared recognition of the challenges. To that end, both governments and industry stakeholders should invest in structured training programs for staff and managers. For example:

- **Cross-cultural communication training tailored for space business professionals** (e.g., addressing differing risk cultures—Japan's cautious, pre-commitment approach vs. the U.S.'s iterative, risk-tolerant mindset—and offering practical tools to manage expectations and collaborate with less friction).
- **International space business development bootcamps** focused on regulatory environments, procurement systems (e.g., U.S. Federal Acquisition Regulation; Defense Federal Acquisition Regulation Supplement; ITAR), and contracting practices across borders.
- **Executive exchange programs** or joint leadership retreats, where mid-to-senior-level professionals from both countries can engage in real-world scenario planning and negotiation workshops.

Such programs can build the cultural intelligence and operational awareness needed to reduce miscommunication and foster effective collaboration.

Next Play Option 2:

Towards Co-Service Model

Our analysis suggests a more direct and potentially higher-impact approach: identify and assign the right individuals who are capable of driving cross-border collaboration. This insight aligns with the concept of *co-opetition* as outlined by Adam Brandenburger and Barry Nalebuff (2021) in *The Rules of Co-opetition*:

“Ultimately, getting the right mindset requires choosing the right people. The executives we interviewed emphasized the need to staff the cooperating teams with people who are open to the dual mindset of co-opetition.”

To succeed under a co-opetition model, U.S.–Japan space business collaboration must go beyond simple corporate matchmaking or symbolic partnerships. What is needed are structured platforms and mechanisms that foster sustained, actionable engagement between professionals who understand both strategic contexts. One promising approach would be to develop a U.S.–JP cross-border space business acceleration program, for example. This initiative could be jointly supported by agencies from both countries. The program could:

- Support **joint participation in international space procurement programs.**
- Offer **government-backed technical and financial assistance** to space firms building dual-qualified products (e.g., components compliant with both U.S. and Japanese military or civil standards).
- Establish **binational startup cohorts** where selected companies receive coordinated mentoring, policy guidance, funding, and exposure to key government stakeholders in both countries.
- Facilitate **public-private advisory councils** made up of key industry leaders and policy officials to coordinate long-term collaboration priorities and standard-setting efforts.

The core value of the acceleration program should be twofold: first, to increase cross-border business outcomes between U.S. and Japanese space companies; and second, to expand the scope of collaboration toward delivering joint space services to third countries, particularly like-minded partners such as Australia, the United Kingdom, and other strategic actors in the Indo-Pacific region. Rather than focusing solely on bilateral exchanges, the program should aim to build a scalable and outward-facing model of U.S.–Japan space cooperation. This means not only enabling co-development and co-production of space systems but also creating frameworks for the joint export of space-based services—such as Earth observation, satellite communications, or space domain awareness solutions—to external markets. These joint offerings could serve shared geopolitical and commercial objectives, reinforcing U.S. and Japanese

leadership in the evolving space economy. More or less, such outbound initiatives should be underpinned by a U.S.–Japan joint procurement commitment to ensure sustainability and commercial viability.



04 Conclusion

Activate Policy via Business

The U.S.–Japan space relationship is marked by a paradox. At the government level, cooperation is deep, structured, and forward-looking, with both nations aligned on exploration, security, and the strategic importance of space. At the commercial level, however, collaboration has lagged. Despite the global expansion of the space economy and the shared capabilities of two of the world's most advanced space industries, joint business ventures remain rare and underdeveloped.

This study suggests that the barriers to collaboration are not primarily regulatory. While export controls, investment screening, and cybersecurity standards present real challenges, these frameworks are navigable with preparation and expertise. The more significant obstacles are cognitive and cultural: divergent approaches to risk, differing assumptions about the value of alliance politics, ambiguity in policy implementation, and uneven organizational readiness to manage institutional processes. These differences shape the pace, quality, and sustainability of partnerships as important as legal constraints.

The path forward requires moving beyond a narrow focus on policy and regulatory reform to building the human and institutional foundations of collaboration. Cross-cultural training, executive exchanges, and regulatory literacy programs can equip professionals to bridge psychological and organizational gaps. Institutional platforms such as a U.S.–Japan space business accelerator can translate political alignment into actionable business opportunities, both bilaterally and in third-country markets in the long run. At its core, however, the question remains: will Japan position itself as a leader or remain a guest in the fast moving global space ecosystem? With right investments to mobilize the cross-border space business developments, the U.S.–Japan partnership can evolve from latent potential into a resilient and competitive space business ecosystem, strengthening not only bilateral ties but also the broader global space economy.

Potential Propositions for Future Study

Building on the cognitive and institutional challenges uncovered in this preliminary research, a more comprehensive, follow-on study could test specific propositions (P) about persistent business-level constraints that hinder space collaboration. The following are illustrative examples:

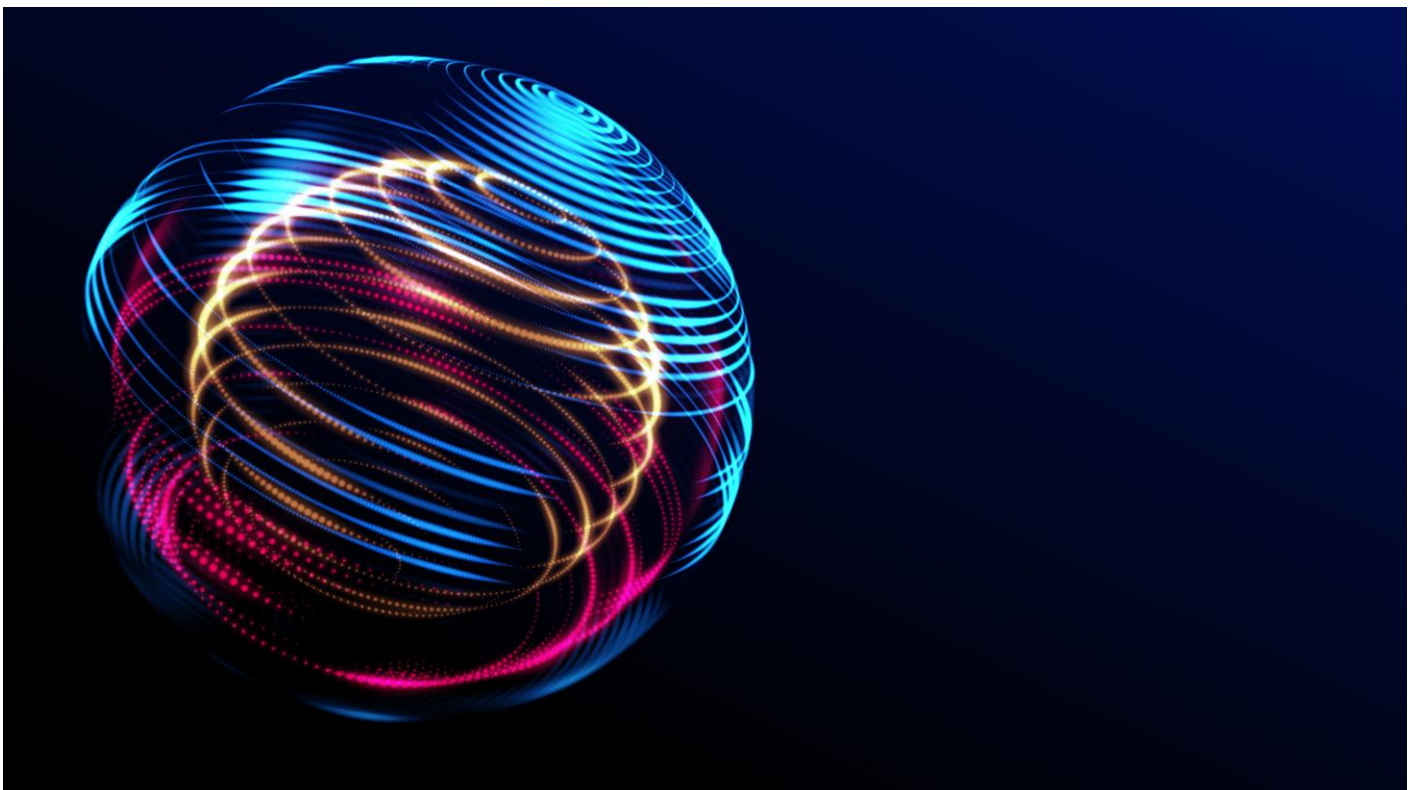
- P1: Lack of export control and regulatory know-how among Japanese SMEs and startups significantly reduces willingness to initiate collaboration with U.S. partners.
 - *E.g., To address P1, the creation of a U.S.–Japan “ITAR Bridge Office” could offer procedural guidance, compliance tools, and pre-screening services for space startups and SMEs. This would reduce uncertainty and enable faster onboarding of Japanese firms into U.S. programs.*
- P2: Perceived intellectual property (IP) and technology transfer risks constrain co-development efforts, especially for dual-use applications.
 - *E.g., To address P2, a binational entity—perhaps hosted within a future U.S.–Japan space innovation framework—could offer legal templates, safe harbor provisions, and joint licensing mechanisms to protect and encourage co-development. This would lower legal risk and streamline negotiations for space-relevant IP.*
- P3: Limited availability of cross-border funding mechanisms and national procurement constraints prevent the formation of sustainable binational business models.
 - *E.g., To address P3, governments could co-fund a public-private investment vehicle that supports collaborative projects aligned with national strategies. This would overcome procurement fragmentation and unlock patient capital for cross-border ventures.*
- P4: Manufacturing scalability concerns—particularly mass production readiness—impede Japanese firms from integrating into global space supply chains.
 - *E.g., To address P4, the creation of a “Mass Production Sandbox” can be considered. This initiative would allow Japanese component manufacturers to*

test interoperability, quality assurance standards, and production scalability with U.S. integrators under simulated high-volume procurement scenarios. Such a sandbox could help de-risk long-term partnerships by resolving technical friction before full integration.

A future, more comprehensive study should aim not only to validate these questions, but also to map the institutional and procedural infrastructure necessary to address them. By doing so, research can evolve from simply identifying perceptual gaps to offering concrete, sector-specific pathways for overcoming them.

References

- Brandenburger, A. M., & Nalebuff, B. J. (2021, January–February). The rules of coopetition. *Harvard Business Review*.
- Horowitz, M. C., & Johns, K. (2023). The politics of space partnerships: Institutional barriers and soft alignments. *International Security Review*, 48(1), 112–141.
- Johnson, E., & Miller, A. (2023). Cross-border space innovation: Challenges in alliance-based commercial strategy. *Journal of Strategic Space Policy*, 11(2), 34–57.
- NASA. (2024, April 10). *NASA, Japan advance space cooperation, sign agreement for lunar rover*. NASA. Retrieved August 25, 2025, from <https://www.nasa.gov/news-release/nasa-japan-advance-space-cooperation-sign-agreement-for-lunar-rover/>
- Ministry of Foreign Affairs of Japan. (2025, May 30). *Japan-U.S. space cooperation*. Retrieved July 28, 2025, from <https://www.mofa.go.jp/region/n-america/us/space/index.html>
- Space Foundation. (2025, July 22). *The Space Report 2025 Q2 highlights record \$613 billion global space economy for 2024, driven by strong commercial sector growth*. Space Foundation. Retrieved August 25, 2025, from <https://www.spacefoundation.org/2025/07/22/the-space-report-2025-q2/>
- SPACETIDE Foundation. (2025, May). *COMPASS (Vol. 12)*. SPACETIDE Foundation.
- Tada, M. (2025). *Analysis of Options for Japan in the Peaceful Uses of Space Nuclear Power* (AIAA Paper No. 2025-4070). American Institute of Aeronautics and Astronautics.
- World Economic Forum. (2024, December 20). *How Japan can remain a star player in the space sector*. World Economic Forum. Retrieved August 25, 2025, from <https://www.weforum.org/stories/2024/12/space-industry-japan-growth/>



Appendix

Rationales and the Organization of the Study

This preliminary study, not intended as a comprehensive analysis, shed new light on the underlying dynamics that hinder robust U.S.-Japan commercial space collaboration. It seeks to move beyond traditional accounts of regulatory friction to uncover deeper, often less visible cognitive and cultural barriers that hinder trust-building between Japanese and American stakeholders at the interpersonal, human-to-human business development.

The study was initiated by Deloitte Tohmatsu Space and Security (DTSS), an arm of Deloitte Tohmatsu Group (Tokyo, Japan) specializing in strategy, public-private partnership, and defense-related innovation in the defense and space domain. In collaboration with counterparts in the U.S. Deloitte network, DTSS brings together deep expertise in the space industry, informed by years of client-facing work, policy engagement, and market research across both Japan and the United States. This cross-regional, multi-sectoral perspective positions Deloitte to uniquely assess the enablers and impediments to cross-border commercial engagement in space.

Grounded in this domain expertise, this independent, interview-based research project garnered first-hand insights from stakeholders in both countries. By engaging directly with industry professionals, the study aims to complement existing policy literature and offer practitioner-informed observations that can inform future policymaking, business strategy, and bilateral engagement efforts.

Research Design

To better understand the challenges and opportunities surrounding U.S.-Japan space business collaboration, this study employed a qualitative, interview-based research design. Between April and June 2025, our researchers conducted in-depth, semi-structured interviews with representatives from both Japanese and U.S. space firms.

Samples

Participants were selected based on their involvement in or familiarity with U.S.-Japan space partnerships, and many were affiliated with or had participated in past Japan-U.S. Comprehensive Dialogue on Space events. Interviewees included space business professionals working in:

- Strategy and business development,
- Government affairs, or
- Sales and marketing.

The interviews were primarily conducted in person within the Washington, D.C. metropolitan area, where the researchers are based, with the option of using Microsoft Teams for remote participation. Invitations to participate were sent via email to 10 Japanese companies in April, resulting in a response rate of 70%. For U.S. companies, 9 invitations were sent between May and June, with a response rate of 55%. A total of 9 individuals from Japanese companies and 6 individuals from U.S. companies were interviewed, representing 12 distinct companies in total.

Research Instruments

Two main formats were used:

- In-depth interviews (45–60 minutes) focusing on organizational strategy, market entry barriers, and perceptions of partnership risks.
- Short-format surveys (5–10 minutes) collecting broader impressions and validating themes from interviews. Only applicable to Japanese companies.

Each interview lasted approximately 45 to 60 minutes and followed a flexible protocol that allowed for open-ended discussion while maintaining alignment with core research questions. Notes were taken during each session, and individual company names and personal identifiers were excluded from the analysis to preserve confidentiality. Participants were asked to voluntarily sign an informed consent form prior to the study.

Data Analysis

All responses were anonymized and securely stored, with data access restricted to authorized members of the research team. The data were analyzed thematically, with recurring patterns coded under categories

such as:

- Business model,
- Market assessment and understanding,
- Corporate culture,
- Individual beliefs,
- Governmental policy,
- Reputational risk.

Where relevant, insights from these interviews were cross-referenced with publicly available documents and relevant scholarly literature to contextualize findings.

Methodological Limitations

First, we could increase the sample size. A total of 15 professionals across 12 firms were interviewed, which, while valuable for qualitative pattern recognition, may not capture the full diversity of perspectives within each national space sector. Relatedly, the response rates (i.e., 70% for Japanese firms and 55% for U.S. firms) introduce the potential for non-response bias, where the firms that chose to participate may differ systematically from those that decline. Second, while the study benefited from semi-structured interviews, there remains a risk of selection bias, as many interviewees were recruited through personal or professional networks rather than selected through a systematic sampling process. Third, the study's reliance on self-reported perceptions means that response bias—such as overreporting confidence or downplaying internal constraints—may affect the accuracy of some claims.

Directions for Future Research

To address these limitations, future studies should pursue more systematic and scaled data collection, ideally incorporating: A larger, more diverse sample of firms, including those outside traditional government-funded ecosystems; Broader surveys, in addition to interviews, would enable broader pattern recognition and allow for statistical analysis of shifts over time, provided that longitudinal data can be accumulated; Inclusion of non-participant observers (e.g., investors, accelerators, or regulators) to provide triangulated perspectives on constraints and opportunities.

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